McHenry County
Zoning Board of Appeals - Zoning Hearing
AGENDA

July 22, 2026, 1:30 PM
County Board Conference Room
Administration Building, 667 Ware Rd., Woodstock, IL 60098

Pages

1. CALL TO ORDER
2. ROLL CALL
3. NEW BUSINESS / PUBLIC HEARING
4. OLD BUSINESS
   - 4.1 Z25-0074 WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC, A1-A1C, Hartland Twp (continued from September 17, 2025, October 29, 2025 & December 3, 2025, February 11, 2026 and April 8, 2026) — 2
5. PUBLIC COMMENT
   Topics unrelated to public hearing - 3-minute time limit per speaker
6. ANNOUNCEMENTS
7. ADJOURNMENT

Staff Report for the McHenry County Zoning Board of Appeals

Application: #Z25-0074

PIN: #07-36-326-003

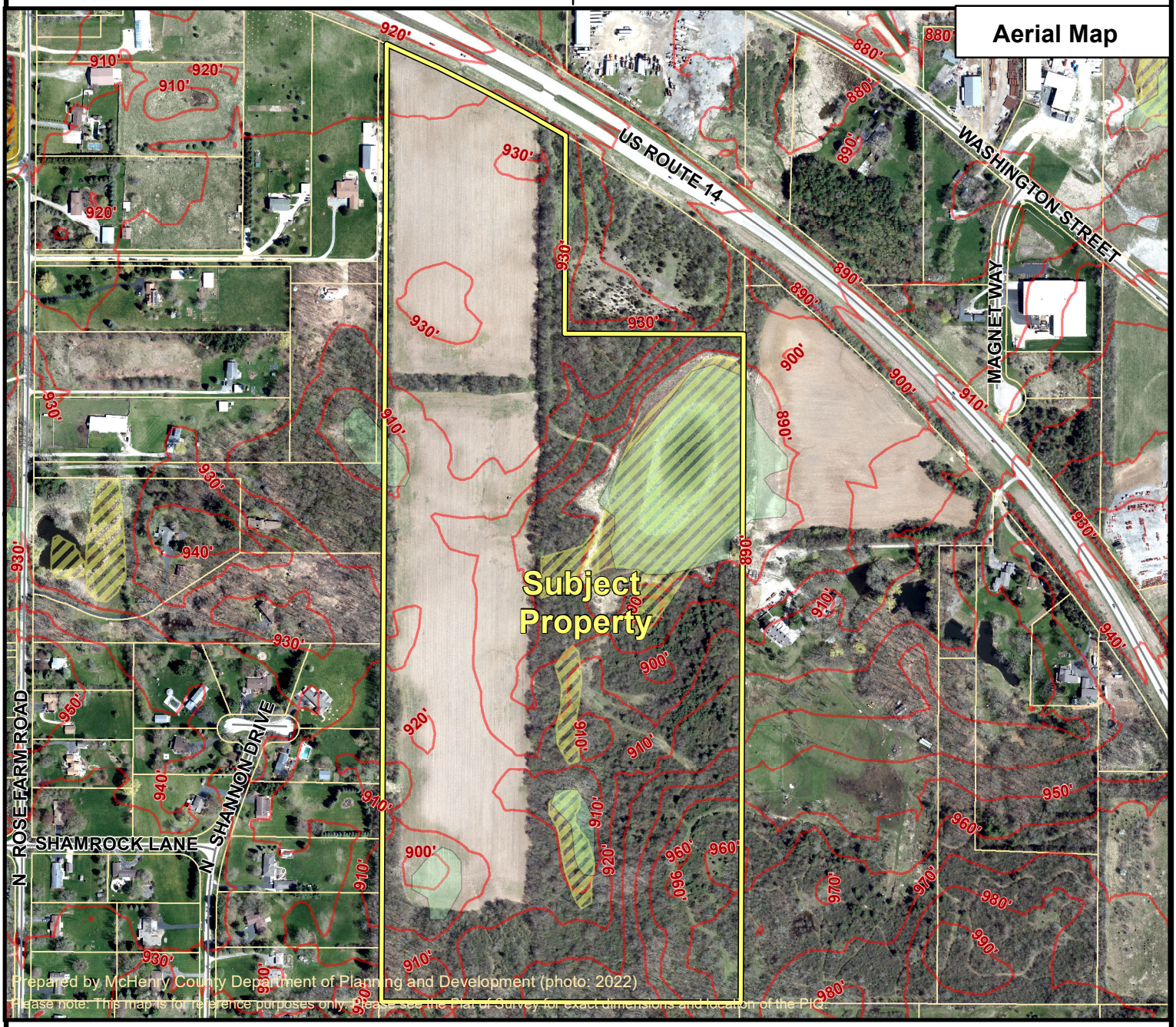
Location: The property consists of approximately 88.075 acres and is located on the south side of U.S. Highway 14, approximately three hundred fifty (350) feet east of the intersection of U.S. Highway 14 and Washington Street, in Hartland Township, Illinois.

Hearing: September 17, 2025

Applicant: Woodstock Community Energy Initiative LLC

Request: Conditional Use Permit to allow for a Commercial Solar Energy Facility

Aerial Map



Elevation
(feet above sea level)
Contours

ADID Wetland Map 2005
High Functional Value Wetland (hfvw)
High Quality Wetland (hqw)
Wetland (w)
Farmed Wetland (fw)

Historic Flood Zone

Feet
275 137.5 0 275 550
1 inch equals 541.7 feet

STAFF COMMENTS

The following comments and conclusions are based upon staff analysis and review prior to this hearing and are to be considered viable unless evidence is established to the contrary. Staff may have additional comments based upon the testimony presented during the public hearing.

BACKGROUND & REQUEST SUMMARY

The applicant is requesting a Conditional Use Permit to allow for a Commercial Solar Energy Facility. The subject property consists of approximately eighty-eight (88) acres and is zoned A-1 Agriculture District. According to the aerial photography, the subject property is currently in crop production and contains significant tree cover.

According to the narrative, the applicant is proposing up to a 5-megawatt commercial solar energy facility, enclosed by a eight (8)-foot tall security fence, per the regulations of the National Electric Code. The nearest adjacent residence on a nonparticipating parcel is over one-hundred fifty (150) feet from the proposed location of the solar array.

Note: On January 27, 2023, the State of Illinois passed Public Act 102-1123 (further modified under trailer bill P.A. 103-0580 on December 8, 2023), which modifies regulations for proposed commercial solar energy facilities. The County of McHenry has amended the Unified Development Ordinance, as of April 18, 2023, in order to comply with the State's regulations.

MCHENRY COUNTY UNIFIED DEVELOPMENT ORDINANCE

- The applicant must meet the Principal Use Standards for a Solar Farm, listed in County Code Section 16.56.030.PP of the UDO (*with the exception of any changes provided by Public Act 102-1123, as outlined above*).

STAFF ANALYSIS

Current Land Use & Zoning

The property is adjacent to Agricultural uses to the east, Single-Family Residential to the south, Agricultural and Single-Family Residential to the west, and Vacant and Industrial to the north. The surrounding zoning consists of A-1 Agriculture to the east and south, A-1 Agriculture and E-1 Estate to the west, and B-3 Business and I-1V Industrial to the north.

2030 Comprehensive Plan Future Land Use Map

The proposed conditional use permit is not consistent with the County's future land use designation of Residential.

2030 Comprehensive Plan & 2030 and Beyond Analysis

The 2030 Comprehensive Plan and 2030 and Beyond Update support the construction of commercial solar energy facilities within existing agricultural areas. *(See analysis below)*

McHenry County 2030 and Beyond, Adopted October 18, 2016

Big Idea #1 Let's make our communities healthy, active, and green

"We can make it happen by preserving our groundwater aquifers, lakes, rivers, streams, and their natural functions." (p.11)

- The McHenry County Water Resources Division has determined that the panels will not be calculated as an impervious surface for the development permit. This is because the panels are proposed to be elevated above the ground several feet and supported by driven piles. The petitioner will be required to obtain a Stormwater Management Permit which will include calculations for all impervious areas, including but not limited to the piles, access drives, and equipment pads.

Big Idea #2 Let's build on our strengths

"We can make it happen by recognizing the economic and social importance of our agricultural industry." (p. 15)

- The McHenry County Soil and Water Conservation District's Natural Resources Inventory report (#25-063-4724) indicates that the LE score is 71.54 out of a possible 100 regarding soils for crop production. This is due, in part, to approximately 55.7% of the site containing prime farmland soils. The concerns that the development of solar facilities in the county will result in the loss of farmland, particularly prime farmland can be remediated because, unlike other forms of development, the land is preserved for future farming. Also, the proposed native vegetation may slow the velocity of runoff, capturing sediments or other pollutants and allowing water to infiltrate into the soil, thereby reducing potential for erosion and sedimentation and improving soil conditions.

Big Idea #3 Let's grow smarter

"The county should also be open to commercial enterprises in the unincorporated areas that are major generators of jobs or tax revenues for which no suitable municipal sites exist elsewhere in the county, or that are dependent upon a direct proximity to agriculture or open space and designed in harmony with these areas." (p. 17 & 21)

- Due to the size and scale of the project, undeveloped acreage is important to the siting and development of a commercial solar energy facility. The applicant should be prepared to address how the proposed use relates to the statement above regarding generation of jobs, tax revenues, and siting of the facility.

Big Idea #4 Let's expand our economy

"We can make it happen by improving infrastructure, including freight and commuter rail, access to major regional and interstate roadways, and access to high-speed internet services." (p.22)

- The proposed commercial solar energy facility will provide a renewable energy source to the electrical grid as an alternative to energy created from sources with a larger carbon footprint.

McHenry County 2030 Comprehensive Plan, Adopted April 20, 2010

Community Character & Housing

No applicable text.

Agricultural Resources

"Encourage owners of parcels with the greatest potential for productive agricultural use, such as parcels with an LE score of 80 or above that are in agricultural use and contiguous with other such parcels, to preserve their parcels for agricultural uses." (p. 38, #7)

- Commercial solar energy facilities typically have a life of approximately thirty (30) to forty (40) years and after that time the property may return to agriculture.

"Continue joint participation with the USDA Natural Resources Conservation Service and McHenry County Soil and Water Conservation District in educational programs regarding best soil conservation practices and improving rural water quality." (p. 38, #20)

- The McHenry-Lake County Soil and Water Conservation District recommends that areas between panels be planted to a native prairie mix to help increase water infiltration and reduce runoff from the site. It is recommended that a planting and maintenance plan be developed with the landowner to ensure that noxious weeds are controlled, and native plantings are properly installed and managed. The petitioner is encouraged to add pollinator species to this planting plan. The Soil and Water Conservation District also recommends, upon decommissioning, that if any underground lines are to remain, they should have at least five (5) feet of cover to adequately allow farming operations to commence after the facility's removal.

Greenways, Open Space & Natural Resources

"Protect environmentally sensitive areas from negative impacts of adjacent land uses." (p.57, #9)

- The IDNR found record of potential protected resources in the vicinity of the project location (West Woodstock Prairie INAI Site, Yonder Prairie Nature Preserve Class 3 Groundwater, Blanding's Turtle, and Rusty Patched Bumble Bee) but concluded that adverse effects were unlikely, as long as the applicants adopted their recommendations as outlined in their February 20, 2025 letter. The endangered species consultation was terminated.

"Encourage the design of developments to achieve the broader sustainability of human and natural communities, including the social and economic dimensions of sustainability." (p. 57, #15)

- The proposed commercial solar energy facility will contribute to a broader sustainability objective in that it will produce clean energy as a replacement for energy produced by unsustainable means.

Water Resources

"Preserve and enhance the chemical, physical, biological, hydrologic integrity of streams, lakes and wetlands." (p.63)
"…land use and development should be carefully examined and regulated within sensitive groundwater recharge areas to ensure that the water quality, quantity, and natural recharge functions of the area are safely maintained." (p.67)

- The applicant will be required to obtain a Stormwater Management Permit prior to construction.

Economic Development

"Decrease the degree to which the residential sector in the County must pay for services." (p.87)

- The state legislature has approved standards that would regulate how commercial solar energy facilities are assessed for tax purposes. The standards would result in an increase from the current assessed value of agricultural land.

Infrastructure

"It is estimated that every 120 MW of solar power would eliminate 1.7 million tons of carbon dioxide emissions which is the equivalent of removing 310,000 vehicles from the nation's roadways annually. A 1,000 MW coal plant produces approximately 6 million tons of carbon dioxide per year." (p.116)

"Encourage all governmental units in the County to adopt and support ordinances that will enhance all segments of the areas electric grid." (p. 120, #5)

The proposed commercial solar energy facility is consistent with the *Comprehensive Plan* support of more sustainable energy sources.

STAFF ASSESSMENT

The 2030 Comprehensive Plan and the *2030 and Beyond Update* both support the development of commercial solar energy facilities. Once the facility is constructed, there is very little to no traffic generated by the use. There is very minimal risk of noise, lighting, or other nuisances generated by this use. The proposed use is compatible with adjacent uses. As noted within Public Act 102-1123, *a request for a Conditional Use Permit for a commercial solar energy facility shall be approved if the request is in compliance with the standards and conditions imposed within the Act, the zoning ordinance adopted consistent with this Code, and the conditions imposed under State and Federal statutes and regulations. A County may not adopt zoning regulations that disallow commercial solar energy facilities from being developed or operated in any district zoned to allow agricultural or industrial uses*. All construction will be required to meet applicable codes and ordinances for: fire protection, commercial building and electrical construction, and stormwater management.

Staff offers the following conditions for consideration:

1. The Conditional Use shall have no time limit, unless the use is abandoned as specified in 16.56.030.PP.4 of the McHenry County Unified Development Ordinance.

2. Site development shall be in substantial conformance with the site plan prepared by Kimley-Horn, dated July 25, 2025, and received by the Department of Planning and Development on August 8, 2025. (attached).

3. The *Decommissioning Plan* shall be applicable in part as well as in whole. If any portion of the commercial solar energy facility ceases to perform its intended function for more than twelve (12) consecutive months, that portion of the facility shall be decommissioned in compliance with all the terms of the *Decommissioning Plan*.

4. A McHenry County Stormwater Management Permit shall be secured prior to construction. Any damaged drainage tiles shall be repaired at the expense of the Petitioner and in a manner satisfactory to the Water Resources Division Manager.

5. A detailed Landscape Plan illustrating compliance with required landscape screening standards and Illinois Department of Natural Resources Pollinator Scorecard Standards and land management practices shall be approved by the Zoning Enforcement Officer prior to issuance of construction/building permit.

6. Recommendations made by the Illinois Department of Natural Resources in their February 20, 2025 letter to the applicants, with regard to protected resources in the vicinity of the project location, shall be followed.

7. Fencing shall be provided in compliance with the National Electrical Code, as applicable, and shall be of a woven wire agricultural style, containing a 6-inch gap along the bottom to prevent the restriction of wildlife movement. The use of barbed wire is prohibited. Setting fence posts in concrete is prohibited except for gate posts and where otherwise required for stability.

8. All requirements of McHenry County Unified Development Ordinance §16.56.030.PP (as amended, subject to State of Illinois Public Act 102-1123 and Public Act 103-0580) shall be met or exceeded unless specifically amended by this Conditional Use Permit.

9. All other federal, state, and local laws shall be met.

16.56.030 Principal Use Standards

PP. **COMMERCIAL SOLAR ENERGY FACILITY**. Conditional use permits for a COMMERCIAL SOLAR ENERGY FACILITY shall have no time limit, unless the use is abandoned as specified in subsection PP.4. below (COMMERCIAL SOLAR ENERGY FACILITY: Abandonment), or the permit is revoked in accordance with § 16.20.040I. (Revocation of Conditional Use Permits).

1. Application.

a. A threatened and endangered species consultation (EcoCAT) from the Illinois Department of Natural Resources is required at the time of conditional use permit application for any site that is five (5) acres or greater in size and currently in agricultural use or undeveloped.

b. A site plan shall be provided showing all improvements, including structures, fencing, power lines (above and below ground), lighting, and landscaping, at a detail sufficient to understand the location, height, appearance, and area.

c. All other application submittal requirements outlined in the *Planning and Development Department Zoning Application Packet* as published on the McHenry County Website.

2. Site design.

a. Solar panels, structures, and electrical equipment, excluding fences and power lines for interconnection, shall be erected no less than fifty (50) feet from any lot line and no less than one hundred fifty (150) feet from any residence, other than a residence on the same ownership parcel.

b. No structures, excluding power lines for interconnection, may exceed twenty (20) feet in height. Power lines shall be placed underground to the maximum extent possible.

c. Lighting must comply with § 16.60.020 (Exterior Lighting).

d. Solar panels shall have a surface that minimizes glare and shall comply with § 16.60.040D. (Lighting and Glare).

e. The facility shall be situated as to minimize impacts to woodlands, savannas, wetlands, drainage tiles, and encroachment into flood plains. All site development shall comply with the Stormwater Management Ordinance. Any damaged drainage tiles shall be repaired.

f. In order prevent erosion, manage run-off, and provide ecological benefit, the facility shall be planted with “low-profile” native prairie species, using a mix appropriate for the region and soil conditions per Illinois Department of Natural Resources (IDNR) standards, as amended from time to time.

g. Fencing shall be provided in compliance with the National Electrical Code, as applicable. The use of barbed wire must comply with § 16.56.050H.1.c. of this Ordinance.

h. Any part of the facility that is within five hundred (500) feet of a NONPARTICIPATING RESIDENCE, or road right-of-way, shall be landscaped with an arrangement of native shrubs, subject to approval by the County Board, unless the facility is screened from view by existing vegetation.

i. Prior to building permit issuance, the operator shall prepare a landscape monitoring and maintenance plan to ensure the establishment and continued maintenance of the native prairie species, all installed landscape screening, and all existing vegetation that provides required landscape screening.

j. Prior to scheduled public hearing, the operator shall enter into an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture (IDOA), as required by that department.

k. Prior to building permit issuance, the operator shall provide an executed road use agreement between the Applicant and the appropriate governing road and highway jurisdictions or the Illinois Department of Transportation (IDOT), showing approved entrances.

3. Safety.

a. Prior to construction, the operator shall prepare an emergency management plan acceptable to the County and the local fire district and shall be responsible for training of emergency personnel, as needed.

b. A sign shall be posted providing the name of the operator and a phone number to be used in case of an on-site emergency.

c. Access shall be granted, provided appropriate advance notice, for periodic inspection of the site by the County or the local fire district.

d. Damaged solar panels shall be removed, repaired, or replaced within sixty (60) days of the damage. The ground shall remain free of debris from damaged solar panels at all times.

4. Abandonment.

a. The COMMERCIAL SOLAR ENERGY FACILITY shall be considered abandoned if the operator fails to pay rent as specified in the Agricultural Impact Mitigation Agreement, or it ceases to generate electricity for a period of twelve (12) consecutive months. Reports of electrical power production shall be provided to the County upon request. An abandoned COMMERCIAL SOLAR ENERGY FACILITY must be decommissioned and removed within twelve (12) months from the time it is deemed abandoned. The operator may appeal in writing to the Zoning Enforcement Officer for an extension of time in order to remove the facility or to bring the solar farm back into operation.

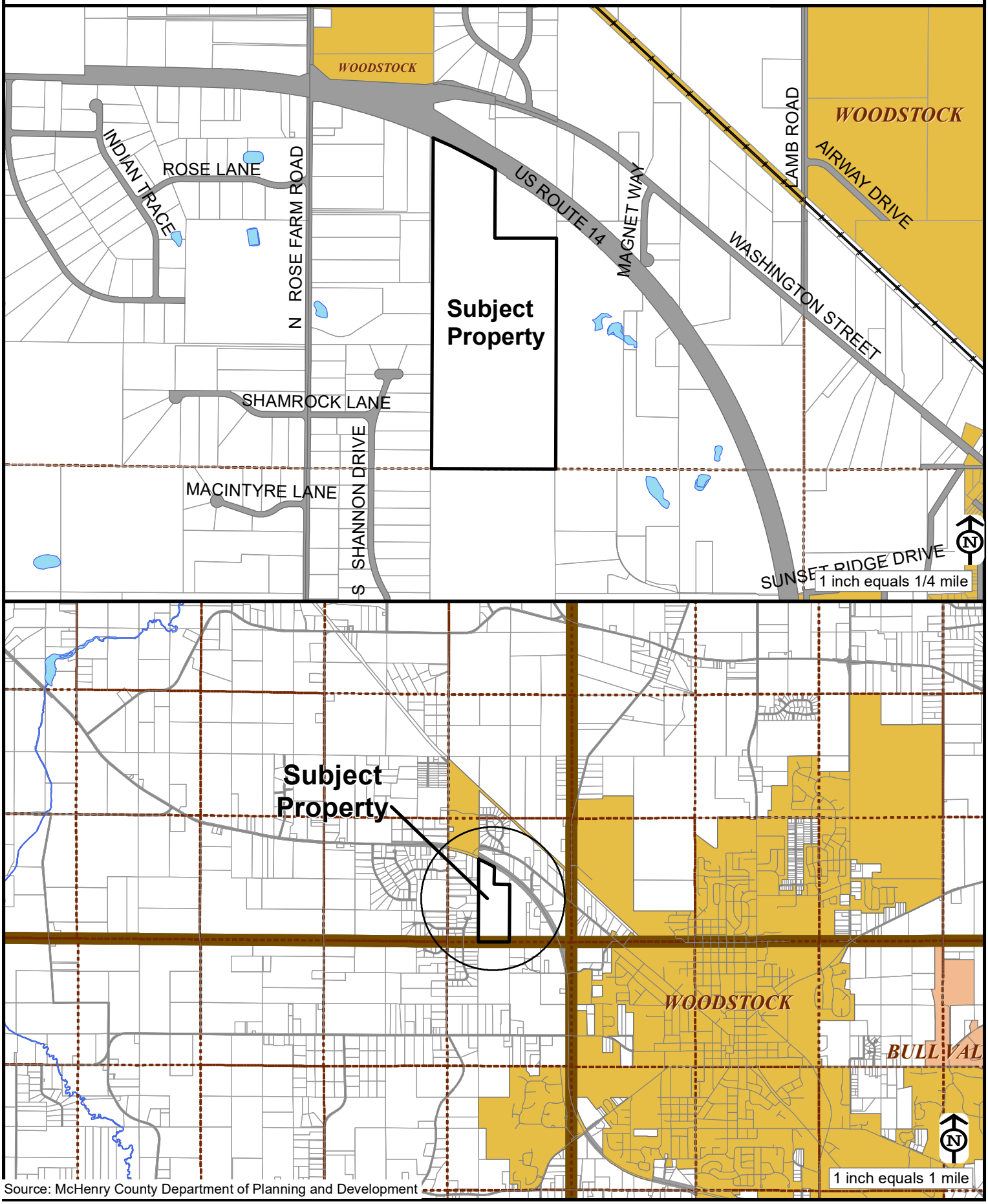
5. Decommissioning. Decommissioning and removal of the COMMERCIAL SOLAR ENERGY FACILITY shall be the responsibility of the operator upon abandonment or revocation of the conditional use permit. All operators shall comply with the following:

a. Prior to building permit issuance, the operator shall prepare a decommissioning plan which shows the final site conditions after the COMMERCIAL SOLAR ENERGY FACILITY has been removed from the property. Decommissioning plans shall require removal of all solar panels, electrical equipment, poles, piles, foundations, and conduits (above and below ground). Access roads, fencing, groundcover, and landscaping may remain only by agreement of property owner.

b. Prior to building permit issuance, the operator shall submit an engineer's estimate of cost for decommissioning the facility and restoring the site in accordance with the approved decommissioning plan. Upon review and approval by the Zoning Enforcement Officer of the estimate, the operator shall obtain a bond, letter of credit, or other form of surety acceptable to the County to be held by the Department of Planning and Development in the amount of one hundred percent (100%) of the estimate. Provision of this financial assurance shall be phased in over the first eleven (11) years of the project's operation or as otherwise provided in accordance with the executed Agricultural Impact Mitigation Agreement.

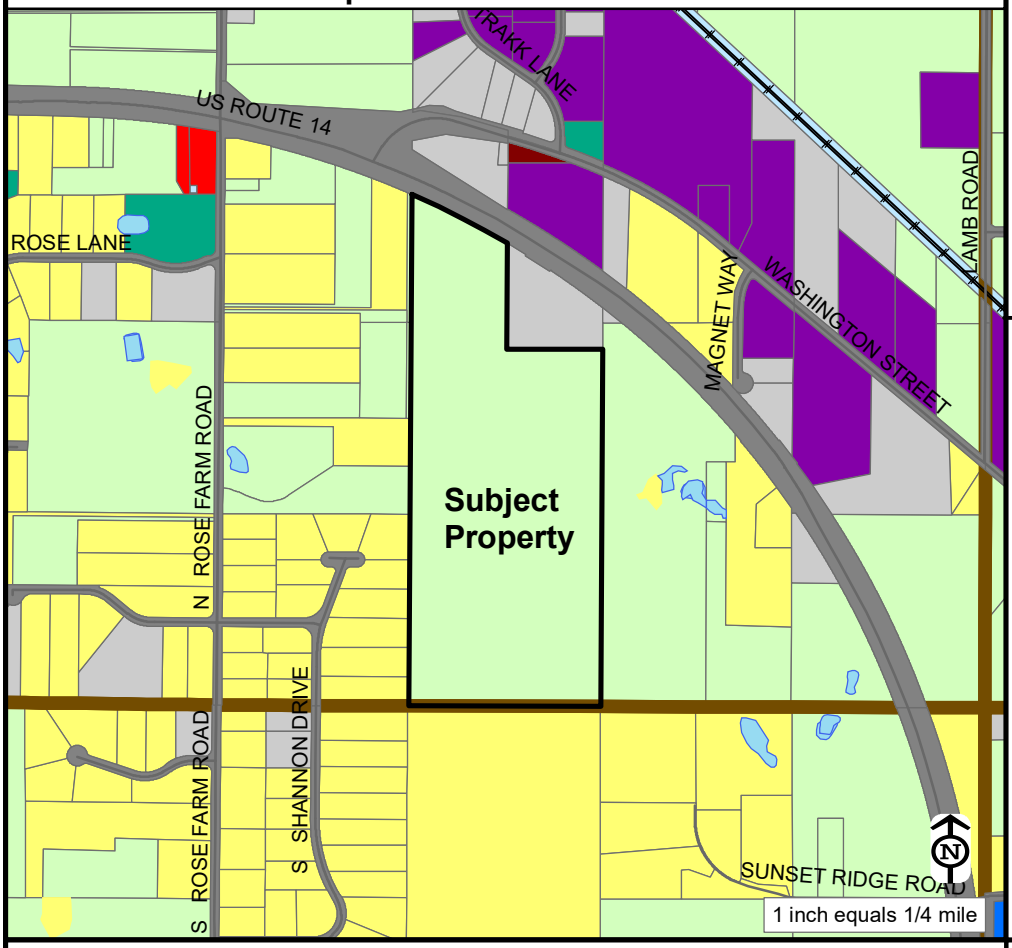
c. During the operation of the facility, a new engineer's estimate of cost for decommissioning shall be submitted every ten (10) years to the Department of Planning and Development. Upon approval of the estimated costs by the Zoning Enforcement Officer, a revised surety shall be provided to the Department of Planning and Development in the amount of one hundred percent (100%) of the new estimate.

Location Map | **US Highway 14, Woodstock, Illinois** | **Hartland Township**



Source: McHenry County Department of Planning and Development

Current Land Use Map



Current Land Use

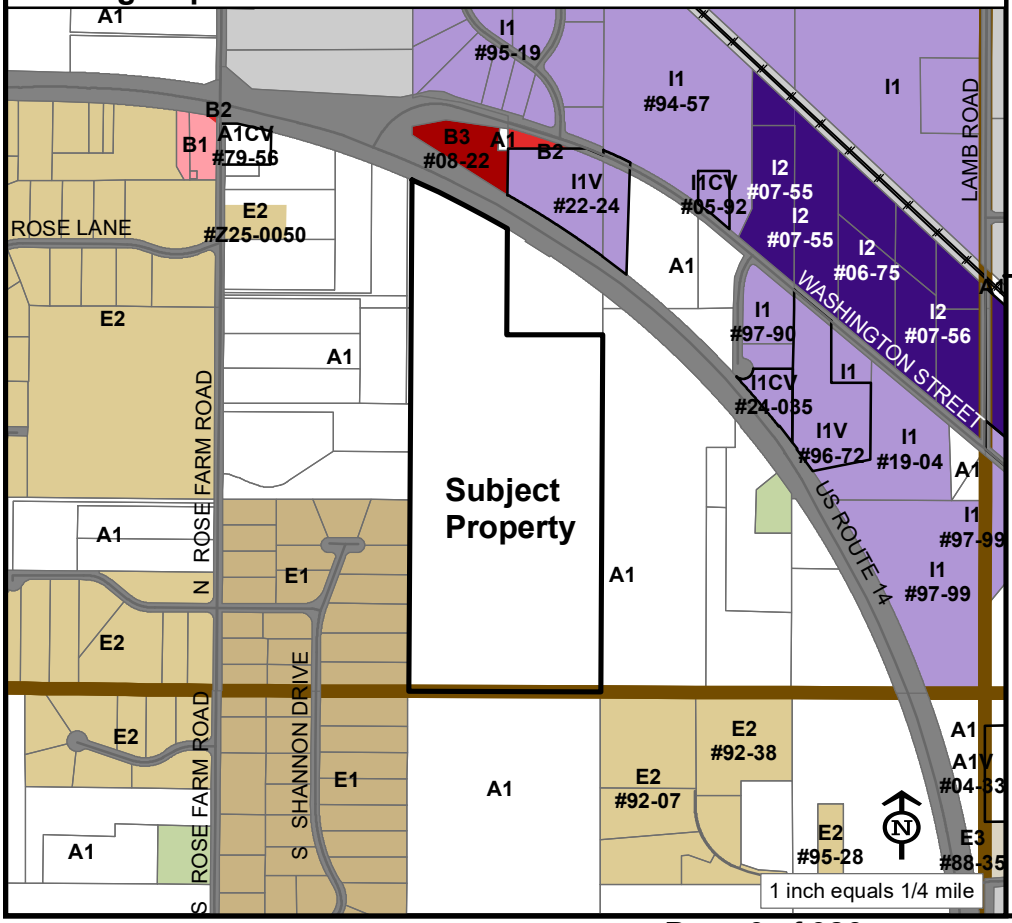
Agriculture

Adjacent Land Use(s)

North: *Vacant/Industrial*
South: *Single-Family Residential*
East: *Agriculture*
West: *Agriculture/Single-Family Residential*

- Agriculture
- MCCD Agriculture
- Single-Family Residential
- Multi-Family Residential
- Open Space
- Golf Course
- Commercial
- Office
- Industrial
- Mixed Use
- Earth Extraction
- Vacant
- Government / Institutional
- Transportation, Communication, Utilities
- Under Review

Zoning Map



Current Zoning

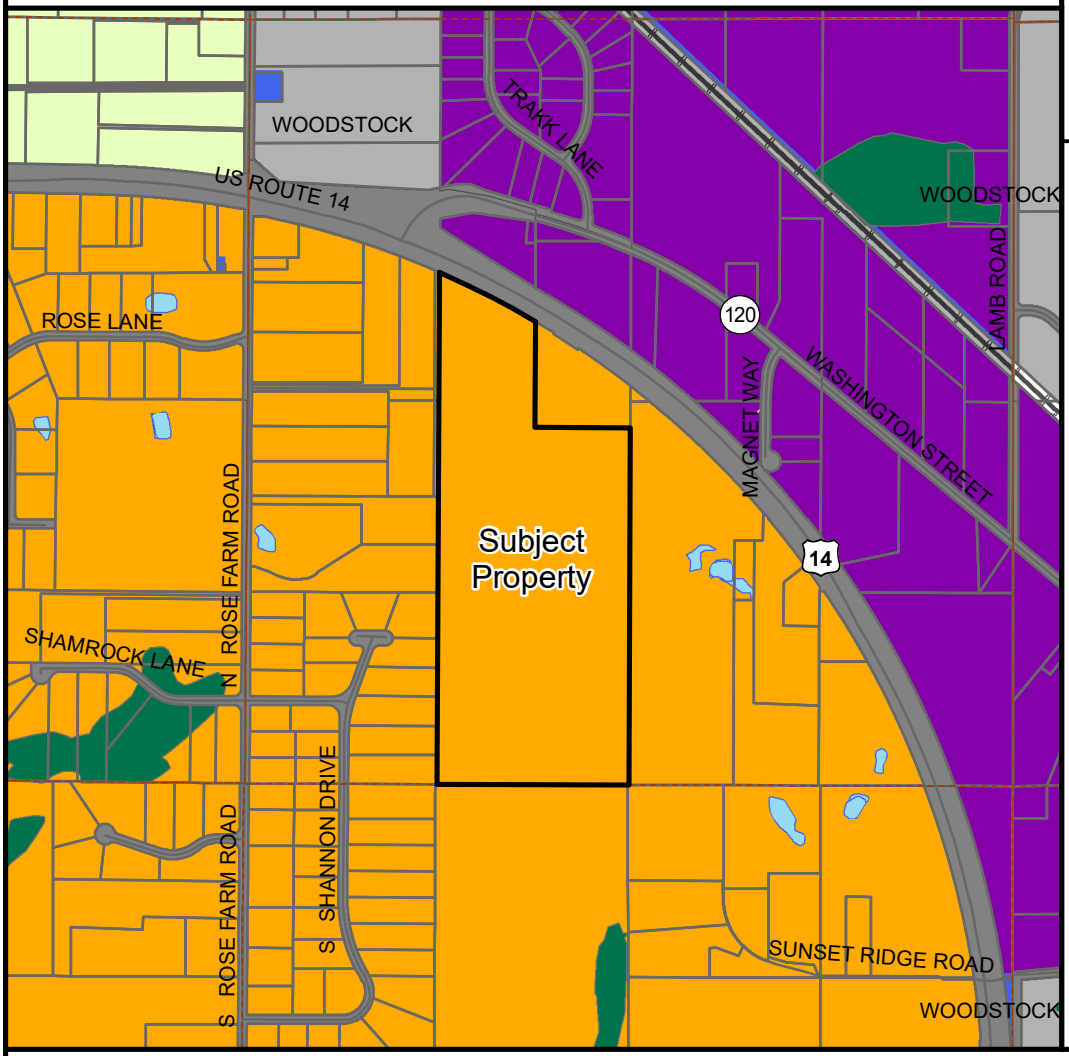
A-1 Agriculture

Adjacent Zoning

North: B-3 Business/I-1V Industrial
South: A-1 Agriculture
East: A-1 Agriculture
West: A-1 Agriculture/E-1 Estate

- A-1 Agriculture
- A-2 Agriculture
- E-5 Estate
- E-3 Estate
- E-2 Estate
- E-1 Estate
- R-1 Single-Family Residential
- R-2 Two-Family Residential
- R-3 Multiple-Family Residential
- B-1 Neighborhood Business
- B-2 Neighborhood Business
- B-3 General Business
- O Office / Research
- I-1 Light Industrial
- I-2 Heavy Industrial
- PD Planned Development
- C Conditional Use
- V Variation
- Incorporated

McHenry County 2030 Comprehensive Plan Future Land Use Map



Future Land Use Map Designation

Residential

- Agricultural
- Open Space
- Environmentally Sensitive Area
- Estate
- Isolated Estate
- Residential
- Isolated Residential
- Retail
- Mixed Use
- Office, Research, Industrial
- Gov't, Institutional, Utilities
- TOD Existing Rail Station
- TOD Future Rail Station
- Active Earth Extraction Site
- Municipality

Scale: 1 inch = 1/4 mile

Municipal / Township Plan Designations

Hartland Township: Agriculture

Woodstock: Neighborhood Development

McHenry County 2030 Comprehensive Plan — Text Analysis

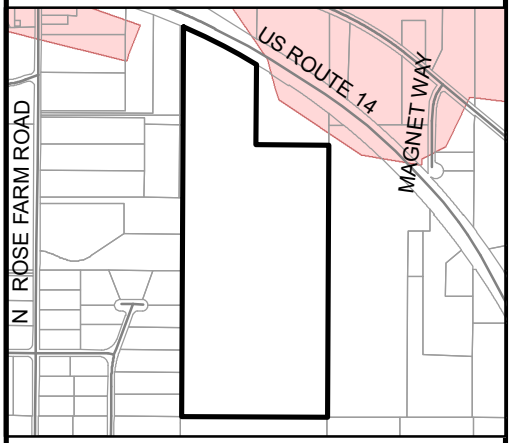
Land Use

Residential includes existing and proposed areas for single-family and multifamily residential uses at gross densities of less than one acre per dwelling unit. Within the Residential district, development densities should consider nearby land uses and zoning, and the availability of transportation, infrastructure, water supply, and other public services, environmental limitations, and other factors required by County ordinances, state statutes, and case law.

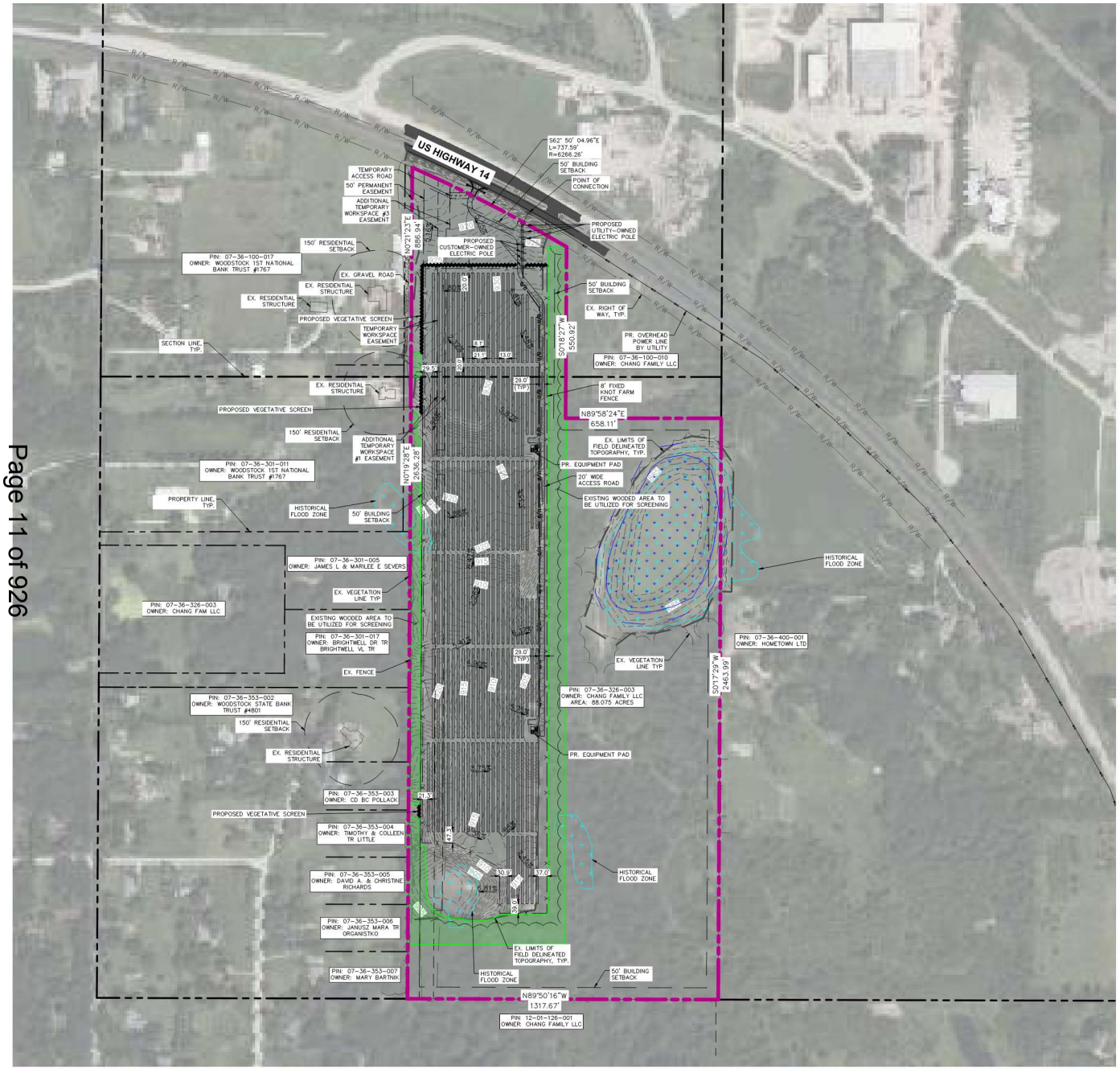
Sensitive Aquifer Recharge Areas

The site is not located in a zone with elevated contamination potential.

Sensitive Aquifer Recharge Areas (SARA)



Sensitive Recharge Area



LEGEND

- PROJECT BOUNDARY
- PROPERTY LINE
- PROPERTY SETBACK
- ROAD CENTERLINE
- EX OHE — EX OHE — EX OVERHEAD ELECTRIC
- R/W — R/W — EX RIGHT-OF-WAY
- EXISTING RESIDENCE/STRUCTURE
- EX. WETLAND AREA
- EX. WETLAND BUFFER
- EX. TREELINE
- EX. EXISTING TREELINE
- X — X — X — EX. FENCE
- EX. UTILITY EASEMENT
- EX. HISTORICAL FLOOD ZONE
- EX. WOODED AREA TO BE UTILIZED FOR SCREENING
- X — X — X — PR. SECURITY FENCE
- PR. TREELINE
- PR. UTILITY POLE
- PR. ELECTRICAL EQUIPMENT AREA
- PR. SOLAR ARRAY
- OHW — PR. OVERHEAD ELECTRIC
- U/G — U/G — U/G — PR. UNDERGROUND ELECTRIC (AC)
- PR. SITE ACCESS
- PR. SITE ACCESS SHOULDER
- PR. ACCESS ROAD
- PR. GRADING LIMITS
- PR. CULVERT OUTLET
- PR. CULVERT
- PR. VEGETATIVE SCREENING

NOTES

1. SETBACKS PER MCHENRY COUNTY UNIFIED DEVELOPMENT ORDINANCE. PRINCIPAL USE STANDARDS OUTLINES IN §16.56.030.PP (ACCESSED ON 06/18/2025):
   - 1.1. OCCUPIED COMMUNITY BUILDINGS AND DWELLINGS ON NON-PARTICIPATING PROPERTIES: 150'
   - 1.2. BOUNDARY LINES OF PARTICIPATING PROPERTY: NONE
   - 1.3. PUBLIC ROAD RIGHTS OF WAY: 50'
   - 1.4. BOUNDARY LINES OF NON-PARTICPATING PROPERTY: 50'
2. ALL EXISTING PARCEL INFORMATION WAS OBTAINED FROM THE ALTA/NSPS LAND TITLE SURVEY COMPLETED BY COMPASS SURVEYING LTD, DATED 05/05/2025.
3. PER THE UNIVERSITY OF ILLINOIS WATER GIS MAP ACCESSED ON 07/02/2025, ONE WATER WELL EXISTS WITHIN THE SUBJECT PARCEL. WELL API: 12113207300. KIMLEY-HORN SUBMITTED A FREEDOM OF INFORMATION ACT REQUEST ON 07/03/2025 WHICH TURNED UP NO EVIDENCE OF WELLS ON THE SUBJECT PARCEL. THE FIELD SURVEY DID NOT RETURN EVIDENCE OF THE EXISTENCE WELLS ON THE SUBJECT PARCEL. PER THE PHASE I ESA BY SCI ENGINEERING, DATED 03/13/2025, NO WELLS WERE IDENTIFIED. STATEMENTS FROM THE PARCEL LANDOWNER INCLUDED IN THE PHASE I ESA ALSO EXHIBIT NO KNOWLEDGE OF THE EXISTENCE OF SUCH WELLS. IT IS ASSUMED THAT THERE ARE NO WATER WELLS ON THE SUBJECT PARCEL.
4. PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), NO FEMA FLOODPLAINS EXIST WITHIN THE SUBJECT PARCEL. THE SITE RESIDES ON FEMA PANEL 17111C0178J, DATED 11/16/2006.
5. PER THE DELINEATED WETLAND REPORT BY SCI DATED 07/10/2025, THERE ARE WETLAND AND/OR WATERBODY FEATURES WITHIN THE SITE. THE PROPOSED IMPROVEMENTS WILL NOT DISTURB ANY DELINEATED WETLANDS OR WATERBODIES.
6. ALL TOPOGRAPHIC INFORMATION WITHIN THE PROJECT BOUNDARY LINE WERE OBTAINED FROM THE ALTA/NSPS LAND TITLE SURVEY BY COMPASS SURVEYING LTD, DATED 05/05/2025.
7. HISTORICAL FLOOD ZONE DATA WAS PROVIDED BY THE MCHENRY COUNTY GIS DEPARTMENT ON 08/06/2025.

SITE DATA TABLE

PIN #	07-36-326-003
APPLICANT	WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
PROPERTY OWNER	CHANG FAMILY LLC
SITE ADDRESS	S OF US HIGHWAY 14, E OF NORTH ROSE FARM ROAD MCHENRY COUNTY IL, 60098
ZONING JURISDICTION	MCHENRY COUNTY
CURRENT LAND USE	AGRICULTURAL USE
PROPOSED AREA	SOLAR ENERGY FACILITY
TOTAL PARCEL AREA	88.075 ± AC
PRELIMINARY DISTURBED AREA	30.92 ± AC (AREA WITHIN FENCE)
PRELIMINARY SOLAR AREA	25.13 ± AC
PROPERTY LINE SETBACK	50' FRONT, 50' REAR, 50' SIDE, 50' R-O-W
OCCUPIED RESIDENCE BUFFER	150'
TOTAL POWER OUTPUT (AC)	5.00 MW
GROUND COVER RATIO (GCR)	38.30%

*THE PURPOSE OF THIS PLAN IS FOR CONDITIONAL USE PERMIT REVIEW AND APPROVAL BY MCHENRY COUNTY.

NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2988

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD SUITE 200
DEERFIELD, ILLINOIS 60015-5207
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE: 184.002012-0006 062.045338

No	REVISIONS	DATE

KHA PROJECT 119938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NBW
CHECKED BY AMC

SITE LAYOUT

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-200

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Drawing name: K:\MSN_Energy\119938000 - ECA US Hwy 14 Woodstock, IL\CAD\Plansheets\CUP Plan Set\C-200 SITE LAYOUT PLAN.dwg C-200 SITE LAYOUT Aug 08, 2025 9:41am by Ethan Horst

McHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

NATURAL RESOURCES INFORMATION REPORT

25-063-4724

August 5, 2025

This report has been prepared for:
Woodstock Community Energy Initiative LLC

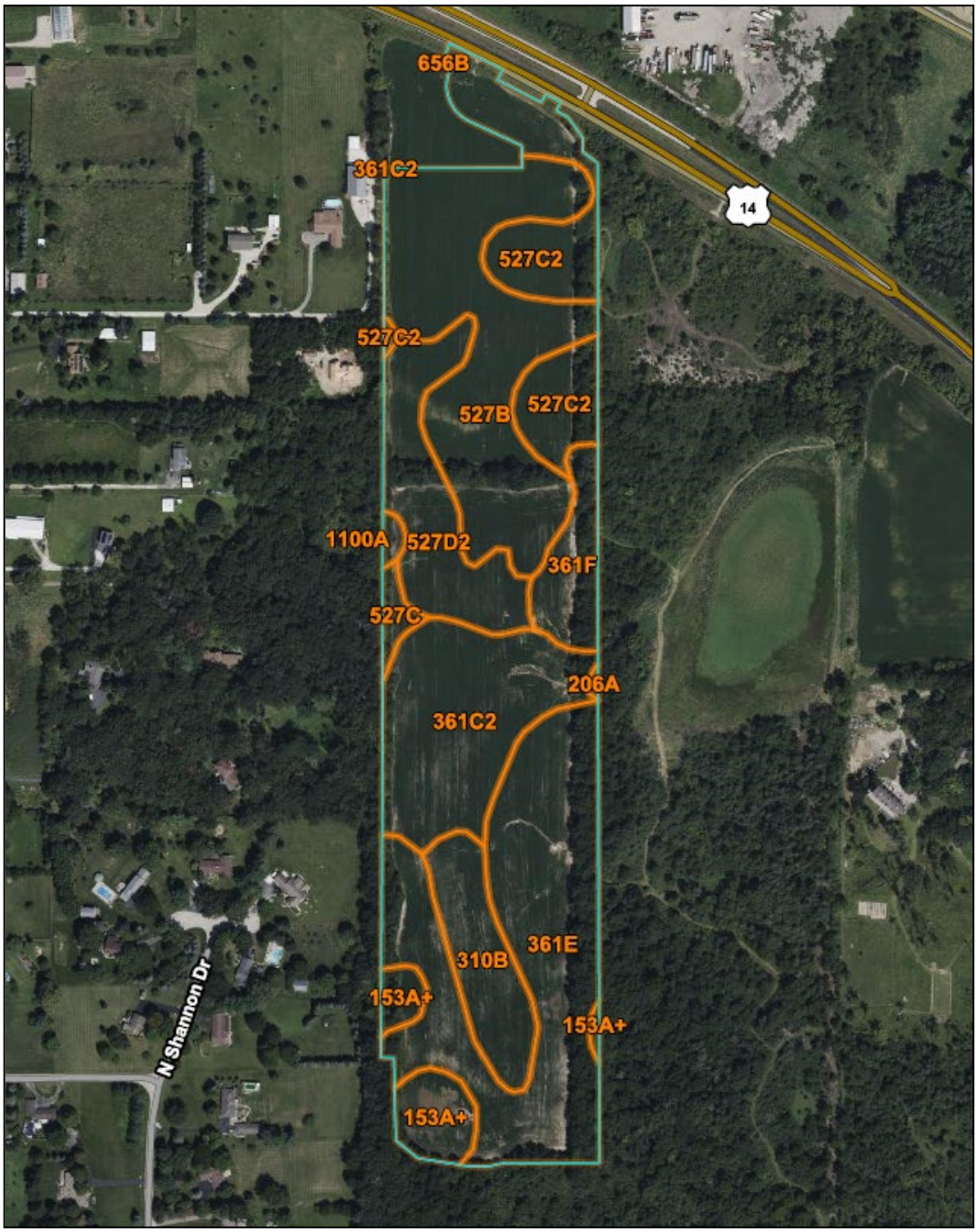
Contact Person:
Hobie Anderson

PREPARED BY:
McHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT
1648 S. EASTWOOD DR.
WOODSTOCK, IL 60098
PHONE: (815) 338-0444
www.mchenryswcd.org

The McHenry-Lake County Soil & Water Conservation District is an equal opportunity provider and employer.

EXECUTIVE SUMMARY OF NRI REPORT #25-063-4724

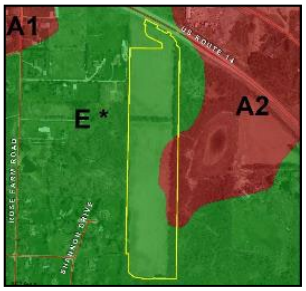
It is the opinion of the McHenry-Lake County Soil and Water Conservation District Board of Directors that this report as summarized on these pages are pertinent to the requested zoning change.



Picture 1: Looking southeast from the northwest property corner.

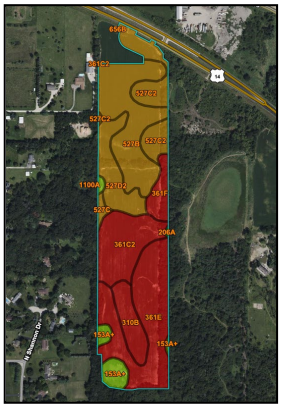
Picture 2: Looking southwest from eastern boundary (just south of the wooded field border located within the northern 1/3 of the parcel).

Groundwater Contamination Potential and Recharge Areas:



Aquifer Sensitivity Map (*This is the area beneath the soil profile down to bedrock)
The Geologic features map indicates that the parcel is comprised of 4.22 acres of A2 and 36.46 acres of E* geologic limitations. A2 has a high aquifer contamination potential and E* has a low aquifer contamination potential.

Sensitive Aquifer Recharge Areas (Includes the soil profile and underlying geology).
The Sensitive Aquifer Recharge Map indicates the parcel is not within an area designated as Sensitive Aquifer Recharge.

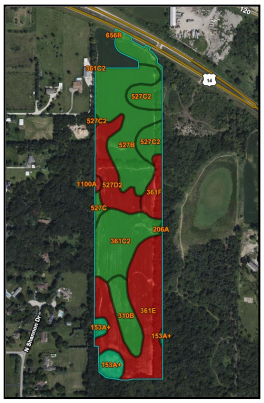


Soil Leachability Map (This is only the soil profile within the parcel from the surface down to approx. 5 feet).
The Soil Leachability Index indicates 20.7 acres or 50.9% of the parcel contains high leachable soils, for fertilizers, on the parcel (identified in red).

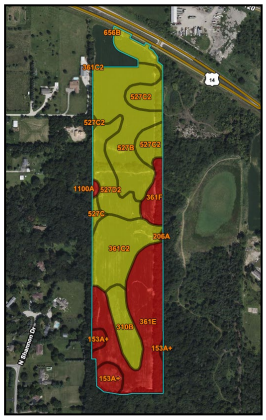
Soil Permeability (This is only the soil profile within the parcel from the surface down to approx. 5 feet. Soil permeability is a reflection of the speed in which water (with or without pollutants) can move through the soil profile.)
The USDA-NRCS Soil Survey Map of the area indicates there are no highly permeable soils on the parcel.

Soil Limitations (This evaluates the parcel from the surface down to approximately 5 feet.):

Erosion Ratings
The NRCS Soils Survey indicates 25.4 acres or 66.4% of the parcel contains highly erodible soils.



Prime Farmland Soils
The Natural Resources Conservation Service (NRCS) Soil Survey indicates 22.8 acres or 55.7% of the parcel is comprised of prime farmland soils and 1.7 acres or 4.2% of the parcel is comprised of prime farmland if drained soils (identified in shades of blue and green).



Ground-Based Solar Arrays
The Natural Resources Conservation Service (NRCS) Soil Survey indicates 14.1 acres or 34.6% of the parcel has very limited soils for ground-based solar arrays (identified in red).

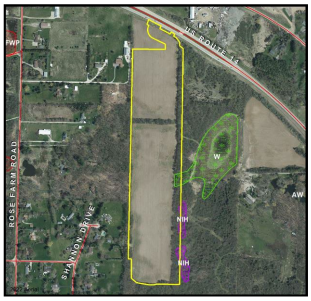
Hydric Soils
The NRCS Soil Survey indicates 1.9 acres or 4.6% of the parcel contains hydric soils (identified in red and orange).

Floodplain Information:

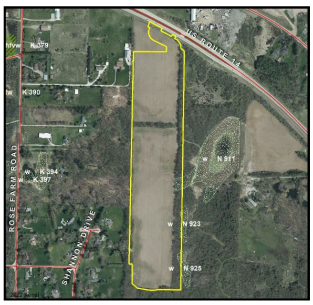
The Flood Insurance Rate Map
Indicates the parcel is outside of the 100-year floodplain.

Flood of Record Map (Hydrologic Atlas)
The Flood of Record Map for this area indicates the site has not previously flooded.

Wetland Information:



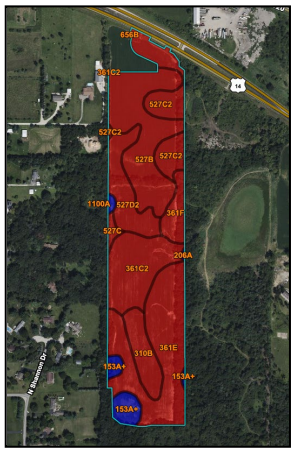
USDA-NRCS Wetland Inventory
The NRCS Wetlands Inventory identifies 0.25 acres of wetland and 0.12 acres of Non-Inventoried Hydric Soil on the parcel.



ADID Wetland Inventory
The ADID Wetland Study identifies 0.25 acres of wetland N911, 0.08 acres of wetland N923, and 0.11 acres of N925 on the parcel.

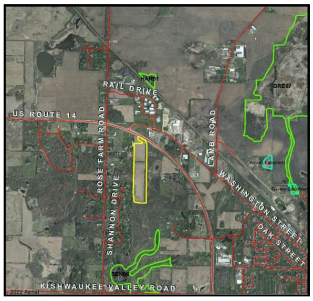
*The Prospecting Site Plan, prepared by Kimley Horn, dated 7/9/2025, indicates the wetland areas will be avoided.

Flooding Frequency
The NRCS Soil Survey indicates that flooding is not probable on the parcel. The chance of flooding is nearly 0% in any year. Flooding occurs less than once in 500 years.



Ponding Frequency
The NRCS Soil Survey indicates that frequent ponding occurs on 1.9 acres or 4.6% of the parcel. Frequent means that ponding occurs, on average, more than once in 2 years. The chance of ponding is more than 50 % in any year (identified in blue).

Cultural Resources: Office maps indicate there are no known cultural/historical features within the parcel in question.



Preserved or Recognized Ecological Sites: Office maps indicate 3 McHenry County Natural Area Inventory Sites and 2 Land Conservancy of McHenry County Easements – Airway Easement and Gavers Easement, in the vicinity of the parcel.

McHenry County Natural Areas Inventory Site – Silver Creek Marsh (GRE07) contains a sedge meadow and streamside marsh threatened by siltation, an upstream impoundment, water table alteration, cattail expansion, Reed Canary Grass, and Development.

McHenry County Natural Areas Inventory Site – Rose Farm Prairie (HAR01) is comprised of mesic silt loam prairies, wet silt loam prairies, and sedge meadows that is threatened by siltation, water table alteration, and brush encroachment.

McHenry County Natural Areas Inventory Site – West Woodstock Prairie (SEN06) contains a mesic silt loam prairie, wet silt loam prairie, basin marsh, and sedge meadows threatened by water table alteration, brush encroachment and Reed Canary Grass.

Woodlands: There are existing mature trees along the eastern boundary of the parcel.

Agricultural Areas: Office Maps indicate there are no State designated agricultural areas on the parcel in question.

Land Evaluation Site Assessment (LESA)
The Land Evaluation Score for the parcel is 71.54. A Site Assessment was not completed due to the Agricultural zoning on the parcel.

Agricultural Impact Mitigation Agreement: We have received notice from the Illinois Department of Agriculture that an Agricultural Impact Mitigation Agreement has been filed.

ADDITIONAL CONCERNS

The Board recommends that areas between panels and within the buffers be planted to a native prairie mix to help increase water infiltration and reduce runoff from the site. It is recommended that a planting and maintenance plan be developed with the landowner to ensure that noxious weeds are controlled, and native plantings are properly installed and managed. The petitioner should refer to the planting requirements of the Illinois Department of Natural Resources and McHenry County Department of Planning & Development.

NATURAL RESOURCE INFORMATION REPORT (NRI)

NRI Report Number	25-063-4724
Applicant's Name	Woodstock Community Energy Initiative LLC
Size of Parcel	40.72 acres
Zoning Change	Solar Facility
Parcel Index Number(s)	07-36-326-003
Common Location	Undefined
Contact Person	Hobie Anderson

Copies of this report or notification of the proposed land-use change were provided to:	***yes***	***no***
The Applicant	x	
The Applicant's Legal Representation/Consultant		x
The Village/City/County Planning and Zoning Department or Appropriate Agency	x	

Report Prepared By: *Spring M. Duffey* Position: *Executive Director*

February 20, 2025

Michael Holm
650 Pierce Blvd
O'Fallon, IL 62269

RE: Woodstock Community Energy Initiative LLC Solar Project
Consultation Program
EcoCAT Review #2509418
McHenry County

Dear Mr. Holm:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The proposed action consists of the construction of a solar project in McHenry County.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Illinois Natural Areas Inventory (INAI)
West Woodstock Prairie INAI Site

Class 3 Groundwater
Yonder Prairie Nature Preserve Class 3 Groundwater

State Threatened or Endangered Species
Blanding's Turtles (*Emydoidea blandingii*)
Rusty-patched Bumble Bee (*Bombus affinis*)

Due to the project scope and proximity to protected resources the Department recommends the following actions be taken to avoid adversely impacting listed species in the vicinity of the project:

West Woodstock Prairie INAI Site
The Department has determined adverse impacts to this site are unlikely.

Yonder Prairie Nature Preserve Class 3 Groundwater

This project falls within the Yonder Prairie Nature Preserve Class 3 Groundwater recharge area, which protects the integrity of the Yonder Prairie Nature Preserve. The modification of groundwater quality and quantity which may affect conditions within a Nature Preserve is prohibited. The Department recommends the following to avoid and minimize impact to the Class 3 Groundwater:

- Use the lightest weight equipment possible to complete the job.
- Balloon or large tires should be used whenever possible to reduce compaction.
- Disc site upon completion to de-compact the surface after final soil is placed to ensure good infiltration.

Blanding's Turtles

EcoCAT has indicated records for the state-listed Blanding's Turtle in vicinity of the project area. The Department recommends:

- Educate personnel working on site about the Blanding's Turtle. Post photos of juvenile and adult Blanding's Turtles at a central location. State-listed species may not be handled without the appropriate permits pursuant to the *Illinois Endangered Species Protection Act*.
- If Blanding's turtles are encountered, crews should stop work immediately, allow the turtle to move out of the way and contact IDNR at (217) 785-5500.

Rusty-Patched Bumble Bee

The Department has determined adverse impacts to this species are unlikely.

Given the above recommendations are adopted the Department has determined that impacts to these protected resources are unlikely. The Department has determined impacts to other protected resources in the vicinity of the project location are also unlikely.

In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

This letter does not serve as permission to take any listed or endangered species. As a reminder, no take of an endangered species is permitted without an Incidental Take Authorization or the required permits. Anyone who takes a listed or endangered species without an Incidental Take Authorization or required permit may be subject to criminal and/or civil penalties pursuant to the *Illinois Endangered Species Act*, the *Fish and Aquatic Life Act*, the *Wildlife Code* and other applicable authority.

The Department also offers the following conservation measures be considered to help protect native wildlife and enhance natural areas in the project vicinity:

- The Department strongly recommends that the project proponent establish pollinator-friendly habitat as groundcover wherever feasible. Solar Site Pollinator Establishment Guidelines can be found here: https://dnr.illinois.gov/conservation/pollinatorscorecard.html
- The site should be de-compacted before planting.
- Long term management of the site should be planned for prior to development to ensure successful native pollinator habitat establishment and prevent the spread of invasive species throughout the lifetime of this project. An experienced ecological management consultant should be hired to assist with long-term management.
- Required fencing, excluding areas near or adjacent to public access areas, should have a 6-inch gap along the bottom to prevent the restriction of wildlife movement. Woven wire or a suitable habitat wildlife friendly fence should be used. Barbed wire should be avoided.
- If tree clearing is necessary, the Department recommends removing trees between November 1st and March 31st to avoid impacts to the state-listed bats and birds.
- Any required night lighting should follow International Dark-Sky Association's (IDA) Five Principles for Responsible Outdoor Lighting to minimize the effect of light pollution on wildlife: Five Principles for Responsible Outdoor Lighting | DarkSky International

Please contact Isabella Newingham (Isabella.newingham@illinois.gov) with any questions about this review.
Sincerely,

Bradley Hayes

Bradley Hayes
Manager, Impact Assessment Section
Division of Real Estate Services and Consultation
Office of Realty & Capital Planning
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
Bradley.Hayes@Illinois.gov
Phone: (217) 782-0031

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: SCI ENGINEERING, INC.
Contact: Michael Holm
Address: 650 Pierce Blvd
O'Fallon, IL 62269

IDNR Project Number: 2509418
Date: 02/11/2025

Project: Woodstock Community Energy Initiative LLC Solar Project
Address: South of Highway 14 and north of Kishwaukee Valley Road, Woodstock

Description: Proposed construction of a new solar development with associated access roads and infrastructure.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

West Woodstock Prairie INAI Site
Blanding's Turtle *(Emydoidea blandingii)*
Rusty Patched Bumble Bee *(Bombus affinis)*

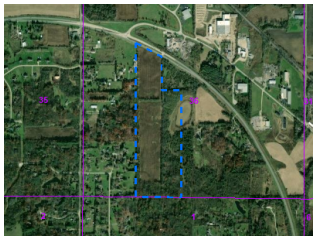
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: McHenry

Township, Range, Section:
45N, 6E, 36



IL Department of Natural Resources Contact
Isabella Newingham
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Division of Water Pollution Control
PO Box 19276
Springfield, Illinois 62794 -9276

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

1.0 INTRODUCTION

1.1 PROJECT OVERVIEW

Woodstock Community Energy Initiative LLC, a wholly-owned entity of ECA Solar (collectively, the "Applicant" or "Woodstock Community Energy Initiative LLC" or "ECA Solar"), hereby submits this application for a Conditional Use Permit (Application) to construct, operate, and maintain the Woodstock Community Energy Initiative LLC solar project, a proposed up-to 5 MW_{AC} aggregate commercial solar energy facility (Project) on approximately 30.90 acres (Project Area) of the 88.075 acres (Total Parcel Area), which is located south of US Highway 14, and approximately 350 yards east of North Rose Farm Road, 15015 US-14, Woodstock, IL 60098. As shown on the Conditional Use Permit Plan Set, the Project's site layout meets the required minimum road right-of-way and property line setbacks outlined in Title 16.56.030.PP, in the McHenry County Unified Development Ordinance.

The Woodstock Community Energy Initiative's interest in the property is defined by a lease agreement with Chang Family LLC, who currently own the subject parcel (07-36-326-003) that will host the Project's infrastructure. The Project's current land usage can be characterized as cultivated cropland. The Project has one proposed access point at an existing drive that connects to US Highway 14. The Project parcels are not within the limits of the City of Woodstock; thus, the Project will fall under the jurisdiction of McHenry County. The applicant has met with McHenry County to solicit feedback on the Project's design. This feedback has been taken into consideration and is reflected in the Project's design.

The Project will deliver power to the electrical grid through one point of interconnection via the Commonwealth Edison Company (ComEd) power lines on the south side of US Highway 14. The Project has the capacity to generate up to 5 MW_{AC} of electricity, which could power up to approximately 1,100 McHenry County homes.

The Applicant has considered the McHenry County Conditional Use Permit process to ensure the Project meets the applicable requirements and submits this Application to obtain a Conditional Use Permit (CUP) from McHenry County. Care has been taken to ensure the Project will be in full compliance with all aspects of the State of Illinois' siting bill for solar, Public Act 102-1123.

1.2 ABOUT ECA SOLAR

ECA Solar was founded in 2014 and is 100% employee-owned. ECA Solar develops, engineers, installs, and operates large-scale solar facilities across the US. ECA Solar takes an institutional approach to the solar energy industry. Our goal is to deploy the highest quality of solar power projects to diversify the electric grid, while remaining risk-averse and prioritizing safety. We value diversity and creativity to achieve the common goal of making solar energy more accessible to everyone. ECA Solar has over 50 projects in operation or construction and over 100 projects in development throughout the US.

February 20, 2025

Michael Holm
650 Pierce Blvd
O'Fallon, IL 62269

RE: Woodstock Community Energy Initiative LLC Solar Project
Consultation Program
EcoCAT Review #2509418
McHenry County

Dear Mr. Holm:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The proposed action consists of the construction of a solar project in McHenry County.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Illinois Natural Areas Inventory (INAI)
West Woodstock Prairie INAI Site

Class 3 Groundwater
Yonder Prairie Nature Preserve Class 3 Groundwater

State Threatened or Endangered Species
Blanding's Turtles (*Emydoidea blandingii*)
Rusty-patched Bumble Bee (*Bombus affinis*)

Due to the project scope and proximity to protected resources the Department recommends the following actions be taken to avoid adversely impacting listed species in the vicinity of the project:

West Woodstock Prairie INAI Site
The Department has determined adverse impacts to this site are unlikely.

Yonder Prairie Nature Preserve Class 3 Groundwater

This project falls within the Yonder Prairie Nature Preserve Class 3 Groundwater recharge area, which protects the integrity of the Yonder Prairie Nature Preserve. The modification of groundwater quality and quantity which may affect conditions within a Nature Preserve is prohibited. The Department recommends the following to avoid and minimize impact to the Class 3 Groundwater:

- Use the lightest weight equipment possible to complete the job.
- Balloon or large tires should be used whenever possible to reduce compaction.
- Disc site upon completion to de-compact the surface after final soil is placed to ensure good infiltration.

Blanding's Turtles

EcoCAT has indicated records for the state-listed Blanding's Turtle in vicinity of the project area. The Department recommends:

- Educate personnel working on site about the Blanding's Turtle. Post photos of juvenile and adult Blanding's Turtles at a central location. State-listed species may not be handled without the appropriate permits pursuant to the *Illinois Endangered Species Protection Act*.
- If Blanding's turtles are encountered, crews should stop work immediately, allow the turtle to move out of the way and contact IDNR at (217) 785-5500.

Rusty-Patched Bumble Bee

The Department has determined adverse impacts to this species are unlikely.

Given the above recommendations are adopted the Department has determined that impacts to these protected resources are unlikely. The Department has determined impacts to other protected resources in the vicinity of the project location are also unlikely.

In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

This letter does not serve as permission to take any listed or endangered species. As a reminder, no take of an endangered species is permitted without an Incidental Take Authorization or the required permits. Anyone who takes a listed or endangered species without an Incidental Take Authorization or required permit may be subject to criminal and/or civil penalties pursuant to the *Illinois Endangered Species Act*, the *Fish and Aquatic Life Act*, the *Wildlife Code* and other applicable authority.

The Department also offers the following conservation measures be considered to help protect native wildlife and enhance natural areas in the project vicinity:

- The Department strongly recommends that the project proponent establish pollinator-friendly habitat as groundcover wherever feasible. Solar Site Pollinator Establishment Guidelines can be found here: https://dnr.illinois.gov/conservation/pollinatorscorecard.html
- The site should be de-compacted before planting.
- Long term management of the site should be planned for prior to development to ensure successful native pollinator habitat establishment and prevent the spread of invasive species throughout the lifetime of this project. An experienced ecological management consultant should be hired to assist with long-term management.
- Required fencing, excluding areas near or adjacent to public access areas, should have a 6-inch gap along the bottom to prevent the restriction of wildlife movement. Woven wire or a suitable habitat wildlife friendly fence should be used. Barbed wire should be avoided.
- If tree clearing is necessary, the Department recommends removing trees between November 1st and March 31st to avoid impacts to the state-listed bats and birds.
- Any required night lighting should follow International Dark-Sky Association's (IDA) Five Principles for Responsible Outdoor Lighting to minimize the effect of light pollution on wildlife: Five Principles for Responsible Outdoor Lighting | DarkSky International

Please contact Isabella Newingham (Isabella.newingham@illinois.gov) with any questions about this review.
Sincerely,

Bradley Hayes

Bradley Hayes
Manager, Impact Assessment Section
Division of Real Estate Services and Consultation
Office of Realty & Capital Planning
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
Bradley.Hayes@Illinois.gov
Phone: (217) 782-0031

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: SCI ENGINEERING, INC.
Contact: Michael Holm
Address: 650 Pierce Blvd
O'Fallon, IL 62269

IDNR Project Number: 2509418
Date: 02/11/2025

Project: Woodstock Community Energy Initiative LLC Solar Project
Address: South of Highway 14 and north of Kishwaukee Valley Road, Woodstock

Description: Proposed construction of a new solar development with associated access roads and infrastructure.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

West Woodstock Prairie INAI Site
Blanding's Turtle *(Emydoidea blandingii)*
Rusty Patched Bumble Bee *(Bombus affinis)*

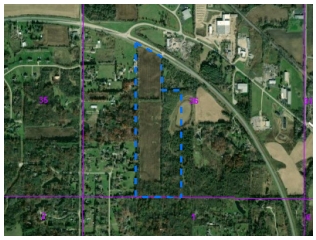
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: McHenry

Township, Range, Section:
45N, 6E, 36



IL Department of Natural Resources Contact
Isabella Newingham
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Division of Water Pollution Control
PO Box 19276
Springfield, Illinois 62794 -9276

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

Woodstock Community Energy Initiative LLC

CONDITIONAL USE PERMIT APPLICATION FOR

MCHENRY COUNTY, ILLINOIS PIN #: 07-36-326-003

JULY 2025 | VERSION 1

Prepared By: **Andrew Click**, **P.E.** of Kimley-Horn and Associates, Inc.

Ben Dykema, P.E. of ECA Solar & Woodstock Community Energy Initiative LLC

Kimley»Horn

eca solar

Contents

1.0 Introduction 4

1.1 Project Overview 4

1.2 About ECA Solar 4

2.0 Project Description 4

2.1 Interconnection Facilities 5

2.2 Project Construction 5

2.3 Health and Safety 6

2.4 Operations and Maintenance 7

3.0 Federal and State Approvals, Permits, and Agreements 7

3.1 Federal Aviation Administration (FAA) 7

3.2 Federal Emergency Management Agency (FEMA) 8

3.3 Wetland and Waterbody Delineation Report 8

3.4 U.S. Fish & Wildlife Service (USFWS) 8

3.5 Illinois Department of Natural Resources (IDNR) State Ecological Review 8

3.6 Illinois Historic Preservation Review (SHPO) 9

3.7 Illinois Environmental Protection Agency (IEPA) - SWPPP 9

3.8 Illinois Department of Agriculture (IDOA) 9

4.0 McHenry County Unified Development Ordinance and Other Local Approvals 10

4.1 Height Requirements 10

4.2 Setbacks 10

4.3 Vegetative Ground Cover 10

4.4 Security Barrier 11

4.5 Lighting 11

4.6 Decommissioning Plan 11

4.7 Avoidance and Mitigation of Damages to Public Infrastructure 11

5.0 Conclusion 12

Exhibits

EXHIBIT A: CONDITIONAL USE PERMIT APPLICATION AND CHECKLIST 13

EXHIBIT B: CONDITIONAL USE PERMIT PLAN SET 14

EXHIBIT C: PLAT OF SURVEY 15

EXHIBIT D: DECOMMISSIONING PLAN 16

EXHIBIT E: WETLAND DELINEATION REPORT 17

EXHIBIT F: STATE HISTORIC PRESERVATION OFFICE (SHPO) CONCURRENCE 18

EXHIBIT G: ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR) ECOCAT 19

EXHIBIT H: ECOSPHERE INFORMATION FOR PLANNING AND CONSULTATION (IPAC) ..20

EXHIBIT I: FEDERAL AVAIATION AGENCY (FAA) NOTICE OF CRITERIA 21

EXHIBIT J: AGRICULTURAL IMPACT MITIGATION AGREEMENT (AIMA).....22

EXHIBIT K: NRI 23

EXHIBIT L: USGS MAP 24

EXHIBIT M: FEMA MAP 25

EXHIBIT N: LEASE/PURCHASE AGREEMENT 26

EXHIBIT O: CONSENT, VERIFICATION, ACCEPTANCE OF COURT REPORTING & PUBLIC NOTICE FEES 27

EXHIBIT P: NOISE STUDY.....28

EXHIBIT Q: GLARE STUDY 29

EXHIBIT R: PRODUCT CUT SHEETS.....30

EXHIBIT S: HEALTH & SAFETY STUDIES 31

EXHIBIT T: PHASE I ENVIRONMENTAL SITE ASSESSMENT.....32

EXHIBIT U: FIRE DEPARTMENT COORDINATION.....33

EXHIBIT V: PROPERTY VALUATION STUDIES 34

1.0 INTRODUCTION

1.1 PROJECT OVERVIEW

Woodstock Community Energy Initiative LLC, a wholly-owned entity of ECA Solar (collectively, the "Applicant" or "Woodstock Community Energy Initiative LLC" or "ECA Solar"), hereby submits this application for a Conditional Use Permit (Application) to construct, operate, and maintain the Woodstock Community Energy Initiative LLC solar project, a proposed up-to 5 MW_{AC} aggregate commercial solar energy facility (Project) on approximately 30.90 acres (Project Area) of the 88.075 acres (Total Parcel Area), which is located south of US Highway 14, and approximately 350 yards east of North Rose Farm Road, 15015 US-14, Woodstock, IL 60098. As shown on the Conditional Use Permit Plan Set in **Exhibit B**, the Project's site layout meets the required minimum road right-of-way and property line setbacks outlined in Title 16.56.030.PP, in the McHenry County Unified Development Ordinance.

The Woodstock Community Energy Initiative's interest in the property is defined by a lease agreement with Chang Family LLC provided in **Exhibit N**, who currently own the subject parcel (07-36-326-003) that will host the Project's infrastructure. The Project's current land usage can be characterized as cultivated cropland. The Project has one proposed access point at an existing drive that connects to US Highway 14. The Project parcels are not within the limits of the City of Woodstock; thus, the Project will fall under the jurisdiction of McHenry County. The applicant has met with McHenry County to solicit feedback on the Project's design. This feedback has been taken into consideration and is reflected in the Project's design.

The Project will deliver power to the electrical grid through one point of interconnection via the Commonwealth Edison Company (ComEd) power lines on the south side of US Highway 14. The Project has the capacity to generate up to 5 MW_{AC} of electricity, which could power up to approximately 1,100 McHenry County homes.

The Applicant has considered the McHenry County Conditional Use Permit process to ensure the Project meets the applicable requirements and submits this Application to obtain a Conditional Use Permit (CUP) from McHenry County. Care has been taken to ensure the Project will be in full compliance with all aspects of the State of Illinois' siting bill for solar, Public Act 102-1123.

1.2 ABOUT ECA SOLAR

ECA Solar was founded in 2014 and is 100% employee-owned. ECA Solar develops, engineers, installs, and operates large-scale solar facilities across the US. ECA Solar takes an institutional approach to the solar energy industry. Our goal is to deploy the highest quality of solar power projects to diversify the electric grid, while remaining risk-averse and prioritizing safety. We value diversity and creativity to achieve the common goal of making solar energy more accessible to everyone. ECA Solar has over 50 projects in operation or construction and over 100 projects in development throughout the US.

2.0 PROJECT DESCRIPTION

The Project Area is currently cultivated cropland. The subject parcel is located in McHenry County and zoned for AG-1 – Agricultural use. Adjacent properties in each direction are incorporated into McHenry

County and zoned for AG-1 – Agricultural use. Multiple properties to the west of the Project Area are zoned for E-1 – Estate.

The Project, if approved, will be a ground-mounted solar energy system comprised of solar photovoltaic (PV) modules, a racking system, inverters, and underground electrical conduits connecting PV array blocks with inverters.

Access to the site is proposed via an existing right-in/right-out driveway to US Highway 14, as shown on the Conditional Use Permit Plan Set in **Exhibit B**. Security fencing will enclose the perimeter of the Project, with road access secured through a locked metal gate. The internal access road will be used to provide access to Project equipment for future maintenance.

Although the Illinois State Geological Survey Illinois Water & Related Wells Map (ILWATER) indicates the potential presence of a well on the subject parcel, no evidence of such a well has been identified through multiple sources. The Applicant submitted a Freedom of Information Act (FOIA) request to McHenry County, which yielded no records of a well at the Project location. Additionally, no well was observed during the site survey, and the current landowner has confirmed there is no known well on the property (see the landowner's statement in section 4.1 of Exhibit T – Phase I ESA). The Applicant will continue to coordinate with the County should any new information arise, but based on the available evidence, no existing well is anticipated to be impacted by the Project.

The Project is anticipated to employ approximately 50 to 75 workers during construction, encompassing a range of roles including equipment operators, electricians, laborers, and supervisory personnel. The estimated construction timeline for the Project is 12 to 18 months, dependent on weather conditions, equipment availability, and permitting timelines. The Applicant will coordinate closely with contractors and local agencies to ensure that construction proceeds efficiently and with minimal disruption to the surrounding community.

2.1 INTERCONNECTION FACILITIES

The Project will ultimately deliver power to the electrical grid via one point of interconnection and circuit extension located on the south side of US Highway 14. ComEd will bear responsibility for the circuit extension. ECA Solar has received study results from ComEd and has a fully executed and paid interconnection agreement with ComEd. The Project has the capacity to provide up to 5 MW_{AC} of energy into the grid which could power up to approximately 1,100 McHenry County homes.

2.2 PROJECT CONSTRUCTION

Dust and noise from construction will be mitigated with industry standard best management practices. Construction hours will be limited to 8am – 6pm, Monday through Friday, or as otherwise directed by the County. Below is a high-level construction schedule including number of vehicle trips.

Estimated Vehicles During Construction				
Time Period	**Construction Activity**	**Estimated Increase in Vehicles (All Vehicles)**	**Estimated Total Vehicles Per Day**	**Estimated Total Heavy Vehicles Per Month**
Month 1	Mobilization, Site Clearing, Erosion Control, and Initial Access Drive Improvements	8 – 10 personal vehicles per work day, 3 – 6 contractor vehicles per work day, 1 – 2 material deliveries (tractor-trailer trucks, tandem dump trucks) per work day, 1 – 2 equipment delivery (30-foot bed, box trucks) per week	13 – 20	24 – 48
Months 2 – 5	Fence, Solar Array, and Final Access Road Improvements	20 – 30 personal vehicles per work day, 6 – 8 contractor vehicles per work day, 3 – 4 material deliveries (tractor-trailer truck) per work day, and 1 – 2 equipment deliveries (30-foot bed, box trucks, concrete trucks) per work day.	30 – 44	80 – 120
Month 6	Commissioning and Demobilization	6 – 8 personal vehicles per work day, 3 – 6 contractor vehicles per work day, and approx. 1 equipment removal (tractor-trailer truck) per week.	9 - 14	4

All equipment uses and operations will be conducted to avoid impeding the flow of traffic on adjacent roadways. Contractor shall maintain access to adjacent landowners for the duration of the project construction. The Contractor shall be fully responsible to provide signs, barricades, warning lights, guard rails, and employ flaggers as necessary when construction endangers either vehicular or pedestrian traffic. The Contractor will also follow all applicable DOT requirements for traffic mitigation. These devices shall remain in plan until the traffic may proceed normally again. Project construction shall ensure all equipment is properly maintained and equipped with manufacturer's standard noise control devices.

2.3 HEALTH AND SAFETY

During the Building Permit process, the Project will coordinate with the appropriate fire safety personnel to ensure adequate plans and systems are in place in the unlikely event a safety issue emerges. Appropriate signage containing necessary contact and safety information for the Commercial Solar

Energy Facility will be displayed in accordance with local code and coordination with staff. Upon request, a walk-through of the site with the local authorities and emergency agencies will be scheduled once construction is complete. Emergency personnel will also be given the key or code to access the facility.

Solar Energy Systems do not raise concern for fire and explosive hazards. The solar panels and racking, which comprise most of the Project's equipment, are not flammable. Tempered glass offers protection from heat and the elements, and the panels are designed to absorb heat as solar energy. From a study titled Health and Safety Impacts of Solar Photovoltaics by North Carolina State University:

> *"…Concern over solar fire hazards should be limited because only a small portion of materials in the panels are flammable, and those components cannot self-support a significant fire. Flammable components of PV panels include the thin layers of polymer encapsulates surrounding the PV cells, polymer back sheets (framed panels only), plastic junction boxes on rear of panel, and insulation on wiring. The rest of the panel is composed of non-flammable components, notably including one or two layers of protective glass that make up over three quarters of the panel's weight."* (Cleveland, 2017, p.16).

Refer to **Exhibit S** for the Health and Safety Impacts of Solar Photovoltaics study and **Exhibit R** for product cut sheets for the proposed Project solar modules.

2.4 OPERATIONS AND MAINTENANCE

Once constructed, the solar farm will operate throughout the year, passively generating renewable energy. The site and equipment will be designed, approved, maintained, and inspected to ensure safety and security. Maintenance activities during operation are expected to be minimal with occasional service for inverters and transformers. Solar panels are monitored remotely. Traffic is not anticipated to increase during the operations of the Project.

Maintenance operations will likely be carried out rarely and with minimal traffic as only one vehicle will likely be needed to help carry out tasks and maintenance several times a year. To prevent shading of the panels for solar energy production, an on-going vegetation maintenance program will be implemented for all vegetated areas within the fenced boundary and buffer areas. After construction is complete and stabilized vegetation has been established within the fenced Project Area, the Project will conduct vegetative management at appropriate frequency based on weather and moisture conditions. This management schedule would continue each year until implementation of the Decommissioning Plan, included in **Exhibit D**.

3.0 FEDERAL AND STATE APPROVALS, PERMITS, AND AGREEMENTS

3.1 FEDERAL AVIATION ADMINISTRATION (FAA)

To verify that the Project does not violate FAA airspace restrictions and regulations, the Project was submitted to the FAA Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) office. A confirmation

letter from the OE/AAA Office verifying that the Project does not exceed obstruction standards and does not violate FAA airspace restrictions and regulations is included in **Exhibit I**.

3.2 FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) portal was consulted to determine if any FEMA 100-year floodplains are on the site. Per FEMA, the project is designated as a Zone X floodplain (Area of minimal flood hazard). The site is on FEMA Panel 17111C0178J, effective date 11/16/2006. A FEMA map is provided in **Exhibit M.**

3.3 WETLAND AND WATERBODY DELINEATION REPORT

A field wetland and waterbody delineation investigation was performed on the site by SCI Engineering, Inc. on May 28, 2025. The delineation identified one emergent wetland (Wetland A) within the proposed Project boundary. Based on current regulatory definitions, this feature would likely not be considered a Water of the United States (WOTUS) under Section 328.3 of the Code of Federal Regulations and the Supreme Court's May 25, 2023, decision in Sackett v. U.S. Environmental Protection Agency. However, Wetland A would likely be considered an Isolated Water of McHenry County and, therefore, subject to a 50-foot buffer requirement as outlined in the McHenry County Stormwater Management Ordinance.

If any Project-related impacts are proposed to this feature, it is anticipated that a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the Illinois Environmental Protection Agency (IEPA) would be required. The wetland and waterbody delineation report is provided in Exhibit E.

3.4 U.S. FISH & WILDLIFE SERVICE (USFWS)

The Project will be designed such that federally listed species will not be significantly impacted. Solar projects typically impose only minimal impacts on wildlife species. Woodstock Community Energy Initiative LLC evaluated the Project's potential to impact federally protected species. The assessment, performed by SCI Engineering, Inc., identified five species that may be present within the project area: Northern Long-eared Bat *(Myotis septentrionalis)*, Whooping Crane *(Grus americana)*, Monarch Butterfly *(Danaus Plexippus)*, Rusty Patched Bumble Bee *(Bombus affinis)*, Western Ragal Fritillary *(Argynnis idalia occidentalis)*, Eastern Prairie Fringed Orchid *(Plantanthera leucophaea)*. Please see **Exhibit H** for more information on mitigation efforts and details of each species. It should be noted that there is limited tree removal anticipated in association with construction and operation of this Project.

3.5 ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR) STATE ECOLOGICAL REVIEW

The Applicant consulted with the IDNR for potential impacts to state threatened or endangered species. This consultation is conducted pursuant to IDNR's EcoCAT process. EcoCAT refers to IDNR's Ecological Compliance Assessment Tool (EcoCAT). EcoCAT contains the Section, Township, and Range data of the Project and generates a Project map. Species of concern within the identified Project Area (and/or which may be affected by migrating through or, by reason of the Project, avoiding the identified area) are examined as part of the EcoCAT review process.

EcoCAT requires that state agencies and units of local governments consider the potential adverse effects of proposed actions on Illinois endangered and threatened species and sites listed on the Illinois Natural Areas Inventory.

The Applicant submitted an EcoCAT review request to the IDNR in February 2025. The Applicant consulted with IDNR through the department's online EcoCAT program for potential impacts to the State threatened or endangered species. The Applicant received a formal response letter dated 02/20/2025 from IDNR's EcoCAT review provided in **Exhibit G**. The review indicated three protected resources possible in the vicinity of the project location: West Woodstock Prairie INAI Site, Yonder Prairie Nature Preserve Class 3 Groundwater, Blanding's Turtles (*Emydoidea blandingii*), and Rusty-patched Bumble Bee (*Bombus affinis*). The review provided recommendations to avoid adverse impacts to the resources listed and states that if the recommendations provided are adopted, the Department has determined that impacts to these resources are unlikely. In other words, pursuant to 17 III. Adm. Code Part 1075, the IDNR consultation is terminated.

3.6 ILLINOIS HISTORIC PRESERVATION REVIEW (SHPO)

Under the Illinois State Agency Historic Resources Protection Act, the State Historic Preservation Office (SHPO) division at IDNR is responsible for studying possible Project effects on archaeological and/or architectural (cultural) resources. Agencies requiring SHPO evaluation concurrent with their review include the Illinois Environmental Protection Agency, IDNR, and USACE. As provided in **Exhibit F**, the Project received correspondence from the SHPO office in March 2025 indicating the location does not contain any historic properties. There were also no archaeological sites within the area of potential direct effects, nor is it in an area with a high probability for archaeological resources as defined in the state statute. This project is exempt from archaeological survey request pursuant to section 6 of the Illinois State Agency Historic Resources Preservation Act.

3.7 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) - SWPPP

IEPA's Bureau of Water is responsible for overseeing the issuance of permits within the National Pollutant Discharge Elimination System (NPDES) program that regulates construction stormwater discharges. Permits require a Storm Water Pollution Prevention Plan (SWPPP), which is a site-specific document that outlines the measures a project will take to reduce pollutants in the stormwater discharges from a construction site. Stormwater controls reduce silt transport and sedimentation during precipitation events.

Prior to construction, a SWPPP will be prepared for the Project as well as sediment and erosion control plans for submittal and approval for an NPDES Permit through IEPA. The SWPPP will ensure construction activity compliance with guidelines and regulations for controlling sediment and erosion runoff.

3.8 ILLINOIS DEPARTMENT OF AGRICULTURE (IDOA)

The Illinois Renewable Energy Facilities Agricultural Impact Mitigation Act (505 ILCS 147/1 et seq.) requires the owner of a commercial solar energy facility to have an Agricultural Impact Mitigation Agreement (AIMA) in place within 45 days prior to the commencement of Project construction. The intent of the AIMA is to preserve and/or restore the integrity of affected agricultural land during construction and decommissioning activities. Illinois State Legislature passed Amendment to House Bill 4412 in January

2023, now formally known as Public Act 102-1123. The Amendment requires that facility owners enter into an AIMA prior to the date of the required public hearing. The Project AIMA was executed 04/16/2025, and a copy of the executed application is included as **Exhibit J**.

4.0 MCHENRY COUNTY UNIFIED DEVELOPMENT ORDINANCE AND OTHER LOCAL APPROVALS

The Project will comply with the McHenry County Unified Development Ordinance as described below and as shown on the Conditional Use Permit Plan Set, included as **Exhibit B**. The Project Area is located on vacant farmland. The Project will be a ground-mounted solar energy system comprised of solar photovoltaic (PV) modules, racking system, inverters and medium voltage transformers, and underground electrical conduits connecting PV array blocks with inverters. The access road with a gated entrance shall be located for site maintenance, maintenance of inverters, as well as construction access.

Per the McHenry County Unified Development Ordinance, a Building Permit will be obtained prior to construction.

4.1 HEIGHT REQUIREMENTS

According to the McHenry County Unified Development Ordinance Principal Use Standards outlined in §16.56.030.PP, Commercial Solar Energy Facilities, ground-mounted solar energy systems may not exceed 20 feet in height when oriented at maximum tilt. The Project will ensure no system of the Commercial Solar Energy Facility exceeds the maximum height requirement.

4.2 SETBACKS

Per the McHenry County Unified Development Ordinance Principal Use Standards outlined in §16.56.030.PP, Commercial Solar Energy Facilities, excluding fences and power lines for interconnection, are subject to the following setbacks:

- Occupied Community Buildings and Dwellings on Non-participating Properties: one hundred fifty (150) feet to the nearest point on the outside wall of the structure.
- Boundary lines of Participating Property: None.
- Public Road Rights of Way: fifty (50) feet to the nearest edge of the public road right-of-way.
- Boundary lines of Non-participating Property: fifty (50) feet to the nearest point on the property line of the non-participating property.

These requirements may be waived subject to the written consent of the owner of each affected Nonparticipating property. The Project will adhere to the requirements set forth above. The Project demonstrates its compliance in the Conditional Use Permit Plan Set included as **Exhibit B**.

4.3 VEGETATIVE GROUND COVER

Per the McHenry County Unified Development Ordinance Principal Use Standards outlined in §16.56.030.PP.i the facility owner shall submit a Vegetation Management Plan for the property inside and

outside the fenced area for the entire property. A Vegetation Management Plan will be submitted to the County prior to application for building permit.

4.4 SECURITY BARRIER

Per the McHenry County Unified Development Ordinance Principal Use Standards outlined in §16.56.030.PP.2.g, Commercial Solar Energy Facilities must be enclosed by perimeter security fencing or other county approved barrier. The Project will be secured by a 8' tall Fixed Knot Farm fence. The Project fence shall comply with the requirements of McHenry County Unified Development Ordinance as well as the National Electric Code.

4.5 LIGHTING

According to the McHenry County Unified Development Ordinance §16.56.030.PP.2.c. lighting may be required for the Project. However, due to the nature of the operations of a Commercial Solar Energy Facility, OSHA safety requirements may be met for the operation and maintenance of the facility without the use of site lighting. The Project will have no permanent lighting systems on site.

4.6 DECOMMISSIONING PLAN

A Decommissioning Plan is included in **Exhibit D** to ensure the solar farm elements will be properly removed after the Commercial Solar Energy Facility is inoperable for twelve (12) months. The Decommissioning Plan was developed in accordance with both the McHenry County Unified Development Ordinance and the AIMA. The Decommissioning Plan outlines a strategy for the removal of Project components such as panels, roads, fences, and racking, including any applicable recyclable items once the Commercial Solar Energy Facility is no longer in use. The Decommissioning Plan also includes the removal of landscape and restoration of soil and vegetation. The combination of the native grasses and pollinator friendly seed mix established during the Project life and temporary re-use of the soils from agricultural planting will promote soil restoration and more productive farmland after decommissioning.

Prior to commercial operation, the Applicant shall provide McHenry County with a decommissioning bond to ensure proper decommissioning at the end of the Project life.

4.7 AVOIDANCE AND MITIGATION OF DAMAGES TO PUBLIC INFRASTRUCTURE

Per the McHenry County Unified Development Ordinance §16.56.030.PP.2.k the Project will enter into a road use agreement with the local government prior to application for a building permit. The road use agreement shall require the facility owner to be responsible for the reasonable cost of repairs associated with damage created by the Construction process of the facility owner. A pre-construction road survey will establish the conditions of the roads prior to the commencement of construction. If roads are deemed unfit for construction traffic by the Pre-Construction Road survey, the Owner shall be responsible for negotiating improving the roads with the relevant Roadway AHJs. Upon completion of the project construction, the owner shall be only responsible for damage created by the owner and not by general construction traffic. Roadways improved in preparation for and during the construction of the Commercial Solar Energy Facility will be repaired and restored to the improved condition at the reasonable cost of the developer if the roadways have degraded or were damaged as a result of construction-related activities.

5.0 CONCLUSION

The Woodstock Community Energy Initiative LLC project adheres to all requirements of McHenry County and the State of Illinois and should qualify for a Conditional Use Permit to construct a Solar Energy System on US Highway 14 in McHenry County. Woodstock Community Energy Initiative LLC, a wholly-owned entity of ECA Solar, seeks a Conditional Use Permit that can be transferred if Woodstock Community Energy Initiative LLC is sold by ECA Solar.

EXHIBIT A: CONDITIONAL USE PERMIT APPLICATION AND CHECKLIST

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

APPLICATION FOR ZONING PETITION – COMMERCIAL SOLAR ENERGY FACILITY

OWNER INFORMATION:	**ATTORNEY or AGENT CONTACT INFORMATION** (If Applicable):
Name Jae Chul Chang	Name
Address 1782 Milburne Rd	Address
City, St, Zip Lake Forest, IL 60045	City, St, Zip
Daytime Phone 847-877-2316	Phone
Email lukechange@aol.com	Email

APPLICANT (If other than owner):	**TRUSTEE/BENEFICIARY/OFFICERS/DIRECTORS/CONTRACT PURCHASER** (please use separate page for additional information):
Name Woodstock Community Energy Initiative LLC	Name
Address 203 Crescent St #106	Address
City, St, Zip Waltham, MA 02453	City, St, Zip
Daytime Phone 508-460-2068	Phone
Email pd@ecasolar.com	Email

PARCEL INFORMATION:

Address South of Highway 14 and north of Kishwaukee Valley Road

City Woodstock Zip 60098

Parcel/Tax Number 07-36-326-003

Number of Acres +/- 31 acres (project area) on +/- 88 acres (total parcel area) of land

Project Details	System Size: 5 MWac	CUP Request: Permit for a solar farm
	Number of Panels: Estimated 12,720	Variation Request:
	Fence Height: 8	Map Amendment Request:

Please provide additional information on the back of this page or as a separate Project Narrative.

NARRATIVE: Please use this space to explain your request in detail.
Please see the narrative attached in the CUP application

CONSENT

I/We hereby authorize that the aforementioned applicant, attorney, and agent may act and testify on my behalf as my agent in the matter of this zoning application regarding the property listed above that is the subject of this application.

VERIFICATION

I/We hereby verify and attest to the truth and correctness of all facts, statements and information presented herein.

Jae Chul Chang
Owner's Signature

JAE CHUL CHANG
Print Name

Signature

Print Name

SUBSCRIBED and SWORN to before me
this 11th day of July, 2025.

NOTARY PUBLIC

TIMOTHY E JOHNSON
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
July 29, 2025

NARRATIVE: Please use this space to explain your request in detail.
Please see the narrative attached in the CUP application

CONSENT

I/We hereby authorize that the aforementioned applicant, attorney, and agent may act and testify on my behalf as my agent in the matter of this zoning application regarding the property listed above that is the subject of this application.

VERIFICATION

I/We hereby ~~verify~~ and attest to the truth and correctness of all facts, statements and information presented herein.

Owner's Signature | ***Signature***

Todd Fryatt

Print Name | ***Print Name***

SUBSCRIBED and SWORN to before me
this 16th day of July, 2025.

NOTARY PUBLIC

MONICA R. LESLIE
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS
MY COMMISSION EXPIRES MAY 31, 2030

CONSENT TO ON-SITE INSPECTION

I/We are the owners of record of the real estate which is the subject of this application. Owners of the described real estate do hereby freely and voluntarily consent to inspection of the site of the parcel in question for purposes of determining the appropriateness of the pending proposed zoning petition by the Zoning Enforcement Officer and/or designated representative, McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer, and hereby release such persons from any liability based in whole or in part on the inspection of the parcel in question. That in exchange for the above actions by the Applicant(s), McHenry County agrees that the Zoning Enforcement Officer and/or designated representative, member of the Zoning Board of Appeals or, if applicable, the McHenry County Hearing Officer, will inspect the parcel in question prior to considering the evidence presented upon the above application. In the case of Conditional Use applications, if approved by the McHenry County Board, the Zoning Enforcement Officer and/or designated representative many inspect the property periodically to ensure compliance with the adopting ordinance and any conditions therein.

ACCEPTANCE OF FEES FOR TRANSCRIPTION SERVICES

I/We, the applicant(s), verify that I/we are aware of the use of a transcription service utilized by McHenry County to prepare a record of public hearings. Applicant(s) agree to directly reimburse the Department of Planning and Development for all incurred transcript fees and associated costs for hearings before the McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer unless determined otherwise by McHenry County. The applicant(s) further recognizes failure to fully reimburse the County prior to the scheduled County Board Date will grant McHenry County the unconditional right to withhold the application from McHenry County Board action. Applicant(s) further understand that transcripts shall be retained by McHenry County as part of the permanent zoning application file.

ZONING APPLICATION INTERPRETATION

I/We understand that the McHenry County Department of Planning and Development Staff will review and evaluate this application per the text of the McHenry County Unified Development Ordinance, the Official Zoning Maps, and any relevant documentation provided by the applicant and otherwise available to the Department, and consult with other staff to create a Legal Notice and staff report.

ACCEPTANCE OF FEES FOR NOTIFICATION

I/We, the applicant(s), authorize the McHenry County Department of Planning and Development Staff to produce the Legal Notice of Public Hearing to be published and mailed per the requirements of Chapter 16.16 (Zoning Application Process) of the McHenry County Code of Ordinances. I/We agree to reimburse the County for the cost of certified mailing and publication to the newspaper, prior to a vote by the McHenry County Board, in order to meet the notification requirements for a public hearing by Illinois State Statute.

Jae Chul Chang
Owner's Signature

Signature

JAE CHUL CHANG
Print Name

Print Name

SUBSCRIBED and SWORN to before me
this 6th day of JUNE, 2025

TIMOTHY E JOHNSON
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
July 29, 2025

NOTARY PUBLIC

CONSENT TO ON-SITE INSPECTION

I/We are the owners of record of the real estate which is the subject of this application. Owners of the described real estate do hereby freely and voluntarily consent to inspection of the site of the parcel in question for purposes of determining the appropriateness of the pending proposed zoning petition by the Zoning Enforcement Officer and/or designated representative, McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer, and hereby release such persons from any liability based in whole or in part on the inspection of the parcel in question. That in exchange for the above actions by the Applicant(s), McHenry County agrees that the Zoning Enforcement Officer and/or designated representative, member of the Zoning Board of Appeals or, if applicable, the McHenry County Hearing Officer, will inspect the parcel in question prior to considering the evidence presented upon the above application. In the case of Conditional Use applications, if approved by the McHenry County Board, the Zoning Enforcement Officer and/or designated representative many inspect the property periodically to ensure compliance with the adopting ordinance and any conditions therein.

ACCEPTANCE OF FEES FOR TRANSCRIPTION SERVICES

I/We, the applicant(s), verify that I/we are aware of the use of a transcription service utilized by McHenry County to prepare a record of public hearings. Applicant(s) agree to directly reimburse the Department of Planning and Development for all incurred transcript fees and associated costs for hearings before the McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer unless determined otherwise by McHenry County. The applicant(s) further recognizes failure to fully reimburse the County prior to the scheduled County Board Date will grant McHenry County the unconditional right to withhold the application from McHenry County Board action. Applicant(s) further understand that transcripts shall be retained by McHenry County as part of the permanent zoning application file.

ZONING APPLICATION INTERPRETATION

I/We understand that the McHenry County Department of Planning and Development Staff will review and evaluate this application per the text of the McHenry County Unified Development Ordinance, the Official Zoning Maps, and any relevant documentation provided by the applicant and otherwise available to the Department, and consult with other staff to create a Legal Notice and staff report.

ACCEPTANCE OF FEES FOR NOTIFICATION

I/We, the applicant(s), authorize the McHenry County Department of Planning and Development Staff to produce the Legal Notice of Public Hearing to be published and mailed per the requirements of Chapter 16.16 (Zoning Application Process) of the McHenry County Code of Ordinances. I/We agree to reimburse the County for the cost of certified mailing and publication to the newspaper, prior to a vote by the McHenry County Board, in order to meet the notification requirements for a public hearing by Illinois State Statute.

Owner's Signature	***Signature***
Print Name	Todd Fryett ***Print Name***

SUBSCRIBED and SWORN to before me
this 16 day of June, 2025.

NOTARY PUBLIC

MONICA R. LESLIE
MY COMMISSION EXPIRES
MAY 31, 2030
NOTARY PUBLIC
COMMONWEALTH OF
MASSACHUSETTS

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: Chang Family LLC

Name	Title (officers, directors, shareholders/stockholders)	Address (address, city, state, zip)	Percent of ownership interest
JAE C. CHANG	PRESIDENT	1782 MILLBURN RD LAKE FOREST IL 60045	25%
SOON J. CHANG	SECRETARY	〃 〃	25%
EUN JI CHANG	SHAREHOLDER	〃 〃	25%
EUN S. CHANG (LUKE)	SHAREHOLDER	〃 〃	25%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: ECA Solar LLC

Name	Title (officers, directors, shareholders/stockholders)	Address (address, city, state, zip)	Percent of ownership interest
Todd Fryatt	Manager	203 Crescent St #106 Waltham, MA 02453	100%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: ECA Illinois HoldCo LLC

Name	Title (officers, directors, shareholders/stockholders)	Address (address, city, state, zip)	Percent of ownership interest
ECA Solar LLC	Owner	203 Crescent St #106 Waltham, MA 02453	100%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: Woodstock Community Energy Initiative LLC

Name	**Title (officers, directors, shareholders/stockholders)**	**Address (address, city, state, zip)**	**Percent of ownership interest**
ECA Illinois HoldCo LLC	Owner	203 Crescent St #106 Waltham, MA 02453	100%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

EXHIBIT B: CONDITIONAL USE PERMIT PLAN SET

CONDITIONAL USE PERMIT PLANS

FOR

WOODSTOCK COMMUNITY ENERGY INITIATIVE, LLC

LOCATED AT

US HIGHWAY 14,

WOODSTOCK, IL 60098

42.336900, -88.486695

PROJECT TEAM

APPLICANT/PROJECT OWNER
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
CONTACT: BEN DYKEMA, P.E.
PHONE: (630) 209-5270
EMAIL: BD@ECASOLAR.COM

DEVELOPER
ECA SOLAR
203 CRESCENT STREET #106
WALTHAM, MA 02453
CONTACT: BEN DYKEMA, P.E.
PHONE: (630) 209-5270
EMAIL: BD@ECASOLAR.COM

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD, SUITE 200
DEERFIELD, IL 60015
CONTACT: ANDREW CLICK, P.E.
EMAIL: ANDREW.CLICK@KIMLEY-HORN.COM
PHONE: (629) 278-4026
ENGINEER OF RECORD: ANDREW CLICK, P.E.

SURVEYOR
COMPASS SURVEYING, LTD.
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
EMAIL: ADMIN@CLSURVEYING.COM
PHONE: (630) 820-9100

ELECTRIC UTILITY COMPANY
COMED
1950 DUNCAN PL
WOODSTOCK, IL 60098
PHONE: (877) 426-6331

AUTHORITY HAVING JURISDICTION (AHJ)
MCHENRY COUNTY
667 WARE RD
WOODSTOCK, IL 60098
CONTACT: KIM SCHARLOW
PHONE: (815) 334-4560
EMAIL: KBSCHARLOW@MCHENRYCOUNTYIL.GOV

IDOT
201 WEST CENTER COURT
SCHAUMBURG, IL 60196
CONTACT: YELEINA HAYDEL
EMAIL: YELEINA.HAYDEL@ILLINOIS.GOV

SURVEY NOTE

ALTA/TOPO: COMPASS SURVEYING LTD DATED MAY 5, 2025
BASIS OF BEARINGS: ILLINOIS STATE PLANE COORDINATES, EAST ZONE, US FOOT

FLOOD ZONE NOTE:

PER FEMA FIRM MAP 17111C0178J EFFECTIVE DATE 11/16/2006, NO FLOOD PLAINS ARE ARE PRESENT WITHIN THE PROJECT AREA. THE AREA IS DESIGNATED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD.

SITE INFORMATION

PARCEL ZONING
AGRICULTURAL (A-1)
PARCEL SIZE
88.075 ACRES
PROJECT DESCRIPTION
5.00MWAC SINGLE AXIS TRACKER SOLAR ARRAY PROJECT

LOCATION MAP

(NOT TO SCALE)

STATE COUNTY MAP

(NOT TO SCALE)

Sheet List Table	
Sheet Number	Sheet Title
C-100	COVER SHEET
C-200	SITE LAYOUT
C-300	GRADING AND DRAINAGE PLAN
C-400	LANDSCAPE PLAN
C-500	CONSTRUCTION DETAILS
C-501	CONSTRUCTION DETAILS

SETBACK TABLE	
OCCUPIED COMMUNITY BUILDINGS AND DWELLINGS ON NON-PARTICIPATING PROPERTIES	150'
BOUNDARY LINES OF PARTICIPATING PROPERTY	NONE
PUBLIC ROAD RIGHTS OF WAY	50'
BOUNDARY LINES OF NON-PARTICIPATING PROPERTY	50'
*SETBACKS PER MCHENRY COUNTY UNIFIED DEVELOPMENT ORDINANCE PRINCIPAL USE STANDARDS OUTLINED IN §16.56.030.PP	

No. | REVISIONS | DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.

570 LAKE COOK ROAD, SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE:
184.002012-0006 062.045338

KHA PROJECT 118938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NEW
CHECKED BY AMC

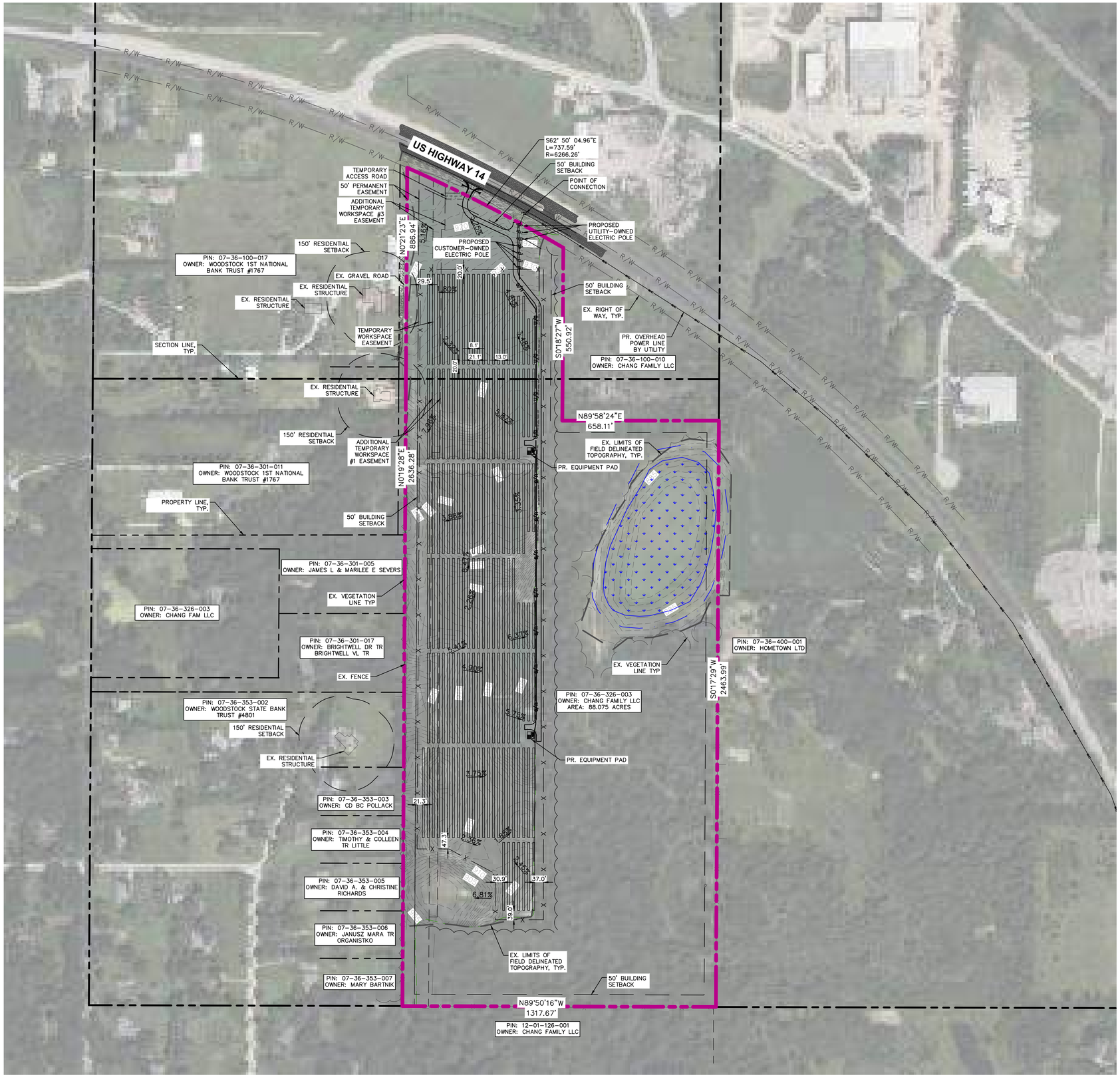
COVER SHEET

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-100

Drawing name: K:\MSN_Energy\118938000 - ECA US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-100 COVER SHEET.dwg C-100 COVER SHEET Jul 24, 2025 4:03pm by: Ethan.Horst

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- PROJECT BOUNDARY
- PROPERTY LINE
- PROPERTY SETBACK
- ROAD CENTERLINE
- EX OHE — EX OHE — EX OVERHEAD ELECTRIC
- R/W — R/W — EX RIGHT-OF-WAY
- EXISTING RESIDENCE/STRUCTURE
- EX. WETLAND AREA
- EX. WETLAND BUFFER
- EX. TREELINE
- EX. EXISTING TREELINE
- EX. FENCE
- EX. UTILITY EASEMENT
- PR. SECURITY FENCE
- PR. TREELINE
- PR. UTILITY POLE
- PR. ELECTRICAL EQUIPMENT AREA
- PR. SOLAR ARRAY
- OHW — PR. OVERHEAD ELECTRIC
- U/G — U/G — U/G — PR. UNDERGROUND ELECTRIC (AC)
- PR. SITE ACCESS
- PR. SITE ACCESS SHOULDER
- PR. ACCESS ROAD
- PR. GRADING LIMITS
- PR. CULVERT OUTLET
- PR. CULVERT

NOTES

1. SETBACKS PER MCHENRY COUNTY UNIFIED DEVELOPMENT ORDINANCE. PRINCIPAL USE STANDARDS OUTLINES IN §16.56.030.PP (ACCESSED ON 06/18/2025):
   - 1.1. OCCUPIED COMMUNITY BUILDINGS AND DWELLINGS ON NON-PARTICIPATING PROPERTIES: 150'
   - 1.2. BOUNDARY LINES OF PARTICIPATING PROPERTY: NONE
   - 1.3. PUBLIC ROAD RIGHTS OF WAY: 50'
   - 1.4. BOUNDARY LINES OF NON-PARTICIPATING PROPERTY: 50'
2. ALL EXISTING PARCEL INFORMATION WAS OBTAINED FROM THE ALTA/NSPS LAND TITLE SURVEY COMPLETED BY COMPASS SURVEYING LTD, DATED 05/05/2025.
3. PER THE UNIVERSITY OF ILLINOIS WATER GIS MAP ACCESSED ON 07/02/2025, ONE WATER WELL EXISTS WITHIN THE SUBJECT PARCEL. WELL API: 1211132073OO. KIMLEY-HORN SUBMITTED A FREEDOM OF INFORMATION ACT REQUEST ON 07/03/2025 WHICH TURNED UP NO EVIDENCE OF WELLS ON THE SUBJECT PARCEL. THE FIELD SURVEY DID NOT RETURN EVIDENCE OF THE EXISTENCE OF WELLS ON THE SUBJECT PARCEL. PER THE PHASE I ESA BY SCI ENGINEERING, DATED 03/13/2025, NO WELLS WERE IDENTIFIED. STATEMENTS FROM THE PARCEL LANDOWNER INCLUDED IN THE PHASE I ESA ALSO EXHIBIT NO KNOWLEDGE OF THE EXISTENCE OF SUCH WELLS. IT IS ASSUMED THAT THERE ARE NO WATER WELLS ON THE SUBJECT PARCEL.
4. PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), NO FEMA FLOODPLAINS EXIST WITHIN THE SUBJECT PARCEL. THE SITE RESIDES ON FEMA PANEL 17111C0173J, DATED 11/16/2006.
5. PER THE DELINEATED WETLAND REPORT BY SCI DATED 07/10/2025, THERE ARE WETLAND AND/OR WATERBODY FEATURES WITHIN THE SITE. THE PROPOSED IMPROVEMENTS WILL NOT DISTURB ANY DELINEATED WETLANDS OR WATERBODIES.
6. ALL TOPOGRAPHIC INFORMATION WITHIN THE PROJECT BOUNDARY LINE WERE OBTAINED FROM THE ALTA/NSPS LAND TITLE SURVEY BY COMPASS SURVEYING LTD, DATED 05/05/2025.

SITE DATA TABLE

PIN #	07-36-326-003
APPLICANT	WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
PROPERTY OWNER	CHANG FAMILY LLC
SITE ADDRESS	S OF US HIGHWAY 14, E OF NORTH ROSE FARM ROAD MCHENRY COUNTY IL, 60098
ZONING JURISDICTION	MCHENRY COUNTY
CURRENT LAND USE	AGRICULTURAL USE
PROPOSED AREA	SOLAR ENERGY FACILITY
TOTAL PARCEL AREA	88.075 ± AC
PRELIMINARY DISTURBED AREA	30.92 ± AC (AREA WITHIN FENCE)
PRELIMINARY SOLAR AREA	25.13 ± AC
PROPERTY LINE SETBACK	50' FRONT, 50' REAR, 50' SIDE, 50' R-O-W
OCCUPIED RESIDENCE BUFFER	150'
TOTAL POWER OUTPUT (AC)	5.00 MW
GROUND COVER RATIO (GCR)	38.30%

*THE PURPOSE OF THIS PLAN IS FOR CONDITIONAL USE PERMIT REVIEW AND APPROVAL BY MCHENRY COUNTY.

NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE: 184.002012-0006 062.045338

KHA PROJECT 118938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NBW
CHECKED BY AMC

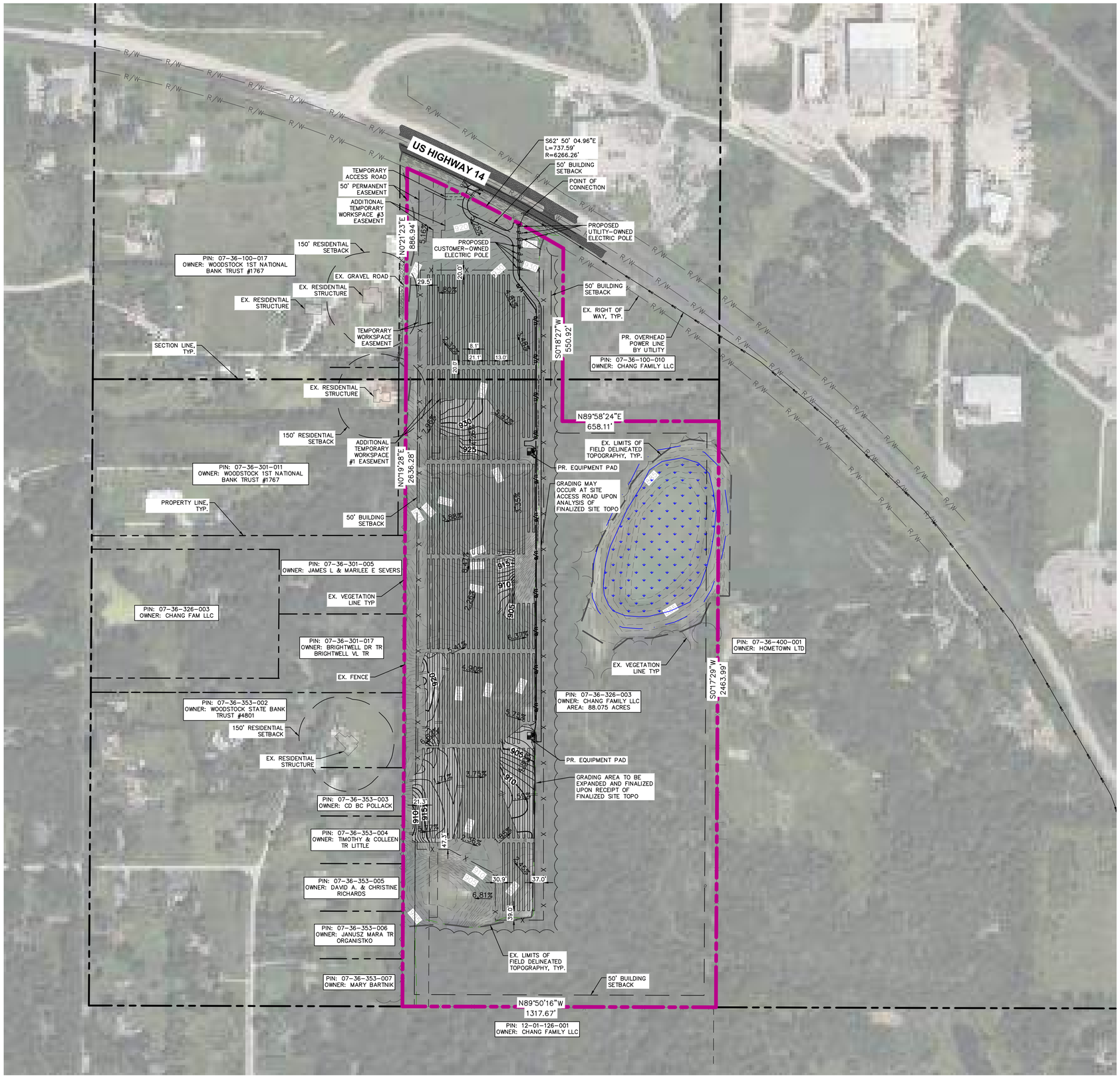
SITE LAYOUT

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-200

Drawing name: K:\WSH_Energy\118938000 - ECA, US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-200 SITE LAYOUT PLAN.dwg C-200 SITE LAYOUT Jul 24, 2025 4:04pm by: Ethan.Horst

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- PROJECT BOUNDARY
- PROPERTY LINE
- PROPERTY SETBACK
- ROAD CENTERLINE
- EX OHE — EX OHE — EX OVERHEAD ELECTRIC
- R/W — R/W — EX RIGHT-OF-WAY
- EXISTING RESIDENCE/STRUCTURE
- EX. WETLAND AREA
- EX. WETLAND BUFFER
- EX. TREELINE
- EX. EXISTING TREELINE
- X — X — X — EX. FENCE
- EX. UTILITY EASEMENT
- X — X — X — PR. SECURITY FENCE
- PR. TREELINE
- PR. UTILITY POLE
- PR. ELECTRICAL EQUIPMENT AREA
- PR. SOLAR ARRAY
- OHW — PR. OVERHEAD ELECTRIC
- U/G — U/G — U/G — PR. UNDERGROUND ELECTRIC (AC)
- PR. SITE ACCESS
- PR. SITE ACCESS SHOULDER
- PR. ACCESS ROAD
- PR. GRADING LIMITS
- PR. CULVERT OUTLET
- PR. CULVERT

GENERAL NOTES

1. PHOTOVOLTAIC PANELS, INVERTERS, AND INTERCONNECTION EQUIPMENT LOCATIONS SHOWN FOR REFERENCE ONLY. DESIGN AND FINAL LAYOUT PER DRAWINGS BY ELECTRICAL AND STRUCTURAL ENGINEER.
2. PROJECT ENTRANCE DESIGN TO BE DESIGNED AND PERMITTED THROUGH IDOT REGION 1, DISTRICT 1. SEE SEPARATE PERMIT SET FOR DESIGN INFORMATION.
3. DESIGN PARAMETERS FOR GRADING WERE 0.75' DEFLECTION, 5% NORTH FACING SLOPES AND 10% EAST/WEST/SOUTH FACING SLOPES AND A +/- 12.0" TOLERANCE (1.0' REVEAL RANGE FOR PILES). DESIGN PARAMETERS USED AS BASIS OF DESIGN - REFER TO MANUFACTURERS SPECS FOR FINAL DESIGN CRITERIA.

CUT/FILL VOLUMES

CUT	4790 CY
FILL	4530 CY
NET	260 CY <CUT>
ASSUMED FILL FACTOR	1.200

NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.

570 LAKE COOK ROAD SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE: 184.002012-0006 062.045338

KHA PROJECT	118938000
DATE	7/25/2025
SCALE	AS SHOWN
DESIGNED BY	AMC
DRAWN BY	NBW
CHECKED BY	AMC

GRADING AND DRAINAGE PLAN

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-300

Drawing name: K:\MSN_Energy\118938000 - ECA US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-300 GRADING AND DRAINAGE PLAN.dwg Jul 24, 2025 4:04pm by: Ethan Horst

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

PLANT SCHEDULE

	EVERGREEN TREES	116
	OPEN AREA SEED MIX	
	ARRAY AREA SEED MIX	

NOTE: SEED MIX SPECIFICATIONS TO FOLLOW AT A LATER DATE AFTER FINAL SITE LAYOUT DETERMINED. SEED MIX WILL ADHERE TO ILLINOIS STATE POLLINATOR PROGRAM PARAMETERS. FINAL TREE SPECIES AND SPECIFICATIONS TO COMPLY WITH LOCAL AND COUNTY ORDINANCES.

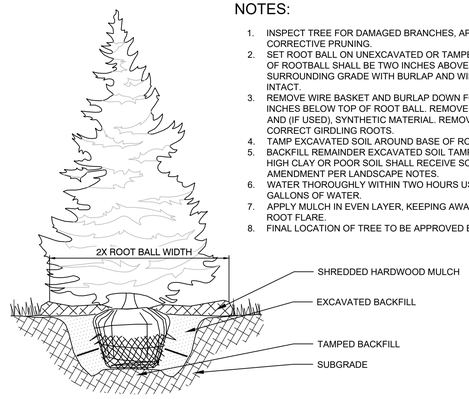
NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

GENERAL LANDSCAPE NOTES

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MATERIALS AND PLANTS SHOWN ON THE LANDSCAPE PLAN. THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION OR DURING THE SPECIFIED MAINTENANCE PERIOD. CALL FOR UTILITY LOCATIONS PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR SHALL REPORT ANY DISCREPANCY IN PLAN VS. FIELD CONDITIONS IMMEDIATELY TO THE LANDSCAPE ARCHITECT, PRIOR TO CONTINUING WITH THAT PORTION OF WORK.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
5. DO NOT DISTURB THE EXISTING PAVING, LIGHTING, OR LANDSCAPING THAT EXISTS ADJACENT TO THE SITE UNLESS OTHERWISE NOTED ON PLAN.
6. PLANT QUANTITIES SHOWN ARE FOR THE CONVENIENCE OF THE OWNER AND JURISDICTIONAL REVIEW AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES AS DRAWN.
7. THE CONTINUED MAINTENANCE OF ALL REQUIRED LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY ON WHICH SAID MATERIALS ARE REQUIRED. ALL PLANT MATERIALS REQUIRED BY THIS SECTION SHALL BE MAINTAINED AS LIVING VEGETATION AND SHALL BE PROMPTLY REPLACED IF THE PLANT MATERIAL HAS DIED PRIOR TO FINAL ACCEPTANCE.
8. NO GENERAL SPRAY OF HERBICIDES IS TO BE USED FOR ANY SEEDED AREAS.
9. ONLY HERBICIDES FORMULATED FOR ANIMAL SAFETY SHALL BE USED.
10. ALL WORK DEEMED NATURAL AREA TO BE SEEDED OR PLANTED SHALL BE PERFORMED BY A QUALIFIED LANDSCAPE CONTRACTOR.
11. SEED SHALL BE OBTAINED FROM SOURCE SPECIALIZING IN NATIVE SPECIES, WHERE AVAILABLE OR AS APPROVED BY CLIENT OR CLIENT'S REPRESENTATIVE.
12. ALL SEED MIXES SHALL BE INSTALLED WITH A COVER CROP DEPENDENT ON SEASON AND REQUIREMENTS SPECIFIED PER SEED MIX / SEED SUPPLIER.

PLANTING DETAIL



NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.

1 EVERGREEN TREE PLANTING

NTS

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE: 184.002012-0006 062.045338

KHA PROJECT	118938000
DATE	7/25/2025
SCALE	AS SHOWN
DESIGNED BY	AMC
DRAWN BY	NBW
CHECKED BY	AMC

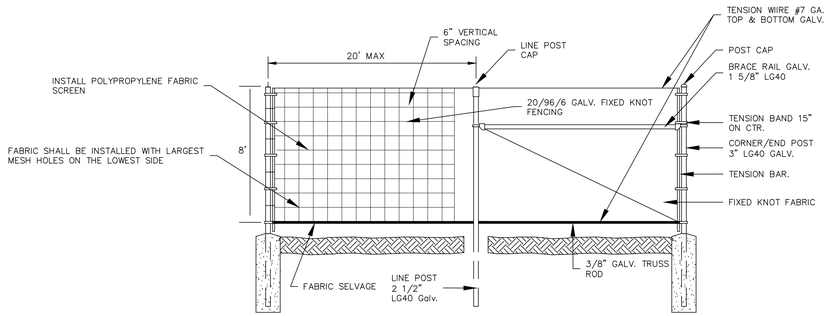
LANDSCAPE PLAN

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

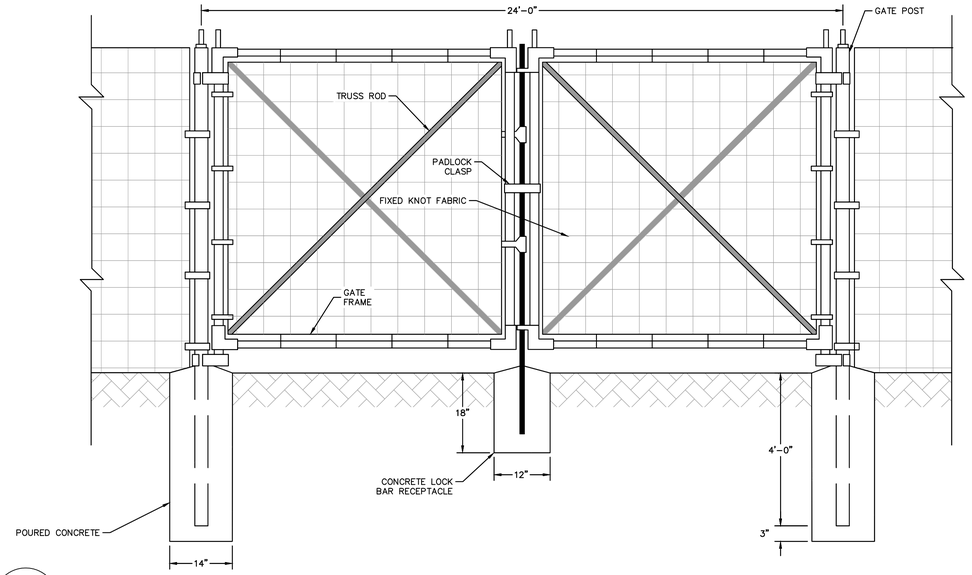
SHEET NUMBER
C-400

Drawing name: K:\VGH_Energy\118938000 - ECA_US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-400 LANDSCAPE PLAN.dwg C-400 LANDSCAPE PLAN Jul 24, 2025 4:04pm by: Ethan.Horst

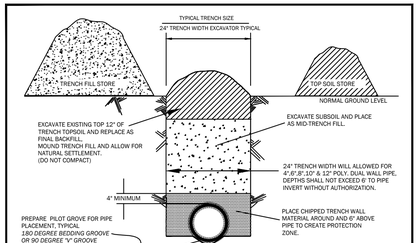
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



1 C-500 FIXED KNOT FARM FENCE – STEEL POSTS



2 C-500 DOUBLE SWING GATE DETAIL (FIXED KNOT FENCE)

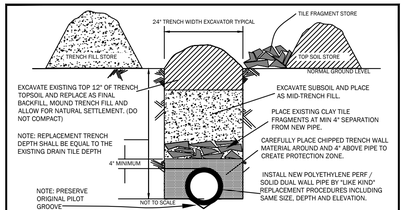


NEW POLYETHYLENE DUAL WALL PERFORATED DRAIN TILE INSTALLATION FOR AGRICULTURAL LAND USE.

1. EXCAVATE 12" (+) TOPSOIL, STORE SEPARATE AND SAVE FOR FINAL BACKFILL.
2. EXCAVATE SUBSOIL TO PROPOSED GRADE LINE, STORE SEPARATE AND SAVE FOR MID-TRENCH FILL.
3. HAND EXCAVATE DRAIN TILE PILOT GROOVE TO PROPOSED LASER GRADE, AND INSTALL NEW POLYETHYLENE PERFORATED DUAL WALL DRAIN TILE (ADS N-12 OR EQUAL) *(FILTER PIPE WRAP OPTIONAL FOR SANDY SOILS)*
4. PLACE "HAND SPADED CHIPPED" CLEAN TOP SOIL MATERIAL AROUND NEW PIPE TO CREATE BEDDING SUPPORT AND PIPE PROTECTION.
5. BACKFILL EXCAVATION TRENCH WITH MID TRENCH MATERIAL AND REPLACE SAVED TOP SOIL AS FINAL BACKFILL.

TYPICAL SINGLE WALL POLYETHYLENE PERFORATED DRAIN TILE INSTALLATION BY AGRICULTURAL DRAINAGE TRENCHERS IN ACCORDANCE WITH A.S.T.M. F-405, F-449 OR F-667, A.A.S.H.T.O. M-252, OR M-294. INSTALLATION PROCEDURE MAY BE ALLOWED ONLY BY DIRECTION OF THE RESIDENT PROJECT ENGINEER.

EX. CLAY DRAIN TILE REPLACEMENT SECTION
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING AGRICULTURAL DRAIN TILE REPLACEMENT SECTION
TYPICAL FIELD INSTALLATION FOR POLYETHYLENE DUAL WALL DRAIN TILE
TYPICAL SECTION NO. 20A



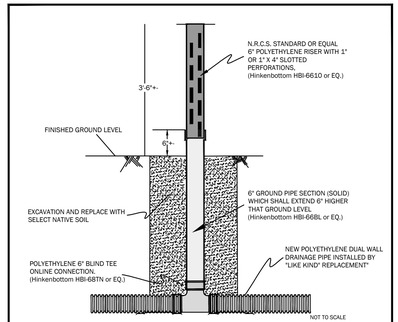
EXISTING CLAY DRAIN TILE REPLACEMENT PROCEDURE

1. EXCAVATE 12" (+) TOPSOIL, STORE SEPARATE AND SAVE FOR FINAL BACKFILL.
2. EXCAVATE SUBSOIL TO TOP OF EXISTING TILE, STORE SEPARATE AND SAVE FOR MID-TRENCH FILL.
3. EXCAVATE CLAY PIPE, STORE FRAGMENTS SEPARATE AND SAVE FOR BURY FILL. (REMOVE POLYETHYLENE DRAINAGE PIPE FROM SITE)
4. CAREFULLY PRESERVE ORIGINAL DRAIN TILE PILOT GROOVE. CLEAN WITH HAND SHOVEL AND INSTALL NEW POLYETHYLENE SOLID or PERFORATED DUAL WALL PIPE WITH IN EXISTING PILOT GROVE POSITION. (ADS N-12 OR EQUAL) (A.S.T.M. F-405 OR F-677, A.A.S.H.T.O.M.-252 OR M-294). INSTALLATION BY "LIKE KIND PROCEDURES INCLUDING SAME PIPE SIZE AT SAME LOCATION AND ELEVATION.
(PIPE SIZE MY BE MODIFIED IF APPROVED BY RESIDENT ENGINEER OR PROJECT OWNER)
5. PLACE "SPADE CHIPPED" CLEAN TRENCH WALL MATERIAL AROUND AND 4" ABOVE NEW PIPE TO CREATE BEDDING SUPPORT AND PIPE PROTECTION.
6. BACKFILL EXCAVATION TRENCH IN FOLLOWING SEQUENCE.
(1) -EXISTING CLAY FRAGMENTS OVER BEDDING SOIL.
(2) - BACKFILL TRENCH SUBSOIL
(3) -BACKFILL FINAL LIFT WITH SAVED TOPSOIL.
7. FINAL RECORD MAPPING SHALL BE PREPARED INCLUDING GPS SURVEY LOCATION.

SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

NOTE: ALL EXISTING UNKNOWN LATERAL DRAIN TILES ENCOUNTERED DURING "LIKE KIND" REPLACEMENT PROCESS SHALL BE REPLACED BY SAME PROCEDURE

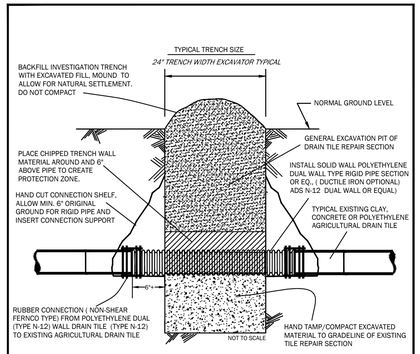
EXISTING DRAIN TILE REPLACEMENT SECTION
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING AGRICULTURAL DRAIN TILE "LIKE KIND" REPLACEMENT
TRENCH REPLACEMENT INCLUDING EXISTING LATERALS BY MID SIZE EXCAVATOR
TYPICAL SECTION NO. 20A/1



NOTE: THESE TYPICAL STANDARD SPECIFICATION MAY BE FIELD ADJUSTED WITH THE PROPER AUTHORIZATION FROM THE PROJECT MANAGER, ALL CHANGES SHALL BE RECORDED ON FINAL AS-BUILT DRAWINGS.

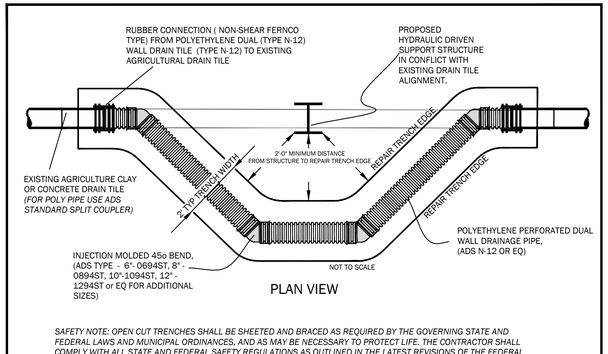
SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

6" OBSERVATION RISER STRUCTURE
FOR COMMERCIAL SOLAR ENERGY PROJECTS
6" ONLINE RISER FOR IDENTIFICATION AND OBSERVATION
INSTALLED AT PARCEL INGRESS AND EGRESS LOCATIONS
TYPICAL SECTION NO. 27D



SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

EXISTING CLAY DRAIN TILE REPAIR SECTION
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING AGRICULTURAL DRAIN TILE REPLACEMENT SECTION
TYPICAL REPAIR SECTION FOR DRAIN TILE "BLOWOUT" OR FAILURE
DRAINAGE TYPICAL SECTION NO. 62A



PLAN VIEW

SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

EXISTING DRAIN TILE BYPASS REROUTE
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING DRAIN TILE REROUTE WHICH IS IN CONFLICT WITH FIXED IMPROVEMENT
INSTALLED AS MODIFICATION TO ORIGINAL ROUTE
TYPICAL SECTION NO. 360D

EXISTING CLAY DRAIN TILE REPAIR SECTION DETAILS (FOR REFERENCE ONLY – CONSULT WITH DRAIN TILE CONSULTANT FOR FINAL DETAILS)

N.T.S.

3 C-500

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE:
184.002012-0006 062.045338

KHA PROJECT 118938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NEW
CHECKED BY AMC

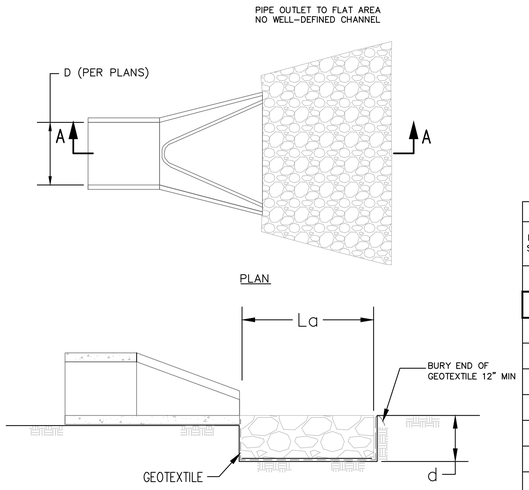
CONSTRUCTION DETAILS

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-500

Drawing name: K:\MSN_Energy\118938000 – ECA US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-500 CONSTRUCTION DETAILS.dwg C-500 CONSTRUCTION DETAILS Jul 24, 2025 4:05pm by: Ethan Horst

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES:

1. THE ROCK RIPRAP SHALL MEET IDOT REQUIREMENTS FOR GRADATION NO. RR-3 & RR-4 , QUALITY DESIGNATION "A".

2. GEOTEXTILE (NON-WOVEN) MINIMUM CRITERIA:
   - 2.1. WEIGHT OF GEOTEXTILE (OZ/SQ.YD.) 6
   - 2.2. TENSILE STRENGTH (LB) ASTM D 4632 180
   - 2.3. ELONGATION AT FAILURE (%) ASTM D 4632 ≥ 50
   - 2.4. PUNCTURE (LB) ASTM D 4833 80
   - 2.5. ULTRAVIOLET LIGHT (% RESIDUAL TENSILE STRENGTH) ASTM D 4355 MIN 70
   - 2.6. APPARENT OPENING SIZE (AOS) ASTM D 4751 MAX 40 SIEVE
   - 2.7. PERMITTIVITY SEC^{-1} ASTM D 4491 MIN 0.70

3. ANY GEOTEXTILE SPLICES SHALL OVERLAP A MINIMUM OF 18 INCHES, WITH UPSTREAM OR UPSLOPE GEOTEXTILE OVERLAPPING THE ABUTTING DOWNSLOPE GEOTEXTILE.

4. REFER TO PLAN FOR RIPRAP DIMENSIONS.

5. ROCK THICKNESS D SHALL BE AT LEAST 1.5 TIMES THE RIPRAP D_{100} SIZE.

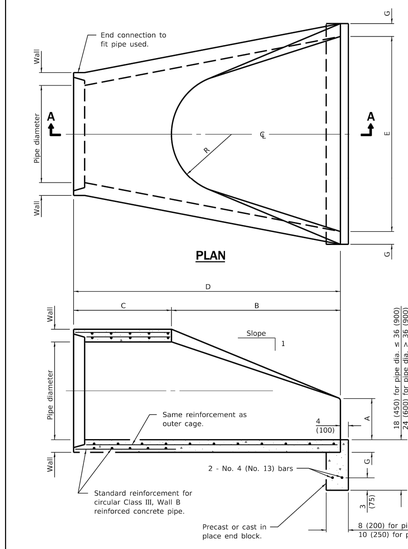
6. APRON LENGTH L_a AND ROCK RIPRAP HAS BEEN SIZED ACCORDING TO ILLINOIS URBAN MANUAL ROCK OUTLET PROTECTION STANDARD 910 BASED CALCULATED VELOCITY FOR THIS PROJECT SITE. WIDTH HAS BEEN ADJUSTED TO FIT EXISTING DITCH. PLEASE SEE TABLE 1 FOR DETAILS.

RIPRAP DIMENSION TABLE

INLET PIPE SIZE d (IN)	LENGTH OF APRON La (FT)	MEDIAN RIPRAP SIZE C (IN)	WIDTH OF APRON U/S FACE W1 (FT)	WIDTH OF APRON D/S FACE W2 (FT)	DEPTH OF RIPRAP d (IN)	AREA OF RIPRAP (SY)	VOLUME OF RIPRAP (CY)
12	10	6	3.00	13.00	15	8.89	3.7
15	10	6	3.75	13.75	15	9.72	4.1
18	15	9	4.50	19.50	20	20.00	11.1
21	15	9	5.25	20.25	20	21.25	11.8
24	18	9	6.00	24.00	20	30.00	16.7
27	18	9	6.75	24.75	20	31.50	17.5
30	20	9	7.50	27.50	20	38.89	21.6
36	24	12	9.00	33.00	28	56.00	43.6
42	27	12	10.50	37.50	30	72.00	60.0
48	27	15	12.00	39.00	32	76.50	68.0
54	27	15	13.50	40.50	32	81.00	72.0
60	36	15	15.00	51.00	32	132.00	118.0
72	44	18	18.00	62.00	32	195.56	174.0

1 C-501 RIP RAP OUTLET PROTECTION

SCALE: NTS



PIPE DIA.	APPROX. QTY. lbs. (kg)	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12 (300)	530 (240)	2 (51)	4 (102)	24 (610)	4'-0⅜" (1.241 m)	6'-0⅜" (1.853 m)	24 (610)	2 (51)	9 (229)	1:2.4
15 (375)	740 (335)	2¼ (57)	6 (152)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	30 (762)	2¼ (57)	11 (280)	1:2.4
18 (450)	990 (450)	2½ (64)	9 (229)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	36 (914)	2½ (64)	12 (305)	1:2.4
21 (525)	1280 (580)	2¾ (70)	9 (229)	35 (889)	38 (965)	6'-1" (1.854 m)	3'-6" (1.067 m)	2¾ (70)	13 (330)	1:2.4
24 (600)	1520 (690)	3 (76)	9½ (241)	3'-7½" (1.105 m)	30 (762)	6'-1½" (1.867 m)	4'-0" (1.219 m)	3 (76)	14 (356)	1:2.5
27 (675)	1930 (875)	3¼ (83)	10½ (267)	4'-0" (1.219 m)	25⅞ (648)	6'-1½" (1.867 m)	4'-6" (1.372 m)	3¼ (83)	14½ (368)	1:2.4
30 (750)	2190 (995)	3½ (89)	12 (305)	4'-6" (1.375 m)	19¾ (502)	6'-1⅜" (1.874 m)	5'-0" (1.524 m)	3½ (89)	15 (381)	1:2.5
33 (825)	3200 (1450)	3¾ (95)	13⅜ (343)	4'-10½" (1.486 m)	39¼ (997)	8'-1⅜" (2.483 m)	5'-6" (1.676 m)	3¾ (95)	17½ (445)	1:2.5
36 (900)	4100 (1860)	4 (102)	15 (381)	5'-3" (1.6 m)	34¾ (883)	8'-1⅜" (2.483 m)	6'-0" (1.829 m)	4 (102)	20 (508)	1:2.5
42 (1050)	5380 (2440)	4½ (114)	21 (533)	5'-3" (1.6 m)	35 (889)	8'-2" (2.489 m)	6'-6" (1.981 m)	4½ (114)	22 (559)	1:2.5
48 (1200)	6550 (2970)	5 (127)	24 (610)	6'-0" (1.829 m)	26 (660)	8'-2" (2.489 m)	7'-0" (2.134 m)	5 (127)	22 (559)	1:2.5
54 (1350)	8240 (3740)	5½ (140)	27 (686)	5'-5" (1.651 m)	35 (889)	8'-4" (2.54 m)	7'-6" (2.286 m)	5½ (140)	24 (610)	1:2.0
60 (1500)	8730 (3960)	6 (152)	35 (889)	5'-0" (1.524 m)	39 (991)	8'-3" (2.515 m)	8'-0" (2.438 m)	5 (127)	*	1:1.9
66 (1650)	10710 (4860)	6½ (165)	30 (762)	6'-0" (1.829 m)	27 (686)	8'-3" (2.515 m)	8'-6" (2.591 m)	5½ (140)	*	1:1.7
72 (1800)	12520 (5680)	7 (178)	36 (914)	6'-6" (1.981 m)	21 (533)	8'-3" (2.514 m)	9'-0" (2.743 m)	6 (152	*	1:1.8
78 (1950)	14770 (6700)	7½ (191)	36 (914)	7'-6" (2.286 m)	21 (533)	9'-3" (2.819 m)	9'-6" (2.896 m)	6½ (165)	*	1:1.8
84 (2100)	18160 (8240)	8 (203)	36 (914)	7'-6½" (2.299 m)	21 (533)	9'-3½" (2.832 m)	10'-0" (3.048 m)	6½ (165)	*	1:1.6

* Radius as furnished by manufacturer

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2011
ENGINEER OF BRIDGES AND STRUCTURES

APPROVED January 1, 2011
ENGINEER OF DESIGN AND ENVIRONMENT

BC400D 1-1-97

DATE	REVISIONS
1-1-11	Clarified ref. to pipe dia.
	on Section A-A. Changed
	'inner' to 'outer' cage ref.
1-1-09	Switched units to
	English (metric).

PRECAST REINFORCED CONCRETE FLARED END SECTION

STANDARD 542301-03

2 C-501 PRECAST REINFORCED CONCRETE FLARED END SECTION

SCALE: NTS

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD, SUITE 200
DEERFIELD, IL 60015 (847) 267-2804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE:
184.002012-0006 062.045338

No.	REVISIONS	DATE

KHA PROJECT 118938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NBW
CHECKED BY AMC

CONSTRUCTION DETAILS

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-501

Drawing name: K:\WSH_Energy\118938000 - ECA US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-500 CONSTRUCTION DETAILS.dwg C-501 CONSTRUCTION DETAILS Jul 24, 2025 4:05pm by: Ethan Horst

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

EXHIBIT C: PLAT OF SURVEY

ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft.

VICINITY MAP
NO SCALE

SCHEDULE B EXCEPTIONS

10. EASEMENT BETWEEN ANNA KUCERA AND ILLINOIS BELL TELEPHONE COMPANY, DATED AUGUST 14, 1961 AND RECORDED FEBRUARY 27, 1962 IN BOOK 683 PAGE 488 INSTRUMENT 92315, IN MCHENRY COUNTY, ILLINOIS.

11. ANY AND ALL MATTERS DISCLOSED ON THE MAP ENTITLED "PLAT OF DEDICATION OF PUBLIC HIGHWAY" DATED MAY 3, 1960 AND RECORDED JUNE 14, 1960 IN BOOK 1 PAGE 283, INSTRUMENT 370779 IN MCHENRY COUNTY, ILLINOIS.

12. EASEMENT AND RIGHT OF WAY AGREEMENT BETWEEN CHANG FAMILY LLC, AN ILLINOIS LIMITED LIABILITY COMPANY; AND ANR PIPELINE COMPANY, A DELAWARE CORPORATION, DATED OCTOBER 2, 2022 AND RECORDED FEBRUARY 15, 2024 IN INSTRUMENT 2024R0003553, IN MCHENRY COUNTY, ILLINOIS.

NOTES

REGARDING SCHEDULE B:

SCHEDULE B EXCEPTIONS 1, 2, 3, 4, 5, 6, 7, 8, 9 AND 13 ARE NOT SURVEY RELATED AND THEREFORE NOT SHOWN.

10. ILLINOIS BELL TELEPHONE COMPANY EASEMENT, RECORDED FEBRUARY 27, 1962 IN BOOK 683 PAGE 488 INSTRUMENT 92315, IS LOCATED ON THE NORTH SIDE OF U.S. ROUTE 14, NOT ON THE SURVEYED PROPERTY. NOT PLOTTABLE.
11. THE PLAT OF DEDICATION OF PUBLIC HIGHWAY, RECORDED JUNE 14, 1960 IN BOOK 1 PAGE 283, INSTRUMENT 370779, ALLOWS AN INDUSTRIAL/COMMERCIAL ENTRANCE TO THE SURVEYED PROPERTY FROM U.S. ROUTE 14 AT THE OPENING IN THE MEDIAN. SHOWN HEREON.
12. AN EXCLUSIVE PERPETUAL EASEMENT AND 50 FOOT RIGHT OF WAY FOR ANR PIPELINE COMPANY FACILITIES, RECORDED FEBRUARY 15, 2024 IN INSTRUMENT 2024R0003553, IS LOCATED ALONG THE WEST LINE OF THE SURVEYED PROPERTY. SEE DOCUMENT FOR DETAILS OF COVENANTS. PERMANENT AND TEMPORARY EASEMENTS SHOWN HEREON.

GENERAL NOTES

1. THIS SURVEY IS BASED ON THE LEGAL DESCRIPTION AND EASEMENTS OF RECORD AS IDENTIFIED IN TITLE COMMITMENT NUMBER ECA-204697-C ISSUED BY TOWER TITLE, LLC HAVING AN EFFECTIVE DATE OF FEBRUARY 4, 2025.
2. THE BASIS OF BEARINGS FOR THIS SURVEY IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (2011), ZONE 1201 (ILLINOIS EAST)
3. THIS SITE FALLS WITHIN "OTHER AREAS: ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DEFINED BY THE FLOOD INSURANCE RATE MAP, MAP NUMBER 17111C0178J, HAVING AN EFFECTIVE DATE OF NOVEMBER 16, 2006.
4. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A TOPOGRAPHIC SURVEY OR TOPOGRAPHIC MAP, AND IS BASED ON FIELD WORK PERFORMED ON 4/22/2025.
5. THE SURVEYOR CONTACTED J.U.L.I.E. FOR A DESIGN STAGE REQUEST FOR THIS SITE WHICH WAS ASSIGNED A DIG NUMBER OF A251073092. INQUIRIES WERE SENT OUT TO THE VARIOUS UTILITY COMPANIES REQUESTING MAPS AND/OR ATLASES OF THEIR RESPECTIVE FACILITIES. THE INFORMATION RECEIVED TO DATE IS SHOWN HEREON. ALSO, PRIOR TO FIELD WORK ON THIS SITE, TRI-COUNTY LOCATORS WAS CONTRACTED TO PROVIDE UTILITY LOCATING SERVICES ON SITE AND DALE MERRIMAN REPORTED THAT "THERE WAS NOTHING IN THE AREA TO BE LOCATED. MY TECH WENT OVER WHOLE AREA. NO CONFLICTS".
6. IN ACCORDANCE WITH TABLE A ITEMS 6(A) AND 6(B), A ZONING REPORT WAS NOT PROVIDED TO THE SURVEYOR.
7. ADJOINING OWNER INFORMATION SHOWN HEREON IS FROM AVAILABLE TAX RECORDS.
8. EVIDENCE OF RECENT EARTH MOVING WORK WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK.
9. NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES BASED ON INFORMATION RECEIVED FROM THE CONTROLLING JURISDICTION AT THE TIME OF THE SURVEY. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
10. IN ACCORDANCE WITH TABLE A ITEM 18, NO PLOTTABLE OFFSITE APPURTENANT EASEMENTS WERE DISCLOSED IN DOCUMENTS PROVIDED TO THE SURVEYOR.
11. THERE WERE NO WETLAND DELINEATION MARKERS OBSERVED IN THE PROCESS OF CONDUCTING FIELD WORK.
12. NO ABOVE GROUND EVIDENCE OF CEMETERIES, BURIAL GROUNDS OR GRAVE SITES OBSERVED IN THE PROCESS OF CONDUCTING FIELD WORK.
13. NO EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LAND FILL OBSERVED IN THE PROCESS OF CONDUCTING FIELD WORK.
14. THE PROPERTY HAS DIRECT AND PHYSICAL PEDESTRIAN AND VEHICULAR INGRESS AND EGRESS TO U.S. ROUTE 14, A PUBLIC RIGHT-OF-WAY.
15. THE SURVEYED SITE IS ONE PARCEL THAT CLOSES WITHOUT GAPS, GORES OR OVERLAPS.
16. ALL PARCELS COMPRISING THE SUBJECT PROPERTY ARE CONTIGUOUS WITHOUT GAPS, GORES OR OVERLAPS.
17. THE SURVEYED PROPERTY IS THE SAME AS THAT DESCRIBED IN THE TITLE COMMITMENT

ABBREVIATIONS

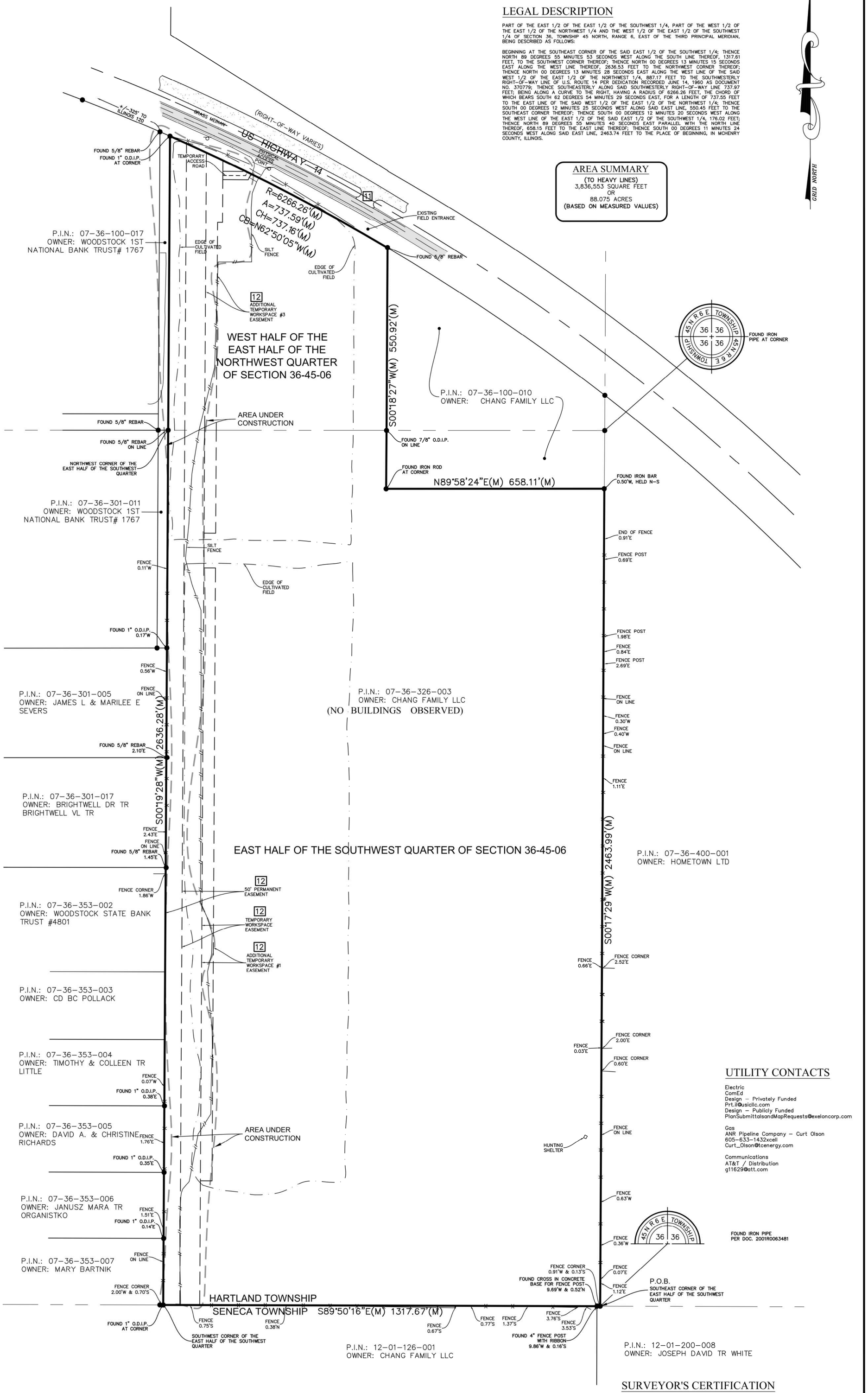
O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
MS = MULTI-STEM TREE

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- AREA OF CONSTRUCTION/GRADING

LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- SPRINKLER CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- WATER VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- COMMUNICATION PEDESTAL
- CABLE TELEVISION PEDESTAL
- AIR CONDITION UNIT
- CONTROL BOX
- WETLAND FLAG
- CAMERA
- CHARGING STATION
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN
- GAS MAIN
- ELECTRIC LINE
- OVERHEAD WIRES
- COMMUNICATION LINE
- FIBER OPTIC LINE
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE METAL
- PVC FENCE
- GUARDRAIL
- OVERHEAD TRAFFIC ARM
- TELLER CHUTE
- DRAIN
- SPEAKER
- BUILDING LIGHT



BENCHMARKS

REFERENCE BENCHMARK
TOP OF 7/8 INCH OUTSIDE DIAMETER IRON PIPE SET ALONG THE NORTH LINE OF THE SITE, APPROXIMATELY 478.8 FEET SOUTHEASTERLY OF THE NORTHWEST PROPERTY CORNER, 41.9 FEET SOUTHWEST OF THE SOUTHWESTERLY EDGE OF PAVEMENT OF U.S. ROUTE 14. THE ELEVATION IS FROM THE NGS OPUS SOLUTION REPORT PROVIDED BY NOAA, FILE 500 TR155440182083I, DATED MAY 6, 2025 AND IS BASED ON GPS OBSERVATIONS PERFORMED ON APRIL 22, 2025.

DATUM: NAVD88
ELEVATION = 921.20

SITE BENCHMARK #1
CUT CROSS IN CONCRETE TURN THROUGH ON US HIGHWAY 14 NEAR THE NORTHEAST CORNER OF SUBJECT PROPERTY

ELEVATION = 916.22

SITE BENCHMARK #2
SET MAG NAIL IN SOUTH EDGE OF PAVEMENT OF EAST BOUND LANE OF US HIGHWAY 14 NEAR THE NORTHWEST CORNER OF THE SUBJECT PROPERTY

ELEVATION = 921.33

LEGAL DESCRIPTION

PART OF THE EAST 1/2 OF THE EAST 1/2 OF THE SOUTHWEST 1/4, PART OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 AND THE WEST 1/2 OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 36, TOWNSHIP 45 NORTH, RANGE 6, EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE SAID EAST 1/2 OF THE SOUTHWEST 1/4; THENCE NORTH 89 DEGREES 55 MINUTES 53 SECONDS WEST ALONG THE SOUTH LINE THEREOF, 1317.61 FEET, TO THE SOUTHWEST CORNER THEREOF; THENCE NORTH 00 DEGREES 13 MINUTES 15 SECONDS EAST ALONG THE WEST LINE THEREOF, 2636.53 FEET TO THE NORTHWEST CORNER THEREOF; THENCE NORTH 00 DEGREES 13 MINUTES 28 SECONDS EAST ALONG THE WEST LINE OF THE SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4, 887.17 FEET TO THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF U.S. ROUTE 14 PER DEDICATION RECORDED JUNE 14, 1960 AS DOCUMENT NO. 370779; THENCE SOUTHEASTERLY ALONG SAID SOUTHWESTERLY RIGHT-OF-WAY LINE 737.97 FEET; BEING ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 6266.26 FEET, THE CHORD OF WHICH BEARS SOUTH 62 DEGREES 54 MINUTES 29 SECONDS EAST, FOR A LENGTH OF 737.55 FEET TO THE EAST LINE OF THE SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4; THENCE SOUTH 00 DEGREES 12 MINUTES 25 SECONDS WEST ALONG SAID EAST LINE, 550.45 FEET TO THE SOUTHEAST CORNER THEREOF; THENCE SOUTH 00 DEGREES 12 MINUTES 20 SECONDS WEST ALONG THE WEST LINE OF THE EAST 1/2 OF THE SAID EAST 1/2 OF THE SOUTHWEST 1/4, 176.02 FEET; THENCE NORTH 89 DEGREES 55 MINUTES 40 SECONDS EAST PARALLEL WITH THE NORTH LINE THEREOF, 658.15 FEET TO THE EAST LINE THEREOF; THENCE SOUTH 00 DEGREES 11 MINUTES 24 SECONDS WEST ALONG SAID EAST LINE, 2463.74 FEET TO THE PLACE OF BEGINNING, IN MCHENRY COUNTY, ILLINOIS.

AREA SUMMARY

(TO HEAVY LINES)
3,836,553 SQUARE FEET
OR
88.075 ACRES
(BASED ON MEASURED VALUES)

UTILITY CONTACTS

Electric
ComEd
Design – Privately Funded
Prt.il@usiclic.com
Design – Publicly Funded
PlanSubmittalsandMapRequests@exeloncorp.com

Gas
ANR Pipeline Company – Curt Olson
605-633-1432xcell
Curt_Olson@tcenergy.com

Communications
AT&T / Distribution
g11629@att.com

FOUND IRON PIPE
PER DOC. 2001R0063481

SURVEYOR'S CERTIFICATION

TO: TOWER TITLE, LLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(A), 6(B), 7(A), (7B1), 7(C), 8, 9, 11(B), 13, 14, 16, 17, 18 AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON APRIL 22, 2025.

COMPASS SURVEYING LTD
PROFESSIONAL DESIGN FIRM
LAND SURVEYOR CORPORATION NO. 184-002778
LICENSE EXPIRES 4/30/2027

DATE OF PLAT OR MAP: MAY 5, 2025

BY: _____
DAVID P. FILIPSKI
IL PROFESSIONAL LAND SURVEYOR NO. 3352
LICENSE EXPIRES 11/30/26

DAVID P. FILIPSKI 35-3352 AURORA, ILLINOIS — PROFESSIONAL LAND SURVEYOR — STATE OF ILLINOIS

5/7/2025 3:38 PM – J:\PSDATA\2025 PROJECTS\25.0101\25.0101 LTS TOPO.DWG

PROJ. NO.: 25.0101
1 OF 3
SCALE: 1" = 150'

COMPASS SURVEYING LTD
ALTA SURVEYS ● TOPOGRAPHY ● CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

PROJECT
ECA Solar Project
HIGHWAY 14
WOODSTOCK, IL

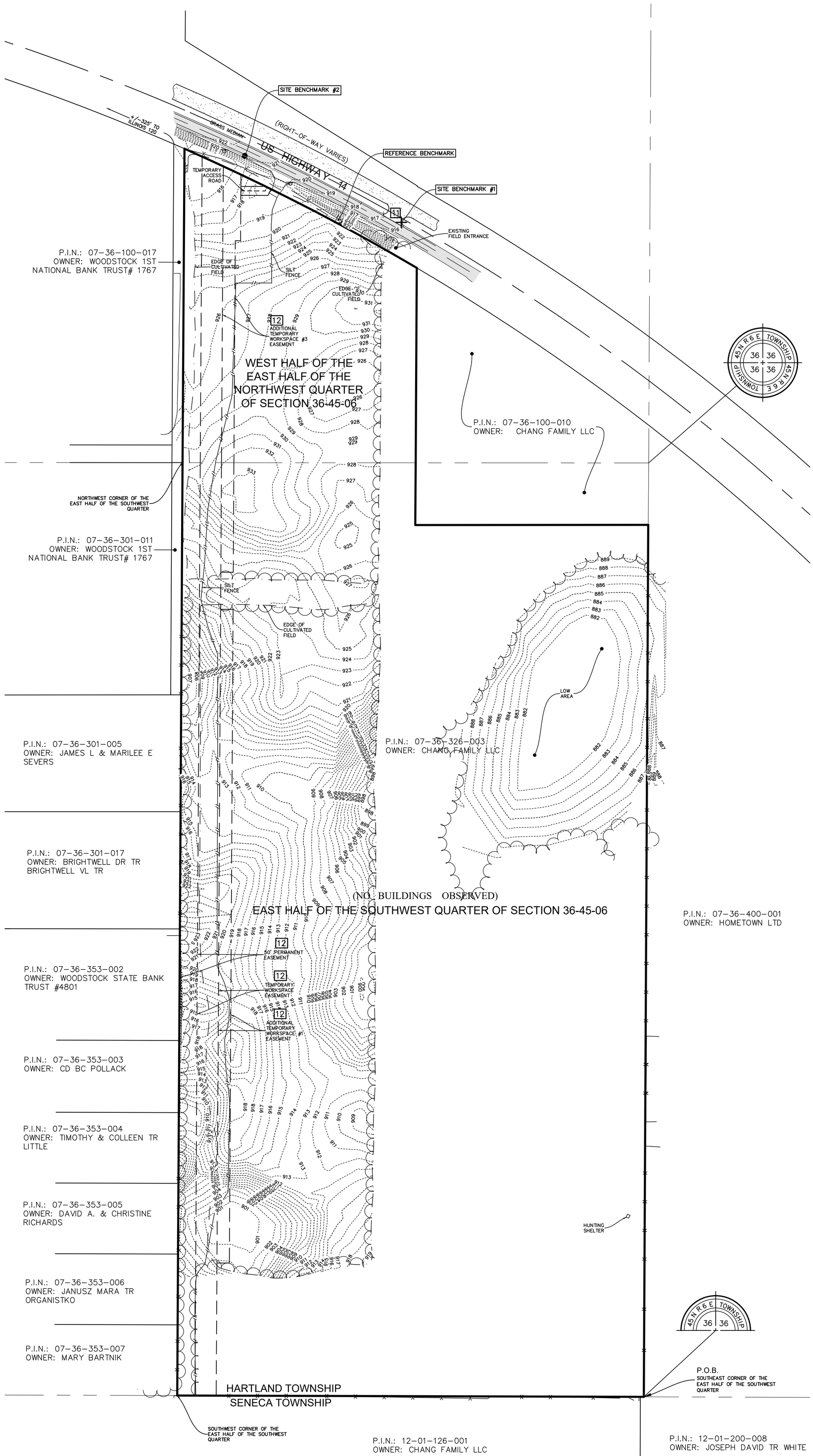
CLIENT
Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
WWW.KIMLEY-HORN.COM

DATE: 05-05-2025 | PC TK | DRAWN BY BT | CHECKED BY DW | BOOK 704 PG 33-35

NO.	REVISIONS	DATE	BY

ALTA/NSPS LAND TITLE
AND TOPOGRAPHIC SURVEY

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft.



ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
HDPE = HIGH-DENSITY POLYETHYLENE PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
BC = BACK OF CURB
BDC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALL
TP = TOP OF PIPE
IE = INVERT ELEVATION
PL = PROPERTY LINE
DS = DOWN SPOUT
S.F. = SQUARE FEET
SL = SHORE LINE
TSF = TRANSFORMER
B = PAVERS
MS = MULTI-STEM TREE

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR
- FLOOD ZONE DIVISION LINE

LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- SPRINKLER CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- WATER VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- COMMUNICATION PEDESTAL
- CABLE TELEVISION PEDESTAL
- AIR CONDITION UNIT
- CONTROL BOX
- WETLAND FLAG
- CAMERA
- CHARGING STATION

- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN
- GAS MAIN
- ELECTRIC LINE
- OVERHEAD WIRES
- COMMUNICATION LINE
- FIBER OPTIC LINE
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE METAL
- PVC FENCE
- GUARDRAIL
- OVERHEAD TRAFFIC ARM
- TELLER CHUTE
- DRAIN
- SPEAKER
- BUILDING LIGHT

5/7/2025 3:38 PM – J:\PSDATA\2025 PROJECTS\25.0101\25.0101 LTS TOPO.DWG

PROJ. NO.: 25.0101
2 OF 3
SCALE: 1" = 150'

COMPASS SURVEYING LTD
ALTA SURVEYS ● TOPOGRAPHY ● CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

PROJECT
ECA Solar Project
HIGHWAY 14
WOODSTOCK, IL

CLIENT
Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
WWW.KIMLEY-HORN.COM

DATE: 05-05-2025 | PC TK | DRAWN BY BT | CHECKED BY DW | BOOK 704 PG 33-35

NO.	REVISIONS	DATE	BY

ALTA/NSPS LAND TITLE
AND TOPOGRAPHIC SURVEY

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR
- FLOOD ZONE DIVISION LINE

ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
HDPE = HIGH-DENSITY POLYETHYLENE PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
BC = BACK OF CURB
BDC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALL
TP = TOP OF PIPE
IE = INVERT ELEVATION
PL = PROPERTY LINE
DS = DOWN SPOUT
S.F. = SQUARE FEET
SL = SHORE LINE
TSF = TRANSFORMER
B = PAVERS
MS = MULTI-STEM TREE

LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- SPRINKLER CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- WATER VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- COMMUNICATION PEDESTAL
- CABLE TELEVISION PEDESTAL
- AIR CONDITION UNIT
- CONTROL BOX
- WETLAND FLAG
- CAMERA
- CHARGING STATION
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN — W —
- GAS MAIN — G —
- ELECTRIC LINE — E —
- OVERHEAD WIRES — OHW —
- COMMUNICATION LINE — T —
- FIBER OPTIC LINE — FO —
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE METAL
- PVC FENCE
- GUARDRAIL
- OVERHEAD TRAFFIC ARM
- TELLER CHUTE
- DRAIN
- SPEAKER
- BUILDING LIGHT

US HIGHWAY 14

BENCHMARK #2

BENCHMARK #1

REFERENCE BENCHMARK

TBT-INV. IE=917.65

16" INV. IE=917.60

15" CMP IE=912.39

15" CMP IE=911.81

END OF WIRE FENCE 0.02'W'LY & 0.29'E

GRASS MEDIAN

ACCESS DRIVE

TEMPORARY ACCESS ROAD

GRADING IN THIS AREA COMMENCED AFTER TOPOGRAPHY WAS MEASURED

SILT FENCE

FIELD ENTRANCE

WIRE FENCE 4.51'NW'LY

APPROXIMATE LIMITS OF TREE LINE

EDGE OF CULTIVATED FIELD

GRAVEL DRIVE 9.9'W

(NO BUILDINGS OBSERVED)

12 ADDITIONAL TEMPORARY WORKSPACE #3 EASEMENT

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

GRID NORTH

DATE:	NO.	REVISIONS	DRAWN BY	BT	CHECKED BY	DW	BOOK 704 PG 33-35	DATE	BY
05-05-2025			PC	TK					

CLIENT

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
WWW.KIMLEY-HORN.COM

PROJECT

ECA Solar Project
HIGHWAY 14
WOODSTOCK, IL

COMPASS SURVEYING LTD
ALTA SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, ILLINOIS 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

SCALE: 1" = 30'

3 OF 3

PROJ. NO.: 25.0101

5/7/2025 3:39 PM – J:\PSDATA\2025 PROJECTS\25.0101\25.0101 LTS TOPO.DWG

EXHIBIT D: DECOMMISSIONING PLAN

DECOMMISSIONING PLAN

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
US HWY 14, WOODSTOCK, IL

07/25/2025

DECOMMISSIONING PLAN

Introduction

Woodstock Community Energy Initiative LLC developed this decommissioning plan for the Commercial Solar Energy Facility located off U.S. Hwy 14 in Woodstock, IL (PARCEL ID 07-36-326-003). This plan will be implemented after the contracted lease term has ended or if deemed abandoned. ***Decommissioning of the Project will be the responsibility of Woodstock Community Energy Initiative LLC***. This plan has been developed based on the conditions outlined in the Agricultural Impact Mitigation Agreement (AIMA) and in compliance with the McHenry County Code of Ordinances.

Abandonment

If the Woodstock Community Energy Generating facility does not produce energy for a continuous period of one year or more, it shall be presumed to have been abandoned. Decommissioning will consist of the physical removal of all solar photovoltaic facilities, including:

- Solar panels, cells and modules;
- Solar panel mounts and racking, including any helical piles, ground screws, ballasts, or other anchoring systems;
- Solar panel foundations, if used (to a depth of 5 feet);
- Transformers, inverters, energy storage facilities, or substations, including all components and foundations; however, Underground cables at a depth of 5 feet or greater may be left in place;
- Overhead collection system components;
- If proposed, operations/maintenance buildings, spare parts buildings and substation/switching gear buildings unless otherwise agreed to by the Landowner.
- Access Road(s) unless Landowner requests in writing that the access road is to remain;
- Operations/maintenance yard/staging area unless otherwise agreed to by the Landowner, and
- Debris and litter generated by Deconstruction and Deconstruction crews.

Decommissioning Activities

Decommissioning of the Woodstock Community Energy Generating facility will include removal of all above-ground infrastructure, including the arrays, inverter structures, concrete foundations and pads, electrical infrastructure, gravel roads and perimeter fences. Grading and re-vegetation will comply with all applicable rules and regulations. Concrete footings or foundations (if present) will be removed.

Woodstock Community Energy Initiative LLC will decommission the Project once the contracted lease term is over or if deemed abandoned. Woodstock Community Energy Initiative LLC will provide notice to McHenry County prior to the start of decommissioning.

Waste Disposal

Disposal of the solar array facility will include landfilling, metal recycling and solar panel recycling. The following is a general list of these items.

Landfilling
Wood fence posts
Wood utility poles
Concrete pads
Privacy mesh

Metal Recycling
Fence mesh
Wires
Racking
Metal electrical equipment

Solar Panel Recycling
Solar Panels

Other Wastes
Transformer oil (non-hazardous) – oil recycling facility
Pollinator gardens – yard waste at landfill or composting facility

The following is a list of disposal facilities that may be used for the decommissioning activities. This list is subject to change depending on facility requirements and permits.

Landfilling
Countryside Landfill. Grayslake, IL
Winnebago Landfill. Rockford, IL

Solar Panel Recycling
Powerhouse Recycling Salisbury, NC
FirstAmerica Atlanta, GA

Metal Recycling
T&C Metal Co. Crystal Lake, IL
Behr Iron & Metal. Woodstock, IL

Other Wastes
SET Environmental. Wheeling, IL

Estimated Timeline and Cost

Decommissioning activities will be completed within 180 days from commencement of the decommissioning process as described herein. Woodstock Community Energy Initiative LLC estimates the cost of decommissioning to be approximately $285,083. This estimate assumes a potential secondary market for certain components of the Project equipment, and disposal or recycling of other components aligned with industry best practices.

Our estimate was developed by Becker Morgan Group of Salisbury, MD. Becker Morgan Group developed a list of decommissioning items by reviewing the proposed civil and electrical plan sets. The estimate was developed using contractor quotes, past project data, and publicly available decommissioning costs for other solar projects. Becker Morgan Group also used RS Means published cost data for Heavy Construction for the solar racking and removal of foundation posts as well as other similar items.

Restoration of Land

Decommissioning consists of the removal of above and below ground facility components, management of excess wastes and materials, and the restoration of ground surface irregularities and herbaceous vegetation. In the event that commercial operations cease for over 12 months, the project area is to be restored in a manner consistent with its condition prior to facility construction. Decommissioning activities are expected to be completed within 180 days. Removal of all equipment will be done in accordance with applicable regulations at the time. Following the removal of all equipment, restoration of the land will consist of the following:

- Minor grading and filling of all holes, ruts, depressions and irregularities created in removal of the solar facility equipment.
- Removal of pollinator gardens and restoration of areas to allow for farming
- Raking and aerating or tilling (de-compaction) of travel pathways used during the operations and decommissioning.
- Seeding of all disturbed and unvegetated areas with a seed mix supportive of farming (e.g. winter rye).

Financial Instrument

Woodstock Community Energy Initiative LLC will provide a financial instrument to ensure the timely decommission of the project. This instrument shall be a performance bond, escrow, cash, certificate of deposit, irrevocable letter of credit, corporate guarantee or other equivalent. The financial instrument will provide payment to the landowner and County for the value of the decommissioning costs. The instrument will remain valid for the entire duration of the project. For all ownership changes, the financial instrument shall be replaced with no gap in coverage. The county may, at it's discretion, reevaluate the estimated costs of the financial instrument ten (10) years after the commercial operation date and then every five (5) years following to ensure the amount reflects the current market decommissioning costs.

PROJECT DECOMMISIONING COST ESTIMATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
US HWY 14, WOODSTOCK, IL

SYSTEM SIZE (MW DC) **7.500**

Estimated Construction Costs					
Item	**Quantity**	**Units**	**Unit Cost**	**Unit Salvage**	**Total Cost**
Mobilization	1	LS	$ 10,000	$ -	$ 10,000
Site Preparation	1	LS	$ 5,000	$ -	$ 5,000
Electrical Permits	1	LS	$ 1,500	$ -	$ 1,500
Building Permits	1	LS	$ 1,500	$ -	$ 1,500
Pole Removal: Utility Poles	3	EA	$ 2,500	$ -	$ 7,500
Pole Removal: Project Poles	4	EA	$ 2,500	$ -	$ 10,000
Pole Gear Removal: Meters & GOAB	1	LS	$ 2,500	$ -	$ 2,500
Underground Conduit Removal: AC&DC	2005	LF	$ 10.00	$ 0.17	$ 19,709
Concrete Pads Removal	2	EA	$ 2,000	$ -	$ 4,000
Transformers Removal	2	EA	$ 3,000	$ 5,400	$ (4,800)
Switchgear Removal	1	EA	$ 2,500	$ -	$ 2,500
Recloser Removal	1	EA	$ 2,500	$ -	$ 2,500
Inverters Removal	20	EA	$ 750	$ 500	$ 5,000
Modules Removal	12720	EA	$ 4.79	$ 3.80	$ 12,593
Racking Removal: Tracker Torque Tube	139	EA	$ 125	$ 175	$ (6,950)
Foundation Removal	1965	EA	$ 17.35	$ 12.75	$ 9,039
Fence Removal	6436	LF	$ 2.50	$ 0.50	$ 12,872
Gravel Access Road Removal	2028	CY	$ 20.00	$ -	$ 40,560
Site Grading	30.0	AC	$ 1,800	$ -	$ 54,000
Hydroseeding and Mulch	30.0	AC	$ 2,000	$ -	$ 60,000
Solid Waste Transportation and Disposal (Dumpsters)	25	EA	$ 700	$ -	$ 17,500
Recycling Disposal Transportation (Palletized Truckloads)	37	EA	$ 380	$ -	$ 14,060
Construction Management	1	LS	$ 3,000	$ -	$ 3,000
Project Administration	1	LS	$ 1,500	$ -	$ 1,500
DECOMMISSIONING TOTAL					**$ 285,083**

NOTES:
LF= liner feet
CY = cubic yards
EA = each
AC = acres
LS = lump sum

EXHIBIT E: WETLAND DELINEATION REPORT

SCI ENGINEERING, INC.
650 Pierce Boulevard
O'Fallon, Illinois 62269
618-624-6969
www.sciengineering.com

Wetland and Waterbody Delineation Report

WOODSTOCK COMMUNITY ENERGY INIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

July 10, 2025

Prepared for:

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC

SCI No. 2025-0239.30 (Task 200)

SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

July 10, 2025

Tiffany Grace
Woodstock Community Energy Initiative LLC
203 Cresent Street #106
Waltham, Massachusetts 02453

RE: Wetland and Waterbody Delineation Report
Woodstock Community Energy Initiative LLC Solar Project
Woodstock, Illinois
SCI No. 2025-0239.30 (Task 200)

Dear Tiffany Grace:

Please find attached SCI Engineering, Inc.'s (SCI) *Wetland and Waterbody Delineation Report*, dated July 10, 2025, for the above-referenced project site. The approximately 88-acre site is located south of Highway 14 and north of Kishwaukee Valley Road in Woodstock, Illinois. The project includes the proposed construction of a solar development with associated access and infrastructure. Our due diligence services consisted of a site reconnaissance survey and the preparation of a Wetland and Waterbody Delineation report. An executive summary of the report is provided below.

- SCI conducted a wetland and waterbody delineation of the site on May 28, 2025. The site was found to contain one emergent wetland within the proposed project boundary.

- The identified feature would likely not be considered a water of the United States (WOTUS) as identified under the definitions described in *Section 328.3 of the Code of Federal Regulations and the May 25, 2023, Sackett V. the U.S. Environmental Protection Agency* supreme court case decision. However, Wetland A would likely be considered an Isolated Water of McHenry County and would require a 50-foot buffer, as specified in the McHenry County Stormwater Management Ordinance.

- If impacts are proposed to the waterbody feature, it is likely that a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the Illinois Environmental Protection Agency (IEPA) would be required.

The attached report should be read in its entirety. We appreciate the opportunity to provide you with our natural resource services. Please contact us should you have any questions or concerns.

Respectfully,

SCI ENGINEERING, INC.

Justin Loos
Field Scientist

Michael S. Holm, CESSWI, CPESC
Project Scientist

Enclosure

N:\Projects\2025\2025-0239 Woodstock Community Energy Initiative LLC\NR\30\T200-Wetland Delineation\Report\250239.30_Woodstock_Energy Delineation Report - revised 7.10.25.docx

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 SITE LOCATION 1

3.0 DESKTOP REVIEW 2
3.1 United States Geological Survey (USGS) 2
3.2 National Wetlands Inventory (NWI) 2
3.3 Web Soil Survey 2
3.4 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 3
3.5 Historic Aerials Review 3
3.6 Hydrologic Atlas 3
3.7 Antecedent Precipitation Evaluation 3

4.0 SITE RECONNAISSANCE 4

5.0 CONDITION SUMMARY 4
5.1 Farmed Wetland Determination 4
5.2 USACE Wetland Delineation 5
5.3 Floristic Quality Index (FQI) Assessment Summary 6

6.0 CONCLUSION & RECOMMENDATIONS 6

7.0 LIMITATIONS 7

TABLES

Table 3.1 – Soil Survey Data 2
Table 5.1 – Farmed Wetland Determination 5
Table 5.2 – FQI Assessment Results 6

FIGURES

Figure 1 – Vicinity and Topographic Map
Figure 2 – NWI & USDA Soils Map
Figure 3 – FEMA Flood Map
Figure 4 – Hydrologic Atlas
Figure 5 – ADID Map
Figure 6 – Wetland Delineation & Aerial Photograph
Figure 7 – 2010 Aerial Photograph
Figure 8 – 2008 Aerial Photograph
Figure 9 – 2007 Aerial Photograph
Figure 10 – 2006 Aerial Photograph
Figure 11 – 2004 Aerial Photograph
Figure 12 – 2003 Aerial Photograph
Figure 13 – 2001 Aerial Photograph
Figure 14 – 1999 Aerial Photograph
Figure 15 – 1996 Aerial Photograph

APPENDICES

Appendix A – Photographic Summary
Appendix B – Wetland Determination Data Forms
Appendix C – FQI Assessment Summary

Wetland and Waterbody Delineation Report

WOODSTOCK COMMUNITY ENERGY INITIATIVE SOLAR PROJECT
WOODSTOCK, ILLINOIS

1.0 INTRODUCTION

SCI Engineering, Inc. (SCI) was retained by Woodstock Community Energy Initiative LLC to conduct a wetland and waterbody delineation of an approximate 88-acre site located south of Highway 14 and north of Kishwaukee Valley Road in Woodstock, Illinois. SCI understands that the project site is being considered for a new solar development with associated access and infrastructure. The scope of services included performing site reconnaissance to characterize the soils, vegetation, and hydrology for the delineation of wetlands and waterbodies. Our services were provided in general accordance with our proposal, dated April 15, 2025, and executed on May 9, 2025.

On May 28, 2025, SCI Natural Resource Scientists performed a wetland and waterbody delineation on the project site and identified one emergent wetland (Wetland A) within the project survey limits.

Traditional Navigable Waterways (TNW), relatively permanent waterways (RPW), virtually indistinguishable wetlands, and some lakes and ponds, are considered waters of the United States (WOTUS) as determined in the recent Supreme Court Case, *Sackett vs the U.S. Environmental Protection Agency* (USEPA). Any impact to a WOTUS, including filling, crossing, piping, relocating, or discharging into, would require a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the Illinois Environmental Protection Agency (IEPA). Please note that the USACE has the sole authority to determine if any features identified are WOTUS resources. Likewise, the USACE has the authority to review the results of the delineation and notify the applicant of any additional requirements or restrictions.

2.0 SITE LOCATION

The approximately 88-acre project site is located south of Highway 14 and north of Kishwaukee Valley Road in Woodstock, Illinois (42.332918, -88.485831). The site consists of two agricultural fields in the west half of the site and forested areas in the east half and south section of the site. The *Vicinity and Topographic Map* depicting the site location is enclosed as Figure 1.

3.0 DESKTOP REVIEW

3.1 United States Geological Survey (USGS)

The United States Geological Survey (USGS) topographic map depicts a pond feature offsite, adjacent to the east boundary of the site. The site has approximately 40 feet of elevation change and generally drains to the north, west and south. The *USGS Topographic Map* is enclosed as Figure 1.

3.2 National Wetlands Inventory (NWI)

The NWI Map depicts two freshwater emergent wetland habitats (PEM1C) in the eastern section of the site, with the larger wetland habitat in the same location as the USGS mapped pond. The *NWI Map* is enclosed as Figure 2.

3.3 Web Soil Survey

The Natural Resources Conservation Service (NRCS) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov) was utilized to determine the mapped soil types and hydric rating of the soils underlaying the project site. Wetlands require hydric soils, which are described as those soils that are sufficiently wet in the upper part to develop anaerobic conditions during the growing season. Fourteen soil units are mapped within the project site, four of which is considered to be a hydric soil. The mapped soil units are summarized in Table 3.1 below. The mapped soils are shown on Figure 2.

Table 3.1 - Soil Survey Data

Soil Map Unit Name	Hydric rating
Pella silt loam, 0 to 2 percent slopes, overwash	Hydric
Thorp silt loam, 0 to 2 percent slopes	Hydric
McHenry silt loam, 2 to 4 percent slopes, eroded	Non-hydric
Kidder loam, 4 to 6 percent slopes, eroded	Non-hydric
Kidder loam, 6 to 12 percent slopes, eroded	Non-hydric
Kidder loam, 12 to 20 percent slopes, eroded	Non-hydric
Kidder silt loam, 20 to 30 percent slopes	Non-hydric
Kidami silt loam, 2 to 4 percent slopes	Non-hydric
Kidami silt loam, 4 to 6 percent slopes	Non-hydric
Kidami loam, 4 to 6 percent slopes, eroded	Non-hydric
Kidami loam, 6 to 12 percent slopes, eroded	Non-hydric
Octagon silt loam, 2 to 4 percent slopes	Non-hydric
Palms muck, ponded, 0 to 2 percent slopes	Hydric
Selmass loam, 0 to 2 percent slopes, undrained	Hydric

3.4 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM)

Review of the FIRM panel map 17111C0178J (Effective date: November 16, 2006) indicates no regulatory floodway within the project survey limits. The *FEMA Flood Map* is enclosed as Figure 3.

3.5 Historic Aerials Review

Publicly available historic aerials were reviewed from 1953 to 2021. In 1953, the project site had an agricultural field in the northern section of the site with the rest of the property being pasture. In 1961, 1966, and 1972, water appears to be present in a depressional area in the eastern section of the site. The site appears to show little change in these years. By 1980, the western section of the site appears to be farmed annually. The eastern section of the site appears to be used as pasture. By 1988, the eastern and southern sections of the site appear to have increased tree cover with the rest of the site being used for agriculture. By 1999, the eastern and southern sections of the site have significant tree coverage. The wet area is still present in the eastern section of the site. From 2002 to 2021, the site shows little change. In 2009, 2010, 2017, and 2019 there is visible water gathered in the depressional area within the eastern section of the site. The western section of the site is currently being used for agricultural purposes while the eastern section of the site remains forested with the large depressional area.

3.6 Hydrologic Atlas

The atlases include the extent of historic floods, gage height during flood events, and flood discharge rates, alongside related information. The proposed project site does not appear to be located within areas of historic flooding as shown on the Hydrologic Atlas figure included as Figure 5.

3.7 Antecedent Precipitation Evaluation

The USACE Antecedent Precipitation Tool (APT) was utilized to calculate the normal range of precipitation for the project area, including whether the area was experiencing a drought at the time of the delineation. The APT shows that the project site was experiencing “Normal Conditions” at the time of the site visit and was within the wet season. The drought index indicated that the project area was experiencing a mild drought.

4.0 SITE RECONNAISSANCE

On May 28, 2025, SCI Natural Resource Scientists conducted a field exploration to delineate the extent of wetlands and waterbodies that may exist within the project site. Suspect areas that were identified during the desktop review were explored for wetland and waterbody characteristics utilizing methods as described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0).

Most of the site is used as agricultural fields and appears to be farmed annually. The agricultural fields were planted with field corn (*Zea mays*). During the time of the site visit the western edge of the property was disturbed for the installation of a new gas pipeline. The top few inches of soil were cleared away and a large trench was dug to place the pipe. Many large sections of pipe were present onsite along with several large excavators. A large semi-trailer was also present in the northwestern corner of the site. No work was being completed while SCI was onsite. The dominant tree species within the forested area includes bur oak (*Quercus macrocarpa*), white ash (*Fraxinus americana*), and box elder (*Acer negundo)*. The dominant vegetation within the forested areas on site includes dame's rocket (*Hesperis matronalis)*, jumpseed (*persicaria virginiana)*, Canadian black snake root *(Sanicula canadensis)*, Canadian anemone (*Anemonidium canadensis)*, and Canada goldenrod *(Solidago canadensis).*

5.0 CONDITION SUMMARY

5.1 Farmed Wetland Determination

In an effort to assist in the identification of farmed wetlands within the project limits, SCI reviewed a minimum of five years of aerial imagery for designated years with approximate "normal precipitation" during the early growing season (April through June), based on long-term precipitation averages. The aerial review focused on the identification of wetland signatures, which are indicators left in the field due to ponding, flooding or impacts of saturation for sufficient duration. During our review, two areas possessing wetland signatures were identified within the project area, as depicted on Figures 5 through 13. Farmed Wetland 1 was only observed on the 2007 aerial photograph while Farmed Wetland 2 was observed on the 2007, 2003, and 2001 aerial photographs. Both farmed wetland areas were not observed on a majority of the reviewed normal condition year aerial photographs, therefore these areas are likely not farmed wetlands. A Farmed Wetland Determination Summary is provided in Table 5.1, below. The aerial photographs used in this review are included as Figures 5 through 11.

Table 5.1 - Farmed Wetland Determination

Imagery Date	Source	Annual Precipitation Condition	Wetland Signature Assessment				
			1	2	3	4	5
2010	FSA	Wet	Yes	Yes	-	-	-
2008	FSA	Normal	No	No	-	-	-
2007	FSA	Normal	Yes	Yes	-	-	-
2006	FSA	Normal	No	No	-	-	-
2004	FSA	Normal	No	No	-	-	-
2003	FSA	Normal	No	Yes	-	-	-
2001	FSA	Normal	No	Yes	-	-	-
1999	FSA	Normal	No	No	-	-	-
1996	FSA	Normal	No	No	-	-	-
	Number of Normal Years	8	1	3	-	-	-
	ID on NWI or MCWI (Y/N)		N	N	-	-	-
	Potential FW		No	No	-	-	-
	Field-Verified Hydric Soil (Y/N)		N	N			
	Qualifies as FW?		No	No			

5.2 USACE Wetland Delineation

During the site visit, one emergent wetland was observed within the site boundaries. Data was collected on USACE – Wetland Determination Data Forms for areas on site. A photographic summary of the representative site conditions and identified features are included as Appendix A. The *Automated Wetland Determination Data Forms* are enclosed as Appendix B. In addition, the features identified are illustrated on Figure 4 - *Wetland Delineation and Aerial Photograph*. The following discussion provides a narrative description of the identified features.

Wetland A is an approximately 2.61-acre closed depressional, emergent wetland located in the eastern portion of the site. The emergent vegetative community was dominated by reed canary grass (*Phalaris arundinacea).* Soils possessing hydric soil indicators of a dark surface and depletion below a dark surface were observed throughout the wetland area. Observed wetland indicators included geomorphic position, and the FAC-neutral test. Based on the lack of hydrologic connections to any waterbodies, this wetland would likely not be determined a WOTUS and would likely be considered non-jurisdictional by the USACE.

5.3 Floristic Quality Index (FQI) Assessment Summary

The Floristic Quality Index (FQI) calculation utilizes the coefficient of conservatism (C) value assigned to each vegetative species by Swink and Wilhelm's Plants of the Chicago Region, 1994. The C values range from 0 to 10 for each native species and represent the probability that a species is likely to occur in northeastern Illinois landscapes relatively unaltered by settlement. Plant species which have relatively specialized habitat requirements have been assigned high C values. Conversely, species found in a variety of habitats have been assigned low C values. According to the USACE Chicago District definitions, wetlands with an FQI value of 20 or greater and/or a mean C-value of 3.5 or greater are considered a high-quality aquatic resource (HQAR).

Wetland A contained no native species and was calculated to have an FQI value of 0. The Native Mean C value for Wetland A was calculated to 0. Based on these calculations, the on-site wetland would not be considered an HQAR. A summary of the FQI is provided in Table 5.2 below and within Appendix C.

Table 5.2 – FQI Assessment Results

	Wetland A
Total Number of Species (n)	1
Number of Native Species	0
Native Mean C	0
FQI Value	**0**

6.0 CONCLUSION & RECOMMENDATIONS

SCI performed a wetland and waterbody delineation on May 28, 2025, and identified 1 emergent wetland within the project survey limits. The feature is not anticipated to be considered a WOTUS resource as determined by the *Sackett vs the USEPA/USACE* supreme court decision and thus regulated by the USACE. A Section 404 Permit from the USACE and Section 401 Water Quality Certification from the IEPA would likely be necessary if impacts are proposed to this feature.

The project area is located within unincorporated McHenry County. Based on our review of available information, the project area would fall under the regulations of the McHenry County Stormwater Management Ordinance. Wetland A would likely be considered Isolated Waters of McHenry County (IWMC). IWMC are defined as all waters such as rivers, lakes, ponds, streams, farmed wetlands, and wetlands that are not under USACE jurisdiction. A buffer of 50 feet is required around wetlands greater

than 0.5 acres. Our delineation report includes additional information and documentation, as required by this ordinance. Please note additional requirements are necessary for the McHenry County Stormwater Management Permit.

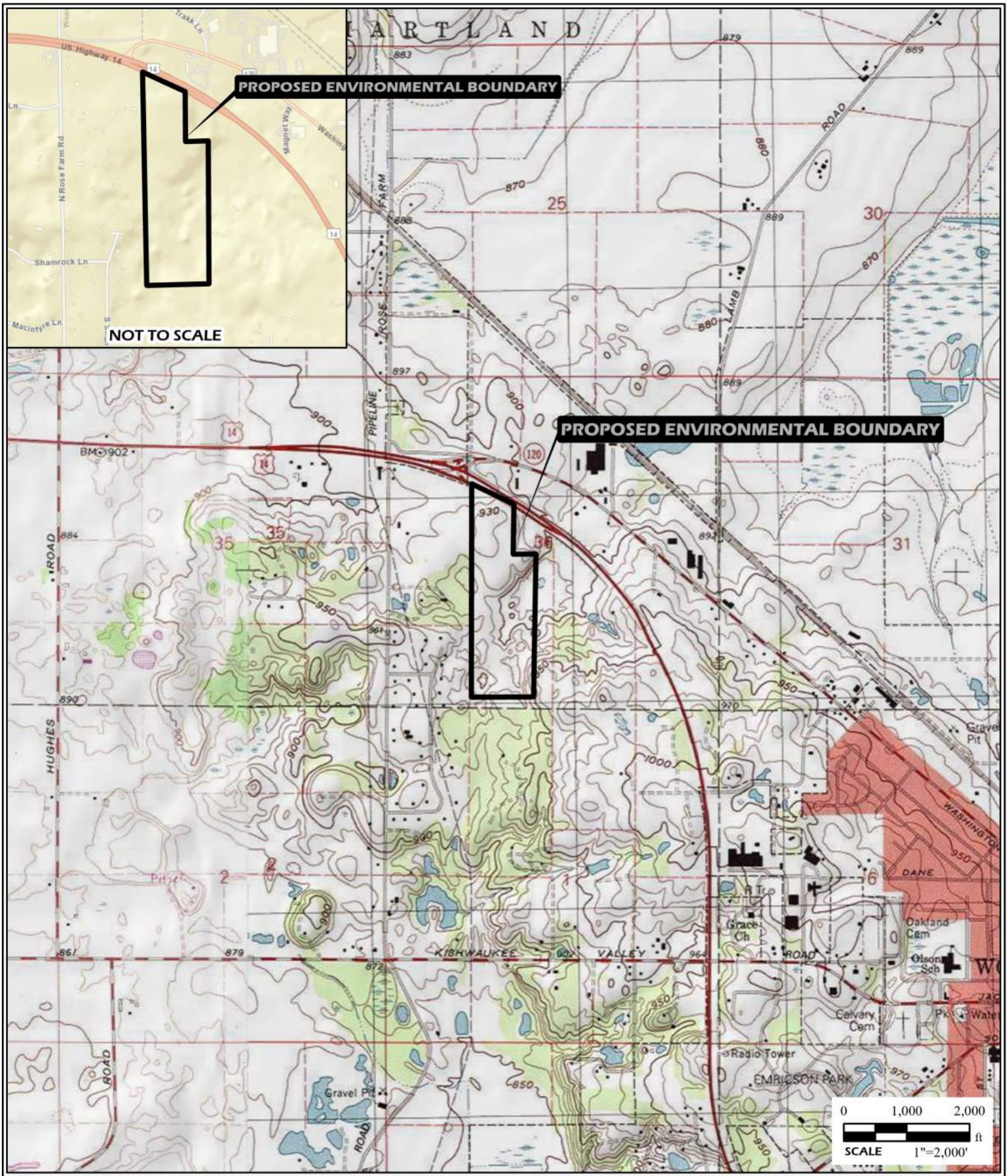
7.0 LIMITATIONS

This report has been prepared for the exclusive use of Woodstock Community Energy Initiative LLC. SCI is not responsible for independent conclusions or recommendations made by others. The USACE has the sole authority to determine if any of the features identified would be under their jurisdiction. Likewise, the USACE has the authority to review the results of the delineation and request additional information or studies.

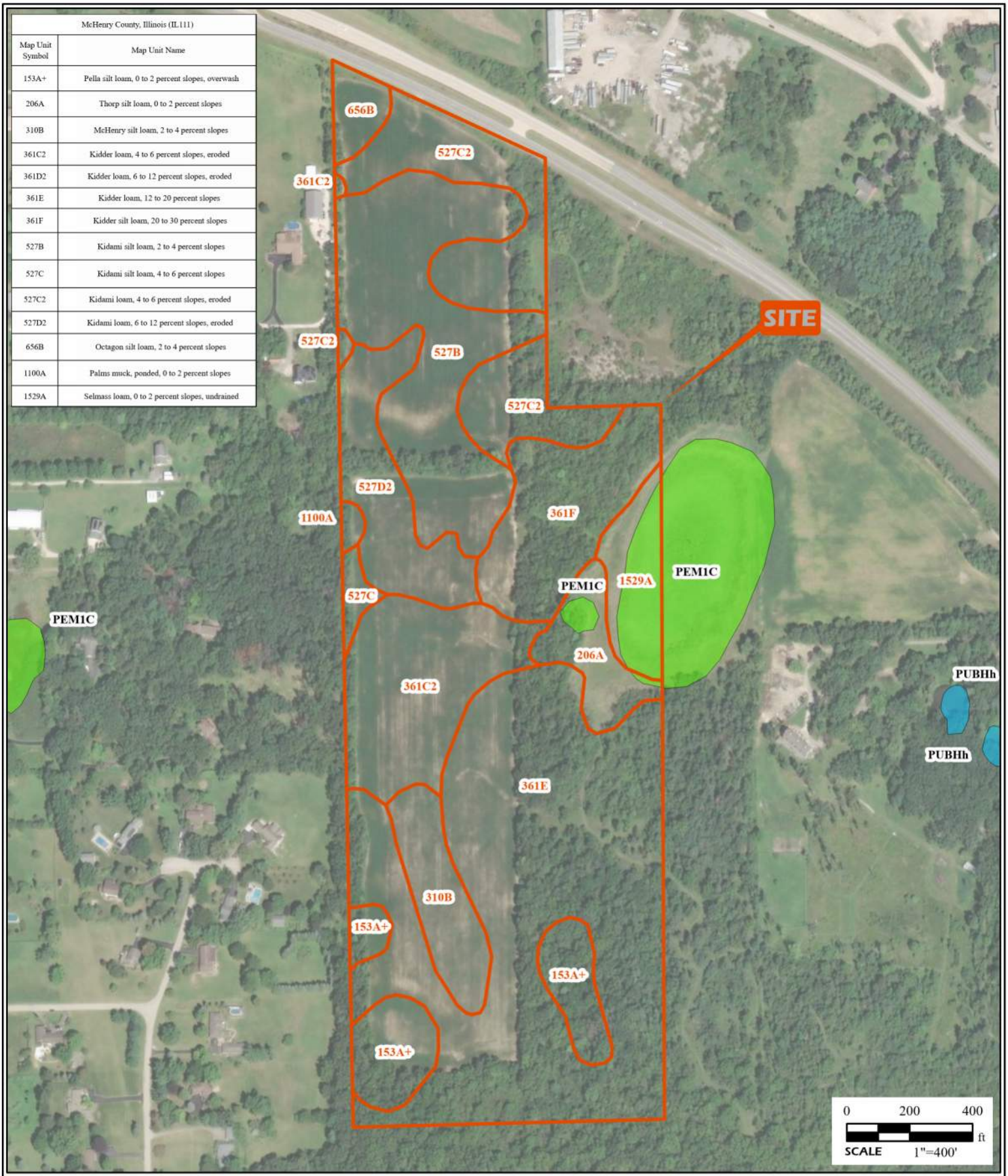
Furthermore, written consent must be provided by SCI or Woodstock Community Energy Initiative LLC should another party wish to excerpt or rely on the contents of this report. The findings of this report are valid as of the present date of the delineation. SCI is not responsible for surveys, calculations, or plans that were prepared by others.

This delineation is based on the professional experience in the approved methodology and from experience with the USACE; however, this delineation does not constitute a jurisdictional determination of WOTUS. This delineation has been based on the professional experience of SCI staff and our interpretation of USACE regulations at 33 CFR 328.3 and the *Sackett vs the USEPA/USACE* supreme court decision. While SCI believes our delineation is accurate, final authority to interpret regulations and to issue or deny a permit lies solely with the USACE and or McHenry County. SCI in no way guarantees the acquisition of a permit from the USACE/IEPA/McHenry County.

Changes in surface and subsurface conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, the broadening of knowledge, or other reasons. Accordingly, the findings of this report may be invalidated in whole or in part by changes outside our control. The intent of this report is to provide you with natural resource due diligence information to assist you in planning your project.



	PROJECT NAME WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT WOODSTOCK, ILLINOIS			GENERAL NOTES/LEGEND USGS TOPOGRAPHIC MAP MARENGO NORTH, ILLINOIS QUADRANGLE DATED 1970 REVISED 1975 10' CONTOURS WOODSTOCK, ILLINOIS QUADRANGLE DATED 1992 10' CONTOURS STREET MAP SOURCE: ESRI, DELORME, HTTP://WWW.ARCGISONLINE.COM/MAPS/WORLD_STREET_MAP	N W E S
	VICINITY AND TOPOGRAPHIC MAP				FIGURE 1
	DRAWN BY CJD CHECKED BY MSH	FIGURE DATE 06/13/2025	JOB NUMBER 2025-0239		



McHenry County, Illinois (IL111)	
Map Unit Symbol	Map Unit Name
153A+	Pella silt loam, 0 to 2 percent slopes, overwash
206A	Thorp silt loam, 0 to 2 percent slopes
310B	McHenry silt loam, 2 to 4 percent slopes
361C2	Kidder loam, 4 to 6 percent slopes, eroded
361D2	Kidder loam, 6 to 12 percent slopes, eroded
361E	Kidder loam, 12 to 20 percent slopes
361F	Kidder silt loam, 20 to 30 percent slopes
527B	Kidami silt loam, 2 to 4 percent slopes
527C	Kidami silt loam, 4 to 6 percent slopes
527C2	Kidami loam, 4 to 6 percent slopes, eroded
527D2	Kidami loam, 6 to 12 percent slopes, eroded
656B	Octagon silt loam, 2 to 4 percent slopes
1100A	Palms muck, ponded, 0 to 2 percent slopes
1529A	Selmass loam, 0 to 2 percent slopes, undrained

PROJECT NAME

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

NATIONAL WETLAND INVENTORY & USDA SOIL SURVEY MAP

DRAWN BY	CJD	FIGURE DATE	JOB NUMBER
CHECKED BY	MSH	06/13/2025	2025-023

GENERAL NOTES/LEGEND

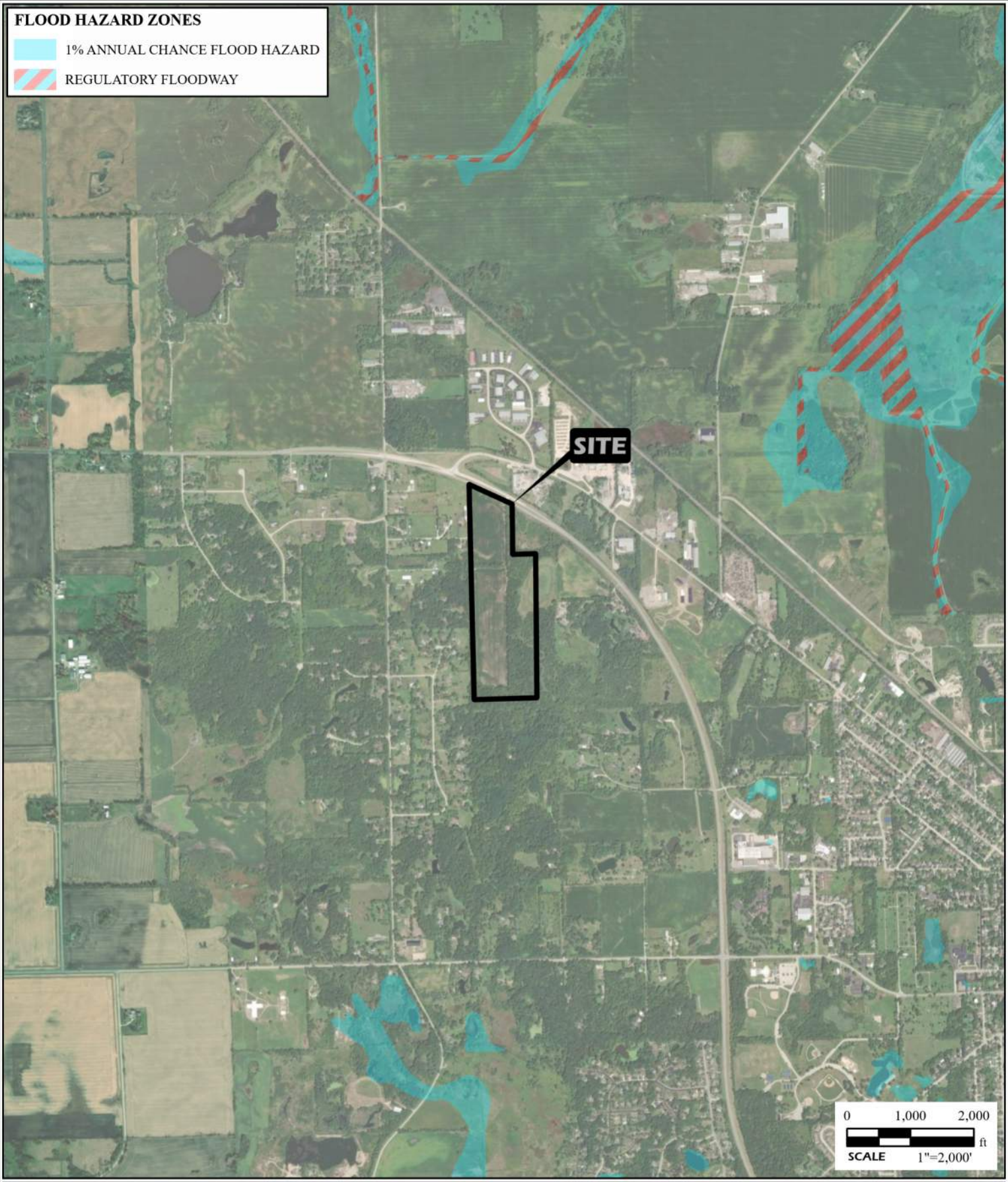
SOILS DATA OBTAINED FROM https://websoilsurvey.sc.egov.usda.gov/

IL WETLAND DATA OBTAINED FROM https://www.fws.gov/wetlands/

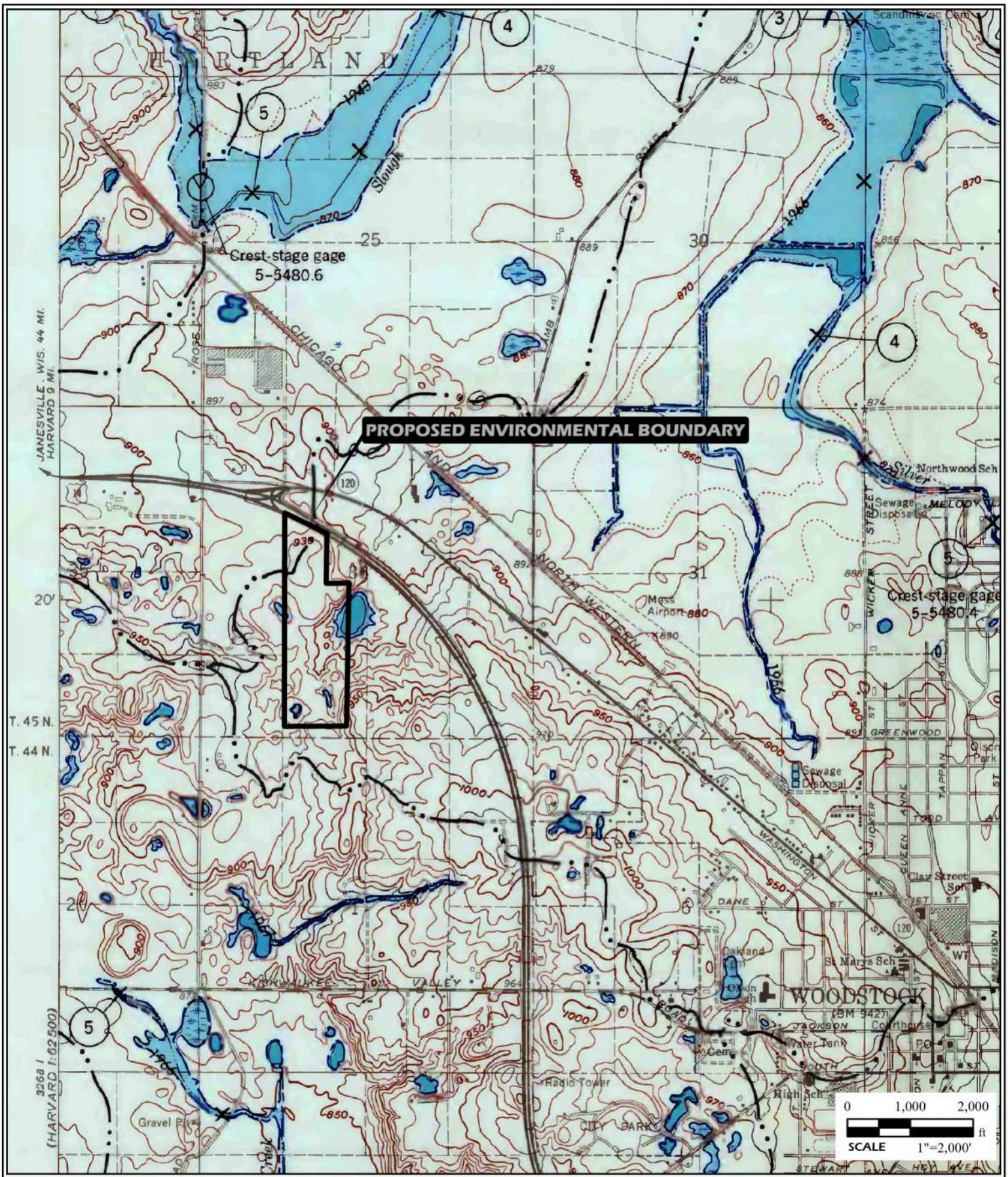
AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY. DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

N
W
E
S

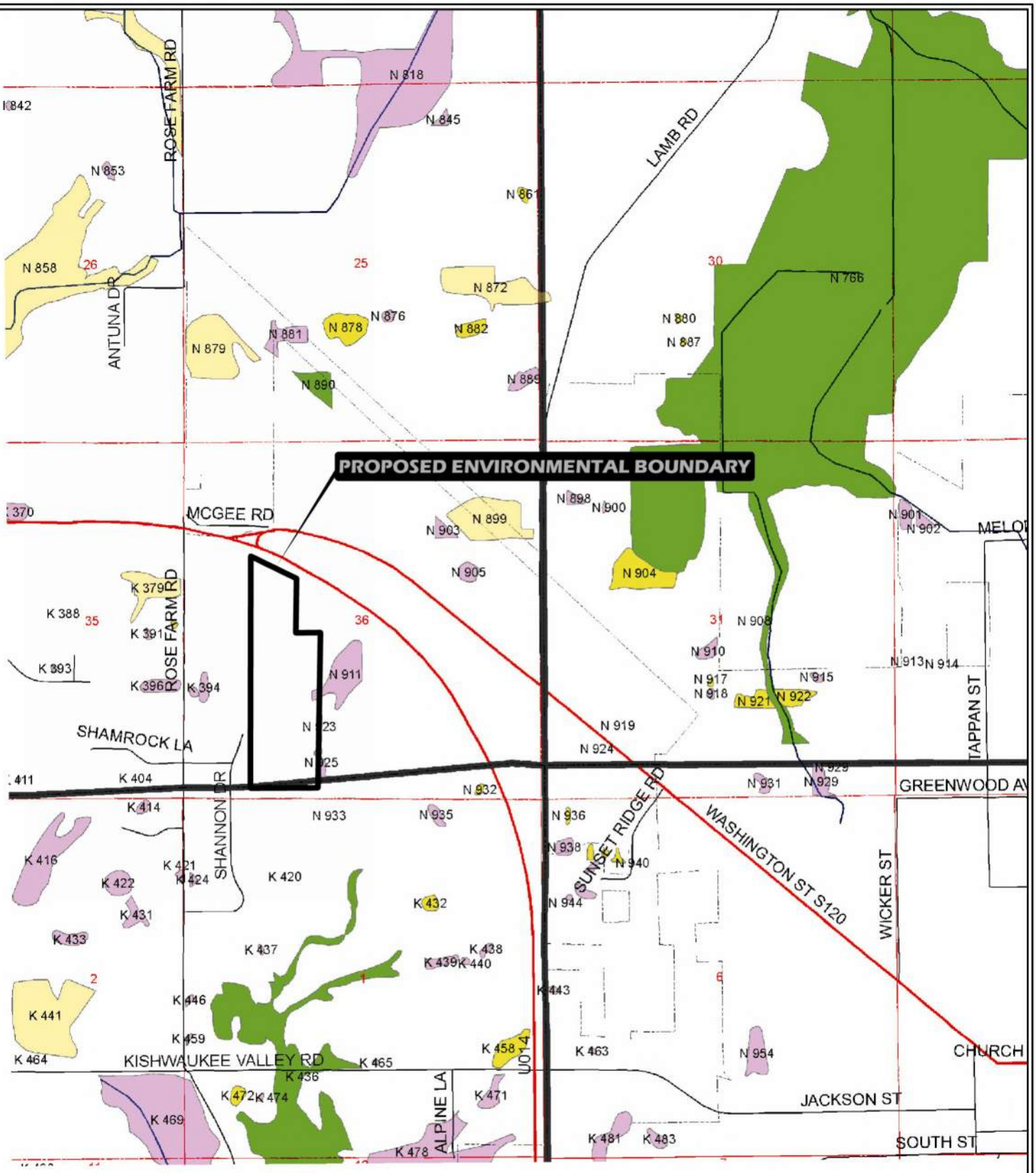
FIGURE
3



SCI	PROJECT NAME WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT WOODSTOCK, ILLINOIS			GENERAL NOTES/LEGEND MCHENRY COUNTY, ILLINOIS PANEL: 17111C0178J EFFECTIVE DATE: 11/16/2006	N W E S
	FEMA FLOOD MAP			DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.	FIGURE 3
	DRAWN BY CJD CHECKED BY MSH	FIGURE DATE 06/13/2025	JOB NUMBER 2025-0239		

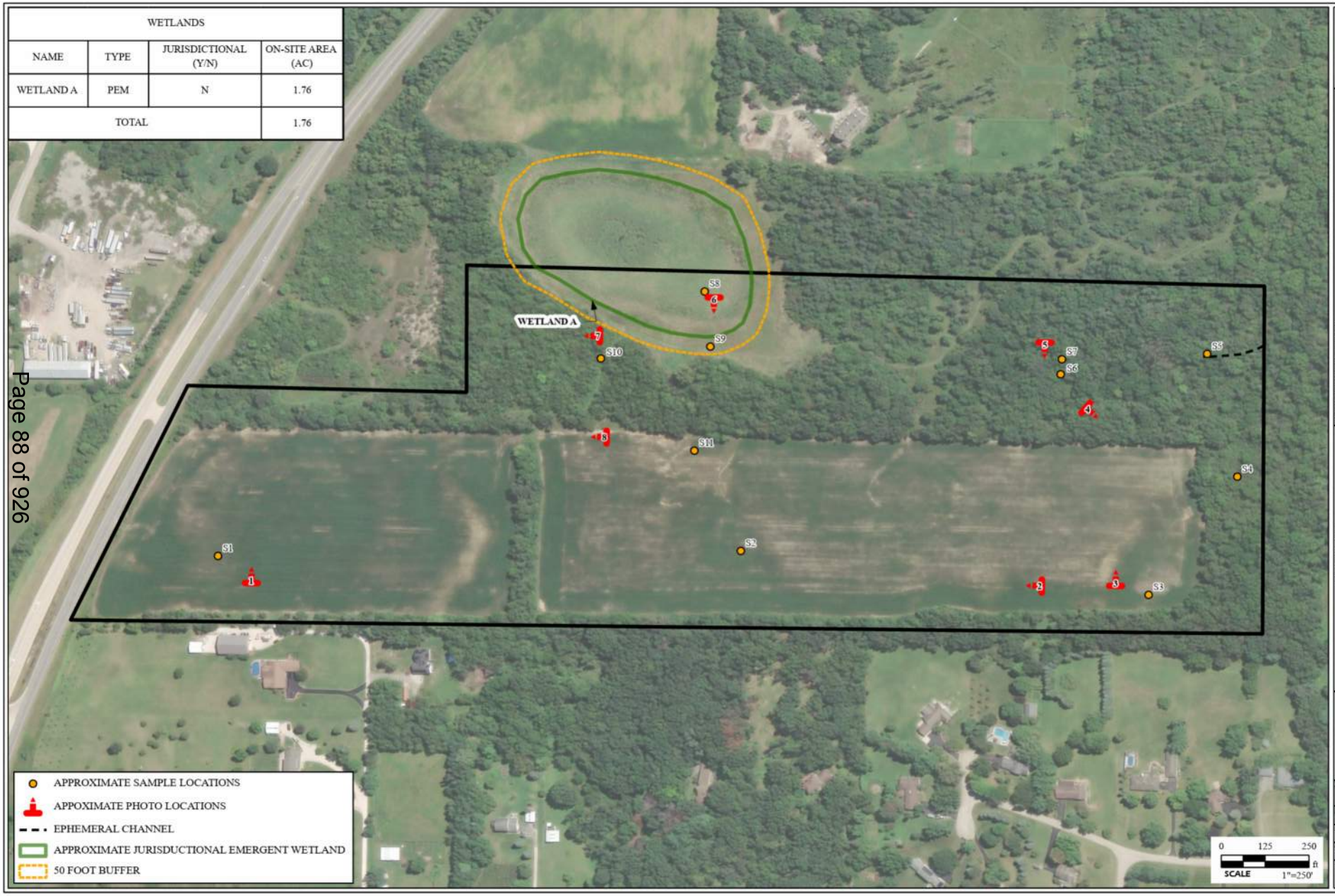


PROJECT NAME: WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT WOODSTOCK, ILLINOIS				GENERAL NOTES/LEGEND
HYDROLOGIC ATLAS				HYDROLOGIC ATLAS FOR WOODSTOCK COUNTY FROM HTTPS://PUBS.USGS.GOV/PUBLICATION/HA256
DRAWN BY: MAV	FIGURE DATE: 06/25/2025	JOB NUMBER: 2025-0235		DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.
CHECKED BY: MSH				FIGURE 4



PROJECT NAME: WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT, WOODSTOCK, ILLINOIS				GENERAL NOTES/LEGEND
HYDROLOGIC ATLAS				ADID FOR MC HENRY COUNTY FROM HTTPS://USACE.CONTENTDM.OCLC.ORG/DIGITAL/COLLECTION/P16021COLL10/ID/16238
DRAWN BY: MAV	FIGURE DATE: 06/25/2025	JOB NUMBER: 2025-0239		DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.
CHECKED BY: MSH				FIGURE: 5

WETLANDS			
NAME	TYPE	JURISDICTIONAL (Y/N)	ON-SITE AREA (AC)
WETLAND A	PEM	N	1.76
TOTAL			1.76



GENERAL NOTES/LEGEND

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE WORLD IMAGERY

DIMENSIONS AND LOCATIONS ARE APPROXIMATE. ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED

PROJECT NAME
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

WETLAND DELINEATION & AERIAL PHOTOGRAPH

JOB NUMBER 2025-0239 30
FIGURE DATE 07/03/2025
DRAWN BY ACV
CHECKED BY MSH
FIGURE 6

PROJECT NAME
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

2010 AERIAL PHOTOGRAPH

DRAWN BY	MAV	FIGURE DATE	JOB NUMBER
CHECKED BY	MSH	06/26/2025	2025-023

GENERAL NOTES/LEGEND

FARMED WETLAND

AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

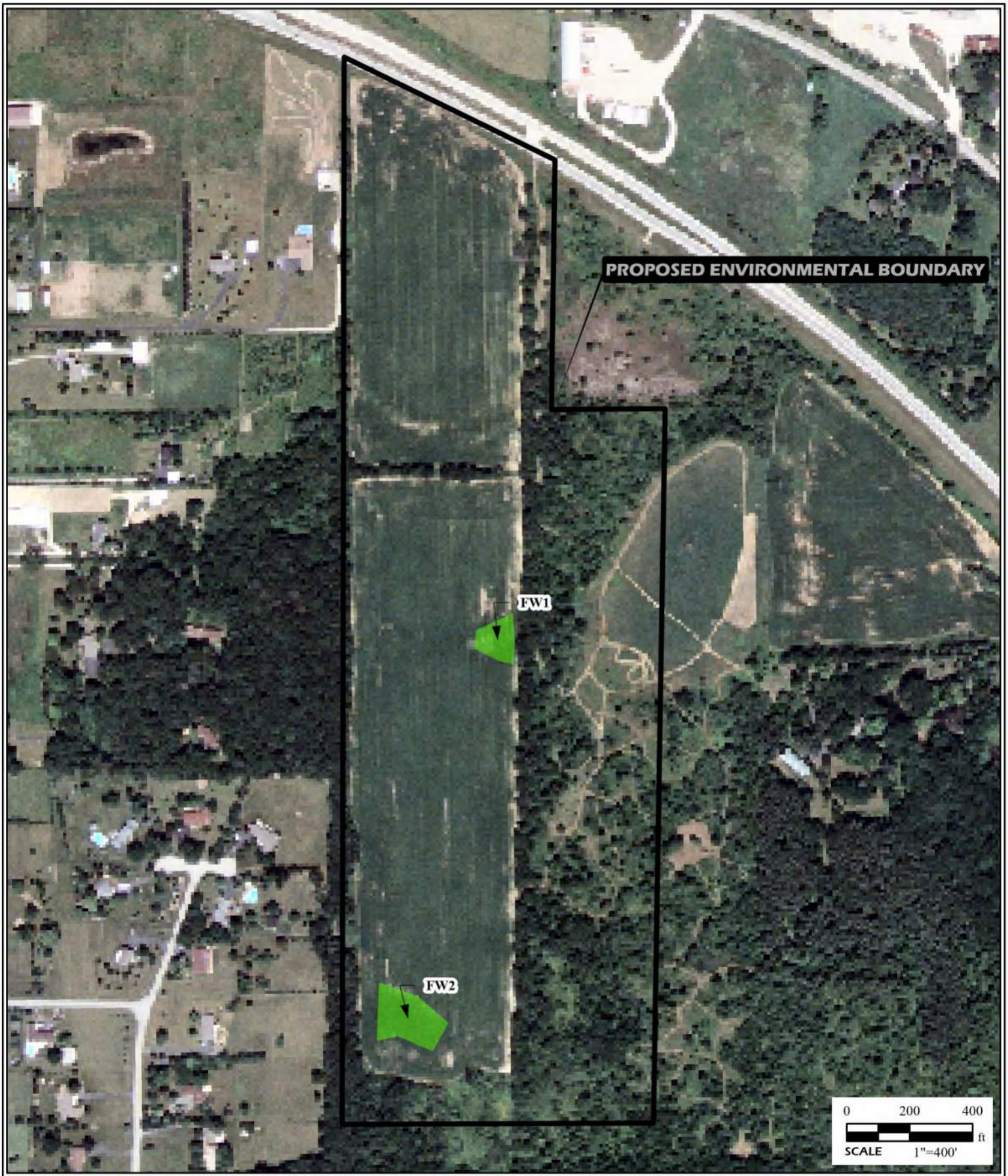
N
W
E
S

FIGURE
7

PROJECT NAME WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT WOODSTOCK, ILLINOIS				GENERAL NOTES/LEGEND AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.
2008 AERIAL PHOTOGRAPH				
DRAWN BY	MAV	FIGURE DATE	JOB NUMBER	
CHECKED BY	MSH	06/26/2025	2025-0235	

N
W
E
S

FIGURE
8



PROJECT NAME
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

2007 AERIAL PHOTOGRAPH

DRAWN BY	MAV	FIGURE DATE	JOB NUMBER
CHECKED BY	MSH	06/26/2025	2025-023[illegible]

GENERAL NOTES/LEGEND

FARMED WETLAND

AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

N
W
E
S

FIGURE
9

PROJECT NAME
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

2006 AERIAL PHOTOGRAPH

DRAWN BY	MAV	FIGURE DATE	JOB NUMBER
CHECKED BY	MSH	06/26/2025	2025-0235

GENERAL NOTES/LEGEND

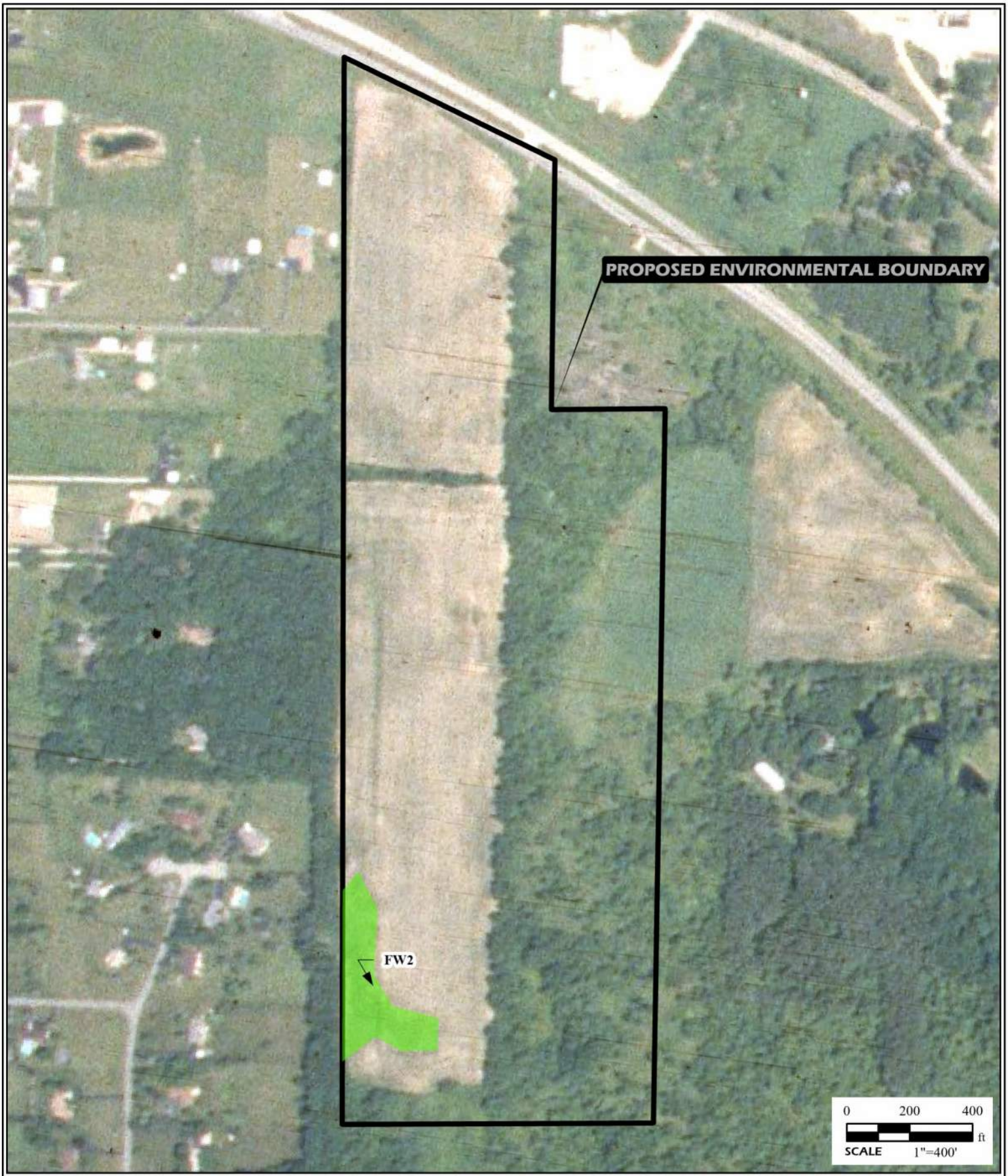
AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

N
W
E
S

FIGURE
10

PROJECT NAME: WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT WOODSTOCK, ILLINOIS				GENERAL NOTES/LEGEND
2004 AERIAL PHOTOGRAPH				AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT
DRAWN BY: ACV	FIGURE DATE: 06/26/2025	JOB NUMBER: 2025-0235		DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.
CHECKED BY: MSH				FIGURE 11



PROJECT NAME
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

2003 AERIAL PHOTOGRAPH

DRAWN BY	ACV	FIGURE DATE	JOB NUMBER
CHECKED BY	MSH	06/26/2025	2025-023

GENERAL NOTES/LEGEND

FARMED WETLAND

AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

N
W
E
S

FIGURE
12

PROJECT NAME
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

2001 AERIAL PHOTOGRAPH

DRAWN BY	ACV	FIGURE DATE	JOB NUMBER
CHECKED BY	MSH	06/26/2025	2025-0235

GENERAL NOTES/LEGEND

FARMED WETLAND

AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

N
W
E
S

FIGURE
13

PROJECT NAME
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT
WOODSTOCK, ILLINOIS

1999 AERIAL PHOTOGRAPH

DRAWN BY	ACV	FIGURE DATE	JOB NUMBER
CHECKED BY	MSH	07/07/2025	2025-0235

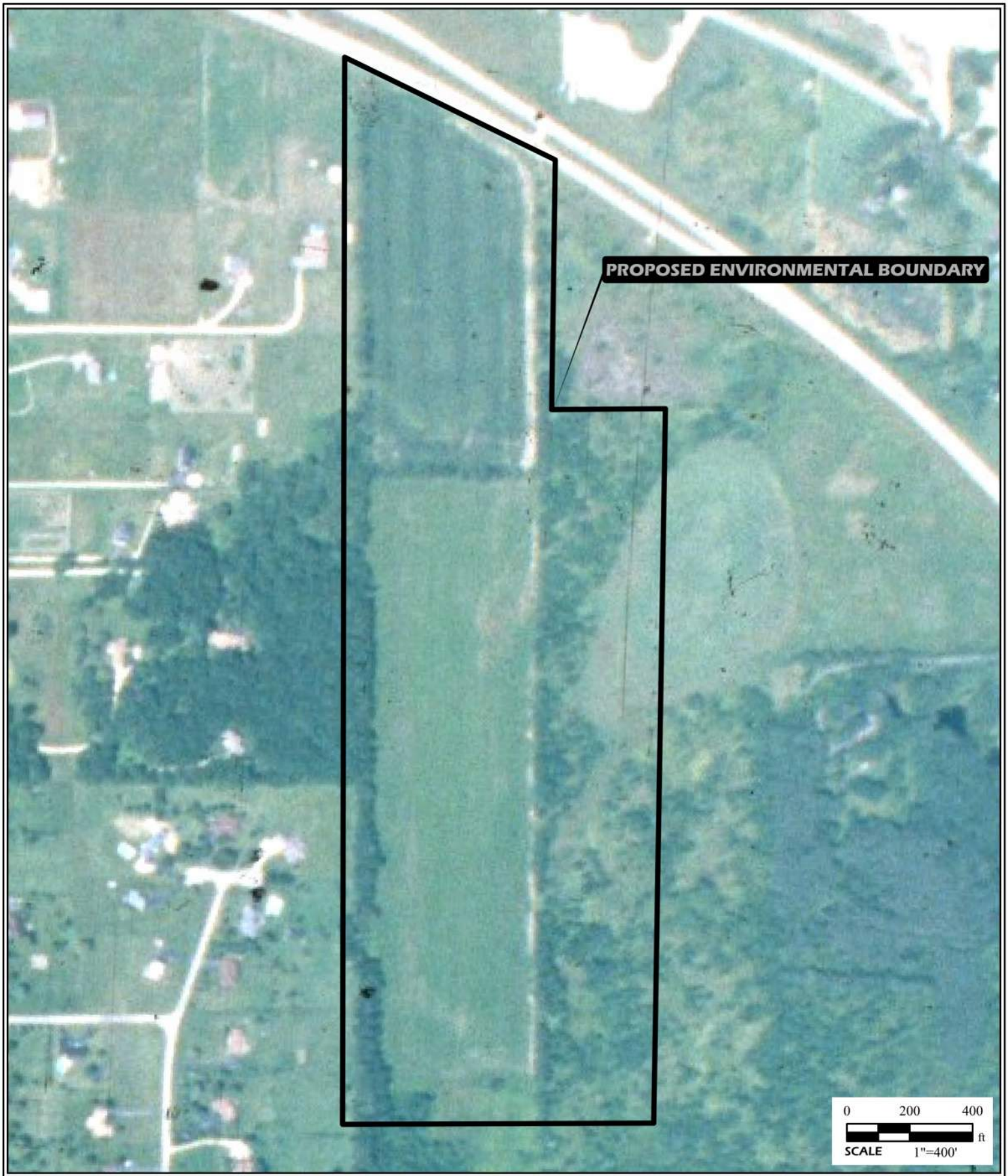
GENERAL NOTES/LEGEND

AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

N
W
E
S

FIGURE
14



	PROJECT NAME WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC SOLAR PROJECT WOODSTOCK, ILLINOIS			GENERAL NOTES/LEGEND AERIAL PHOTOGRAPH OBTAINED FROM MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.	N W E S
	1996 AERIAL PHOTOGRAPH				
	DRAWN BY ACV CHECKED BY MSH	FIGURE DATE 07/07/2025	JOB NUMBER 2025-0235		FIGURE 15

Appendix A

Photo 1. View of northern agricultural field, facing east.

Photo 2. View of southern agricultural field and pipeline work along the western boundary, facing north.

Photo 3. View of southern end of the southern agricultural field, facing east.

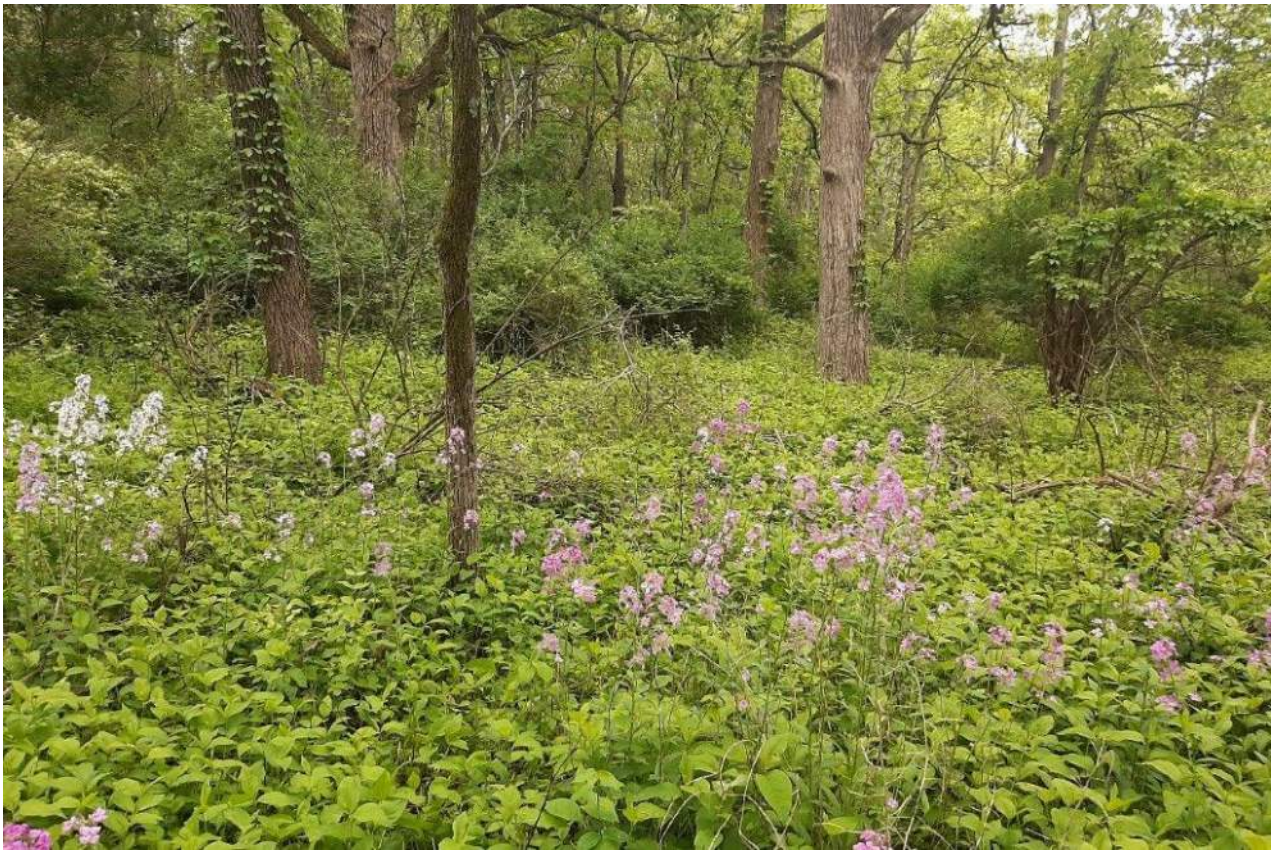


Photo 4. View of the southern forested area, facing southwest.

Photo 5. View of eastern forested area, facing west.

Photo 6. Emergent wetland area, facing west.

Photo 7. View of eastern forested area, facing north.

Photo 8. View of northern agricultural field, facing north.

Appendix B

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S1

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillsope Local relief (concave, convex, none): None

Slope (%): 2-5 Lat: 42.335982 Long: -88.486217 Datum: WGS84

Soil Map Unit Name: Kidder loam, 4 to 6 percent slopes, eroded NWI classification: Non-hydric

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

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "I X Yes X No ____

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

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 1 is located in the northwestern section of the site in an agricultural field. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Zea mays*	30	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	30 (A)		150 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ____ **No** ____

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

SOIL

Sampling Point: S1

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	100					Loamy/Clayey	
6-20	10YR 3/4	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S2

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 2-5 Lat: 42.331902 Long: -88.486111 Datum: WGS84

Soil Map Unit Name: Kidami loam, 6 to 12 percent slopes, eroded NWI classification: Non-hydric

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

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "I X Yes X No ____

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

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 2 is located in the central portion of the site, in the southern agricultural field. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Zea mays*	30	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	30 (A)		150 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No ____

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

SOIL

Sampling Point: S2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					Loamy/Clayey	
7-20	10YR 3/4	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S3

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 2-5 Lat: 42.328721 Long: -88.486520 Datum: WGS84

Soil Map Unit Name: Pella silt loam, 0 to 2 percent slopes, overwash NWI classification: Non-hydric

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

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "N X Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 3 is located in the southwestern corner of the site, in the southern agricultural field. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Capsella bursa-pastoris*	75	Yes	FACU
2. *Erigeron annuus*	5	No	OBL
3. *Stellaria media*	5	No	FACU
4. *Poa annua*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	90 (A)		345 (B)

Prevalence Index = B/A = 3.83

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.

Hydrophytic Vegetation Present? Yes ____ No X

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

SOIL

Sampling Point: S3

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/4	90	10YR 2/1	10	C	M	Loamy/Clayey	Faint redox concentrations
18-24	10YR 5/4	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S4

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillsope Local relief (concave, convex, none): None

Slope (%): 5-7 Lat: 42.328096 Long: -88.485555 Datum: WGS84

Soil Map Unit Name: Kidder loam, 12 to 20 percent slopes, eroded NWI classification: Non-hydric

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

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "N X Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 4 is located in the southern portion of the site, in the central forested area. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Rhus typhina*	20	Yes	UPL
2. *Lonicera maackii*	20	Yes	UPL
3.			
4.			
5.			
	40 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Melilotus officinalis*	50	Yes	FACU
2. *Anemonidium canadense*	10	No	FACW
3. *Solidago canadensis*	20	Yes	FACU
4. *Sorghum halepense*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	85 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	40	x 5 =	200
Column Totals:	125 (A)		520 (B)
Prevalence Index = B/A =			4.16

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.

Hydrophytic Vegetation Present? Yes ____ No X

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

SOIL

Sampling Point: S4

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/3	100					Loamy/Clayey	
5-20	10YR 3/4	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S5

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillsope Local relief (concave, convex, none): None

Slope (%): 7-10 Lat: 42.328268 Long: -88.483960 Datum: WGS84

Soil Map Unit Name: Kidder loam, 12 to 20 percent slopes, eroded NWI classification: Non-hydric

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

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "N X Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes X	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 5 is located in the forested portion of the site in the southeastern corner. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Rhus typhina*	10	Yes	UPL
2. *Lonicera maackii*	20	Yes	UPL
3.			
4.			
5.			
	30 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Cryptotaenia canadensis*	20	Yes	FAC
2. *Anemonidium canadense*	10	Yes	FACW
3. *Geum canadense*	10	Yes	FAC
4. *Pastinaca sativa*	5	No	UPL
5. *Persicaria virginiana*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	50 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	35	x 3 =	105
FACU species	0	x 4 =	0
UPL species	35	x 5 =	175
Column Totals:	80 (A)		300 (B)
Prevalence Index = B/A =			3.75

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 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.

Hydrophytic Vegetation Present? Yes X No ____

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

SOIL

Sampling Point: S5

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/3	100					Loamy/Clayey	
5-20	10YR 3/4	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S6

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 5-7 Lat: 42.328272 Long: -88.483964 Datum: WGS84

Soil Map Unit Name: Kidder loam, 12 to 20 percent slopes, eroded NWI classification: Non-hydric

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

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "N X Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes 0	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 6 is located in the southeastern portion of the site within a forested area. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus macrocarpa*	30	Yes	FAC
2. *Fraxinus americana*	15	Yes	FACU
3.			
4.			
5.			
	45	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Acer negundo*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Melilotus officinalis*	20	Yes	FACU
2. *Hesperis matronalis*	15	No	FACU
3. *Cryptotaenia canadensis*	5	No	FAC
4. *Sanicula canadensis*	45	Yes	FACU
5. *Allium canadense*	10	No	FACU
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	45	x 3 =	135
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	150 (A)		555 (B)

Prevalence Index = B/A = 3.70

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.

Hydrophytic Vegetation Present? Yes ____ No X

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

SOIL

Sampling Point: S6

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					Mucky Sand	
12-21	10YR 3/4	100					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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- X Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S7

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 3-5 Lat: 42.332265 Long: -88.484864 Datum: WGS84

Soil Map Unit Name: Kidder loam, 12 to 20 percent slopes, eroded NWI classification: Non-hydric

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

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "I X Yes X No ____

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

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 7 is located in a forested depressional area in the southeastern portion of the site. The site was experiencing a mild drought at the time of inspection.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Acer negundo*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Solidago canadensis*	15	Yes	FACU
2. *Phalaris arundinacea*	15	Yes	FACW
3. *Rhamnus cathartica*	10	Yes	FAC
4. *Daucus carota*	10	Yes	UPL
5. *Lonicera morrowii*	5	No	
6. *Zea mays*	10	Yes	UPL
7.			
8.			
9.			
10.			
	65 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	20	x 3 =	60
FACU species	15	x 4 =	60
UPL species	20	x 5 =	100
Column Totals:	70 (A)		250 (B)

Prevalence Index = B/A = 3.57

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.

Hydrophytic Vegetation Present? Yes ____ No ____

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

SOIL

Sampling Point: S7

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
0-3	10YR 5/4	100					Loamy/Clayey	
3-20	10YR 4/3	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S8

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 5-7 Lat: 42.332156 Long: -88.483467 Datum: WGS84

Soil Map Unit Name: Thorp silt loam, 0 to 2 percent slopes NWI classification: Hydric

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

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "N X Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Sample point 8 is located in the eastern portion of the site within an emergent wetland. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.	10	Yes	
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	75	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	75 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		150 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
X 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

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

SOIL

Sampling Point: S8

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
0-20	10YR 2/1	100					Sandy	
20-24	10YR 4/1	100					Sandy	

[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)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X **No** ___

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S9

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 0-2 Lat: 42.332296 Long: -88.483856 Datum: WGS84

Soil Map Unit Name: Thorp silt loam, 0 to 2 percent slopes NWI classification: Hydric

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

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "I X Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 9 is located in the eastern portion of the site upland an emergent wetland The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.	10	Yes	
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Melilotus officinalis*	50	Yes	FACU
2. *Anemonidium canadense*	10	No	FACW
3. *Solidago canadensis*	20	Yes	FACU
4. *Sorghum halepense*	20	Yes	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.80

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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

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

SOIL

Sampling Point: S9

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					Loamy/Clayey	
12-21	10YR 5/4	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S10

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 5-7 Lat: 42.333015 Long: -88.484283 Datum: WGS84

Soil Map Unit Name: Kidder silt loam, 20 to 30 percent slopes NWI classification: Non-hydric

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

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "N X Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 10 is located in eastern boundary of the southern agricultural field, in the central portion of the site. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Acer negundo*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Lonicera morrowii*	60	Yes	FACU
2. *Geum canadense*	10	No	FAC
3. *Torilis arvensis*	10	No	UPL
4. *Pilosella caespitosa*	5	No	
5. *Agrimonia gryposepala*	5	No	
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. *Vitis riparia*			FACW
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	60	x 4 =	240
UPL species	10	x 5 =	50
Column Totals:	90 (A)		350 (B)
Prevalence Index = B/A =			3.89

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.

Hydrophytic Vegetation Present? Yes ____ No X

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

SOIL

Sampling Point: S10

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
0-5	10YR 3/3	100					Loamy/Clayey	
5-10	10YR 5/3	100					Loamy/Clayey	gravel impass at 10 inches

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Midwest Region** See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	*OMB Control #: 0710-0024, Exp: 9/30/2027* *Requirement Control Symbol EXEMPT:* *(Authority: AR 335-15, paragraph 5-2a)*

Project/Site: Woodstock Coomuity Energy Solar Project City/County: Woodstock/McHenry Sampling Date: 5/28/2025

Applicant/Owner: Woodstock Community Energy Initiative LLC State: IL Sampling Point: S11

Investigator(s): SCI - J. Loos, M. Kerr Section, Township, Range: 36, 45N, 6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 2-5 Lat: 42.332940 Long: -88.484921 Datum: WGS84

Soil Map Unit Name: Kidami loam, 6 to 12 percent slopes, eroded NWI classification: Non-hydric

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

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "N X Yes X No ____

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

SUMMARY OF FINDINGS – Attach site map showing sampling p X

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 11 is located in the northeast portion of the site, in the southern agricultural field. The site was experiencing a mild drought at the time of visitation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Zea mays*	30	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	30 (A)		150 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ____ **No** ____

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

SOIL

Sampling Point: S11

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					Loamy/Clayey	
7-20	10YR 3/4	100					Loamy/Clayey	

[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)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ 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** X

Remarks:

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)
- ___ 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)

Secondary Indicators (minimum of two required)

- ___ 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:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Appendix C

SITE:
LOCALE:
BY:
NOTES:

CONSERVATISM-BASED METRICS			ADDITIONAL METRICS	
MEAN C (NATIVE SPECIES)		0.00	SPECIES RICHNESS (ALL)	1
MEAN C (ALL SPECIES)		0.00	SPECIES RICHNESS (NATIVE)	0
MEAN C (NATIVE TREES)	n/a		% NON-NATIVE	1.00
MEAN C (NATIVE SHRUBS)	n/a		WET INDICATOR (ALL)	-1.00
MEAN C (NATIVE HERBACEOUS)	n/a		WET INDICATOR (NATIVE)	0.00
FQAI (NATIVE SPECIES)		0.00	% HYDROPHYTE (MIDWEST)	1.00
FQAI (ALL SPECIES)		0.00	% NATIVE PERENNIAL	0.00
ADJUSTED FQAI		0.00	% NATIVE ANNUAL	0.00
% C VALUE 0		1.00	% ANNUAL	0.00
% C VALUE 1-3		0.00	% PERENNIAL	1.00
% C VALUE 4-6		0.00		
% C VALUE 7-10		0.00		

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	NC-NE WET INDICATOR	WET INDICATOR (NUMERIC)	HABIT	DURATION	NATIVITY
PHAARU	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	FACW	-1	Grass	Perennial	Adventive

EXHIBIT F: STATE HISTORIC PRESERVATION OFFICE (SHPO) CONCURRENCE

McHenry County
Woodstock
US-14, E of IL-120
Section:36-Township:45N-Range:6E
NPDES, SCI-2025-0239.40
New Construction of a Solar Farm,
Woodstock Community Energy Initiative LLC

PLEASE REFER TO: SHPO LOG #009021925

March 13, 2025

Breanna Henderson
SCI Engineering, Inc.
650 Pierce Blvd.
O'Fallon, IL 62269

The Illinois State Historic Preservation Office is required by the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420, as amended, 17 IAC 4180) to review all state undertakings for their effect on cultural resources. Pursuant to this requirement, we have received information regarding the above referenced project for our comment.

According to the information provided there is no federal involvement in your project. Be aware the state law is less restrictive than the federal cultural resource laws concerning archaeology. If your project will use federal loans or grants, need federal agency permits, use federal property, or involve assistance from a federal agency, then your project must be reviewed under the National Historic Preservation Act of 1966, as amended. Please notify us immediately if such is the case so we can determine which entity should initiate consultation.

No historic properties have been identified within the area of potential visual effects. Additionally, our files do not identify any known archaeological sites within the area of potential direct effects, nor is it within a high probability area for archaeological resources as defined in the state statute. Accordingly, this project is **EXEMPT** from archaeological survey requests pursuant to Section 6 of the Illinois State Agency Historic Resources Preservation Act. An archaeological survey is not *required* under state law as there is no public funding nor is it on public land.

Since the area has never been surveyed for archaeological resources, however, it is possible that historic properties are present but remain unidentified. Please consider assisting the State of Illinois in its efforts to preserve and protect historic resources by sharing with us the results of any due diligence archaeological surveys. Early awareness of the presence of historic properties may help prevent unanticipated discoveries and potential construction delays.

This letter remains in effect for two (2) years from the date of issuance. This does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Remains Protection Act (20 ILCS 3440). If further assistance is needed please contact Jeff Kruchten, Principal Archaeologist, at 217/785-1279 or jeff.kruchten@illinois.gov.

Sincerely,

Carey L. Mayer

Carey L. Mayer, AIA
Deputy State Historic Preservation Officer

EXHIBIT G: ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR) ECOCAT

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: SCI ENGINEERING, INC.
Contact: Michael Holm
Address: 650 Pierce Blvd
O'Fallon, IL 62269

IDNR Project Number: 2509418
Date: 02/11/2025

Project: Woodstock Community Energy Initiative LLC Solar Project
Address: South of Highway 14 and north of Kishwaukee Valley Road, Woodstock

Description: Proposed construction of a new solar development with associated access roads and infrastructure.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

West Woodstock Prairie INAI Site
Blanding's Turtle *(Emydoidea blandingii)*
Rusty Patched Bumble Bee *(Bombus affinis)*

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: McHenry

Township, Range, Section:
45N, 6E, 36

IL Department of Natural Resources Contact
Isabella Newingham
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Division of Water Pollution Control
PO Box 19276
Springfield, Illinois 62794 -9276

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

EXHIBIT H: ECOSPHERE INFORMATION FOR PLANNING AND CONSULTATION (IPAC)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chicago Ecological Service Field Office
1511 47th Ave
Moline, IL 61265-7022
Phone: (309) 757-5800

In Reply Refer To: 02/11/2025 19:12:02 UTC
Project Code: 2025-0054841
Project Name: Woodstock Community Energy Initiative LLC

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

To Whom It May Concern:

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

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

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

Additionally, please note that on March 23, 2022, the Service published a proposal to reclassify the northern long-eared bat (NLEB) as endangered under the Endangered Species Act. The U.S. District Court for the District of Columbia has ordered the Service to complete a new final listing

determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The bat, currently listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across the continent. The proposed reclassification, if finalized, would remove the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective (anticipated to occur by December 30, 2022). If your project may result in incidental take of NLEB after the new listing goes into effect this will first need to addressed in an updated consultation that includes an Incidental Take Statement. If your project may require re-initiation of consultation, please contact our office for additional guidance.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

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

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and

their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

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

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

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

Chicago Ecological Service Field Office
1511 47th Ave
Moline, IL 61265-7022
(309) 757-5800

PROJECT SUMMARY

Project Code: 2025-0054841
Project Name: Woodstock Community Energy Initiative LLC
Project Type: Power Gen - Solar
Project Description: Proposed construction of a new solar development with associated access roads and infrastructure.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.332252,-88.48509755580127,14z

Counties: McHenry County, Illinois

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

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

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

---

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

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Rusty Patched Bumble Bee *Bombus affinis* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9383	Endangered
Western Regal Fritillary *Argynnis idalia occidentalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Eastern Prairie Fringed Orchid *Platanthera leucophaea* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ Follow the guidance provided at https://www.fws.gov/midwest/endangered/section7/s7process/plants/epfos7guide.html Species profile: https://ecos.fws.gov/ecp/species/601	Threatened

CRITICAL HABITATS

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

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

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jacob Travelstead
Address: 650 Pierce Boulevard
City: O'Fallon
State: IL
Zip: 62269
Email jtravelstead@sciengineering.com
Phone: 6186246969

EXHIBIT I: FEDERAL AVAIATION AGENCY (FAA) NOTICE OF CRITERIA

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-AGL-6850-OE

Issued Date: 05/13/2025

Todd Fryatt
ECA Solar LLC
203 Crescent St
suite 106
Waltham, MA 02453

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Woodstock Community Energy Initiative LLC
Location:	Woodstock, IL
Latitude:	42-20-08.95N NAD 83
Longitude:	88-29-05.19W
Heights:	932 feet site elevation (SE) 15 feet above ground level (AGL) 947 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 11/13/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

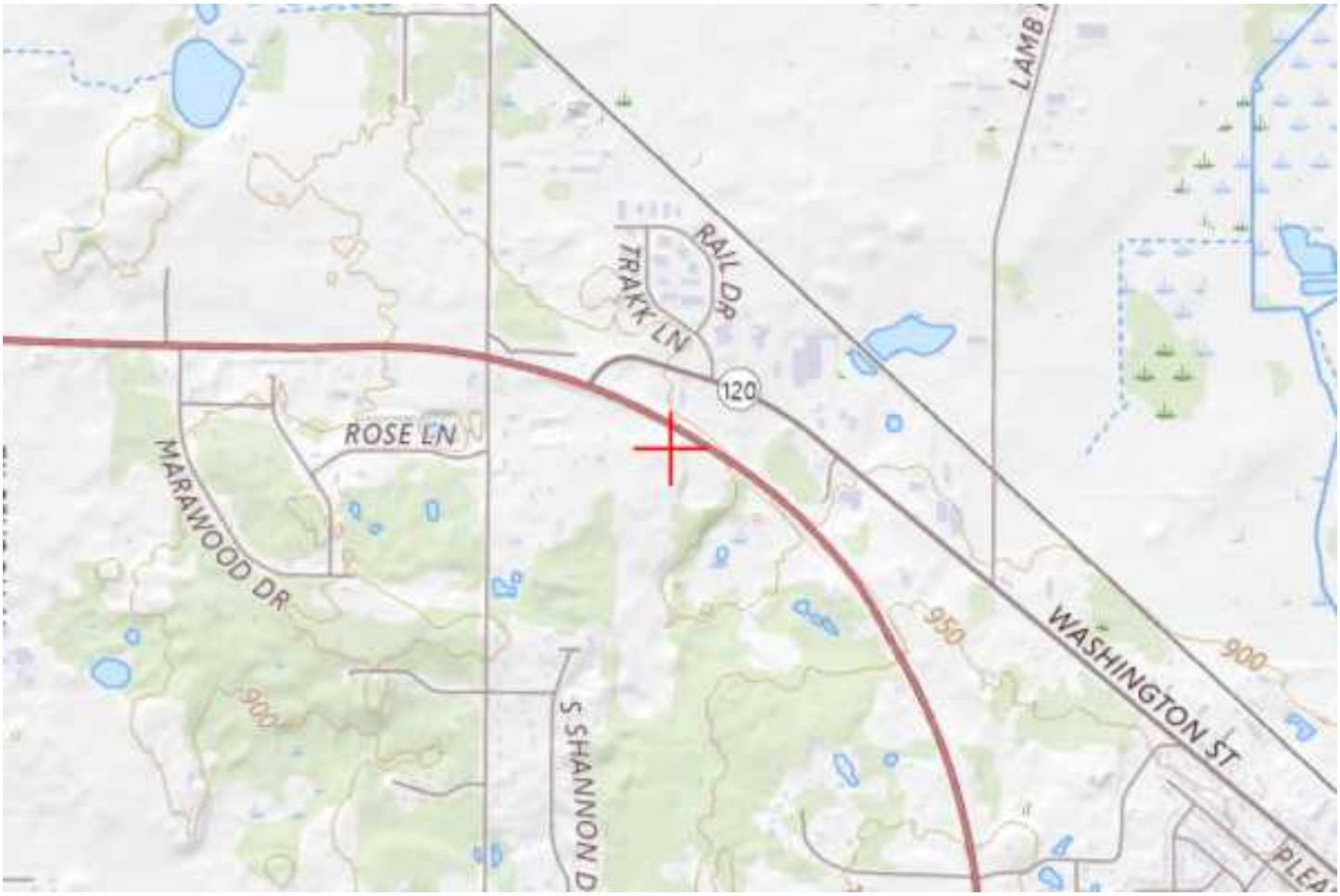
If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-AGL-6850-OE.

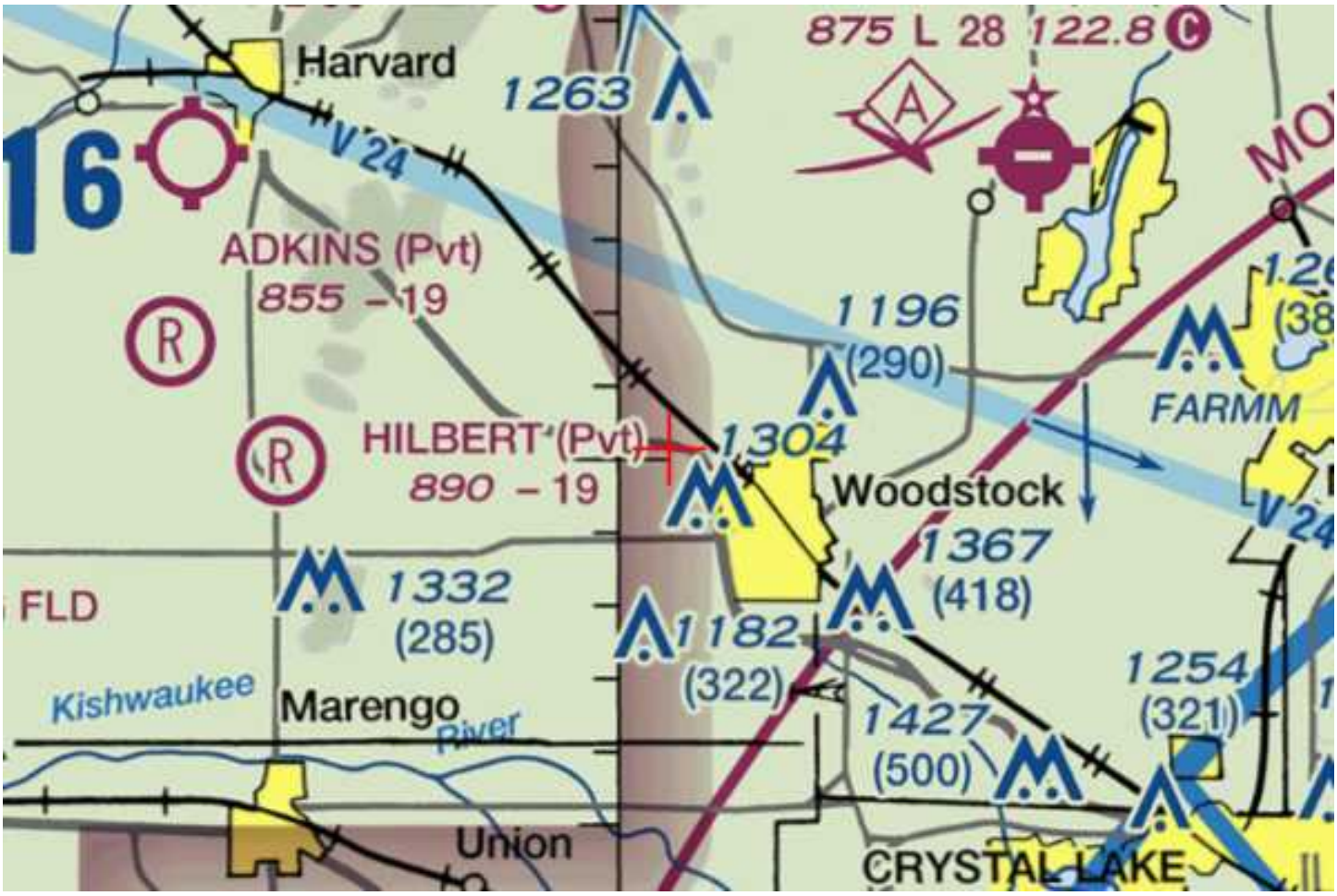
Signature Control No: 655019356-659288193 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

Ground mounted solar array facility

TOPO Map for ASN 2025-AGL-6850-OE




Harvard
1263
875 L 28 122.8
V 24
ADKINS (Pvt)
855 – 19
1196
(290)
FARMM
HILBERT (Pvt)
890 – 19
1304
Woodstock
1367
(418)
FLD
1332
(285)
1182
(322)
1254
(321)
Kishwaukee
Marengo
River
1427
(500)
Union
CRYSTAL LAKE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-AGL-6848-OE

Issued Date: 05/13/2025

Todd Fryatt
ECA Solar LLC
203 Crescent St
suite 106
Waltham, MA 02453

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Woodstock Community Energy Initiative LLC
Location:	Woodstock, IL
Latitude:	42-19-55.53N NAD 83
Longitude:	88-29-08.46W
Heights:	912 feet site elevation (SE) 15 feet above ground level (AGL) 927 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 11/13/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

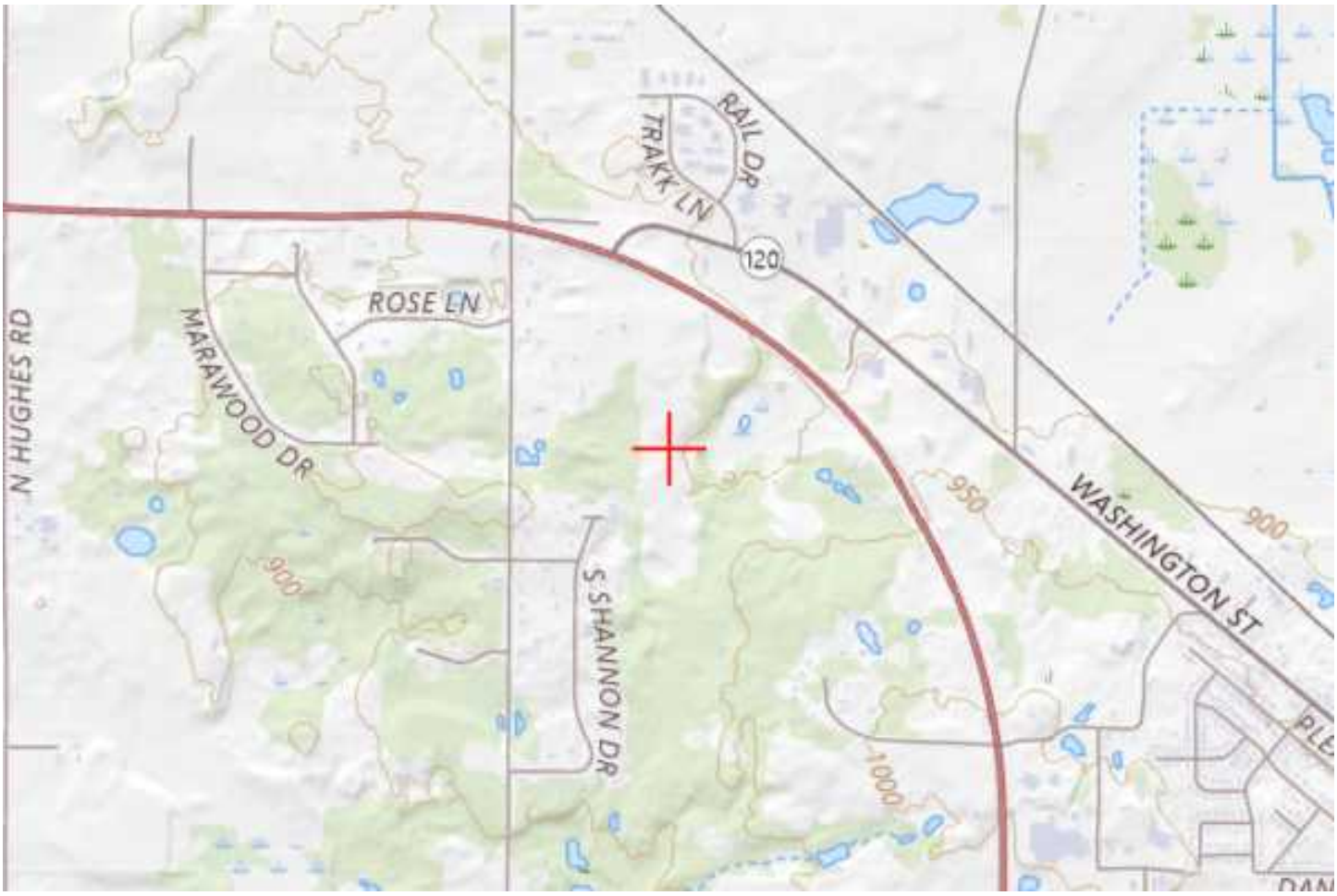
If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-AGL-6848-OE.

Signature Control No: 655019352-659288194 (DNE)
Timothy Waychoff
Specialist

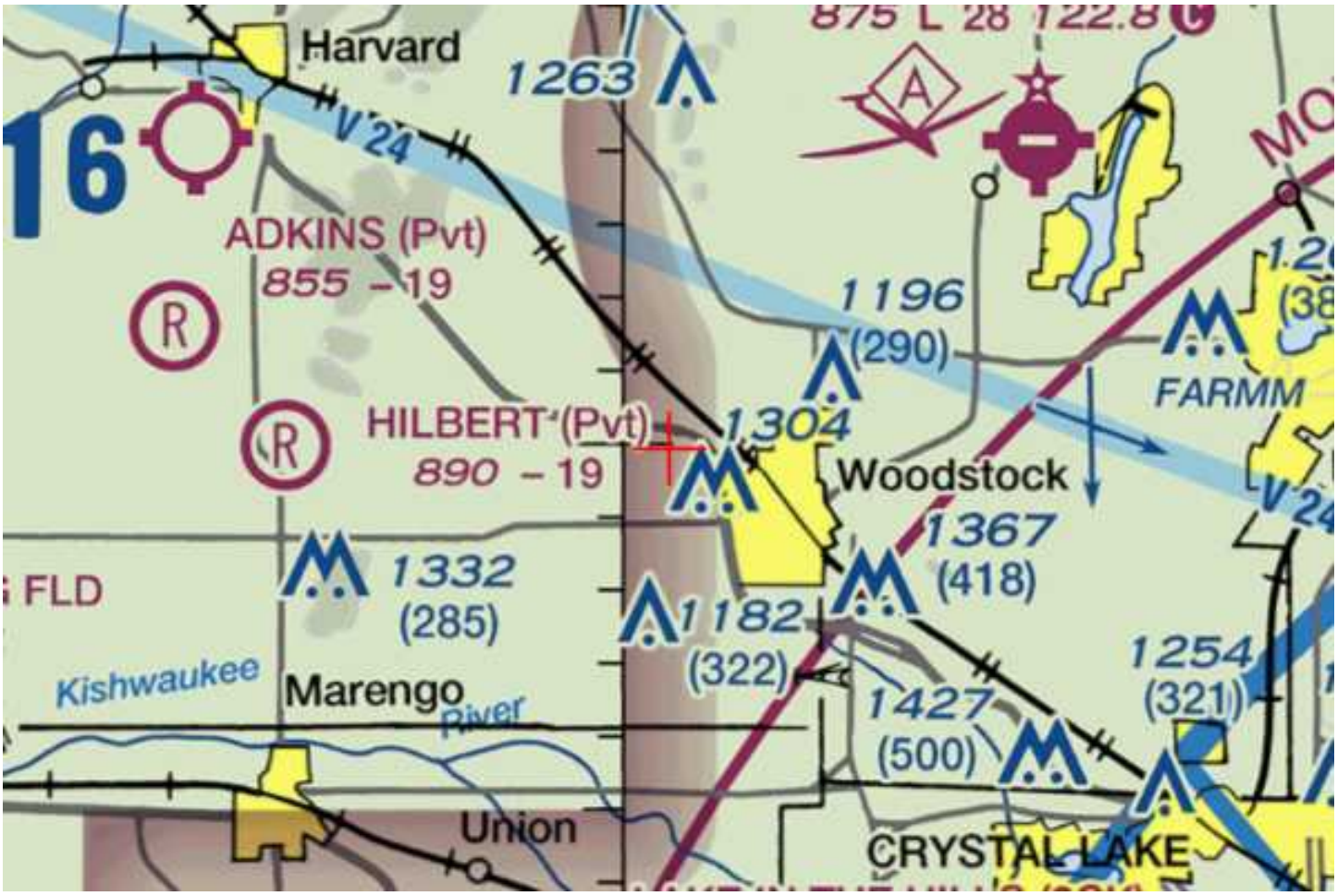
Attachment(s)
Case Description
Map(s)

Ground mounted solar array facility

TOPO Map for ASN 2025-AGL-6848-OE



Sectional Map for ASN 2025-AGL-6848-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-AGL-6852-OE

Issued Date: 05/13/2025

Todd Fryatt
ECA Solar LLC
203 Crescent St
suite 106
Waltham, MA 02453

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Woodstock Community Energy Initiative LLC
Location:	Woodstock, IL
Latitude:	42-19-41.95N NAD 83
Longitude:	88-29-09.31W
Heights:	908 feet site elevation (SE) 15 feet above ground level (AGL) 923 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 11/13/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

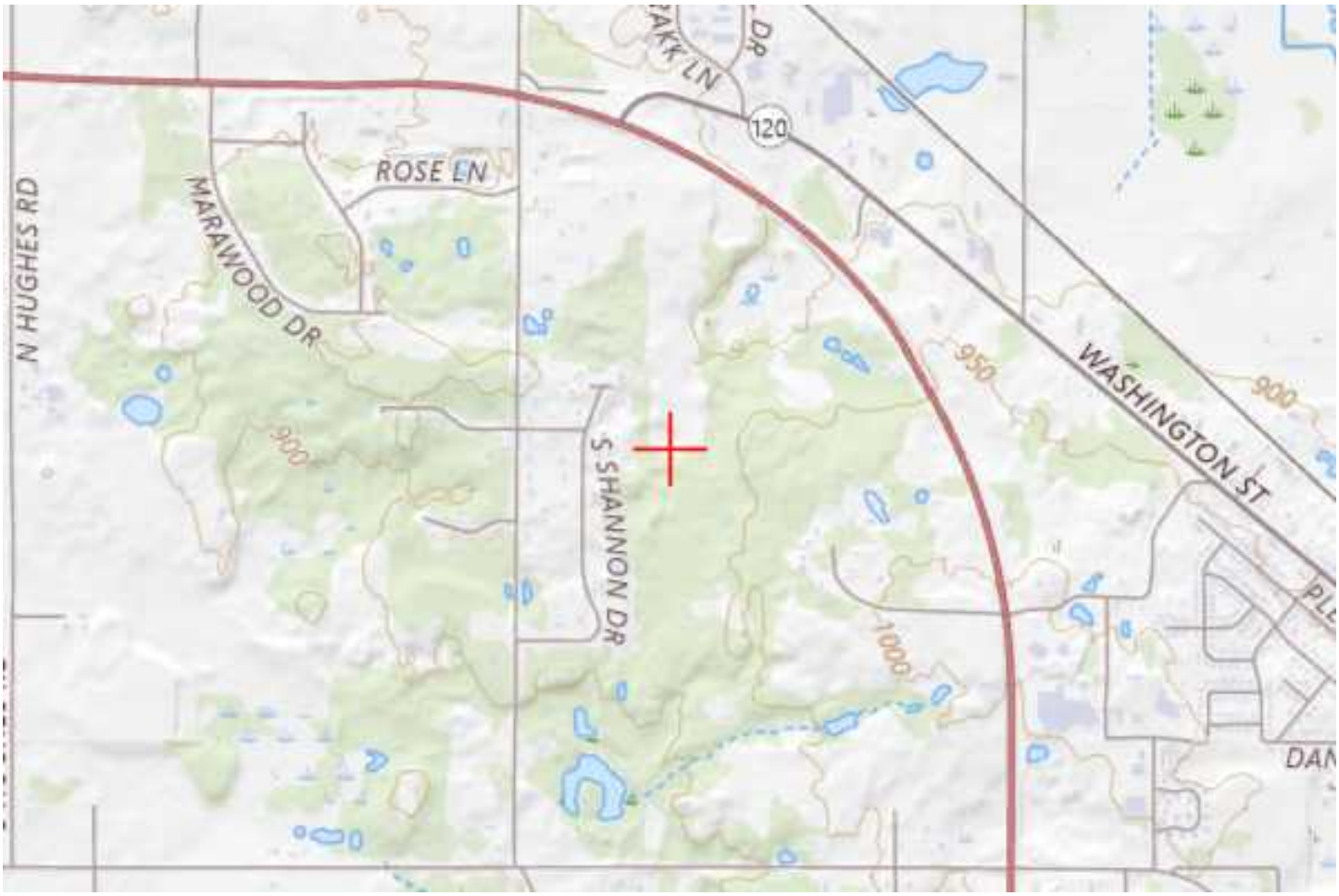
If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-AGL-6852-OE.

Signature Control No: 655019362-659288195 (DNE)
Timothy Waychoff
Specialist

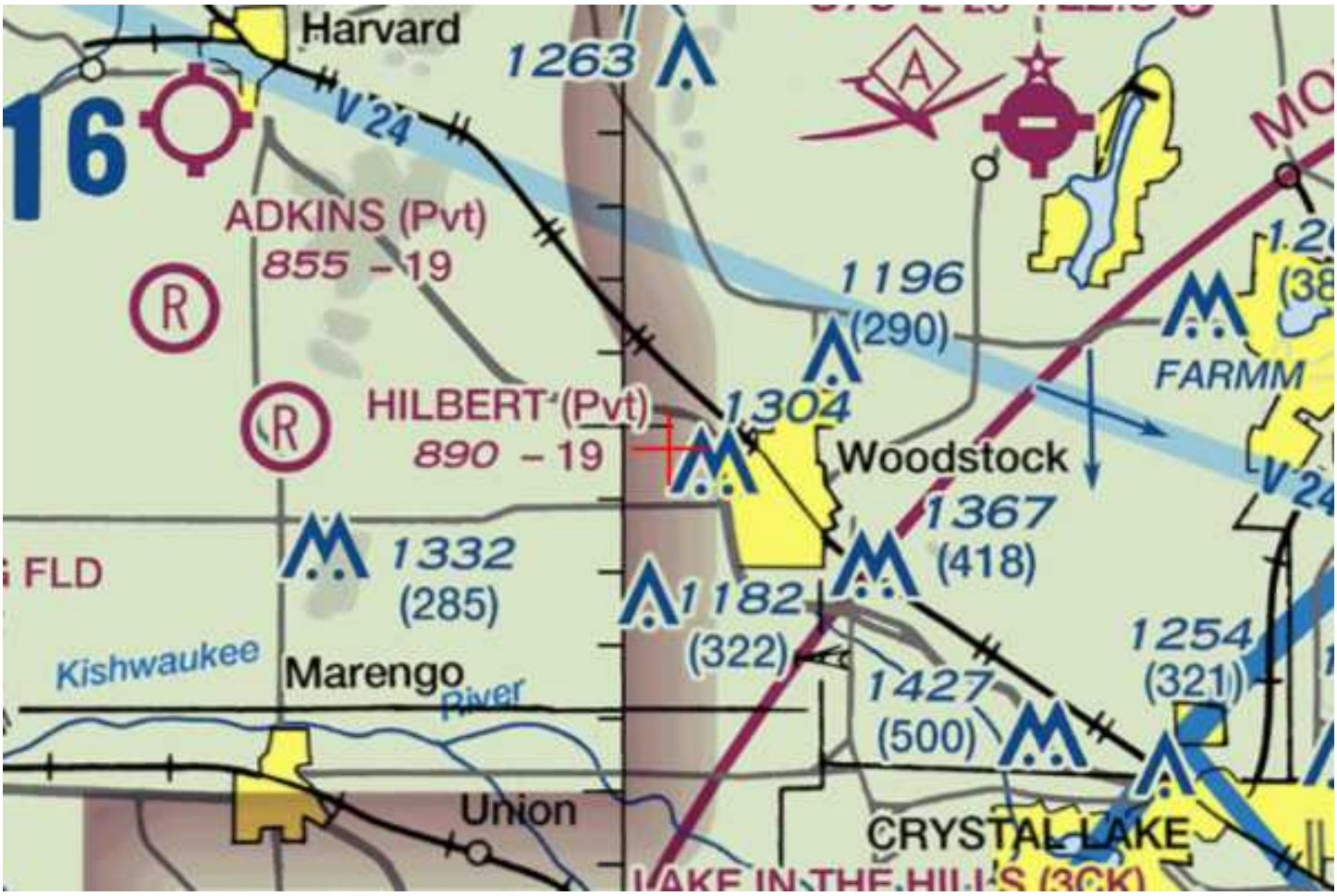
Attachment(s)
Case Description
Map(s)

Ground mounted solar array facility

TOPO Map for ASN 2025-AGL-6852-OE



Sectional Map for ASN 2025-AGL-6852-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-AGL-6851-OE

Issued Date: 05/13/2025

Todd Fryatt
ECA Solar LLC
203 Crescent St
suite 106
Waltham, MA 02453

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Woodstock Community Energy Initiative LLC
Location:	Woodstock, IL
Latitude:	42-19-41.94N NAD 83
Longitude:	88-29-05.12W
Heights:	921 feet site elevation (SE) 15 feet above ground level (AGL) 936 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 11/13/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

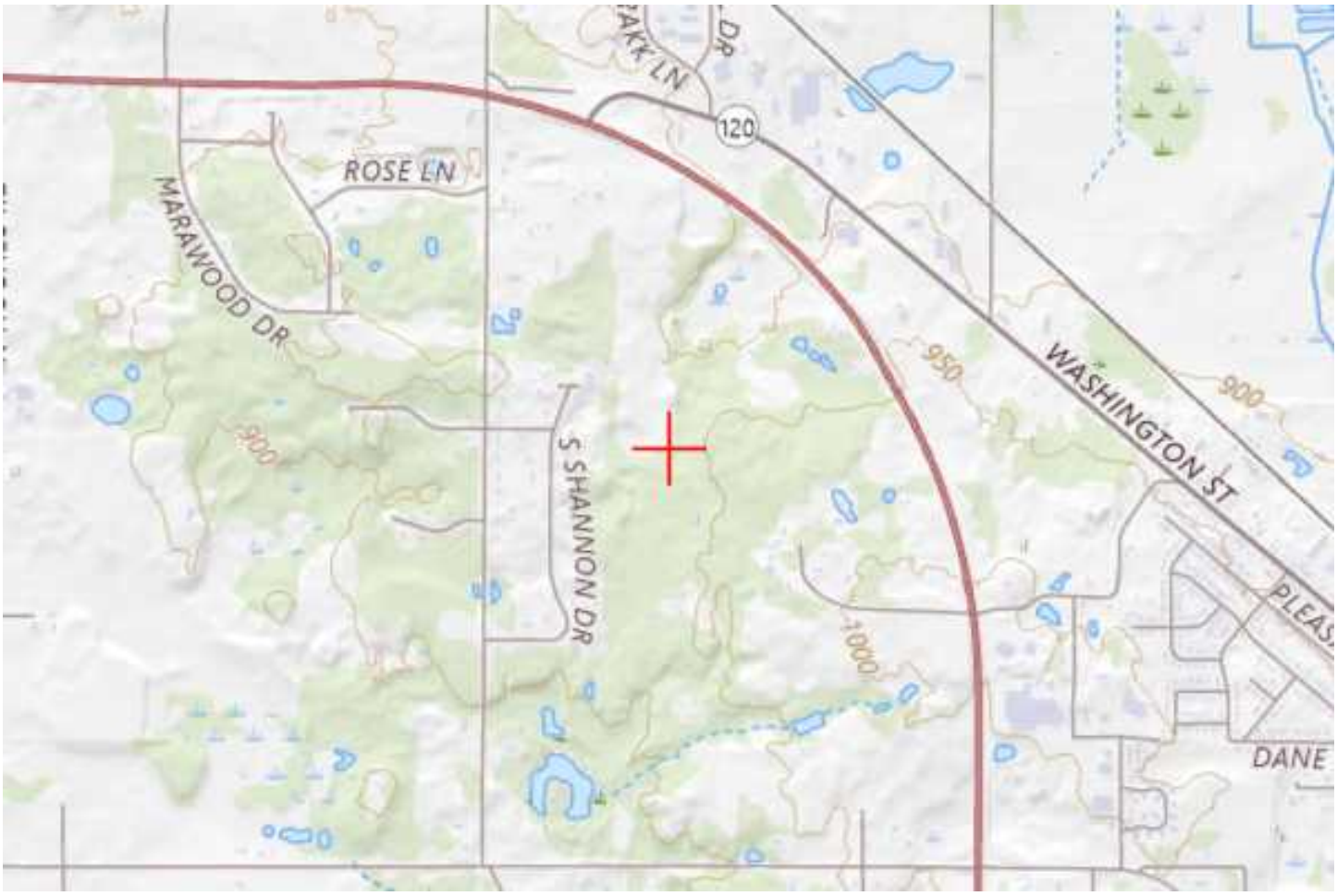
If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-AGL-6851-OE.

Signature Control No: 655019359-659288196 (DNE)
Timothy Waychoff
Specialist

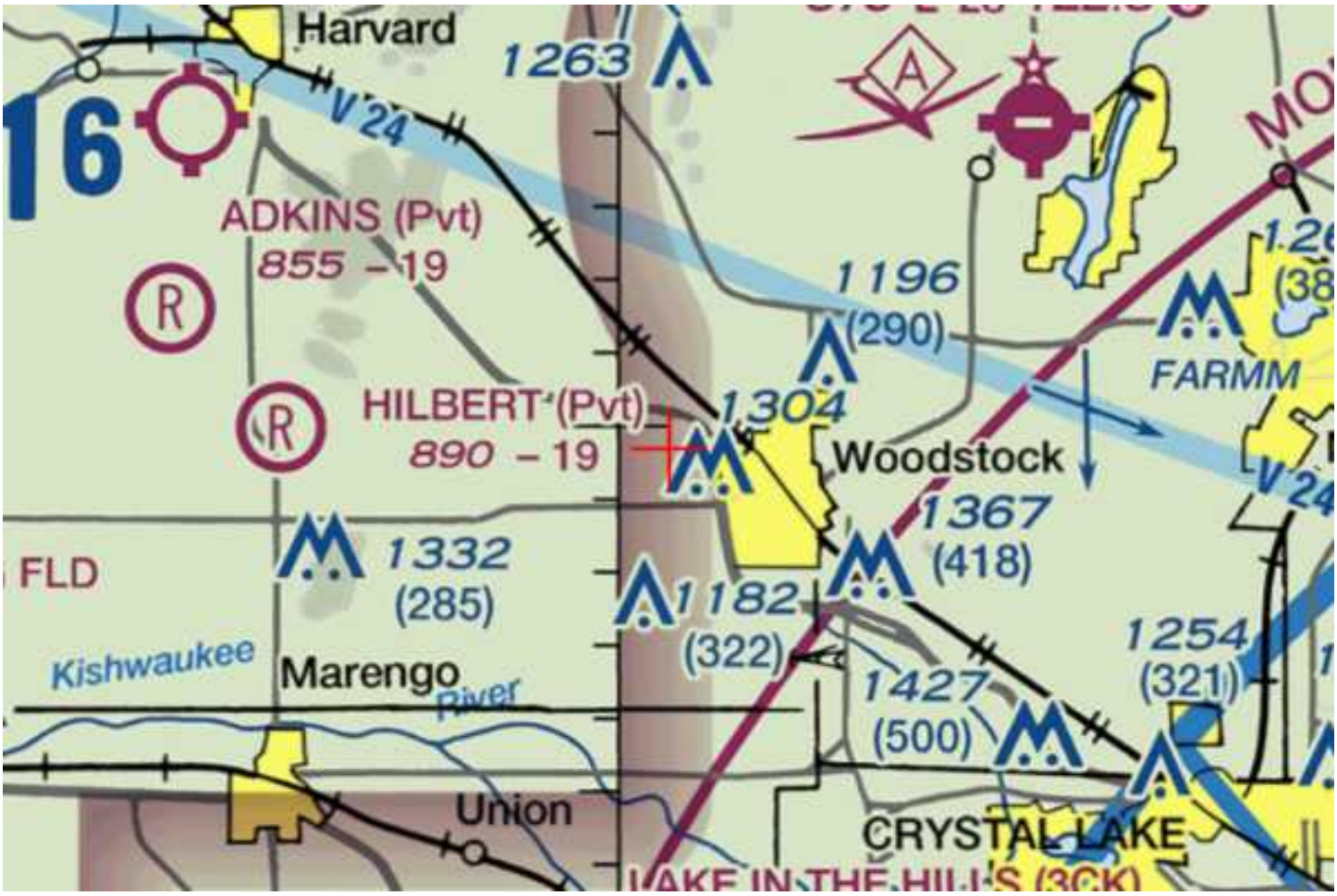
Attachment(s)
Case Description
Map(s)

Ground mounted solar array facility

TOPO Map for ASN 2025-AGL-6851-OE



Sectional Map for ASN 2025-AGL-6851-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-AGL-6849-OE

Issued Date: 05/13/2025

Todd Fryatt
ECA Solar LLC
203 Crescent St
suite 106
Waltham, MA 02453

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Woodstock Community Energy Initiative LLC
Location:	Woodstock, IL
Latitude:	42-20-08.94N NAD 83
Longitude:	88-29-12.02W
Heights:	927 feet site elevation (SE) 15 feet above ground level (AGL) 942 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 11/13/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

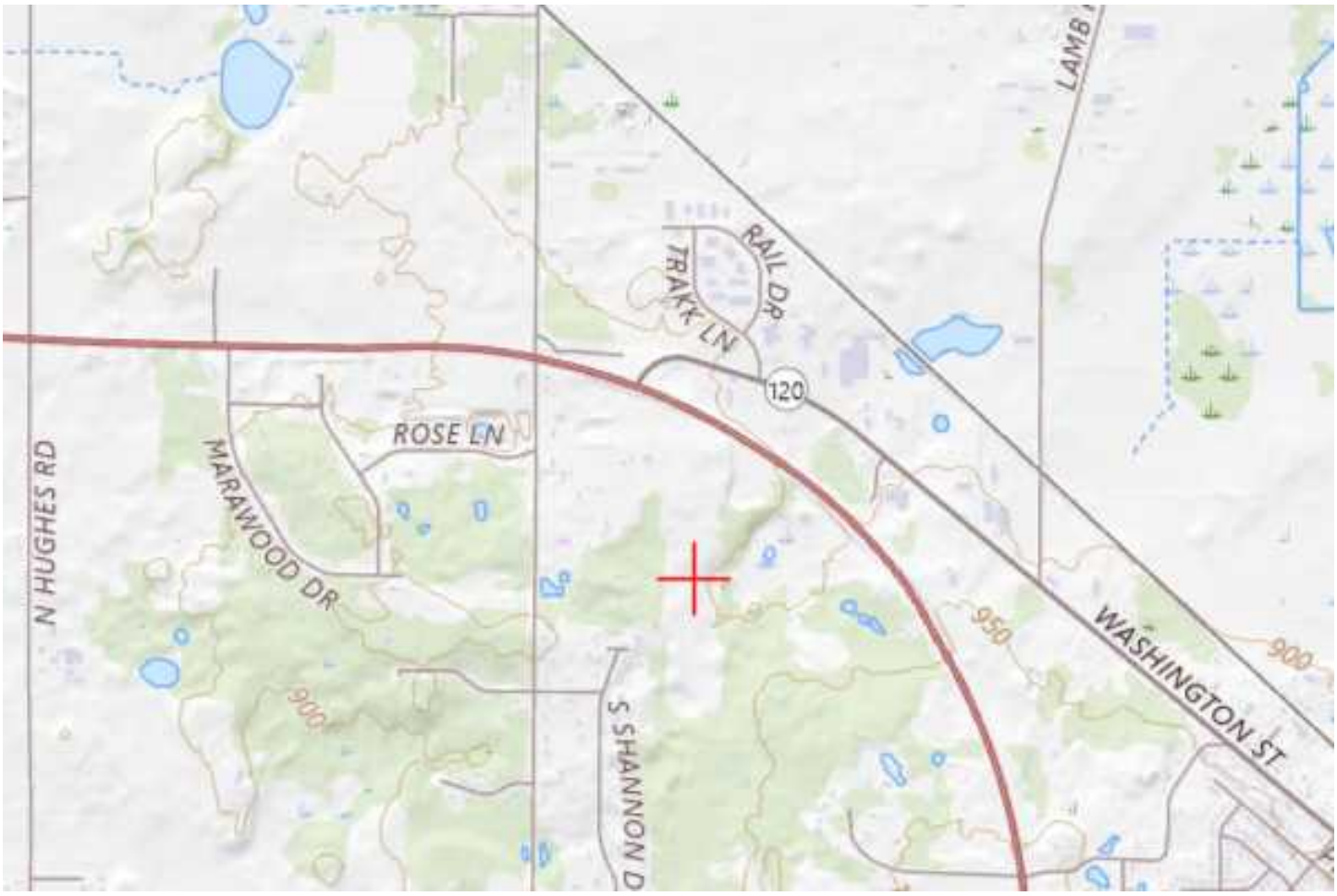
If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-AGL-6849-OE.

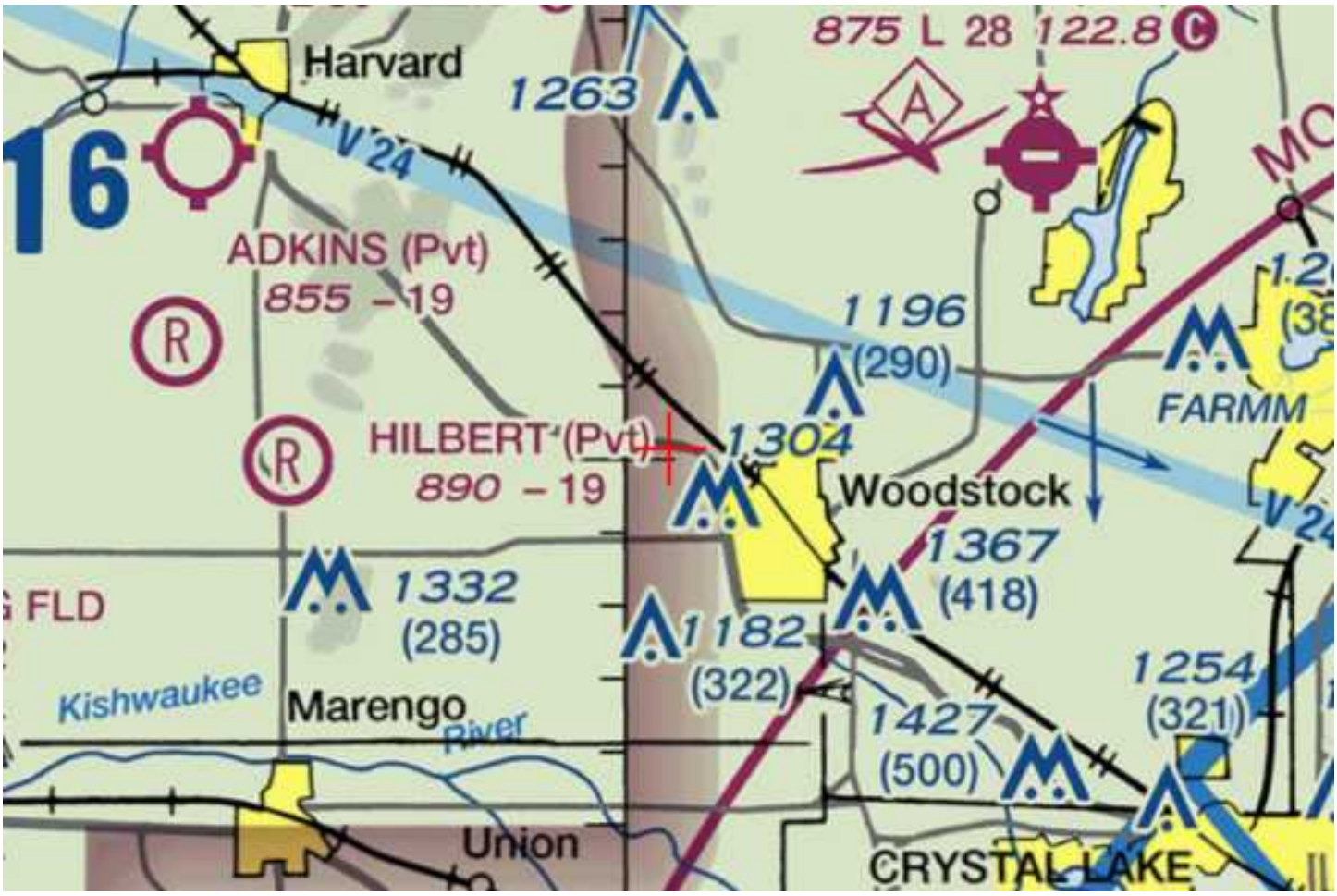
Signature Control No: 655019355-659288197 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

Ground mounted solar array facility

TOPO Map for ASN 2025-AGL-6849-OE




875 L 28 122.8
Harvard
1263
V24
ADKINS (Pvt)
855 –19
1196
(290)
FARMM
HILBERT (Pvt)
890 –19
1304
Woodstock
1367
(418)
1332
(285)
1182
(322)
1254
(321)
Kishwaukee
Marengo
River
1427
(500)
Union
CRYSTAL LAKE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-AGL-6853-OE

Issued Date: 05/13/2025

Todd Fryatt
ECA Solar LLC
203 Crescent St
suite 106
Waltham, MA 02453

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Woodstock Community Energy Initiative LLC
Location:	Woodstock, IL
Latitude:	42-19-42.95N NAD 83
Longitude:	88-29-11.94W
Heights:	902 feet site elevation (SE) 15 feet above ground level (AGL) 917 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 11/13/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

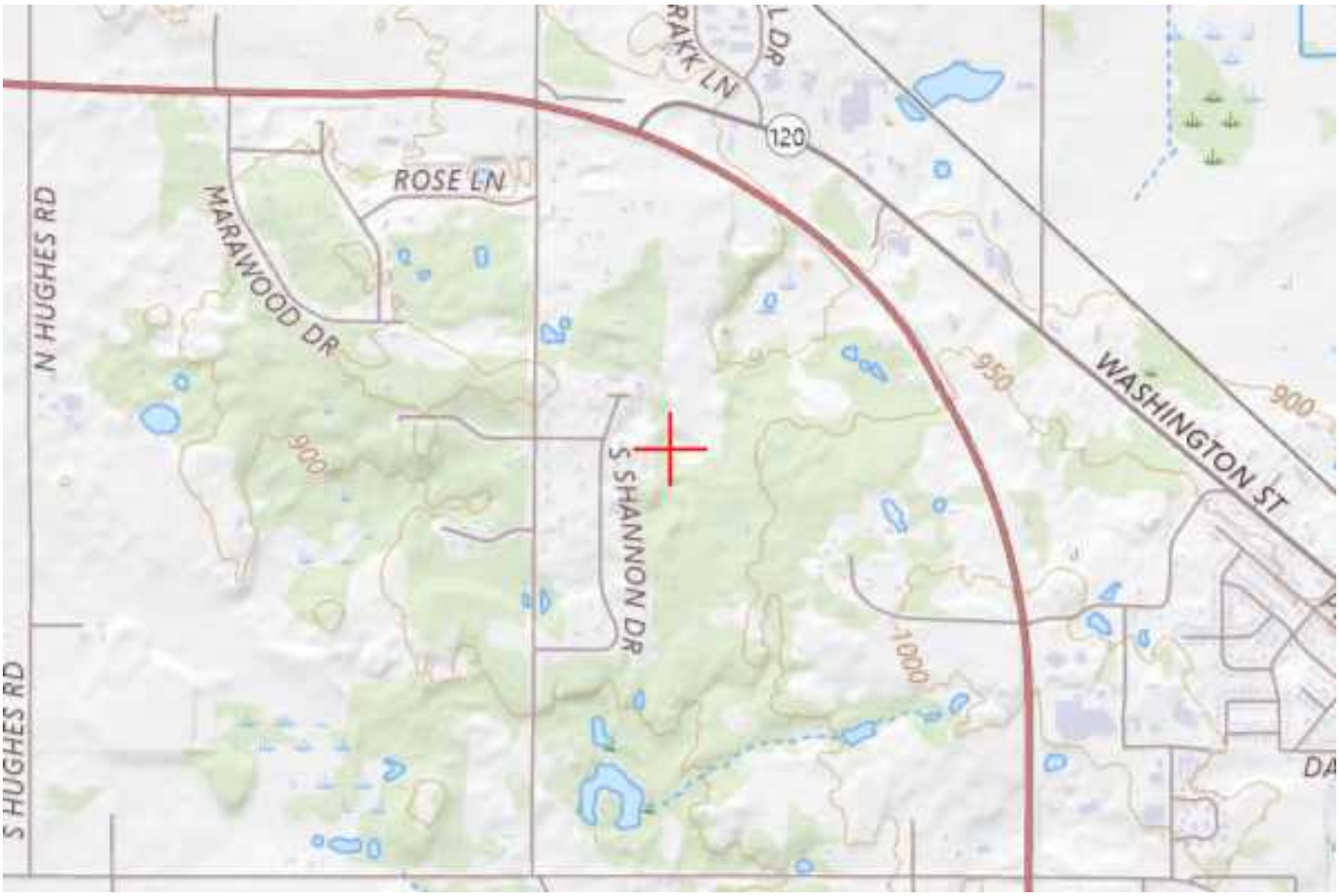
If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-AGL-6853-OE.

Signature Control No: 655019373-659288198 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

Ground mounted solar array facility

TOPO Map for ASN 2025-AGL-6853-OE



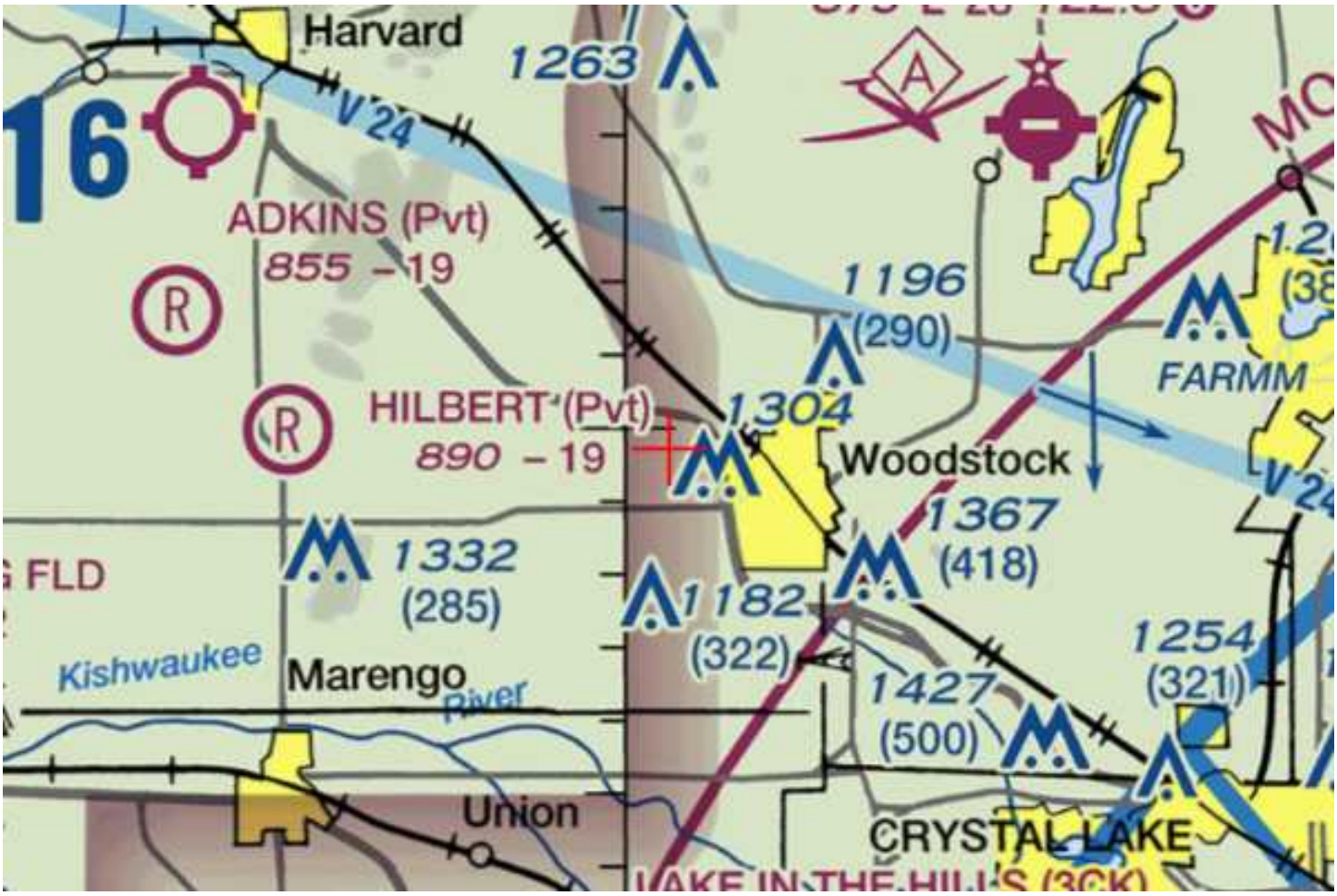

Harvard
1263
V 24
ADKINS (Pvt)
855 – 19
1196
(290)
FARMM
HILBERT (Pvt)
890 – 19
1304
Woodstock
1367
(418)
1332
(285)
1182
(322)
1254
(321)
Kishwaukee
Marengo
River
1427
(500)
Union
CRYSTAL LAKE

EXHIBIT J: AGRICULTURAL IMPACT MITIGATION AGREEMENT (AIMA)

Docusign Envelope ID: CE5C5177-55C9-4FA8-9340-64C427A282B0

STANDARD AGRICULTURAL IMPACT MITIGATION AGREEMENT
between
Woodstock Community Energy Initiative LLC

and the
ILLINOIS DEPARTMENT OF AGRICULTURE
Pertaining to the Construction of a Commercial Solar Energy Facility
in
McHenry County, Illinois

Pursuant to the Renewable Energy Facilities Agricultural Impact Mitigation Act (505 ILCS 147), the following standards and policies are required by the Illinois Department of Agriculture (IDOA) to help preserve the integrity of any Agricultural Land that is impacted by the Construction and Deconstruction of a Commercial Solar Energy Facility. They were developed with the cooperation of agricultural agencies, organizations, Landowners, Tenants, drainage contractors, and solar energy companies to comprise this Agricultural Impact Mitigation Agreement (AIMA).

Woodstock Community Energy Initiative LLC, hereafter referred to as Commercial Solar Energy Facility Owner, or simply as Facility Owner, plans to develop and/or operate a 5 MW AC Commercial Solar Energy Facility in McHenry County [GPS Coordinates: 42.333358, -88.485970], which will consist of up to 31.98 acres that will be covered by solar facility related components, such as solar panel arrays, racking systems, access roads, an onsite underground collection system, inverters and transformers and any affiliated electric transmission lines. This AIMA is made and entered between the Facility Owner and the IDOA.

If Construction does not commence within four years after this AIMA has been fully executed, this AIMA shall be revised, with the Facility Owner's input, to reflect the IDOA's most current Solar Farm Construction and Deconstruction Standards and Policies. This AIMA, and any updated AIMA, shall be filed with the County Board by the Facility Owner prior to the commencement of Construction.

The below prescribed standards and policies are applicable to Construction and Deconstruction activities occurring partially or wholly on privately owned agricultural land.

Conditions of the AIMA

The mitigative actions specified in this AIMA shall be subject to the following conditions:

A. All Construction or Deconstruction activities may be subject to County or other local requirements. However, the specifications outlined in this AIMA shall be the minimum standards applied to all Construction or Deconstruction activities. IDOA may utilize any legal means to enforce this AIMA.

B. Except for Section 17. B. through F., all actions set forth in this AIMA are subject to modification through negotiation by Landowners and the Facility Owner, provided such changes are negotiated in advance of the respective Construction or Deconstruction activities.

C. The Facility Owner may negotiate with Landowners to carry out the actions that Landowners wish to perform themselves. In such instances, the Facility Owner shall offer Landowners the area commercial rate for their machinery and labor costs.

D. All provisions of this AIMA shall apply to associated future Construction, maintenance, repairs, and Deconstruction of the Facility referenced by this AIMA.

E. The Facility Owner shall keep the Landowners and Tenants informed of the Facility's Construction and Deconstruction status, and other factors that may have an impact upon their farming operations.

F. The Facility Owner shall include a statement of its adherence to this AIMA in any environmental assessment and/or environmental impact statement.

G. Execution of this AIMA shall be made a condition of any Conditional/Special Use Permit. Not less than 30 days prior to the commencement of Construction, a copy of this AIMA shall be provided by the Facility Owner to each Landowner that is party to an Underlying Agreement. In addition, this AIMA shall be incorporated into each Underlying Agreement.

H. The Facility Owner shall implement all actions to the extent that they do not conflict with the requirements of any applicable federal, state and local rules and regulations and other permits and approvals that are obtained by the Facility Owner for the Facility.

I. No later than 45 days prior to the Construction and/or Deconstruction of a Facility, the Facility Owner shall provide the Landowner(s) with a telephone number the Landowner can call to alert the Facility Owner should the Landowner(s) have questions or concerns with the work which is being done or has been carried out on his/her property.

J. If there is a change in ownership of the Facility, the Facility Owner assuming ownership of the Facility shall provide written notice within 90 days of ownership transfer, to the Department, the County, and to Landowners of such change. The Financial Assurance requirements and the other terms of this AIMA shall apply to the new Facility Owner.

K. The Facility Owner shall comply with all local, state and federal laws and regulations, specifically including the worker protection standards to protect workers from pesticide exposure.

L. Within 30 days of execution of this AIMA, the Facility Owner shall use Best Efforts to provide the IDOA with a list of all Landowners that are party to an Underlying Agreement and known Tenants of said Landowner who may be affected by the Facility. As the list of Landowners and Tenants is updated, the Facility Owner shall notify the IDOA of any additions or deletions.

M. If any provision of this AIMA is held to be unenforceable, no other provision shall be affected by that holding, and the remainder of the AIMA shall be interpreted as if it did not contain the unenforceable provision.

Definitions

Abandonment	When Deconstruction has not been completed within 12 months after the Commercial Solar Energy Facility reaches the end of its useful life. For purposes of this definition, a Commercial Solar Energy Facility shall be presumed to have reached the end of its useful life if the Commercial Solar Energy Facility Owner fails, for a period of 6 consecutive months, to pay the Landowner amounts owed in accordance with an Underlying Agreement.

Aboveground Cable	Electrical power lines installed above ground surface to be utilized for conveyance of power from the solar panels to the solar facility inverter and/or point of interconnection to utility grid or customer electric meter.
Agricultural Impact Mitigation Agreement (AIMA)	The Agreement between the Facility Owner and the Illinois Department of Agriculture (IDOA) described herein.
Agricultural Land	Land used for Cropland, hayland, pastureland, managed woodlands, truck gardens, farmsteads, commercial ag-related facilities, feedlots, livestock confinement systems, land on which farm buildings are located, and land in government conservation programs used for purposes as set forth above.
Best Efforts	Diligent, good faith, and commercially reasonable efforts to achieve a given objective or obligation.
Commercial Operation Date	The calendar date of which the Facility Owner notifies the Landowner, County, and IDOA in writing that commercial operation of the facility has commenced. If the Facility Owner fails to provide such notifications, the Commercial Operation Date shall be the execution date of this AIMA plus 6 months.
Commercial Solar Energy Facility (Facility)	A solar energy conversion facility equal to or greater than 500 kilowatts in total nameplate capacity, including a solar energy conversion facility seeking an extension of a permit to construct granted by a county or municipality before June 29, 2018. "Commercial solar energy facility" does not include a solar energy conversion facility: (1) for which a permit to construct has been issued before June 29, 2018; (2) that is located on land owned by the commercial solar energy facility owner; (3) that was constructed before June 29, 2018; or (4) that is located on the customer side of the customer's electric meter and is primarily used to offset that customer's electricity load and is limited in nameplate capacity to less than or equal to 2,000 kilowatts.
Commercial Solar Energy Facility Owner deemed (Facility Owner)	A person or entity that owns a commercial solar energy facility. A Commercial Solar Energy Facility Owner is not nor shall it be to be a public utility as defined in the Public Utilities Act.
County	The County or Counties where the Commercial Solar Energy Facility is located.
Construction	The installation, preparation for installation and/or repair of a Facility.
Cropland	Land used for growing row crops, small grains or hay; includes land which was formerly used as cropland, but is currently enrolled in a government conservation program; also includes pastureland that is classified as Prime Farmland.

Deconstruction	The removal of a Facility from the property of a Landowner and the restoration of that property as provided in the AIMA.
Deconstruction Plan	A plan prepared by a Professional Engineer, at the Facility's expense, that includes: (1) the estimated Deconstruction cost, in current dollars at the time of filing, for the Facility, considering among other things: i. the number of solar panels, racking, and related facilities involved; ii. the original Construction costs of the Facility; iii. the size and capacity, in megawatts of the Facility; iv. the salvage value of the facilities (if all interests in salvage value are subordinate to that of the Financial Assurance holder if abandonment occurs); v. the Construction method and techniques for the Facility and for other similar facilities; and (2) a comprehensive detailed description of how the Facility Owner plans to pay for the Deconstruction of the Facility.
Department	The Illinois Department of Agriculture (IDOA).
Financial Assurance	A reclamation or surety bond or other commercially available financial assurance that is acceptable to the County, with the County or Landowner as beneficiary.
Landowner	Any person with an ownership interest in property that is used for agricultural purposes and that is party to an Underlying Agreement.
Prime Farmland	Agricultural Land comprised of soils that are defined by the USDA Natural Resources Conservation Service (NRCS) as "Prime Farmland" (generally considered to be the most productive soils with the least input of nutrients and management).
Professional Engineer	An engineer licensed to practice engineering in the State of Illinois.
Soil and Water Conservation District (SWCD)	A unit of local government that provides technical and financial assistance to eligible Landowners for the conservation of soil and water resources.
Tenant	Any person, apart from the Facility Owner, lawfully residing or leasing/renting land that is subject to an Underlying Agreement.
Topsoil	The uppermost layer of the soil that has the darkest color or the highest content of organic matter; more specifically, it is defined as the "A" horizon.
Underlying Agreement	The written agreement between the Facility Owner and the Landowner(s) including, but not limited to, an easement, option, lease, or license under the terms of which another person has constructed, constructs, or intends to construct a Facility on the property of the Landowner.

Underground Cable	Electrical power lines installed below the ground surface to be utilized for conveyance of power within a Facility or from a Commercial Solar Energy Facility to the electric grid.
USDA Natural Resources Conservation Service (NRCS)	An agency of the United States Department of Agriculture that provides America's farmers with financial and technical assistance to aid with natural resources conservation.

Construction and Deconstruction Standards and Policies

1. Support Structures

A. Only single pole support structures shall be used for the Construction and operation of the Facility on Agricultural Land. Other types of support structures, such as lattice towers or H-frames, may be used on nonagricultural land.

B. Where a Facility's Aboveground Cable will be adjacent and parallel to highway and/or railroad right-of-way, but on privately owned property, the support structures shall be placed as close as reasonably practicable and allowable by the applicable County Engineer or other applicable authorities to the highway or railroad right-of-way. The only exceptions may be at jogs or weaves on the highway alignment or along highways or railroads where transmission and distribution lines are already present.

C. When it is not possible to locate Aboveground Cable next to highway or railroad right-of-way, Best Efforts shall be expended to place all support poles in such a manner to minimize their placement on Cropland (i.e., longer than normal above ground spans shall be utilized when traversing Cropland).

2. Aboveground Facilities

Locations for facilities shall be selected in a manner that is as unobtrusive as reasonably possible to ongoing agricultural activities occurring on the land that contains or is adjacent to the Facility.

3. Guy Wires and Anchors

Best Efforts shall be made to place guy wires and their anchors, if used, out of Cropland, pastureland and hayland, placing them instead along existing utilization lines and on land other than Cropland. Where this is not feasible, Best Efforts shall be made to minimize guy wire impact on Cropland. All guy wires shall be shielded with highly visible guards.

4. Underground Cabling Depth

A. Underground electrical cables located outside the perimeter of the (fence) of the solar panels shall be buried with:

1. a minimum of 5 feet of top cover where they cross Cropland.
2. a minimum of 5 feet of top cover where they cross pastureland or other non-Cropland classified as Prime Farmland.
3. a minimum of 3 feet of top cover where they cross pastureland and other Agricultural Land not classified as Prime Farmland.

4. a minimum of 3 feet of top cover where they cross wooded/brushy land.

B. Provided that the Facility Owner removes the cables during Deconstruction, underground electric cables may be installed to a minimum depth of 18 inches:

1. Within the fenced perimeter of the Facility; or

2. When buried under an access road associated with the Facility provided that the location and depth of cabling is clearly marked at the surface.

C. If Underground Cables within the fenced perimeter of the solar panels are installed to a minimum depth of 5 feet, they may remain in place after Deconstruction.

5. Topsoil Removal and Replacement

A. Any excavation shall be performed in a manner to preserve topsoil. Best Efforts shall be made to store the topsoil near the excavation site in such a manner that it will not become intermixed with subsoil materials.

B. Best Efforts shall be made to store all disturbed subsoil material near the excavation site and separate from the topsoil.

C. When backfilling an excavation site, Best Efforts shall be used to ensure the stockpiled subsoil material will be placed back into the excavation site before replacing the topsoil.

D. Refer to Section 7 for procedures pertaining to rock removal from the subsoil and topsoil.

E. Refer to Section 8 for procedures pertaining to the repair of compaction and rutting of the topsoil.

F. Best Efforts shall be performed to place the topsoil in a manner so that after settling occurs, the topsoil's original depth and contour will be restored as close as reasonably practicable. The same shall apply where excavations are made for road, stream, drainage ditch, or other crossings. In no instance shall the topsoil materials be used for any other purpose unless agreed to explicitly and in writing by the Landowner.

G. Based on the mutual agreement of the landowner and Facility Owner, excess soil material resulting from solar facility excavation shall either be removed or stored on the Landowner's property and reseeded per the applicable National Pollution Discharge Elimination System (NPDES) permit/Stormwater Pollution Prevention Plan (SWPPP). After the Facility reaches the end of its Useful Life, the excess subsoil material shall be returned to an excavation site or removed from the Landowner's property, unless otherwise agreed to by Landowner.

6. Rerouting and Permanent Repair of Agricultural Drainage Tiles

The following standards and policies shall apply to underground drainage tile line(s) directly or indirectly affected by Construction and/or Deconstruction:

A. Prior to Construction, the Facility Owner shall work with the Landowner to identify drainage tile lines traversing the property subject to the Underlying Agreement to the extent reasonably practicable. All drainage tile lines identified in this manner shall be shown on the Construction and Deconstruction Plans.

B. The location of all drainage tile lines located adjacent to or within the footprint of the Facility shall be recorded using Global Positioning Systems (GPS) technology. Within 60 days after Construction is complete, the Facility Owner shall provide the Landowner, the IDOA, and the respective County Soil and Water Conservation District (SWCD) with "as built" drawings (strip maps) showing the location of all drainage tile lines by survey station encountered in the Construction of the Facility, including any tile line repair location(s), and any underground cable installed as part of the Facility.

C. **Maintaining Surrounding Area Subsurface Drainage**

If drainage tile lines are damaged by the Facility, the Facility Owner shall repair the lines or install new drainage tile line(s) of comparable quality and cost to the original(s), and of sufficient size and appropriate slope in locations that limit direct impact from the Facility. If the damaged tile lines cause an unreasonable disruption to the drainage system, as determined by the Landowner, then such repairs shall be made promptly to ensure appropriate drainage. Any new line(s) may be located outside of, but adjacent to the perimeter of the Facility. Disrupted adjacent drainage tile lines shall be attached thereto to provide an adequate outlet for the disrupted adjacent tile lines.

D. **Re-establishing Subsurface Drainage Within Facility Footprint**

Following Deconstruction and using Best Efforts, if underground drainage tile lines were present within the footprint of the facility and were severed or otherwise damaged during original Construction, facility operation, and/or facility Deconstruction, the Facility Owner shall repair existing drainage tiles or install new drainage tile lines of comparable quality and cost to the original, within the footprint of the Facility with sufficient capacity to restore the underground drainage capacity that existed within the footprint of the Facility prior to Construction. Such installation shall be completed within 12 months after the end of the useful life of the Facility and shall be compliant with Figures 1 and 2 to this Agreement or based on prudent industry standards if agreed to by Landowner.

E. If there is any dispute between the Landowner and the Facility Owner on the method of permanent drainage tile line repair, the appropriate County SWCD's opinion shall be considered by the Facility Owner and the Landowner.

F. During Deconstruction, all additional permanent drainage tile line repairs beyond those included above in Section 6.D. must be made within 30 days of identification or notification of the damage, weather and soil conditions permitting. At other times, such repairs must be made at a time mutually agreed upon by the Facility Owner and the Landowner. If the Facility Owner and Landowner cannot agree upon a reasonable method to complete this restoration, the Facility Owner may implement the recommendations of the appropriate County SWCD and such implementation constitutes compliance with this provision.

G. Following completion of the work required pursuant to this Section, the Facility Owner shall be responsible for correcting all drainage tile line repairs that fail due to Construction and/or Deconstruction for one year following the completion of Construction or Deconstruction, provided those repairs were made by the Facility Owner. The Facility Owner shall not be responsible for drainage tile repairs that the Facility Owner pays the Landowner to perform.

7. Rock Removal

With any excavations, the following rock removal procedures pertain only to rocks found in the uppermost 42 inches of soil, the common freeze zone in Illinois, which emerged or were brought to the site as a result of Construction and/or Deconstruction.

A. Before replacing any topsoil, Best Efforts shall be taken to remove all rocks greater than 3 inches in any dimension from the surface of exposed subsoil which emerged or were brought to the site as a result of Construction and/or Deconstruction.

B. If trenching, blasting, or boring operations are required through rocky terrain, precautions shall be taken to minimize the potential for oversized rocks to become interspersed in adjacent soil material.

C. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, shall be removed from the Landowner's premises or disposed of on the Landowner's premises at a location that is mutually acceptable to the Landowner and the Facility Owner.

8. Repair of Compaction and Rutting

A. Unless the Landowner opts to do the restoration work on compaction and rutting, after the topsoil has been replaced post-Deconstruction, all areas within the boundaries of the Facility that were traversed by vehicles and Construction and/or Deconstruction equipment that exhibit compaction and rutting shall be restored by the Facility Owner. All prior Cropland shall be ripped at least 18 inches deep or to the extent practicable, and all pasture and woodland shall be ripped at least 12 inches deep or to the extent practicable. The existence of drainage tile lines or underground utilities may necessitate less ripping depth. The disturbed area shall then be disked.

B. All ripping and disking shall be done at a time when the soil is dry enough for normal tillage operations to occur on Cropland adjacent to the Facility.

C. The Facility Owner shall restore all rutted land to a condition as close as possible to its original condition upon Deconstruction, unless necessary earlier as determined by the Landowner.

D. If there is any dispute between the Landowner and the Facility Owner as to what areas need to be ripped/disked or the depth at which compacted areas should be ripped/disked, the appropriate County SWCD's opinion shall be considered by the Facility Owner and the Landowner.

9. Construction During Wet Weather

Except as provided below, construction activities are not allowed on agricultural land during times when normal farming operations, such as plowing, disking, planting or harvesting, cannot take place due to excessively wet soils. With input from the landowner, wet weather conditions may be determined on a field by field basis.

A. Construction activities on prepared surfaces, surfaces where topsoil and subsoil have been removed, heavily compacted in preparation, or otherwise stabilized (e.g. through cement mixing) may occur at the discretion of the Facility Owner in wet weather conditions.

B. Construction activities on unprepared surfaces will be done only when work will not result in rutting which may mix subsoil and topsoil. Determination as to the potential of subsoil and topsoil mixing will be made in consultation with the underlying Landowner, or, if approved by the Landowner, his/her designated tenant or designee.

10. Prevention of Soil Erosion

A. The Facility Owner shall work with Landowners and create and follow a SWPPP to prevent excessive erosion on land that has been disturbed by Construction or Deconstruction of a Facility.

B. If the Landowner and Facility Owner cannot agree upon a reasonable method to control erosion on the Landowner's property, the Facility Owner shall consider the recommendations of the appropriate County SWCD to resolve the disagreement.

C. The Facility Owner may, per the requirements of the project SWPPP and in consultation with the Landowner, seed appropriate vegetation around all panels and other facility components to prevent erosion. The Facility Owner must utilize Best Efforts to ensure that all seed mixes will be as free of any noxious weed seeds as possible. The Facility Owner shall consult with the Landowner regarding appropriate varieties to seed.

11. Repair of Damaged Soil Conservation Practices

Consultation with the appropriate County SWCD by the Facility Owner shall be carried out to determine if there are soil conservation practices (such as terraces, grassed waterways, etc.) that will be damaged by the Construction and/or Deconstruction of the Facility. Those conservation practices shall be restored to their preconstruction condition as close as reasonably practicable following Deconstruction in accordance with USDA NRCS technical standards. All repair costs shall be the responsibility of the Facility Owner.

12. Compensation for Damages to Private Property

The Facility Owner shall reasonably compensate Landowners for damages caused by the Facility Owner. Damage to Agricultural Land shall be reimbursed to the Landowner as prescribed in the applicable Underlying Agreement.

13. Clearing of Trees and Brush

A. If trees are to be removed for the Construction or Deconstruction of a Facility, the Facility Owner shall consult with the Landowner to determine if there are trees of commercial or other value to the Landowner.

B. If there are trees of commercial or other value to the Landowner, the Facility Owner shall allow the Landowner the right to retain ownership of the trees to be removed and the disposition of the removed trees shall be negotiated prior to the commencement of land clearing.

14. Access Roads

A. To the extent practicable, access roads shall be designed to not impede surface drainage and shall be built to minimize soil erosion on or near the access roads.

B. Access roads may be left intact during Construction, operation or Deconstruction through mutual agreement of the Landowner and the Facility Owner unless otherwise restricted by federal, state, or local regulations.

C. If the access roads are removed, Best Efforts shall be expended to assure that the land shall be restored to equivalent condition(s) as existed prior to their construction, or as otherwise agreed to by the Facility Owner and the Landowner. All access roads that are removed shall be ripped to a depth of 18 inches. All ripping shall be performed consistent with Section 8.

15. Weed/Vegetation Control

A. The Facility Owner shall provide for weed control in a manner that prevents the spread of weeds. Chemical control, if used, shall be done by an appropriately licensed pesticide applicator.

B. The Facility Owner shall be responsible for the reimbursement of all reasonable costs incurred by owners of agricultural land where it has been determined by the appropriate state or county entity that weeds have spread from the Facility to their property. Reimbursement is contingent upon written notice to the Facility Owner. Facility Owner shall reimburse the property owner within 45 days after notice is received.

C. The Facility Owner shall ensure that all vegetation growing within the perimeter of the Facility is properly and appropriately maintained. Maintenance may include, but not be limited to, mowing, trimming, chemical control, or the use of livestock as agreed to by the Landowner.

D. The Deconstruction plans must include provisions for the removal of all weed control equipment used in the Facility, including weed-control fabrics or other ground covers.

16. Indemnification of Landowners

The Facility Owner shall indemnify all Landowners, their heirs, successors, legal representatives, and assigns from and against all claims, injuries, suits, damages, costs, losses, and reasonable expenses resulting from or arising out of the Commercial Solar Energy Facility, including Construction and Deconstruction thereof, and also including damage to such Facility or any of its appurtenances, except where claims, injuries, suits, damages, costs, losses, and expenses are caused by the negligence or intentional acts, or willful omissions of such Landowners, and/or the Landowners heirs, successors, legal representatives, and assigns.

17. Deconstruction Plans and Financial Assurance of Commercial Solar Energy Facilities

A. Deconstruction of a Facility shall include the removal/disposition of all solar related equipment/facilities, including the following utilized for operation of the Facility and located on Landowner property:

1. Solar panels, cells and modules;
2. Solar panel mounts and racking, including any helical piles, ground screws, ballasts, or other anchoring systems;
3. Solar panel foundations, if used (to depth of 5 feet);

4. Transformers, inverters, energy storage facilities, or substations, including all components and foundations; however, Underground Cables at a depth of 5 feet or greater may be left in place;
5. Overhead collection system components;
6. Operations/maintenance buildings, spare parts buildings and substation/switching gear buildings unless otherwise agreed to by the Landowner;
7. Access Road(s) unless Landowner requests in writing that the access road is to remain;
8. Operation/maintenance yard/staging area unless otherwise agreed to by the Landowner; and
9. Debris and litter generated by Deconstruction and Deconstruction crews.

B. The Facility Owner shall, at its expense, complete Deconstruction of a Facility within twelve (12) months after the end of the useful life of the Facility.

C. During the County permit process, or if none, then prior to the commencement of construction, the Facility Owner shall file with the County a Deconstruction Plan. The Facility Owner shall file an updated Deconstruction Plan with the County on or before the end of the tenth year of commercial operation.

D. The Facility Owner shall provide the County with Financial Assurance to cover the estimated costs of Deconstruction of the Facility. Provision of this Financial Assurance shall be phased in over the first 11 years of the Project's operation as follows:

1. On or before the first anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover ten (10) percent of the estimated costs of Deconstruction of the Facility as determined in the Deconstruction Plan.
2. On or before the sixth anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover fifty (50) percent of the estimated costs of Deconstruction of the Facility as determined in the Deconstruction Plan.
3. On or before the eleventh anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover one hundred (100) percent of the estimated costs of Deconstruction of the Facility as determined in the updated Deconstruction Plan provided during the tenth year of commercial operation.

The Financial Assurance shall not release the surety from liability until the Financial Assurance is replaced. The salvage value of the Facility may only be used to reduce the estimated costs of Deconstruction if the County agrees that all interests in the salvage value are subordinate or have been subordinated to that of the County if Abandonment occurs.

E. The County may, but is not required to, reevaluate the estimated costs of Deconstruction of any Facility after the tenth anniversary, and every five years thereafter, of the Commercial Operation Date. Based on any reevaluation, the County may require changes in the level of Financial Assurance used to calculate the phased Financial Assurance levels described in Section 17.D. required from the Facility Owner. If the County is unable to its satisfaction to perform the investigations necessary to approve the Deconstruction Plan filed by the Facility Owner, then the County and Facility may mutually agree on the selection of a Professional Engineer independent of the Facility Owner to conduct any necessary investigations. The Facility Owner shall be responsible for the cost of any such investigations.

F. Upon Abandonment, the County may take all appropriate actions for Deconstruction including drawing upon the Financial Assurance.

Concurrence of the Parties to this AIMA

The Illinois Department of Agriculture and odstock Community Energy Initiative I concur that this AIMA is the complete AIMA governing the mitigation of agricultural impacts that may result from the Construction and Deconstruction of the solar farm project in McHenry County within the State of Illinois.

The effective date of this AIMA commences on the date of execution.

STATE OF ILLINOIS
DEPARTMENT OF AGRICULTURE

Jerry Costello II

By: Jerry Costello II, Director

Clay Nordsiek

By Clay Nordsiek, Deputy General Counsel

801 E. Sangamon Avenue,
State Fairgrounds, POB 19281
Springfield, IL 62794-9281

4/16, 2025

oodstock Community Energy Initiative LL

Signed by:
Todd Fryatt
75EEAC7434024D6...

By Todd Fryatt

203 Crescent St., Suite #106
Waltham, MA 02453

Address

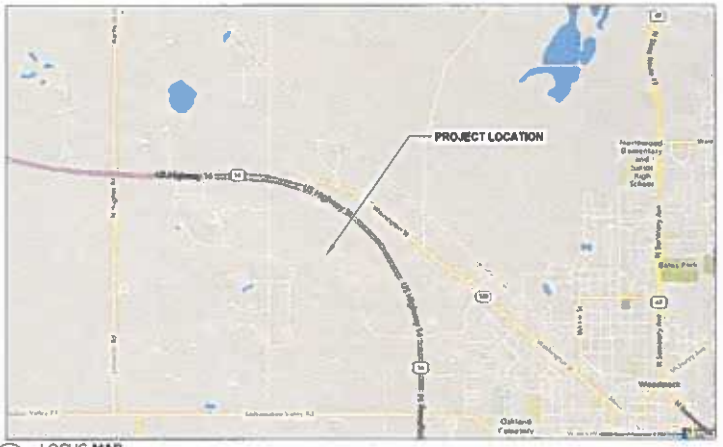
March 31, 2025

PHOTOVOLTAIC SYSTEM
TOTAL: 7.5058 MWDC (5.000 MWAC)
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
US HWY 14, WOODSTOCK, IL

PV SYSTEM DESCRIPTION	
MODULE TYPE	QCELLS Q.TRON_XL-G2.8FG-630
QUANTITY	11914 (518 STRINGS OF 23 MODULES)
SYSTEM SIZE (DC)	7.5058 MW
SYSTEM SIZE (AC)	5.000 MW
INVERTER	SOLECTRIA XGI 1500-250/250 (250 KW) 20 QTY
MOUNTING SYSTEM	SINGLE AXIS TRACKER
TILT ANGLE	+/-60°
ARRAY AZIMUTH (SOUTH = 180°)	180°
GCR	37.0%
PITCH	21.85'

1 PRELIMINARY LAYOUT - WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC: 7.5058 MWDC (5.000 MWAC) PV SYSTEM

SCALE 1" = 200'



2 LOCUS MAP

3 INTERCONNECTION DETAIL

SCALE 1" = 50'

REV.	DESCRIPTION OF REVISION	DATE	APPR.
1	LAYOUT REVISIONS	11/15/2024	NEH
2	PRE SALES DESIGN	11/15/2024	NEH
3	INTERCONNECTION APPLICATION	10/04/2024	NEH
4	PRE SALES DESIGN	09/24/2024	NEH
5	PRE SALES DESIGN	07/26/2024	CAL

eca solar

203 CRESCENT STREET WALTHAM, MA 02453

20 TRAFALGAR SQUARE NASHUA, NEW HAMPSHIRE 03063

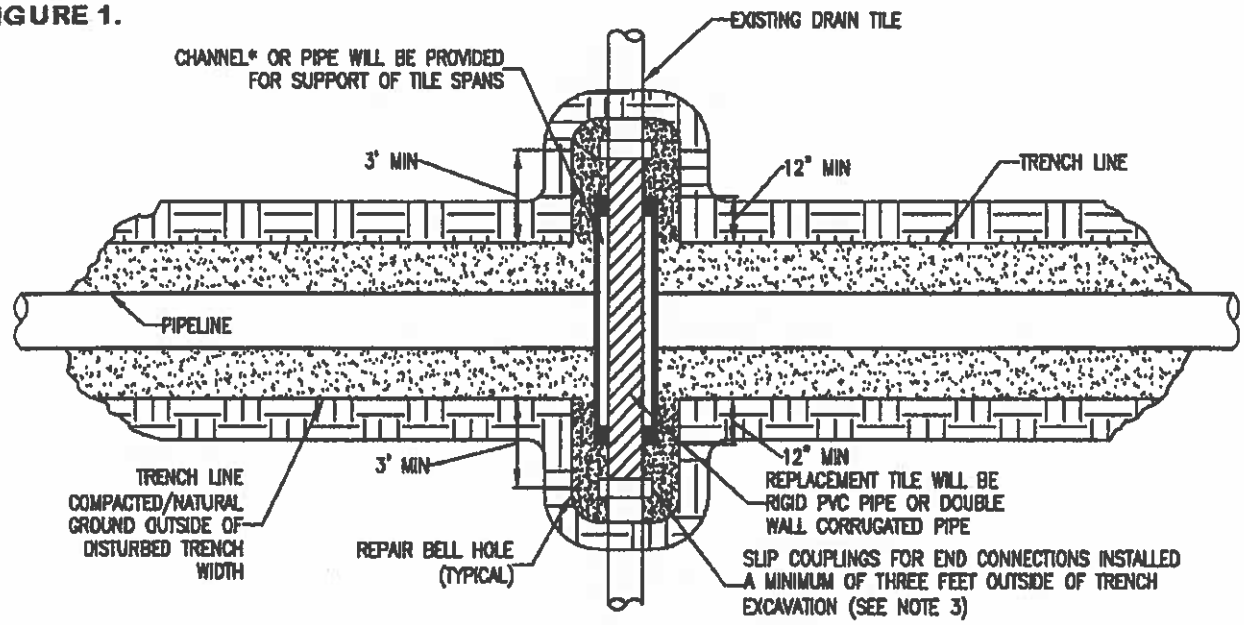
SCALE: AS SHOWN
DRAWN BY: NH — DATE: 11/15/2024
APPROVED BY: SD — DATE: 11/15/2024

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
ECA SOLAR LLC

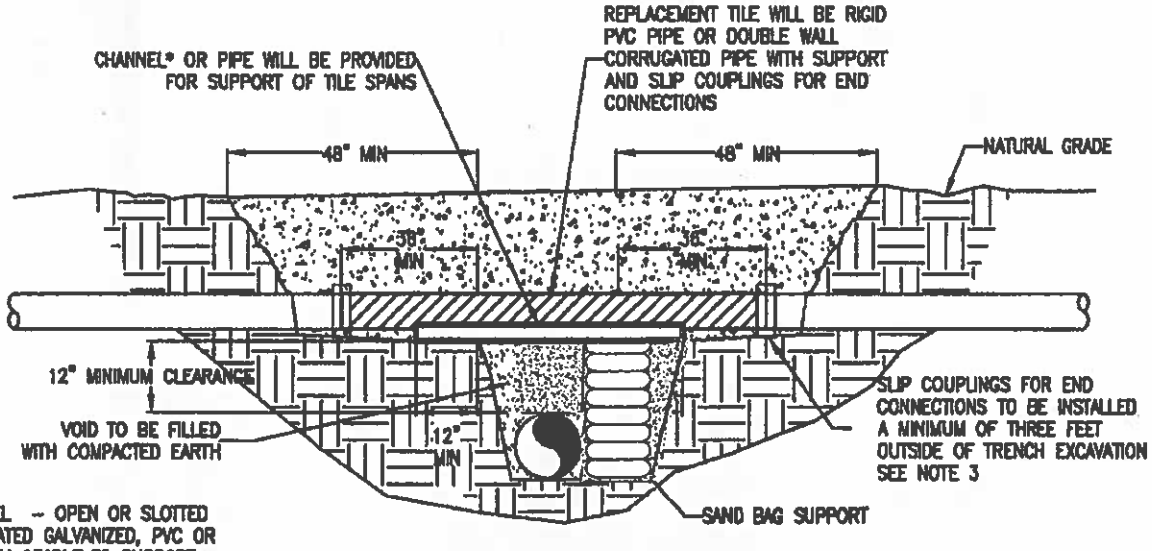
PROSPECTING SITE PLAN
US HWY 14 WOODSTOCK, IL

PSD-1.0
SITE PLAN

FIGURE 1.



PLAN
N.T.S.



*CHANNEL -- OPEN OR SLOTTED CORRUGATED GALVANIZED, PVC OR ALUMINUM CRADLE TO SUPPORT DRAIN TILE.

CROSS SECTION
N.T.S.

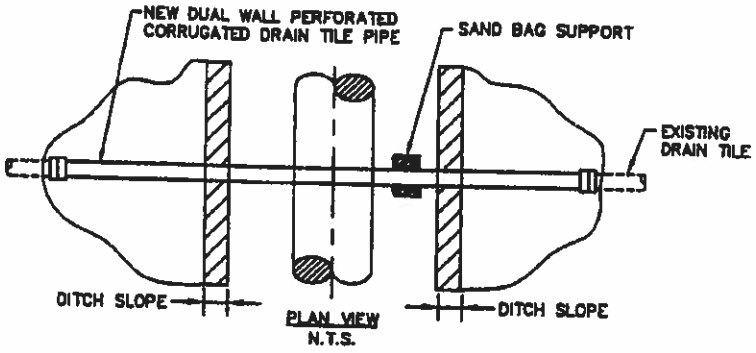
NOTE:

1. IMMEDIATELY REPAIR TILE IF WATER IS FLOWING THROUGH TILE AT TIME OF TRENCHING. IF NO WATER IS FLOWING AND TEMPORARY REPAIR IS DELAYED, OR NOT MADE BY THE END OF THE WORK DAY, A SCREEN OR APPROPRIATE 'NIGHT CAP' SHALL BE PLACED ON OPEN ENDS OF TILE TO PREVENT ENTRAPMENT OF ANIMALS ETC.
2. CHANNEL OR PIPE (OPEN OR SLOTTED) MADE OF CORRUGATED GALVANIZED PIPE, PVC OR ALUMINUM WILL BE USED FOR SUPPORT OF DRAIN TILE SPANS.
3. INDUSTRY STANDARDS SHALL BE FOLLOWED TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES.

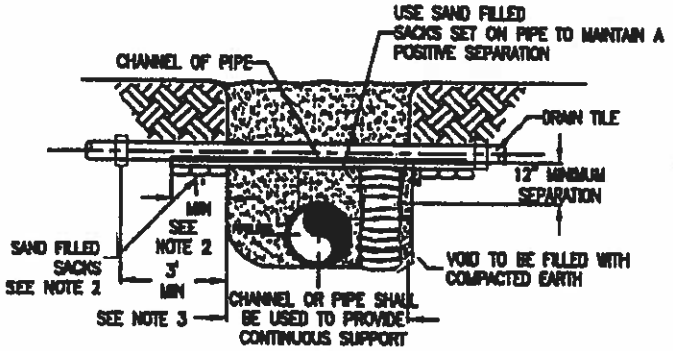
TEMPORARY DRAIN TILE REPAIR

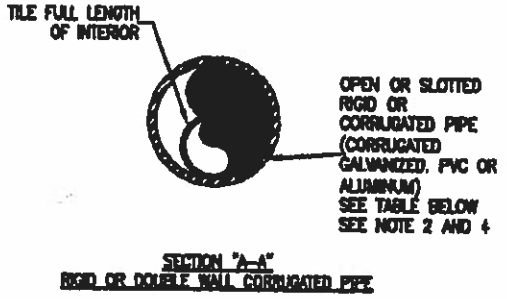
PAGE 1 of 2

FIGURE 2.



PLAN VIEW





END VIEWS

MINIMUM SUPPORT TABLE			
TILE SIZE	CHANNEL SIZE	PIPE SIZE	
3"	4" @ 5.4 #/ft	4"	STD. WT.
4"-5"	5" @ 6.7 #/ft	6"	STD. WT.
6"-9"	7" @ 9.8 #/ft	9"-10"	STD. WT.
10"	10" @ 15.3 #/ft	12"	STD. WT.

NOTE:

1. TILE REPAIR AND REPLACEMENT SHALL MAINTAIN ORIGINAL ALIGNMENT GRADIENT AND WATER FLOW TO THE GREATEST EXTENT POSSIBLE. IF THE TILE NEEDS TO BE RELOCATED, THE INSTALLATION ANGLE MAY VARY DUE TO SITE SPECIFIC CONDITIONS AND LANDOWNER RECOMMENDATIONS.
2. 1'-0" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE (OPEN OR SLOTTED CORRUGATED GALVANIZED. PVC OR ALUMINUM CRADLE) SHALL BE SUPPORTED BY UNDISTURBED SOIL, OR IF CROSSING IS NOT AT RIGHT ANGLES TO PIPELINE, EQUIVALENT LENGTH PERPENDICULAR TO TRENCH. SHIM WITH SAND BAGS TO UNDISTURBED SOIL FOR SUPPORT AND DRAINAGE GRADIENT MAINTENANCE (TYPICAL BOTH SIDES).
3. DRAIN TILES WILL BE PERMANENTLY CONNECTED TO EXISTING DRAIN TILES A MINIMUM OF THREE FEET OUTSIDE OF EXCAVATED TRENCH LINE USING INDUSTRY STANDARDS TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES INCLUDING SLIP COUPLINGS.
4. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
5. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL/PIPE SECTIONS SHOWN AND IF APPROVED BY COMPANY REPRESENTATIVES AND LANDOWNER IN ADVANCE. SITE SPECIFIC ALTERNATE SUPPORT SYSTEM TO BE DEVELOPED BY COMPANY REPRESENTATIVES AND FURNISHED TO CONTRACTOR FOR SPANS IN EXCESS OF 20', TILE GREATER THEN 10" DIAMETER, AND FOR "HEADER" SYSTEMS.
6. ALL MATERIAL TO BE FURNISHED BY CONTRACTOR.
7. PRIOR TO REPAIRING TILE, CONTRACTOR SHALL PROBE LATERALLY INTO THE EXISTING TILE TO FULL WIDTH OF THE RIGHTS OF WAY TO DETERMINE IF ADDITIONAL DAMAGE HAS OCCURRED. ALL DAMAGED/DISTURBED TILE SHALL BE REPAIRED AS NEAR AS PRACTICABLE TO ITS ORIGINAL OR BETTER CONDITION.

PERMANENT DRAIN TILE REPAIR

EXHIBIT K: NRI

Natural Resource Information Report Application

McHenry-Lake County Soil and Water Conservation District

1648 S. Eastwood Dr., Woodstock, IL 60098 Voice: (815) 338-0099 www.mchenryswcd.org

For office use only

File Number:_____ - _____ - _____ Date Received:_____ 20_____

Fee:_____ (*Please make check payable to McHenry-Lake County SWCD.*)

The McHenry-Lake County SWCD has thirty (30) days to complete this report after receipt of **ALL** the following items and after presentation to SWCD Board of Directors at their regularly scheduled meeting: Board meetings are scheduled for the first Tuesday of each month at the SWCD office.

Application Check List

Plat of Survey: **Petition:** **Fee:**
Tentative plat: **Intensive Soil Survey:** **Tile Investigation:**
Certified Wetland Determination/Delineation:

Processing of the NRI report will not begin until all of the required items have been received by the MLCSWCD (office unless otherwise indicated by SWCD Staff)

Fee: **Full report:** $400.00 for 1-3 acres and $25.00 for each additional acre or part thereof.
Letter: $100.00 *SWCD will determine when letter or full report format will be necessary.*

Petitioner's Name: Woodstock Community Energy Initiative LLC **Phone:**(508) 460 - 2068

Address: 203 Crescent St #106, Waltham, MA 02453

Contact Person: Hobie Anderson **Phone:**(508) 460 - 2068

Address: 203 Crescent St #106, Waltham, MA 02453

Email Address: ha@ecasolar.com

Parcel Index Number(s): (1) 07 - 36 - 326 - 003 (2)___ - ____ - ____ - ____
(3)___ - ____ - ____ - ____ Aggregate parcel size 88.08 (CUP area = 40.72 acres) **(acres)**

Current Zoning: A1 **Requested Zoning:** N/A

Description of Zoning Request: Conditional Use for a Community Solar Facility

Proposed Improvements:

Dwellings on Slabs	Common Open Space	Drainage Ditches/Swales
Dwellings with Basements	Sewers	Wet Retention Basin
Commercial Buildings	Individual Wells	Storm Sewers
Park/Playground Areas	Community Water	Dry Detention Basin
Conservation Easements	Septic Systems	Other Solar Facility

Unit of Government Responsible: [County of McHenry] **County of Lake**
City/Town of Unincorporated
Is the parcel within 1 mile of a Village or City Boundary? [Yes] **No**
If yes, which (City/Town/Village)? Woodstock

It is understood that filing this application allows a district representative the right to conduct an onsite investigation of the parcel(s) described above. Furthermore, this report becomes subject to the Freedom of Information Act after presentation to the District Board of directors at their regularly scheduled meeting.

Contact person or Petitioner's signature: **Date:** 07 / 23 /2025

Gmail

Tiffany Grace <tg@ecasolar.com>

Fwd: Receipt

1 message

Michael Mahoney <mam@ecasolar.com> Thu, Jul 24, 2025 at 11:39 AM
To: Tiffany Grace <tg@ecasolar.com>

eca solar

Michael Mahoney
Senior Accountant
(978)502-6733 | www.ecasolar.com | mam@ecasolar.com
New Address 203 Crescent St, Suite 106, Waltham, MA, 02453

---------- Forwarded message ---------
From: **'McHenry-Lake County SWCD' via Payables Internal Group** <payables@ecasolar.com>
Date: Thu, Jul 24, 2025, 11:39 AM
Subject: Receipt
To: <payables@ecasolar.com>

McHenry-Lake County SWCD

1648 S EASTWOOD DRIVE
WOODSTOCK, IL 60098
8153380444

7/24/25 10:39:08 AM
Ref #: R705617041947
Authorization Code: 299810

Total: $1,397.25 USD

Card Number: XXXXXXXXXXXX1003
Card Holder: TODD FRYATT
Card Brand: AMEX

EXHIBIT K: NRI

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

WOODSTOCK QUADRANGLE
ILLINOIS - MCHENRY COUNTY
7.5-MINUTE SERIES

-88.5000°
42.3750°
377000mE
78
79
80
81
82
83
84
85
86
-88.3750°
42.3750°
4692000mN
91
90
89
88
87
86
85
84
83
82
81
80
79
PROJECT BOUNDARY
Scandinavian Cem
McHenry County Courthouse
Fairview Cem
Oakland Cem
Calvary Cem
WOODSTOCK
Bull Valley
McHenry County Memorial Park
CRYSTAL LAKE
Lakewood
Eldy Lake
Lily Lake
Kishwaukee River
NELSON RD
CO HWY 1
N STATE RTE 47
NUSBAUM RD
GREENSIDE DR
WILLIAMS CT
PHEASANT LN
SADDLEBRED TRL
GREENWOOD RD
SHADOW LN
CHARLES RD
CO HWY 2
HAYDN ST
N QUEEN ANNE RD
CHAPMAN LN
MARSHLAND WAY
THOMPSON RD
VERDI ST
WARE RD
WASHINGTON ST
N SEMINARY AVE
BANFORD RD
MANKE LN
ROGER RD
SAINT JOHNS RD
TERRY CT
ROSE LN
INDIAN TREE
NOOSE FARM RD
LAMB RD
RAFFEL RD
RAYS BAY RD
HIDDEN LAKE DR
WEST RD
KISHWAUKEE VALLEY RD
SUNSET RIDGE RD
S SHANNON DR
ALPINE LN
W JACKSON ST
W JUDD ST
E JUDD ST
E CALHOUN ST
PARK DR
DANE ST
MAPLE AVE
OAK ST
MAIN ST
GREENWOOD AVE
BAGLEY ST
DONOVAN AVE
MCHENRY AVE
IRVING AVE
N SHANNON DR
COUNTRY CLUB RD
BULL VALLEY DR
SHELLEY CT
HIDDEN LN
BULL VALLEY RD
SWEETWATER CREEK LN
S GOLD SPRINGS RD
CASTLEBAR TRL
OAKVIEW TER
WESTWOOD TRL
W SOUTH ST
FORREST AVE
RIDGELAND AVE
E KIMBALL AVE
BURBANK AVE
BARBARY LN
HICKORY LN
WAGNER LN
PRAIRIE RIDGE DR
W SOUTH STREET RD
DAVIS RD
CATALPA LN
GREENWOOD AVE
DONOVAN AVE
MCCONNELL RD
COUNTRY CLUB RD
S COUNTRY CLUB RD
DEERPATH RD
CLUB RD
RIDGEMOOR TRL
FAIRVIEW LN
FAIRVIEW CIR
GREENVIEW DR
ASPEN DR
COBBLESTONE WAY
COMMONS DR
FIELDSTONE DR
HERCULES RD
PERKINS RD
SUNNYSIDE RD
GEIGER RD
LUCAS RD
BRYN MAWR LN
BRIARWOOD RD
MOUNT THABOR RD
EASTWOOD DR
S EASTWOOD DR
N SEMINARY AVE
PLEASANT VALLEY RD
EMERY LN
MYERS LN
DEAN ST
CASTLE RD
FOX RIDGE TRL
DOOLY RD
ROSE FARM RD
ELAINE DR
FONDEROSA AVE
SYCAMORE RD
DAVIS LN
TARA DR
BLAKELY ST
GERRY ST
BUNKER ST
S MADISON ST
S MAIN ST
S STATE ST
S PEARL ST
S JEFFERSON ST
S BLAKE ST
ZIMMERMAN RD
LAKE AVE
PACKER LN
GUNNY LN
PRAIRIE RIDGE DR
EDGEWOOD DR
JULIET ST
HICKORY RD
BUTTERFIELD RD
WOODSIDE DR
VASSAR DR
CHESTNUT DR
PRESTWICK DR
HARROW GATE DR
OAKMONT DR
W LONGWOOD DR
E LONGWOOD DR
RIDGEMOOR TRL
PRESTWICK LN
MCKENNY LN
ASPEN DR
GREENVIEW DR
FAIRVIEW LN
FAIRVIEW CIR
MCCONNELL RD
BOSWELL WAY
HIDDEN LN
SWEETWATER CREEK LN
S GOLD SPRINGS RD
SHELLEY CT
SHARON CT
BULL VALLEY DR
CALLOWAY DR
CLUB RD
DEERPATH RD
COUNTRY CLUB RD
S COUNTRY CLUB RD
OAKMONT DR
W LONGWOOD DR
E LONGWOOD DR
RIDGEMOOR TRL
PRESTWICK LN
FAIRVIEW LN
FAIRVIEW CIR
GREENVIEW DR
ASPEN DR
MCCONNELL RD
BOSWELL WAY
COBBLESTONE WAY
COMMONS DR
FIELDSTONE DR
HERCULES RD
CASTLE RD
FOX RIDGE TRL
DOOLY RD
LUCAS RD
BRYN MAWR LN
BRIARWOOD RD
MOUNT THABOR RD
EASTWOOD DR
S EASTWOOD DR
N SEMINARY AVE
PLEASANT VALLEY RD
EMERY LN
MYERS LN
DEAN ST
PERKINS RD
SUNNYSIDE RD
GEIGER RD
ELAINE DR
FONDEROSA AVE
SYCAMORE RD
DAVIS LN
TARA DR
BLAKELY ST
GERRY ST
BUNKER ST
S MADISON ST
S MAIN ST
S STATE ST
S PEARL ST
S JEFFERSON ST
S BLAKE ST
ZIMMERMAN RD
LAKE AVE
PACKER LN
GUNNY LN
PRAIRIE RIDGE DR
EDGEWOOD DR
JULIET ST
HICKORY RD
BUTTERFIELD RD
WOODSIDE DR
VASSAR DR
CHESTNUT DR
PRESTWICK DR
HARROW GATE DR
OAKMONT DR
W LONGWOOD DR
E LONGWOOD DR
RIDGEMOOR TRL
PRESTWICK LN
MCKENNY LN
ASPEN DR
GREENVIEW DR
FAIRVIEW LN
FAIRVIEW CI

EXHIBIT M: FEMA MAP

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

In the State of Illinois, any portion of a stream or watercourse that lies within the floodway fringe of a studied (AE) stream may have a state regulated floodway. The FIRM may not depict these state regulated floodways.

Floodways restricted by anthropogenic features such as bridges and culverts are drawn to reflect natural conditions and may not agree with the model computed widths listed in the Floodway Data table in the Flood Insurance Study report.

FEMA recommends that a Flood Insurance Policy be purchased for structures in areas where levees are shown as providing protection from the 1% annual chance flood. Flooding is not covered by standard property/fire/dwelling insurance policies nor is it covered by Homeowners Insurance, Renters Insurance, Condominium Owners Insurance, or Commercial Property Insurance. Contact your insurance agent and local floodplain administrator for further information. Visit http://www.fema.gov/pdf/fhm/frm_gsah.pdf for information on levees and the risk of flooding in areas shown as being protected by levees.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 16. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1991 or later.

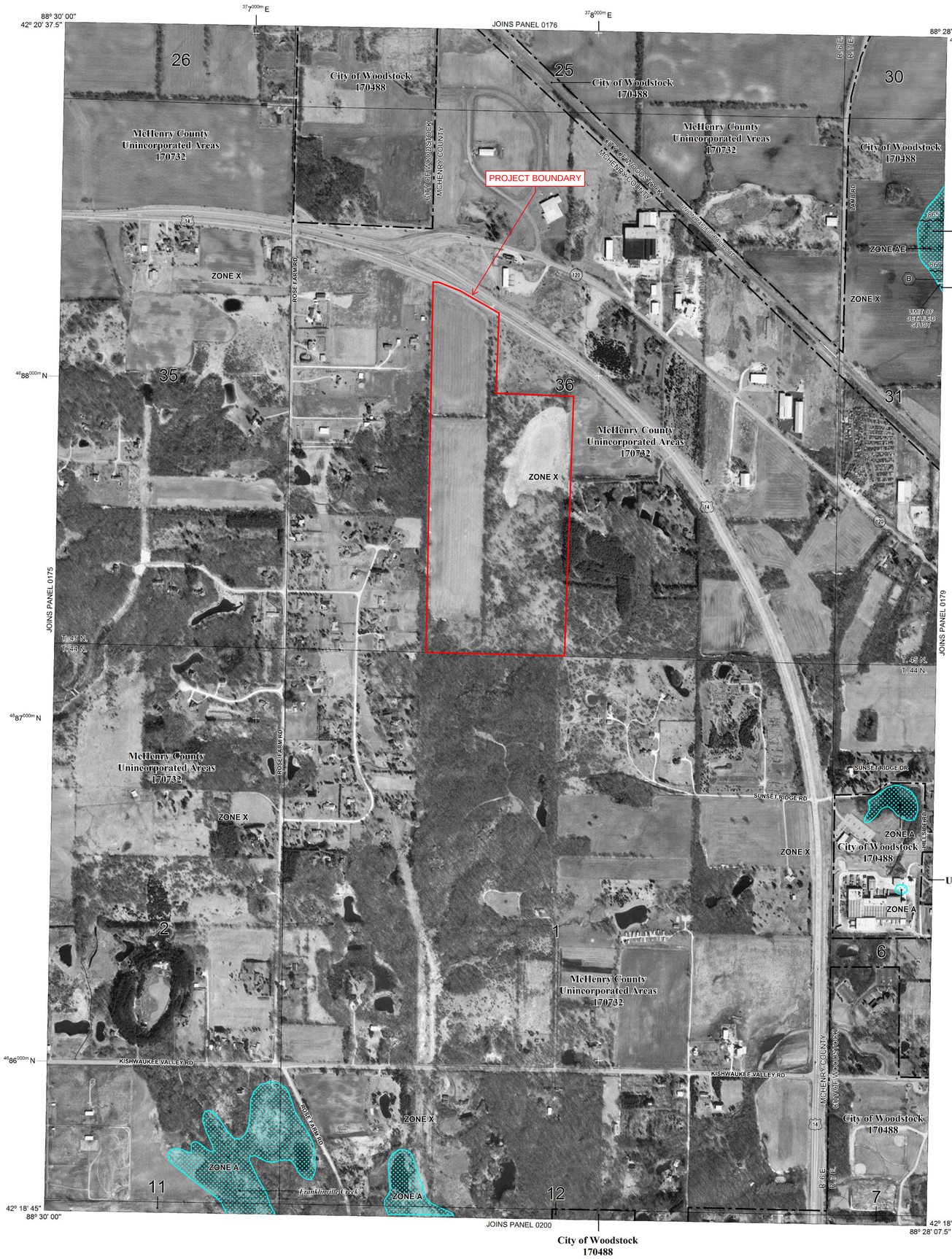
The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the Flood Insurance Study report. As a result of improved topographic data, the profile baseline, in some cases, may deviate significantly from the channel centerline or appear outside the Special Flood Hazard Area.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1- 877- FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
45° 02' 08", 93° 02' 12"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
4689000m N	1000-meter Universal Transverse Mercator grid values, zone 16
ML5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORIES
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
NOVEMBER 16, 2006

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0178J

FIRM
FLOOD INSURANCE RATE MAP

McHENRY COUNTY, ILLINOIS
AND INCORPORATED AREAS

PANEL 178 OF 365

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MCHENRY COUNTY	170732	0178	J
WOODSTOCK, CITY OF	170488	0178	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
17111C0178J

EFFECTIVE DATE
NOVEMBER 16, 2006

Federal Emergency Management Agency

EXHIBIT N: LEASE/PURCHASE AGREEMENT

LEASE AGREEMENT

This Lease Agreement (this "**Lease**") is made, dated and effective as of May 14, 2025 (the "**Effective Date**"), between Chang Family LLC, an Illinois limited liability company ("**Owner**"), and Woodstock Community Energy Initiative LLC, an Illinois limited liability company ("**Lessee**"). Owner and Lessee are sometimes referred to herein as a "**Party**" and collectively as the "**Parties.**"

WHEREAS, Owner holds fee title to that certain property located in the town of Woodstock and County of McHenry in the State of Illinois, as further described in **Exhibit A** attached hereto (the "**Property**[1]"); and

NOW THEREFORE, in consideration of the mutual promises contained herein, and for other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **Grant of Lease**. Owner hereby grants to Lessee an exclusive lease [redacted] acres located on the Property as more particularly described and shown on Exhibit A-1 (the "Leased Premises"), including all improvements thereon, any easements and rights-of-way benefiting such real property, including the right to access and utilize all radiant energy emitted from the sun ("Solar Energy") upon, over and across said real property. Prior to the commencement of construction of the Solar Energy Facility, the Parties shall meet to agree on a mutually acceptable final layout and description of the Leased Premises, to include Lessee's construction staging area. Upon agreement, the Parties shall amend Exhibit A-1 of this Agreement with a new site plan and legal metes and bounds description confirming the actual leased acreage to accurately describe and memorialize the Leased Premises. Notwithstanding the Leased Premises, Lessee shall have a general right of access over and across the Remainder Property provided that Lessee's activities do not conflict with the existing use of the Property by any current or future tenant on the Property outside of the Leased Premises ("Tenant"). Lessee shall pay Owner a non-refundable payment of Thirty Thousand Dollars ($30,000.00) within five days of the Commencement of Construction, which shall be defined as the formal issuance of the Notice to Proceed ("NTP") by Lessee authorizing the mobilization of any equipment for the construction of the Solar Energy Facility. If the construction takes longer than two (2) years from the Commencement of Construction, then Lessee shall pay an additional Thirty Thousand Dollars ($30,000.00) to Owner.

2. **Basic Lease Rights**.

2.1. Exclusive Use; Purpose of Lease. Lessee shall have the exclusive right to use the Leased Premises and the unobstructed flow of Solar Energy upon, over and across the Property for the collection, generation, and sale of electric power and for purposes and activities ancillary thereto ("**Solar Energy Purposes**"), whether accomplished by Lessee or a third party authorized by Lessee, and to derive all profits therefrom. For purposes of this Lease, the meaning of Solar Energy Purposes includes, without limitation, the right to convert the Solar Energy into electrical

[1] References to the Property throughout this Lease Agreement shall include the Leased Premises. References to the Leased Premises shall include only that portion of the Property described in Exhibit A-1. References to the Remainder Property shall refer to the area of the Property outside the Leased Premises.

The contents herein are confidential and proprietary.

energy and to collect, store, sell and transmit the electrical energy so converted, together with any and all activities related thereto, including, without limitation, (a) determining the feasibility of Solar Energy conversion and power generation on the Leased Premises, including studies of the Solar Energy emitted upon, over and across the Leased Premises and other meteorological data and environmental studies and due diligence activities; (b) constructing, installing, using, replacing, relocating and removing from time to time, and maintaining and operating, Solar Energy collection, storage and electrical generating equipment of all types including, without limitation, any such equipment utilizing photovoltaic and/or solar thermal technology (collectively referred to herein as "**Solar Generating Equipment**"), overhead and underground electrical and communications lines, electric transformers, telecommunications equipment, roads, meteorological towers and Solar Energy measurement equipment, control buildings, operations and maintenance buildings, maintenance yards, substations, switch yards, and related facilities and equipment (the Solar Generating Equipment together with all of the other foregoing equipment and improvements, collectively "**Solar Facilities**"); and (c) undertaking any other activities that Lessee reasonably determines are necessary, useful or appropriate to accomplish any of the foregoing, including without limitation, exercising the right of ingress to and egress from Solar Facilities (whether located on the Property, on adjacent property or elsewhere) over and across the Remainder Property by means of roads and lanes thereon if existing, or otherwise by such route or routes as Lessee may construct from time to time ("**Access Rights**"). Lessee shall have the exclusive authority to determine the placement and configuration of the Solar Facilities on the Leased Premises. Lessee's rights with respect to the Leased Premises shall also include the following rights:

(a) Right to Eliminate Obstructions Interfering with Solar Facilities. Lessee may at Lessee's expense, as reasonably necessary, remove, trim, prune, top or otherwise control the growth of any tree, shrub, plant or other vegetation and dismantle, demolish, and remove any improvement, structure, embankment, impediment, berm, wall, fence or other object, on or that intrudes (or could intrude from adjacent property owned or controlled by Owner) into the Remainder Property and Leased Premises that could obstruct, interfere with or impair the Solar Facilities or the use of the Leased Premises by Lessee hereunder.

(b) Specific Right to Use and Demolish Existing Structures. Without limitation of any and all other rights under this Lease, Lessee will have the specific right to occupy, use, renovate, rebuild, demolish, and/or remove any existing structures on the Leased Premises for any and all purposes related to its use of the Leased Premises, including as an office and/or living quarters in connection with construction, operation, and management of the Solar Facilities. Furthermore, no existing structures on any adjacent parcels shall be demolished, renovated, or altered in any manner without the prior written consent of the Owner which consent shall not be unreasonably withheld, delayed, or conditioned.

(c) Right to Control Access. Subject to the terms of this Lease and applicable law, Lessee shall have the right under the Lease to control and restrict access onto and over the Leased Premises and exclude others, and Lessee may, at its sole expense, construct and maintain security devices on and surrounding the Leased Premises which Lessee deems appropriate and necessary for the protection of the Solar Facilities, including, but not limited to, any type of fencing, security monitoring or other security safeguards. Nothing in this Lease shall be construed to require Lessee to repair, maintain or replace any fence existing on the Leased Premises on the

The contents herein are confidential and proprietary.

Effective Date or any other fences erected, with Lessee's permission, by Owner on the Remainder Property thereafter.

(d) Notwithstanding anything to the contrary, Lessee shall cooperate with any other Tenants of the Remainder Property and shall take best efforts not to unreasonably interfere with any Tenant's usual business operations. Lessee shall inform any Tenant of delivery schedules to the extent practicable should they be expected to disturb any Tenant. Owner shall provide contact information for any Tenant at Exhibit B of this Agreement and shall notify Lessee immediately of any change in contact including but not limited to the addition of any new Tenants to the Remainder Property.

2.2. Conveyances, Other Agreements, and Owner's Cooperation. In connection with the exercise of the rights of Lessee hereunder, Lessee, shall also have the right, with the consent of Owner with respect to grants that do not extend beyond the expiration of the Term: (a) to grant directly or (b) cause Owner to promptly grant to any party (a "**Grantee**") such rights or interests in or to the Leased Premises that are reasonably necessary or convenient for the Lessee's use of the Leased Premises for the Solar Facilities as permitted pursuant to Section 2.1, including, without limitation, easements and similar associated rights to construct, operate, and maintain transmission, substation, collection, distribution, interconnection or switching lines or facilities (collectively, the "**Additional Rights**"). It is agreed that it would be unreasonable for Owner to withhold, condition, or delay its consent to any of the Additional Rights to the extent that the grant of the right or interest is necessary for the operation of the Solar Facilities. For the avoidance of doubt, "Additional Rights" shall mean any rights contemplated after the execution of this lease that shall require a formal amendment to the plan set or the Lease. These Additional Rights, if granted by Owner, are subject to additional Rent as determined by Owner, which shall be determined on a per-acre basis at the same rate as the Rent.

2.3. Owner Access. During the Term (as defined below), Owner shall have access to the Leased Premises at reasonable intervals and at reasonable times, upon twenty-four hours prior advance written notice to Lessee, to inspect the Leased Premises, provided that Owner shall not interfere with the Solar Facilities or Lessee's activities or occupancy of the Leased Premises in any manner.

3. **Term**. The term of this Lease ("Original Term") shall commence upon the Effective Date and continue until the [redacted] of the Commercial Operation Date unless terminated earlier pursuant to the terms hereof. "Commercial Operation" is achieved when the Project is authorized to transmit electricity to the grid for commercial sale, including the date on which the Developer receives an executed certificate of completion consistent with 83 Ill. Adm. Code Part 466 Appx. B and Appx. D Article 2; for the avoidance of doubt, the Commercial Operation does not occur due to the generation of electrical energy or other operations conducted for purposes of maintenance and testing. The date on which Commercial Operation is achieved is the "Commercial Operation Date." Lessee may terminate this Agreement during the Original Term at any time upon prior written notice without penalty if Lessee is unable to construct and/or operate the solar facility identified on Exhibit A-1 and/or to transmit & sell power due to any law, order proclamation, regulation, ordinance, action, demand or requirement of any government agency or a Force Majeure event as defined in paragraph 15.1 of the Lease. If Lessee elects to

The contents herein are confidential and proprietary.

terminate the Lease under this paragraph, Lessee agrees that it shall perform its responsibilities in paragraph 14 of the Lease.

Additionally, the Lessee shall have [redacted] to extend the term of this Lease following the expiration of the Original Term, as applicable (each, an "Extension Term"), which may be exercised by Lessee sending written notice to Owner no later than one hundred eighty (180) days prior to the expiration of the Original Term and any Extension Term.

4. **Rent**. In consideration of the rights granted hereunder, Lessee will pay annual rent to the Owner in the amount of [redacted] due and payable beginning on the Commercial Operations Date and each anniversary of the Commercial Operations Date until the expiration or termination of this Lease (collectively, the "**Rent**"). The Rent shall be subject to a yearly escalator of [redacted] The foregoing rent shall be prorated for any partial lease year. Lessee shall be entitled to recover from Owner a prorated amount of the Rent paid if this Lease is terminated for any reason other than Lessee's default before the end of a full lease year.

5. **Ownership of Solar Facilities**. Owner acknowledges and agrees that Lessee is the exclusive owner and operator of the Solar Facilities, and that all equipment comprising the Solar Facilities shall remain the personal property of the Lessee and shall not become fixtures, notwithstanding the manner in which the Solar Facilities are or may be affixed to any real property of Owner. Owner shall have no right, title or interest in the Solar Facilities or any component thereof, notwithstanding that the Solar Facilities may be physically mounted or affixed to the Leased Premises. Owner consents to the filing of a disclaimer of the Solar Facilities as a fixture of the Leased Premises in the office where real estate records are customarily filed in the jurisdiction of the Leased Premises. Except for the Rent payments described in Section 4 above, Owner shall not be entitled to any other payments or benefits accrued by or from the Solar Facilities, including renewable energy credits, environmental credits or tax credits. To the extent Owner comes into possession of any energy credits, environmental credits, or tax credits as a result of the Solar Facilities, Owner shall immediately transfer same to Lessee.

6. **Taxes**. Lessee shall pay all of the real estate property taxes assessed against the Leased Premises when due, subject to this Section 6 and Lessee shall have the right to contest such taxes in a manner that does not jeopardize Owner's rights hereunder. In the event property taxes increase on the remainder Property due to the installation of the Solar Facility, Lessee shall be responsible for the payment of the increase in property tax. Lessee shall pay all property taxes assessed against the Solar Facilities and caused by Lessee's operations on the Leased Premises. Furthermore, Lessee shall be solely responsible for any Transfer Taxes assessed by the County. Lessee may contest the amount and the legal validity and amount of any such taxes for which it is responsible under this Lease, and may institute such proceedings as it considers reasonable or necessary, provided that Lessee shall bear all expenses in pursuing such contest or proceeding. Further, if Lessee elects to challenge any real property taxes assessed against the Leased Premises, Owner agrees to cooperate with such challenge, and file the same upon request of Lessee, at the sole cost of Lessee. Owner shall submit to Lessee a copy of all notices and other correspondence Owner receives from any taxing authorities regarding taxes for which Lessee is responsible hereunder

[redacted]

The contents herein are confidential and proprietary.

within thirty (30) days after Owner receives same, but in no event later than thirty (30) days prior to the date an objection to such assessment or taxes must be filed.

7. **Lessee's Representations and Warranties**. Lessee represents and warrants that it has the unrestricted right and authority to execute this Lease. Each person signing this Lease on behalf of Lessee is authorized to do so. When signed by Lessee, this Lease constitutes a valid and binding agreement enforceable against Lessee in accordance with its terms.

8. **Lessee's Covenants**.

8.1. Insurance. Throughout the term, the Lessee shall maintain and pay for (i) general liability insurance with limits of not less than $2,000,000 combined single limit and $4,000,000 general aggregate which includes EPA pollution coverage and a tail policy to cover for any liabilities that occur or originate during Lessee's use of the Leased Premises; (ii) vehicle liability insurance with minimum limits of $2,000,000; and (iii) statutory workers' compensation insurance covering all of its employees. All such policies shall name Owner and/or its agents as their interests may appear as named insureds, shall be written as primary policies and shall be written with an insurance carrier with a rating of A++ or higher satisfactory to Owner. Lessee shall provide to Owner a certificate evidencing such coverage prior to the commencement of the Term and evidence of renewal or replacement thereof upon request.

8.2. Indemnification of Owner. Lessee shall indemnify, defend, and hold harmless Owner against any and all losses, damages, claims, expenses and other liabilities, including without limitation, reasonable attorneys' fees, in each case to the extent resulting from or arising out of physical damage to property or physical injury to any person from Lessee's use of the Leased Premises. This indemnification shall survive the termination of this Lease. This indemnification shall not apply to losses, damages, claims, expenses, and other liabilities to the extent caused by the willful misconduct or negligence of Owner or any invitees or agents of Owner.

8.3. Requirements of Governmental Agencies. Lessee, at its expense, shall comply in all material respects with valid laws, ordinances, statutes, orders, and regulations of any governmental agency applicable to the Solar Facilities. Lessee shall have the right, in its sole discretion, to contest by appropriate legal proceedings, the validity or applicability to the Leased Premises or Solar Facilities of any law, ordinance, statute, order, regulation, property assessment, or the like now or hereafter made or issued by any federal, state, county, local or other governmental agency or entity. Any such contest or proceeding shall be controlled and directed by Lessee.

8.4. Construction Liens. Lessee shall keep the Leased Premises free and clear of all liens and claims of liens for labor and services performed on, and materials, supplies, or equipment furnished to, the Leased Premises in connection with Lessee's use of the Leased Premises pursuant to this Lease; provided, however, that if Lessee wishes to contest any such lien, Lessee shall, within sixty (60) days after it receives notice of the filing of such lien, remove or bond over such lien from the Leased Premises pursuant to applicable law.

8.5. Hazardous Materials. Lessee shall comply in all material respects with federal, state, and/or local law, and ordinances, and regulations promulgated thereunder relating to the

The contents herein are confidential and proprietary.

generation, manufacture, production, use, storage, release, discharge, disposal, transportation, or presence of any hazardous materials ("**Environmental Laws**") in, on under, or about the Leased Premises by Lessee.

9. **Owner's Representations and Warranties**. Owner hereby represents and warrants as follows:

9.1. Owner's Authority. Owner represents and warrants that it is the sole owner of the Property and has the unrestricted right and authority to execute this Lease and to grant to Lessee the rights granted hereunder. Each person signing this Lease on behalf of Owner is authorized to do so. When signed by Owner, this Lease constitutes a valid and binding agreement enforceable against Owner in accordance with its terms. If an entity, Owner is properly registered to do business in, and in good standing under the laws of the State of Illinois.

9.2. Liens, Conveyances, and Tenants. Except as may be disclosed in Lessee's title policy or otherwise disclosed by Owner in writing to Lessee on or prior to the Effective Date, Owner represents that there are no liens, encumbrances, leases, mortgages, deeds of trust, security interests, claims, disputes, or other exceptions (collectively, "**Liens**") to Owner's right, title, or interest in the Property. There are no existing leases, either oral or written, options to lease, purchase agreements, or options to purchase applicable to the Property other than those listed on Exhibit B. All tenancies or financing interests disclosed in Exhibit B encumbering the Leased Premises shall be properly terminated by Owner in a manner that ensures the Leased Premises will be vacant prior to the Commencement of Construction. Owner shall provide Lessee with proof of termination of such tenancies or financing interests consistent with the legal standards of the State of Illinois upon Lessee's request. Owner shall provide Lessee with written notice of any sale, transfer, or conveyance of all or any portion of the Property prior to the execution of definitive documents, such conveyance subject to the written consent of Lessee, which shall not be unreasonably withheld.

9.3. Hazardous Materials. Owner represents and warrants that, as of the Effective Date, there are no violations of Environmental Laws with respect to the Property. No release or threatened release of any hazardous material has occurred, or is occurring, at, on, under, from or to the Property, and no hazardous material is present in, on, under or about the Property that could give rise to a claim under Environmental Laws. Neither Owner nor, to Owner's knowledge, any third party has used, generated, manufactured, produced, stored, or disposed of on, under or about the Property, or transported to or from the Property any hazardous materials in violation of Environmental Laws. To Owner's knowledge, there are no storage or other tanks or containers, or wells or other improvements, below the surface of the Property, nor have any storage or other tanks or containers, or wells or other improvements ever previously been located below the surface of the Property.

9.4 Owner has disclosed the existence of a gas pipeline easement and right of way on the western side of the property, which appears in the land records of McHenry County at Instrument No. 2024R0003553.

10. **Covenants of Owner**.

The contents herein are confidential and proprietary.

10.1. Quiet Enjoyment. During the entire term of this Lease, (a) Lessee shall have peaceful and quiet enjoyment of the Leased Premises, without hindrance or interruption by Owner or any other person and (b) Owner shall protect and defend the right, title, and interest of Lessee hereunder from any other rights, interests, title and claims of or by any Person. Without limiting the generality of the foregoing, if any Encumbrance, as defined below (including any mortgage against the Property or the lien of property taxes) provides for payment or performance of any obligations by Owner, then Owner shall, prior to delinquency, make such payment and perform such obligations.

(a) Insolation. Owner acknowledges and agrees that the free and unobstructed flow of sunlight ("Insolation") is essential to the value to Lessee of the leased interest granted hereunder and is a material inducement to Lessee in entering into this Agreement, as well as future agreements with any purchaser of energy or renewable energy credits generated hereunder. Accordingly, Owner shall not reasonably permit any interference with Insolation reaching the Leased Premises. Without limiting the foregoing, Owner shall not construct or permit to be constructed any structure on the Remainder Property that could adversely affect Insolation levels, permit the growth of foliage that could adversely affect Insolation levels, or emit or permit the emission of suspended particulate matter, smoke, fog or steam or other air-borne impediments to Insolation. If Owner receives actual notice of any potential development or other activity on adjacent or nearby properties that could diminish the Insolation to the Leased Premises, Owner shall provide notice to Lessee of such information and reasonably cooperate with Lessee in measures to preserve existing levels of Insolation at the Leased Premises. Notwithstanding any other provision of this Lease, the Parties agree that (i) Lessee would be irreparably harmed by a breach of the provisions of this Section 10.1(a), (ii) an award of monetary damages would be inadequate to remedy such a breach, and (iii) Lessee shall be entitled to seek equitable relief, including specific performance, to compel compliance with the provisions of this Section 10.1(a). In addition, Owner hereby grants to Lessee the right, with Owner's consent (which consent shall not be unreasonably withheld, conditioned, or delayed), to remove, trim, prune, top or otherwise control the growth of any tree, shrub, plant, or other vegetation on the Remainder Property to the extent it prevents or otherwise obstructs Insolation to the Leased Premises.

10.2. No Interference. Owner's activities and any grant of rights Owner makes to any person or entity, whether located on the Leased Premises or Remainder Property, shall not, currently, or prospectively, interfere with Lessee's Access Rights, activities on the Property, or any other rights of Lessee granted hereunder. Without limiting the generality of the foregoing, Owner shall not (and shall not allow any other party to) disturb or interfere with the unobstructed flow of Solar Energy upon, over and across the Owner's Property, whether by placing towers or antennas of any type, planting trees or constructing buildings or other structures or facilities, or by engaging in any other activity on the Owner's Property that might delay the installation of, disrupt, or otherwise cause a decrease in the output or efficiency of the Solar Facilities. Owner shall be entitled to grant a lien or otherwise encumber Owner's fee estate in the Property or interest in this Lease (a "**Fee Mortgage**") to a Fee Mortgagee (as hereinafter defined); provided, said grant or encumbrance shall be subject to this Lease, any modifications or extensions hereof or any new

The contents herein are confidential and proprietary.

lease so made pursuant to Section 12 (collectively, "**Modifications**"), and all rights of Lessee under this Lease (including any Financing Party (as hereinafter defined), sublessee or any other party claiming by and through Lessee). The grant of a lien or encumbrance by Owner in favor of any Fee Mortgagee shall be subordinate to and shall not be a lien prior to this Lease, any Modifications, or any Leasehold Mortgage placed thereon. Any encumbrance by Owner shall not be deemed to give any such Financing Party any greater rights than Owner hereunder or the right to cancel this Lease or any Modifications. As used herein, the term "**Fee Mortgagee**" collectively includes any person or entity that holds a security interest in the Property.

10.3. Indemnity. Owner shall indemnify, defend and hold harmless Lessee and Lessee's members, managers, shareholders, directors, employees, agents, successors and assigns (collectively, "**Lessee's Indemnified Parties**") against any and all losses, damages, claims, expenses and other liabilities, including without limitation, reasonable attorneys' fees, in each case to the extent resulting from or arising out of physical damage to property or physical injury to any person, and in each case to the extent caused by Owner's gross negligence or willful misconduct on the Property. This indemnification shall survive the termination of this Lease. This indemnification shall not apply to losses, damages, claims, expenses, and other liabilities to the extent caused by the negligence or willful misconduct of Lessee or any of Lessee's Indemnified Parties.

10.4. Requirements of Governmental Agencies. Owner shall assist and fully cooperate with Lessee, at no out-of-pocket expense to Owner, in complying with or obtaining any land use permits and approvals, building permits, environmental impact reviews or any other approvals required for the financing, construction, installation, monitoring, replacement relocation, maintenance, operation or removal of Solar Facilities, including execution of applications for such permits and approvals, and including participating in any appeals or regulatory proceedings respecting the Solar Facilities. To the extent permitted by law, Owner hereby waives enforcement of any applicable setback requirements respecting the Solar Facilities to be placed on the Property or any such facilities to be placed upon property adjacent to Owner's Property. For the avoidance of doubt, Lessee is responsible for obtaining all necessary permits at its own cost. Lessee confirms that the Leased Premises will have Special Use Permit for Solar Facility and not be re-zoned.

10.5. Easement for Access and Utilities. Upon the request of Lessee, Owner shall grant, for the term of this Lease, an easement without additional consideration, for rights for installing, operating and maintaining a transmission and communication facilities to be used in connection with the Solar Facilities and/or for the purpose of providing ingress and egress to public roads. This easement shall extend over and across only those reasonable portions of other real property interests (whether leasehold, fee or easement rights) owned by Owner or any Affiliate of Owner that are contiguous to the Leased Premises as may be reasonably required for the Solar Facilities ("**Access and Utility Easement**"). Any Access and Utility Easement shall be prepared in a document in recordable and financeable form, shall include the right to improve existing roads and lanes, shall be appurtenant to the Leased Premises, and shall inure to the benefit of Lessee and be binding upon Owner and such Affiliates and each of their respective transferees, successors, and assigns, and all persons claiming under them. For the purposes of this Lease, an "**Affiliate**" shall mean an entity that controls, is controlled by or is under common control with party and where "control" means either (i) ownership of at least fifty percent (50%) of the equity or voting

The contents herein are confidential and proprietary.

rights of the party or (ii) the power to otherwise direct the affairs of the party. Any easement outside of the Leased Premises requested after the Effective Date of the Lease may result in an increase in the Rent based on a per-acre basis.

10.6. Environmental Laws. Owner shall not violate any Environmental Laws in connection with the Property. Owner shall indemnify Lessee against any losses, damages, expenses, or liabilities incurred by Lessee in connection with such violations of Environmental Laws by Owner or any hazardous materials on the Property that: (i) exist as of the Effective Date, or (ii) are caused by Owner or Owner's agents after the Effective Date. Owner shall promptly notify the Lessee of any such violations. This provision shall survive termination of this Lease.

11. **Assignment**. Lessee may assign this Lease, or sublease all or a portion of the Leased Premises, to: (i) any entity which has the power to direct Lessee's management and operation, or any entity whose management and operation is controlled by Lessee; (ii) any entity a majority of whose voting stock or equity is directly or indirectly owned by Lessee or any of the stockholders or equity holders of Lessee; or (iii) any entity into which or with which Lessee, its successors or assigns, is merged or consolidated, in accordance with applicable statutory provisions for merger or consolidation of entities, so long as the liabilities of the entities participating in such merger or consolidation are assumed by the entity surviving such merger or created by such consolidation; or (iv) any entity acquiring this Lease and all or substantially all of Lessee's assets or equity with the prior consent of Owner, which may not be unreasonably withheld; or (v) any Financing Party; or (vi) any successor to a successor entity becoming such by either of the methods described in subsections (iii), (iv) or (v) above.

Subject to Section 10.2 and Section 15.5, Owner may sell, convey, assign, or otherwise transfer and/or collaterally assign, mortgage, or encumber its interest in the Property or this Lease without the prior written consent of Lessee, provided all of Owner's obligations under this Lease are simultaneously assigned to and assumed in writing by the new owner of the Property.

12. Financing.

12.1 Owners' Obligations. As a precondition to exercising any remedies related to any alleged default by Lessee under this Agreement, Owner shall give written Notice of Default (hereinafter defined) to each Financing Party at the same time it delivers Notice of Default to Lessee, specifying in detail the alleged Event of Default (hereinafter defined) and the required remedy.

12.2 Financing Party. Lessee shall have the right to encumber its interest in this Agreement, the System and all of Lessee's improvements located on the Premises by mortgage, lease, deed of trust or similar instrument or instruments and by security agreement, fixture filing and financing statements or similar instrument or instruments in favor of and/or for the benefit of any Financing Party or any Person or Persons refinancing any financing provided by such Financing Party.

12.3 Rights of Financing Party. In the event of a foreclosure or seizure of Lessee's rights or property or the exercise of any other right under any security agreement granted by Lessee to a Financing Party, Lessor agrees to permit such Financing Party to exercise any and all rights of Lessee hereunder, so long as there are no existing uncured defaults. Owner further

The contents herein are confidential and proprietary.

agrees to give each Financing Party thirty (30) days' notice of and the opportunity to cure any Event of Default, defined in Section 13 below, by Lessee. For an Event of Default by Lessee that is not the result of Lessee's failure to pay any monetary amounts due hereunder, a reasonable further opportunity to cure such Event of Default shall be provided to each Financing Party if weather or access to the Premises is physically difficult before Lessor exercises any rights or remedies against Lessee as a result of such Event of Default. Owner agrees to execute any consent to assignment reasonably requested by any Financing Party to evidence and give effect to the provisions of this Section 11. Owner shall be timely provided with current addresses for all Financing Parties and their assignees.

12.4 Amendment of Agreement; Third Party Beneficiary. At Lessee's request, Owner shall amend this Agreement to include any provision that may reasonably be requested by an existing or proposed Financing Party, and shall execute such additional documents as may reasonably be required to evidence such Financing Party's rights hereunder; provided, however, that such amendment shall not materially impair the rights or increase the burdens or obligations of Owner under this Agreement, or extend the Lease Term. Further, Owner shall, within thirty (30) days after receipt of written request from Lessee or any existing or proposed Financing Party, execute and deliver thereto a certificate to the effect that Owner (i) recognizes a particular entity as a Financing Party under this Agreement and (ii) will accord to such entity all the rights and privileges of a Financing Party hereunder. All Financing Parties shall be and be deemed third party beneficiaries of the rights granted to Financing Parties under this Agreement. Lessee shall pay Owner's legal fees for any Lease Amendment(s) in an amount up to Three Thousand Dollars ($3,000.00).

12.5 Financing Party Contact Information. Notwithstanding any other provisions of this Agreement, Lessor shall have no obligation to provide notices to Financing Parties unless and until Lessee has provided to Lessor written notice of such Financing Party's contact information.

12.6 No Liens on Owner's Property. Notwithstanding any other provision of this Agreement, Lessee shall not be permitted to encumber Owner's interest in the Property or place any liens on the Property.

13 **Default**.

13.1 Default. Subject to the rights of Financing Party as provided in Section 12, each of the following events shall constitute an "**Event of Default**" by a Party and shall permit the non-defaulting Party to terminate this Lease and/or pursue all other appropriate remedies:

(a) Failure to Perform. The failure or omission by either Party to observe, keep or perform any of the other terms, agreements or conditions set forth in this Lease, and such failure or omission has continued for thirty (30) days (or such longer period as may reasonably be required to cure such failure or omission, provided that cure has commenced, and such Party is diligently proceeding to complete such cure) after receiving notice from the other Party (the "**Non-Defaulting Party**") regarding the failure to perform such covenant or obligation set forth in this Agreement or the material breach, stating with particularity the nature and extent of such Event of Default and specifying the method of cure (a "**Notice of Default**"); or

The contents herein are confidential and proprietary.

(b) Bankruptcy. A Party files for protection or liquidation under the bankruptcy laws of the United States or any other jurisdiction or has an involuntary petition in bankruptcy or a request for the appointment of a receiver filed against it, and such involuntary petition or request is not dismissed within one hundred twenty (120) days after filing.

13.2 Effect of Default. Upon the occurrence of an Event of Default, subject to the rights of any Financing Party as set forth in Section 10, the non-defaulting Party may, at its option, and in addition to and cumulatively of any other rights it may have at law or in equity or under this Lease, (a) cure the default on the other Party's behalf, in which event the defaulting Party shall reimburse the non-defaulting Party on demand for all sums so expended, (b) terminate this Lease by written notice to the defaulting Party, and/or (c) enforce, by all proper and legal suits and other means, its rights hereunder, including the collection of sums due hereunder.

13.3 [Reserved].

14 Removal of Solar Facilities and Restoration of Property. Lessee shall remove any Solar Facilities, including foundations and subsurface installations, from the Property within one hundred eighty (180) days from the date this Lease terminates or expires. Lessee shall use commercially reasonable efforts to restore the Property original condition prior to the installation of the Solar Facilities, accounting for reasonable wear and tear and consistent with the standards outlined in Addendum A and the Agricultural Impact Mitigation Agreement (AIMA), except that Lessee shall not be required to restore any structures or improvements Lessee was authorized to remove and/or demolish pursuant to the Lease related to its use of the Property for Solar Energy Purposes. Lessee shall continue to pay Rent hereunder until such removal and restoration work is completed on a monthly basis in an amount equal to the annual Rent divided by 12 until such removal and restoration work is completed. If Lessee fails to carry out its obligations under this Section 14 within one eighty hundred (180) days of termination of this Lease, Owner may do so, in which case Lessee shall reimburse Owner for the reasonable and documented costs of removal and restoration incurred by Owner. Owner hereby grants Lessee a license to access the Property after termination of this Lease for up to one hundred eighty (180) days for the purposes set forth in this Section 14. The Owner shall be named as a third-party beneficiary of any bond or surety required by any State or local government body or agency related to the Lease and the actions contemplated herein.

14.1 Land Preservation and Restoration. Lessee will abide by the standards and requirements of Addendum A which is attached hereto and incorporated by reference herein.

14.2 Zoning. Lessee shall ensure that if the zoning classification of the Leased Premises is changed as a result of the Solar Facility, it shall be restored to its original classification, or a substantially similar classification, at the time of decommissioning.

15 **Miscellaneous**.

15.1 Force Majeure. If performance of this Lease or of any obligation hereunder and/or Lessee's ability operate the Solar Facilities and to transmit and sell power therefrom to

The contents herein are confidential and proprietary.

a third party purchaser is prevented, interfered or hindered by reason of an event of Force Majeure (as defined below), the affected Party, upon giving notice to the other Party, shall be excused from such performance and with respect to an event preventing, interfering or hindering Lessee's ability to operate the Solar Facilities and/or to transmit and sell power, Lessee's obligation to pay Rent shall be abated, to the extent of and for the duration of such Force Majeure event, not to exceed 180 days. The affected Party shall use its reasonable efforts to avoid, remove or repair such causes of nonperformance and shall continue performance hereunder whenever such causes are removed. "**Force Majeure**" means fire, earthquake, flood, or other casualty or accident; strikes or labor disputes; war, civil strife, or other violence; any law, order, proclamation, regulation, ordinance, action, demand, or requirement of any government agency; or any other act or condition beyond the reasonable control and without the fault or negligence of the affected Party.

15.2 Condemnation. Should title or possession of all of the Property be taken in condemnation proceedings by a governmental body under the exercise of the right of eminent domain or should a partial taking render the remaining portion of the Property, in Lessee's sole discretion, unsuitable for Lessee's use, then, Lessee may terminate this Lease. All payments made on account of any taking by eminent domain shall be paid to Owner. Lessee shall be entitled to any award made with respect to the Solar Facilities or Solar Energy Purposes. The balance of any award, including severance damage, if any, shall be payable to Owner. It is agreed that Lessee shall have the right to participate in any condemnation proceedings and settlement discussions and negotiations thereof. Lessee's Rent obligations hereunder shall be proportionally reduced to reflect the reduced size of the Property in the event of a condemnation event.

15.3 Confidentiality. To the full extent allowed by law, Owner shall maintain in the strictest confidence, all information pertaining to the financial terms of or payments under this Lease, Lessee's site or product design, compensation, lease terms,, power production or availability of the Solar Facilities, and any similar information, whether disclosed by Lessee or discovered by Owner, unless such information either (i) is in the public domain by reason of prior publication through no act or omission of Owner or its employees or agents, or (ii) was already known to Owner without an obligation of confidentiality at the time of disclosure. Owner shall not use such information for its own benefit, publish or otherwise disclose it to others, or permit its use by others for their benefit or to the detriment of Lessee. Notwithstanding the foregoing, Owner may provide information as required or appropriate to attorneys, accountants, lenders, insurers, or similar agents and consultants, or as may be necessary to enforce this Lease, to comply with legal or regulatory obligations, or to secure financing or insurance coverage. Owner shall ensure any such agents or consultant to whom confidential information is disclosed are bound by similar confidentiality obligations.

15.4 Successors and Assigns/Runs with the Land. This Lease shall inure to the benefit of and be binding upon Owner and Lessee and their respective heirs, transferees, successors and assigns with respect to the Leased Premises and this Lease, and all persons claiming under them. The Leased Premises shall be held, conveyed, assigned, hypothecated, encumbered, used, and occupied subject to the covenants, terms and provisions set forth in this Lease, which covenants, terms and provisions shall run with the Property.

The contents herein are confidential and proprietary.

15.5 Right of First Offer in Favor of Lessee.

(a) If, at any time during the Term or Extension Terms, or within thirty (30) days following the expiration or termination of this Lease, Owner or an Affiliate of Owner intends to sell, assign, transfer or convey all or a portion of the Property or the direct owner of Owner proposes to sell a controlling interest in Owner (hereinafter, the "**ROFO Interests**") (any of the foregoing, a "**Disposition**") to any third party (excluding Affiliates and persons related by blood or marriage to Owner), then Owner shall give notice of such contemplated Disposition (the "**Disposition Notice**") to Lessee containing a concise summary of the commercial terms negotiated by Owner with the third party. Lessee shall have the right of first offer (the "**ROFO**"), exercisable by notice (the "**Exercise Notice**") which may be given on or before the fifteenth (15th) day after the Disposition Notice is given (the "**Exercise Period**"), and which shall set forth the material terms for Lessee's proposed purchase of the ROFO Interests, including the proposed purchase price, proposed feasibility period and proposed time period for closing. If Lessee fails to deliver an Exercise Notice within the Exercise Period, Owner shall have the right to affect a Disposition of the ROFO Interests on the terms specified in the Disposition Notice.

(b) If Lessee delivers an Exercise Notice within the Exercise Period, Owner shall have thirty (30) days after the Exercise Notice is given (the "**Acceptance Period**") to notify Lessee whether or not Owner wishes to pursue negotiation of a purchase agreement with Lessee based upon the terms set forth in the Exercise Notice (the "**Response Notice**").

(c) If Owner delivers a Response Notice indicating that Owner does wish to pursue negotiation with Lessee based upon the terms set forth in the Exercise Notice, the Parties shall proceed to negotiate in good faith on an exclusive basis for at most sixty (60) days following the delivery of such Response Notice ("**Negotiation Period**"), in order to finalize a mutually acceptable purchase agreement based upon the terms in the Exercise Notice. Lessee shall pay a non-refundable $50,000.00 fee to Owner for the opportunity to negotiate at the beginning of the Negotiation Period, which shall be applied to the purchase price. If the Parties are unable to agree upon the terms and conditions of a sale of the ROFO Interests to Lessee during the Negotiation Period, then Owner shall have the right to effect a Disposition of the ROFO Interests specified in the Disposition Notice.

15.6 Notices. Any notice provided hereunder (each a "**Notice**") shall be in writing to the applicable Party's address specified below (or such other address as such Party may provide from time to time) and maybe served (a) personally, (b) by Federal Express or other commercial delivery service, (c) by registered or certified mail (return receipt requested, postage prepaid), or (e) by email transmission, with delivery confirmation. Such Notice shall be effective (i) upon personal delivery, (ii) upon the date of actual delivery if delivered by Federal Express or other commercial or private delivery service, (iii) when received as indicated by the date on the return invoice or receipt showing delivery if delivered by the United States Postal Service, certified mail, return receipt requested, postage prepaid, or (iv) when sent by email with written confirmation of receipt.

If to Owner:

Chang Family LLC
1782 Millburne Road

The contents herein are confidential and proprietary.

Lake Forest, IL 60045
Attn: Eun S. Chang

[redacted]

With a copy to:

Law Offices of Soojae Lee, LLC
5005 Newport Dr, Ste 208
Rolling Meadows, Il 60008
E-mail: attorneysjl@gmail.com

If to Lessee: c/o Woodstock Community Energy Initiative LLC
203 Crescent St., #106
Waltham MA 02453
Attn: Todd Fryatt
Email: PD@ecasolar.com

With a copy which shall not constitute Notice to:

Klavens Law Group
20 Park Plaza, Suite 402
Boston, MA 02116
Attn: Johnathan Klavens, Esq.

15.7 ***Waiver of Consequential Damages.*** NOTWITHSTANDING ANY OTHER PROVISION OF THIS LEASE TO THE CONTRARY, IN NO EVENT, WHETHER BASED IN CONTRACT, INDEMNITY, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL EITHER PARTY, OR ITS AFFILIATES OR ITS AND THEIR RESPECTIVE DIRECTORS, MANAGERS, OFFICERS, SHAREHOLDERS, PARTNERS, MEMBERS, EMPLOYEES, CONTRACTORS, AGENTS AND REPRESENTATIVES, BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES THAT ARISE OUT OF, RELATE TO, OR ARE OTHERWISE ATTRIBUTABLE TO THIS LEASE OR THE PERFORMANCE OR NON-PERFORMANCE OF DUTIES HEREUNDER.

15.8 Tax and Renewable Energy Credits. If under applicable law, Lessee (or any of its assigns) becomes ineligible for any tax credit, renewable energy credit, environmental credit or any other benefit or incentive for renewable energy established by any local, state or federal government, then, at Lessee's option, Owner and Lessee shall exercise good faith and negotiate an amendment to this Lease or replace it with a different instrument so as to convert Lessee's interest in the Property to a substantially similar interest that makes Lessee eligible for such credit, benefit or incentive, so long as Owner's ownership interest in Property is not affected.

The contents herein are confidential and proprietary.

15.9 Modifications and Amendments. This Lease shall not be modified or amended except in a writing signed by both Parties. Provided that no material default in the performance of Lessee's obligations under this Lease shall have occurred and remain uncured, Owner shall cooperate with Lessee in amending this Lease from time to time to include any provision that may be reasonably requested by Lessee for the purpose facilitating a financing related to its Solar Facilities. For each request for modifications and amendments from Lessee, Lessee shall pay Owner an administrative review fee not to exceed Three Thousand ($3,000.00) dollars.

15.10 Governing Law. This Lease shall be governed by and interpreted in accordance with the laws of the State of Illinois. The prevailing Party in any legal action or proceeding brought under this Lease shall be entitled to recover its reasonable attorneys' fees and costs in connection with such action or proceeding from the non-prevailing party.

15.11 Memorandum. Owner and Lessee shall execute in recordable form, and Lessee shall then record at the relevant Recorder of Deeds a memorandum evidencing this Lease, satisfactory in form and substance to Owner and Lessee.

15.12 Partial Invalidity. Should any provision of this Lease be held by a court of competent jurisdiction to be invalid, void or otherwise unenforceable, the remaining provisions hereof shall remain in full force and effect.

15.13 Construction. The Parties agree that this Lease was negotiated by both Parties and any rule of construction to interpret any ambiguities in favor of one Party shall not be employed in the interpretation of this Lease.

15.14 Entire Agreement. This Lease constitutes the entire understanding between Owner and Lessee with respect to the subjects contained herein and supersedes any other prior or contemporaneous agreements with respect to such subjects.

15.15 Counterparts. This Lease may be executed in one or more counterparts (each of which shall be deemed an original, but all of which together shall constitute one and the same instrument) and shall be effective as of the Effective Date upon execution and delivery by the parties hereto, and such execution and delivery may be effectuated by facsimile transmission, transmission of an executed PDF copy via email, a third party electronic signature verification program or process, by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, or by combination of such means. Signatures of the Parties transmitted by any of the foregoing methods shall be deemed to be their original signatures for all purposes and signature pages may be detached from the counterparts and attached to a single copy of this Lease to physically form one document.

15.16 Lessee hereby waives all rights of action against Owner for loss or damage to the Leased Premises, and losses resulting from the interruption of Lessee's business at the Leased Premises, which loss or damage is insured or is required pursuant to this Lease to be insured by valid and collectible insurance policies to the extent of the proceeds collected or collectible under such insurance policies or which would have been collectible had such policies been maintained as

The contents herein are confidential and proprietary.

required under this Lease, and the Lessee shall obtain such waivers of subrogation from the Lessee's insurer. The policies of insurance required to be maintained by Lessee under the terms of this Lease shall contain waiver of subrogation clauses in form and content reasonably satisfactory to Owner and any certificate provided to Owner hereunder evidencing such a policy shall state such waiver.

15.17 TO THE EXTENT PERMITTED BY LAW, EACH OF THE PARTIES KNOWINGLY, VOLUNTARILY, AND INTENTIONALLY WAIVES THE RIGHT TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS LEASE AND ANY OTHER AGREEMENT CONTEMPLATED TO BE EXECUTED IN CONJUNCTION HEREWITH. THIS PROVISION IS A MATERIAL INDUCEMENT TO EACH OF THE PARTIES FOR ENTERING INTO THIS AGREEMENT.

[*signature page follows*]

The contents herein are confidential and proprietary.

IN WITNESS WHEREOF, Owner and Lessee have executed this Solar Lease Agreement as of the Effective Date.

OWNER:

CHANG FAMILY LLC

Signature: _____

Name: Jae Chul Chang

Title: President

LESSEE:

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC

Signature: _____

Name: Todd Fryatt

Title: Manager

The contents herein are confidential and proprietary.

Addendum A

Supplement to Lease Agreement ["Lease"] by and between CHANG FAMILY LLC, ["Owner"] and Woodstock Community Energy Initiative LLC ["Lessee"] dated February __, 2025.

Standards and Guidelines for Protection, Remediation and Restoration of Land impacted by the Solar Energy Project, and related matters.

The Mitigative Actions outlined in this Addendum A have been agreed to by and between Owner and Lessee. They apply to all aspects of repair, remediation and restoration of the Property which have been necessitated by Lessee's activities on the Property and any other property of Owner, specifically including any access roads, said activities by Lessee relating to the construction, operation, maintenance, relocation, repair, repowering and deconstruction of the solar energy project, as that is outlined in the Lease.

It is anticipated Lessee will negotiate with the Illinois Department of Agriculture ("**IDA**") an Agricultural Impact Mitigation Agreement, or "**AIMA**", which will contain protections for the land of Owner of the type contained in this Supplement.

In the event of a conflict of inconsistency between any language and provisions in the body of the Lease, or the AIMA, and any language and provisions of this Supplement, the language and provisions of this Supplement shall control and supersede the language and provisions in the body of the Lease, and the AIMA, as applicable, to the extent such language and provisions are more protective of Owner's Property.

The matters referred to herein apply to all activities of the Lessee, including initial construction, repair, maintenance, repowering, relocation and deconstruction.

Conditions

The Mitigative Actions specified herein will be implemented by Lessee in accordance with the following conditions:

A. Mitigative Actions may be subject to County or other local requirements. In that event, the Mitigative Actions outlined herein shall be considered minimum standards, guidelines and directives.

B. Lessee will implement all Mitigative Actions to the extent that they do not conflict with the requirements of any applicable federal, state and local rules and regulations and other permits and approvals that are obtained by Lessee for the project.

The contents herein are confidential and proprietary.

Definitions

Best Efforts – Diligent, good faith, and commercially reasonable efforts to achieve a given objective or obligation.

Cropland — Land used for growing row crops, small grains, or hay, including land which was formerly used as Cropland, but is currently in a government set-aside program and pastureland comprised of Prime Farmland.

Prime Farmland — Agricultural land comprised of soils that are defined by the USDA NRCS as being "prime" soils—generally considered the most productive soils with the least input of nutrients and management.

Property — those parcels of land located in Grundy County, Illinois, ("**County**"), described in Exhibit A of the Lease.

Topsoil — the uppermost layer of the soil that has the darkest color or the highest content of organic matter, more specifically defined as the "A" horizon.

Underground Cable — Electrical power lines installed below grade to be utilized for conveyance of power related in any way to the Project.

Standards and Guidelines

1. Underground Cabling Depth

A. Any Underground Cable located outside the perimeter of the fence of the Solar Facilities will be buried with:

1. a minimum of 5 feet of top cover where it crosses Cropland.

2. a minimum of 5 feet of top cover where it crosses pastureland or other agricultural land comprised of soils that are classified by the USDA as being prime soils.

3. a minimum of 3 feet of top cover where it crosses pasture land and other agricultural land not comprised of prime soils.

4. a minimum of 3 feet of top cover where it crosses wooded/brushy land.

The contents herein are confidential and proprietary.

B. Notwithstanding the foregoing, in those areas where (i) rock in its natural formation and/or (ii) a continuous strata of gravel exceeding 200 feet in length are encountered, the minimum top cover will be 30 inches.

2. Topsoil Removal and Replacement

A. Best Efforts will be made to ensure that excavation[s] be performed in a manner to preserve topsoil. Best Efforts will be made to store the topsoil near the excavation site in such a manner that it will not become intermixed with subsoil materials.

B. Best Efforts will be made to store all disturbed subsoil material near the excavation site and separate from the topsoil.

C. When backfilling an excavation site, the stockpiled subsoil material will be placed back into the excavation site before replacing the topsoil.

D. Best Efforts will be performed to place the topsoil in a manner so that after settling occurs, the Topsoil's original depth and contour (with an allowance for settling) will be restored as close as reasonably practicable. The same shall apply where excavations are made for roads, streams, drainage ditches, or other crossings. In no instance will the topsoil materials be used for any other purpose unless agreed to otherwise by Owner.

3. Repair of Damaged Field Tile Lines

If underground drainage field tile is damaged by construction, repair, maintenance, repowering, relocation or deconstruction, it will be repaired in a manner that assures the field tile line's proper operation at the point of repair or to the condition that existed immediately prior to such damage. All field tile repair and replacement shall be performed by a qualified, local field tile contractor, approved by Owner. The following standards and policies shall apply to the field tile line repair:

A. Lessee will work with Owner to identify the field tile lines traversing the Property as well as the location of any other field tile lines over any other property of Owner which might be traversed or disturbed during Lessee's activities. All field tile lines identified in this manner will be shown on construction and deconstruction plans and will be staked or flagged prior to any of Lessee's activities, except for routine maintenance and inspection.

B. Field tile lines that are damaged, cut, or removed, whether on the Property, or on other portions of Owner's property, shall be staked or flagged with stakes or flags placed in such a manner they will remain visible until the permanent repairs of the field tile line(s) are completed. In addition, the location of damaged drain tile lines will be recorded using Global Positioning Systems (GPS) technology.

The contents herein are confidential and proprietary.

C. If water is flowing through any damaged field tile line, Lessee shall utilize Best Efforts to immediately and temporarily repair the tile line until such time that Lessee can make permanent repairs. If the field tile lines are dry and water is not flowing, temporary repairs are not required if the permanent repairs can be made by Lessee within 14 days (weather and soil conditions permitting) of the time damage occurred; however, the exposed field tile lines will be screened or otherwise protected to prevent the entry of foreign materials or animals into the tile lines.

D. To the extent practicable, there will be a minimum of one foot of separation between the field tile line and the underground cable whether the underground cable passes over or under the field tile line. If the field tile line was damaged as part of the excavation for installation of the underground cable, the underground cable will be installed with a minimum one-foot clearance below or over the field tile line to be repaired or otherwise to the extent practicable.

E. The original field tile line alignment and gradient shall be maintained. A laser transit, or similar device, shall be used to ensure the proper gradient is maintained. A laser operated tiling machine, or similar, shall be used to install or replace field tile segments of 100 linear feet or more.

F. During construction, all permanent tile line repairs must be made within fourteen (14) days of identification or notification of the damage, weather and soil conditions permitting. At other times, such repairs must be made at a time mutually agreed upon by Owner and Lessee.

G. Following construction, repair, maintenance, repowering, relocation or deconstruction activities, Lessee will utilize best practices to restore any drainage in the area to the condition it was before the commencement of such activities.

H. Following completion of the work, Lessee will be responsible for correcting or paying for the correction of all tile line repairs that fail as a result of Lessee's activities, provided that any such failure was identified within 1 year of the construction, repair, maintenance, repowering or deconstruction activity by Lessee which caused the failure.

4. Rock Removal

The following rock removal procedures only pertain to rocks found in the uppermost 42 inches of soil, the common freeze zone in Illinois, which were exposed or brought to the surface as a result of Lessee's activities.

A. Before replacing any Topsoil, Best Efforts will be taken to remove all rocks greater than 3 inches in any dimension from the surface of exposed subsoil.

The contents herein are confidential and proprietary.

B. If trenching, blasting, or boring operations are required through rocky terrain, precautions will be taken to minimize the potential for oversized rocks to become interspersed with adjacent soil material.

C. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, will be hauled off the Property or disposed of on the Property at a location that is reasonably acceptable to Owner.

5. Compaction and Rutting

A. After the Topsoil has been replaced, all areas that were traversed by vehicles and other equipment of Lessee during its activities, including deconstruction of the Solar Facilities, which activities resulted in compaction of the soil beyond what the soil was before the traversing, will be ripped at least 18 inches deep and all pasture and woodland will be ripped at least 12 inches deep to the extent practicable. The existence of field tile lines or underground utilities may necessitate less depth. The disturbed area will then be disked.

B. To the extent practicable, all ripping and disking will be done at a time when the soil is dry enough for normal tillage operations to occur on land adjacent to the impacted area.

C. Lessee will use Best Efforts to restore all rutted land to a condition as close as possible to its original condition.

D. If there is any dispute between Owner and Lessee as to what areas need to be ripped/disked or the depth at which compacted areas should be ripped/disked, the appropriate County Soil and Water Conservation District's opinion shall be considered by the parties.

6. Land Leveling

A. Following the completion of construction, repowering, relocation or deconstruction activities of Lessee, Lessee will utilize Best Efforts to restore the disturbed area to its original pre-construction elevation and contour, should uneven settling occur or surface drainage problems develop as a result of said activity.

B. If, within 24 months after the activities of Lessee, uneven settling occurs or surface drainage problems develop as a result of Lessee's activities, Lessee will provide such land leveling services within 45 days of Owner's written notice, weather and soil conditions permitting.

C. If there is any dispute between the parties as to what areas need additional land leveling beyond that which is done at the time of completion of any of Lessee's construction, repowering, relocation or deconstruction activities, Lessee may, but

The contents herein are confidential and proprietary.

is not required to, implement the recommendations of the appropriate Soil and Water Conservation District and such implementation will resolve the dispute.

7. Prevention of Soil Erosion

A. Lessee will work with Owner to prevent excessive erosion on land that has been disturbed by Lessee's activities. Lessee shall work with Owner to create and follow a Stormwater Pollution Prevention Plan (SWPPP) to prevent excessive erosion on land that has been disturbed by Construction or Deconstruction of the Solar Facilities.

B. If Owner and Lessee cannot agree upon a reasonable method to control erosion on the Property, Lessee may, but is not required to, implement the recommendations of the appropriate Soil and Water Conservation District's and such implementation will resolve the dispute.

8. Repair of Damaged Soil Conservation Practices

Consultation with the local Soil and Water Conservation District will be carried out by Lessee to determine if there are soil conservation practices (such as terraces, grassed waterways, etc.), that will be damaged by its activities. Lessee will use Best Efforts to restore those conservation practices to their preconstruction condition as close as reasonably practicable in accordance with USDA Natural Resources Conservation Service technical standards. All repair costs resulting from Lessee's activities on the Property shall be borne by Lessee.

9. Construction during Wet Weather

A. Except as provided below, construction, repowering, relocation and deconstruction activities by Lessee are not allowed on the Property when normal farming operations such as plowing, disking, planting or harvesting, cannot take place, due to excessively wet soils.

B. Construction, repowering, relocation and deconstruction activities on prepared surfaces, surfaces where topsoil and subsoil have been removed, heavily compacted in preparation, or other stabilized, may occur at the discretion of Lessee, in wet weather conditions.

C. Construction, repowering, relocation and deconstruction activities on unprepared surfaces will be done by Lessee only when the work will not result in rutting which results in a mixing of subsoil and topsoil.

10. Access Roads

The contents herein are confidential and proprietary.

A. To the extent practicable, access roads will be designed in such a way that they do not impede surface drainage and will be built to minimize soil erosion on or near the access roads.

B. Access roads may be left intact through mutual agreement of the parties unless otherwise restricted by federal, state, or local regulations.

C. If the access roads are removed, Best Efforts will be expended to assure that the land shall be restored to equivalent condition(s) as existed prior to their construction. All land under the access roads shall be ripped to a depth of 18 inches to alleviate compaction.

11. Weed Control

A. Lessee will provide for weed control in a manner which prevents the spread of weeds onto any land of Owner. If spraying is required, spraying will be done by a pesticide applicator that is appropriately licensed for doing such work in the State of Illinois.

B. The Lessee will be responsible for the reimbursement of all reasonable costs incurred by owners of agricultural land where it has been determined by the appropriate state or county entity that weeds have spread from the solar project of Lessee to their property.

12. Pumping of Water from Open Excavations

In the event it becomes necessary to pump water from open excavations, Lessee will pump the water in a manner that will avoid damaging any land of Owner.

The contents herein are confidential and proprietary.

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

Part of the East ½ of the East ½ of the Southwest ¼, part of the West ½ of the East ½ of the Northwest ¼ and the West ½ of the East ½ of the Southwest ¼ of Section 36, Township 45 North, Range 6, East of the Third Principal Meridian, being described as follows:

Beginning at the Southeast corner of the said East ½ of the Southwest ¼; thence North 89 degrees 55 minutes 53 seconds West along the South line thereof, 1317.61 feet, to the Southwest corner thereof; thence North 00 degrees 13 minutes 15 seconds East along the West line thereof, 2636.53 feet to the Northwest corner thereof; thence North 00 degrees 13 minutes 28 seconds East along the West line of the said West ½ of the East ½ of the Northwest ¼, 887.17 feet to the Southwesterly right-of-way line of U.S. Route 14 per Dedication recorded June 14, 1960 as Document No. 370779; thence Southeasterly along said Southwesterly right-of-way line 737.97 feet; being along a curve to the right, having a radius of 6266.26 feet, the chord of which bears South 62 degrees 54 minutes 29 seconds East, for a length of 737.55 feet to the East line of the said West ½ of the East ½ of the Northwest ¼; thence South 00 degrees 12 minutes 25 seconds West along said East line, 550.45 feet to the Southeast corner thereof; thence South 00 degrees 12 minutes 20 seconds West along the West line of the East ½ of the said East ½ of the Southwest ¼, 176.02 feet; thence North 89 degrees 55 minutes 40 seconds East parallel with the North line thereof, 658.15 feet to the East line thereof; thence South 00 degrees 11 minutes 24 seconds West along said East line, 2463.74 feet to the place of beginning, in McHenry County, Illinois.

Parcel ID#: 07-36-326-003

This being a portion of the same property conveyed to Chang Family LLC, an Illinois limited liability company from HWY 14 Woodstock Farm, LLC, an Illinois limited liability company, in a Warranty Deed dated December 15, 2021, and recorded December 29, 2021, as Instrument No. 2021R0068880, in McHenry County, Illinois. Said deed is modified by that Scrivener's Error Affidavit dated February 4, 2022, and recorded February 7, 2022, as Instrument No. 2022R0004897, in McHenry County, Illinois. The subject property is designated as Parcel 2 in the deed and affidavit referenced herein.

The contents herein are confidential and proprietary.

Exhibit A-1

SITE PLAN[3]

[3] For illustration purposes only. Site plan is subject to change.

The contents herein are confidential and proprietary.

EXHIBIT B
LIENS, MORTGAGES, AND TENANCIES ON THE PROPERTY

None.

The contents herein are confidential and proprietary.

EXHIBIT C
NOTICE OF LEASE

The contents herein are confidential and proprietary.

Tax Parcel Nos. 07-36-326-003
Prepared By: Woodstock Community
Energy Initiative LLC
203 Crescent Street, Suite 106
Waltham MA 02453

Memorandum of Solar Lease and Exclusive Easement Agreement

This Memorandum of Solar Lease and Exclusive Easement Agreement, dated May 14, 2025 (this "Memorandum") is made and entered into as of May 14 2025 (the "**Effective Date**") by and between Chang Family LLC, an Illinois limited liability company, with an address of 1782 Millburne Road, Lake Forest, IL 60045 (the "**Owner**" or "**Grantor**") and Woodstock Community Energy Initiative LLC, an Illinois limited liability company, with an address of 203 Crescent Street, Suite 106, Waltham MA 02453 ("**Lessee**" or "**Grantee**").

WITNESSETH

WHEREAS, Owner is the owner of the real property located in the Town of Woodstock, County of McHenry, State of Illinois, as more particularly described in Exhibit A attached hereto and made a part hereof (the "Property");

WHEREAS, pursuant to that certain Lease Agreement by and between Owner and Lessee dated as of date herewith (the "Solar Lease"), by and between Owner and Lessee, Lessee has leased a portion of the Property owned by Owner as more particularly described on Exhibit B (the "Leased Premises") together with all Additional Rights and Access Rights over the Property.

WHEREAS, the parties are executing and recording this Memorandum so that third parties shall have notice of Lessee's exclusive lease of the Property, and of the rights and obligations of Owner and Lessee granted under the Solar Lease; and

NOW, THEREFORE, the parties hereto do hereby certify and agree as follows:

The contents herein are confidential and proprietary.

AGREEMENT

1. Recitals; Defined Terms. The above Recitals are hereby incorporated herein as if fully set forth below. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Solar Lease.

2. Term of Solar Lease and Access/Gen-Tie Easement. The Term of the Solar Lease commenced on MAY 14th 2025, and continues for twenty-five (25) years from the Commercial Operations Date as defined in the Solar Lease, with two (2) Lessee extension options of five (5) years each. The term of the Access/Gen-Tie Easement is co-terminus with the Term of the Solar Lease.

3. Ownership of Solar Facilities. Owner acknowledges and agrees that Lessee is the exclusive owner and operator of the Solar Facilities, and that all equipment comprising the Solar Facilities shall remain the personal property of the Lessee within the meaning of Article 9 of the UCC and shall not become fixtures notwithstanding the manner in which the Solar Facilities are or may be affixed to any real property of Owner. Owner shall have no right, title or interest in the Solar Facilities or any component thereof, notwithstanding that the Solar Facilities may be physically mounted or affixed to the Property. Owner consents to the filing of a disclaimer of the Solar Facilities as a fixture of the Property in the office where real estate records are customarily filed in the jurisdiction of the Property. Except for the Rent payments described in Section 4 of the Solar Lease, Owner shall not be entitled to any other payments or benefits accrued by or from the Solar Facilities, including renewable energy credits, environmental credits or tax credits. To the extent Owner comes into possession of any energy credits, environmental credits, or tax credits as a result of the Solar Facilities, Owner acknowledges that it shall immediately transfer same to Lessee in accordance with Section 5 of the Solar Lease.

4. Incorporation of Solar Lease Terms. All of the terms, conditions and agreements contained within the Solar Lease are fully incorporated herein by reference as if fully set forth herein. This Memorandum is not intended to change the terms of the Solar Lease, and in the event of a conflict between the terms and conditions of this Memorandum and the Solar Lease, the terms and conditions of the Solar Lease shall control.

5. Multiple Counterparts. This Memorandum may be executed by different parties on separate counterparts, each of which, when so executed and delivered, shall be an original, but all such counterparts shall constitute one and the same instrument.

-SIGNATURE PAGES TO FOLLOW-

The contents herein are confidential and proprietary.

OWNER/GRANTOR

Chang Family LLC, an Illinois limited liability company

By: _____

Name: JAE CHUL CHANG

Title: PRESIDENT

State of ILLINOIS)
) ss:
COUNTY OF Cook)

On this 14 day of MAY, 2025, before me, a Notary Public, the undersigned officer, personally appeared JAE CHANG, the PRESIDENT of **Chang Family LLC** known to me (or satisfactorily proven) to be the persons described in the foregoing instrument, signed and sworn to (or affirmed) before me on said date, that they executed the same in the capacity therein stated and for the purposes therein contained.

IN WITNESS WHEREOF, I have hereunto set me hand and notarial seal.

_____ (SEAL)

TIMOTHY E JOHNSON
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
July 29, 2026

The contents herein are confidential and proprietary.

LESSEE/GRANTEE

Woodstock Community Energy Initiative LLC, an Illinois limited liability company

By: _____

Name: Todd Fryatt

Title: Manager

STATE OF Massachusetts)
) SS:
COUNTY OF Middlesex)

On this 14 day of May, 2025, before me, a Notary Public, the undersigned officer, personally appeared Todd Fryatt the Manager of **Woodstock Community Energy Initiative LLC**, known to me (or satisfactorily proven) to be the persons described in the foregoing instrument, signed and sworn to)or affirmed) before me on said date, that they executed the same in the capacity therein stated and for the purposes therein contained.

IN WITNESS WHEREOF, I have hereunto set me hand and notarial seal.

_____
(SEAL)

The contents herein are confidential and proprietary.

EXHIBIT A
LEGAL DESCRIPTION PROPERTY

EXHIBIT A

LEGAL DESCRIPTION

Part of the East ½ of the East ½ of the Southwest ¼, part of the West ½ of the East ½ of the Northwest ¼ and the West ½ of the East ½ of the Southwest ¼ of Section 36, Township 45 North, Range 6, East of the Third Principal Meridian, being described as follows:

Beginning at the Southeast corner of the said East ½ of the Southwest ¼; thence North 89 degrees 55 minutes 53 seconds West along the South line thereof, 1317.61 feet, to the Southwest corner thereof; thence North 00 degrees 13 minutes 15 seconds East along the West line thereof, 2636.53 feet to the Northwest corner thereof; thence North 00 degrees 13 minutes 28 seconds East along the West line of the said West ½ of the East ½ of the Northwest ¼, 887.17 feet to the Southwesterly right-of-way line of U.S. Route 14 per Dedication recorded June 14, 1960 as Document No. 370779; thence Southeasterly along said Southwesterly right-of-way line 737.97 feet; being along a curve to the right, having a radius of 6266.26 feet, the chord of which bears South 62 degrees 54 minutes 29 seconds East, for a length of 737.55 feet to the East line of the said West ½ of the East ½ of the Northwest ¼; thence South 00 degrees 12 minutes 25 seconds West along said East line, 550.45 feet to the Southeast corner thereof; thence South 00 degrees 12 minutes 20 seconds West along the West line of the East ½ of the said East ½ of the Southwest ¼, 176.02 feet; thence North 89 degrees 55 minutes 40 seconds East parallel with the North line thereof, 658.15 feet to the East line thereof; thence South 00 degrees 11 minutes 24 seconds West along said East line, 2463.74 feet to the place of beginning, in McHenry County, Illinois.

Parcel ID#: 07-36-326-003

This being a portion of the same property conveyed to Chang Family LLC, an Illinois limited liability company from HWY 14 Woodstock Farm, LLC, an Illinois limited liability company, in a Warranty Deed dated December 15, 2021, and recorded December 29, 2021, as Instrument No. 2021R0068880, in McHenry County, Illinois. Said deed is modified by that Scrivener's Error Affidavit dated February 4, 2022, and recorded February 7, 2022, as Instrument No. 2022R0004897, in McHenry County, Illinois. The subject property is designated as Parcel 2 in the deed and affidavit referenced herein.

The contents herein are confidential and proprietary.

Exhibit B
Legal Description
Leased Premises

The contents herein are confidential and proprietary.

EXHIBIT O: CONSENT, VERIFICATION, ACCEPTANCE OF COURT REPORTING & PUBLIC NOTICE FEES

CONSENT TO ON-SITE INSPECTION

I/We are the owners of record of the real estate which is the subject of this application. Owners of the described real estate do hereby freely and voluntarily consent to inspection of the site of the parcel in question for purposes of determining the appropriateness of the pending proposed zoning petition by the Zoning Enforcement Officer and/or designated representative, McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer, and hereby release such persons from any liability based in whole or in part on the inspection of the parcel in question. That in exchange for the above actions by the Applicant(s), McHenry County agrees that the Zoning Enforcement Officer and/or designated representative, member of the Zoning Board of Appeals or, if applicable, the McHenry County Hearing Officer, will inspect the parcel in question prior to considering the evidence presented upon the above application. In the case of Conditional Use applications, if approved by the McHenry County Board, the Zoning Enforcement Officer and/or designated representative many inspect the property periodically to ensure compliance with the adopting ordinance and any conditions therein.

ACCEPTANCE OF FEES FOR TRANSCRIPTION SERVICES

I/We, the applicant(s), verify that I/we are aware of the use of a transcription service utilized by McHenry County to prepare a record of public hearings. Applicant(s) agree to directly reimburse the Department of Planning and Development for all incurred transcript fees and associated costs for hearings before the McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer unless determined otherwise by McHenry County. The applicant(s) further recognizes failure to fully reimburse the County prior to the scheduled County Board Date will grant McHenry County the unconditional right to withhold the application from McHenry County Board action. Applicant(s) further understand that transcripts shall be retained by McHenry County as part of the permanent zoning application file.

ZONING APPLICATION INTERPRETATION

I/We understand that the McHenry County Department of Planning and Development Staff will review and evaluate this application per the text of the McHenry County Unified Development Ordinance, the Official Zoning Maps, and any relevant documentation provided by the applicant and otherwise available to the Department, and consult with other staff to create a Legal Notice and staff report.

ACCEPTANCE OF FEES FOR NOTIFICATION

I/We, the applicant(s), authorize the McHenry County Department of Planning and Development Staff to produce the Legal Notice of Public Hearing to be published and mailed per the requirements of Chapter 16.16 (Zoning Application Process) of the McHenry County Code of Ordinances. I/We agree to reimburse the County for the cost of certified mailing and publication to the newspaper, prior to a vote by the McHenry County Board, in order to meet the notification requirements for a public hearing by Illinois State Statute.

Owner's Signature	***Signature***
Print Name	Todd Fryett ***Print Name***

SUBSCRIBED and SWORN to before me
this 16 day of June, 2025.

NOTARY PUBLIC

MONICA R. LESLIE
MY COMMISSION EXPIRES
MAY 31, 2030
NOTARY PUBLIC
COMMONWEALTH OF
MASSACHUSETTS

CONSENT TO ON-SITE INSPECTION

I/We are the owners of record of the real estate which is the subject of this application. Owners of the described real estate do hereby freely and voluntarily consent to inspection of the site of the parcel in question for purposes of determining the appropriateness of the pending proposed zoning petition by the Zoning Enforcement Officer and/or designated representative, McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer, and hereby release such persons from any liability based in whole or in part on the inspection of the parcel in question. That in exchange for the above actions by the Applicant(s), McHenry County agrees that the Zoning Enforcement Officer and/or designated representative, member of the Zoning Board of Appeals or, if applicable, the McHenry County Hearing Officer, will inspect the parcel in question prior to considering the evidence presented upon the above application. In the case of Conditional Use applications, if approved by the McHenry County Board, the Zoning Enforcement Officer and/or designated representative many inspect the property periodically to ensure compliance with the adopting ordinance and any conditions therein.

ACCEPTANCE OF FEES FOR TRANSCRIPTION SERVICES

I/We, the applicant(s), verify that I/we are aware of the use of a transcription service utilized by McHenry County to prepare a record of public hearings. Applicant(s) agree to directly reimburse the Department of Planning and Development for all incurred transcript fees and associated costs for hearings before the McHenry County Zoning Board of Appeals or where applicable, the McHenry County Hearing Officer unless determined otherwise by McHenry County. The applicant(s) further recognizes failure to fully reimburse the County prior to the scheduled County Board Date will grant McHenry County the unconditional right to withhold the application from McHenry County Board action. Applicant(s) further understand that transcripts shall be retained by McHenry County as part of the permanent zoning application file.

ZONING APPLICATION INTERPRETATION

I/We understand that the McHenry County Department of Planning and Development Staff will review and evaluate this application per the text of the McHenry County Unified Development Ordinance, the Official Zoning Maps, and any relevant documentation provided by the applicant and otherwise available to the Department, and consult with other staff to create a Legal Notice and staff report.

ACCEPTANCE OF FEES FOR NOTIFICATION

I/We, the applicant(s), authorize the McHenry County Department of Planning and Development Staff to produce the Legal Notice of Public Hearing to be published and mailed per the requirements of Chapter 16.16 (Zoning Application Process) of the McHenry County Code of Ordinances. I/We agree to reimburse the County for the cost of certified mailing and publication to the newspaper, prior to a vote by the McHenry County Board, in order to meet the notification requirements for a public hearing by Illinois State Statute.

Jae Chul Chang
Owner's Signature

Signature

JAE CHUL CHANG
Print Name

Print Name

SUBSCRIBED and SWORN to before me
this 6th day of JUNE, 2025

TIMOTHY E JOHNSON
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
July 29, 2025

NOTARY PUBLIC

EXHIBIT P: NOISE STUDY

July 10, 2025

Ben Dykema
ECA Solar

Subject: ***Woodstock Community Energy Initiative LLC – Sound Study***
McHenry County, Illinois

Executive Summary

The purpose of this technical memorandum is to summarize the evaluated sound levels associated with the operational equipment located throughout the proposed Woodstock Community Energy Initiative LLC Solar Site in McHenry County, IL. The proposed solar photovoltaic project site is located just outside the jurisdiction of Woodstock, approximately 2 miles southeast of Hartland, approximately 3.5 miles west of Bull Valley, approximately 4 miles northeast of Franklinville, and approximately 7 miles northwest of Ridgefield. The site is generally located south/west of US-14 and Washington Street/IL-120 and east of North Rose Farm Road. The solar site will be located on agricultural land with rural residential properties west, south, and east of the project site. Additionally, Union Pacific Railroad Company (UP) railroad tracks are located less than a mile north/east of the site. The location of the proposed Woodstock Community Energy Initiative LLC Solar Site is shown in **Figure 1**.

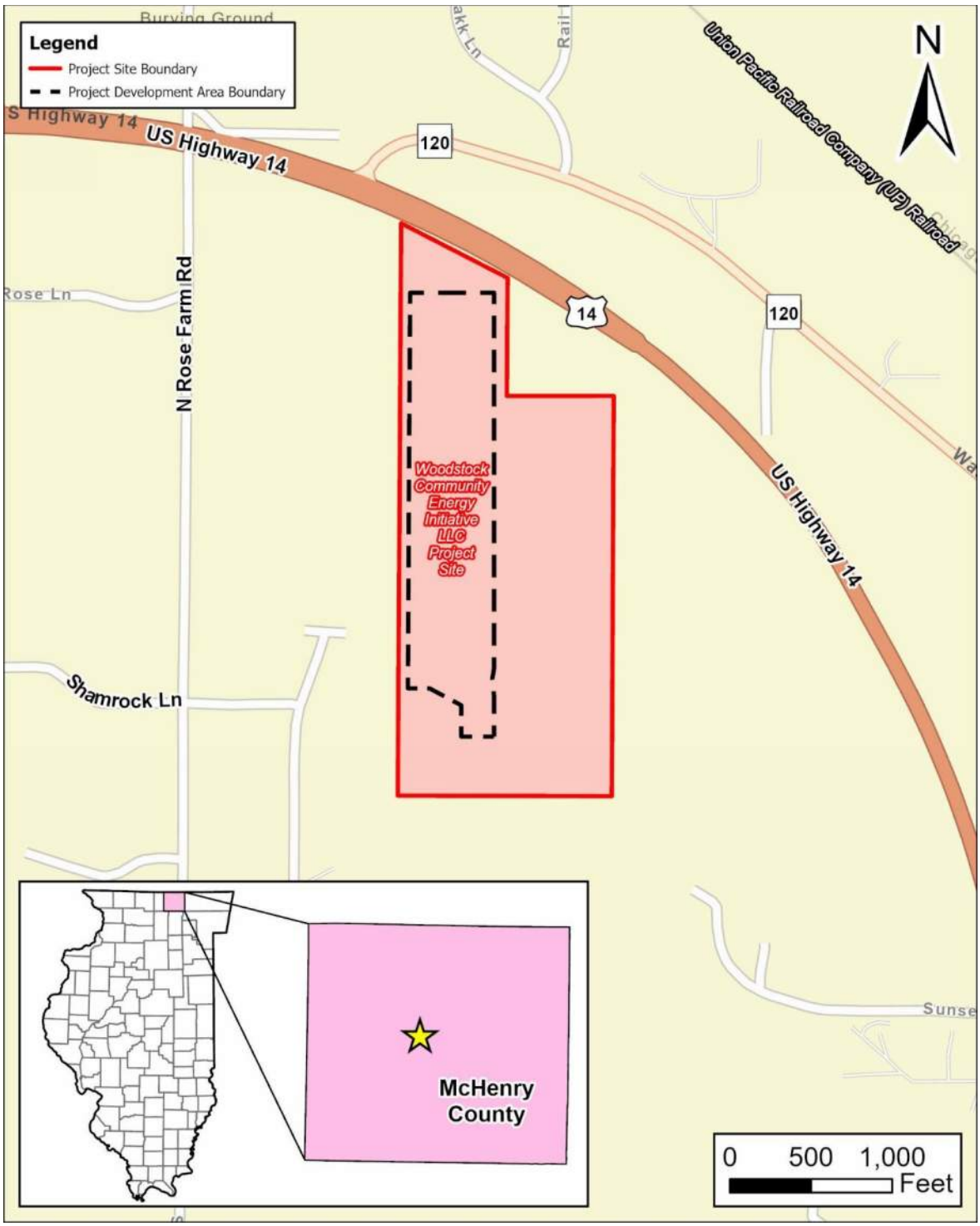
Analysis Findings

- *The solar photovoltaic project will be located on agricultural land with rural residential properties west, south, and east of the project site. Additionally, UP railroad tracks are located less than a mile north/east of the site. The Illinois Pollution Control Board (IPCB) noise regulations are based on allowable octave band sound pressure levels that vary depending on the category of land the noise is generated from and the category of land the noise is received at. Modeled operational octave band sound pressure levels at surrounding Class A properties (i.e., residences) are anticipated to remain below the octave band limits established by IPCB; therefore, noise mitigation is not recommended at this time. Note that if noise mitigation measures are implemented, such as the use of sound barriers, the operational octave band sound levels would likely be further reduced and would still remain below the IPCB allowable noise levels.*

Project Description

The proposed Woodstock Community Energy Initiative LLC Solar Site will be developed on approximately 31 acres of a nearly 88-acre parcel of agricultural land in an unincorporated portion of McHenry County, IL. The solar site will consist of solar arrays throughout the project area with twenty (20) string inverters and two (2) 3,500 kilo-volt-ampere (kVA) transformers located on two (2) equipment pads near the central portion of the site, with ten (10) string inverters and one (1) 3,500 kVA transformer on each equipment pad.

Figure 1: Site Location and Vicinity



Characteristics of Noise

Noise is generally defined as unwanted sound. It is emitted from many natural and man-made sources. Sound pressure levels are usually measured and expressed in decibels (dB). The decibel scale is logarithmic and expresses the ratio of the sound pressure unit being measured to a standard reference level. Most sounds occurring in the environment do not consist of a single frequency, but rather a broad band of differing frequencies. The intensities of each frequency add together to generate sound. Because the human ear does not respond to all frequencies equally, the method commonly used to quantify environmental noise consists of evaluating all of the frequencies of a sound according to a weighting system. It has been found that the A-weighted decibel [dB(A)] filter on a sound level meter, which includes circuits to differentially measure selected audible frequencies, best approximates the frequency response of the human ear.

The degree of disturbance from exposure to unwanted sound – noise – depends upon three factors:

1. The amount, nature, and duration of the intruding noise
2. The relationship between the intruding noise and the existing sound environment; and
3. The situation in which the disturbing noise is heard

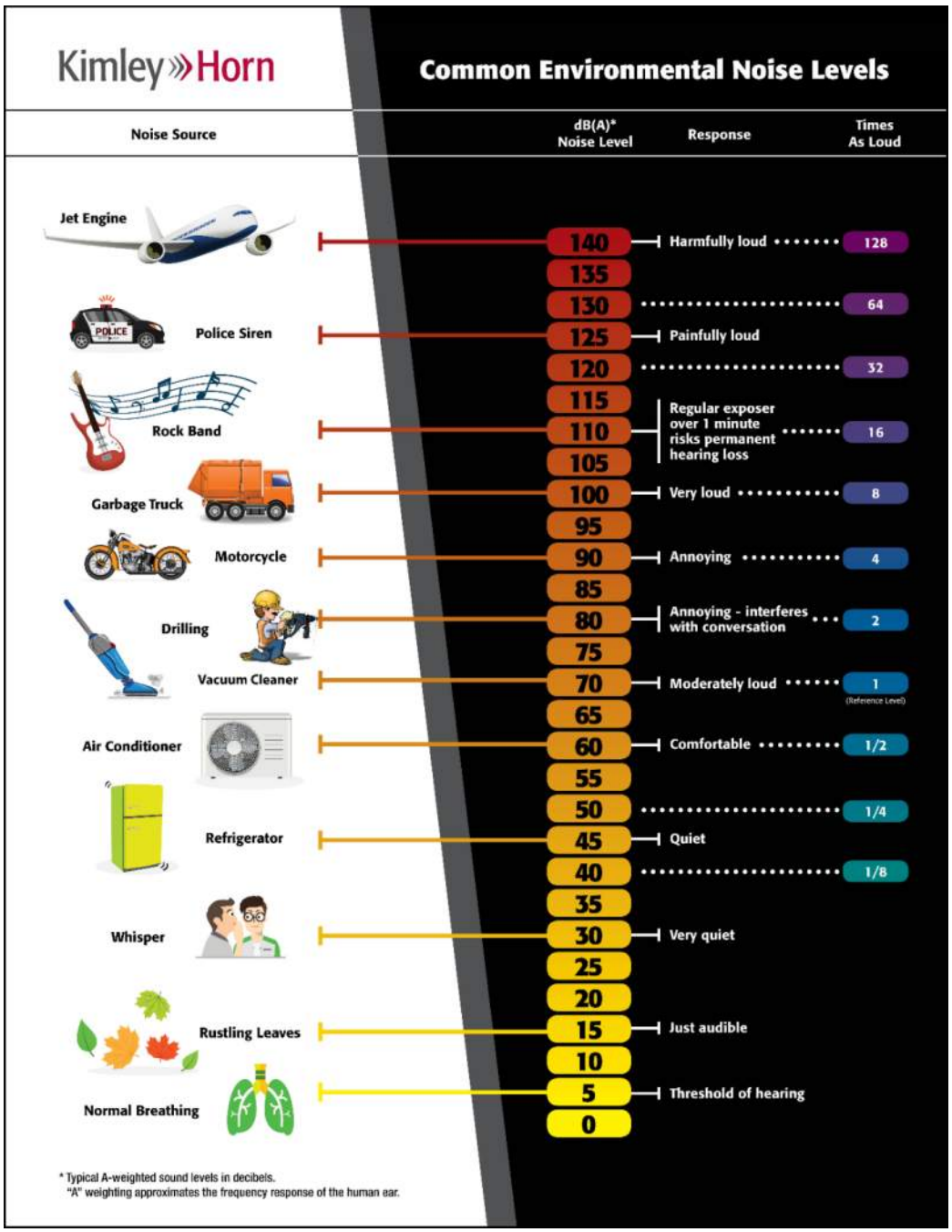
In considering the first of these factors, it is important to note that individuals have varying sensitivity to noise. Loud noises bother some people more than other people, and some individuals become increasingly upset if an unwanted noise persists. The time patterns and durations of noise(s) also affect perception as to whether or not it is offensive. For example, noises that occur during nighttime (sleeping) hours are typically considered to be more offensive than the same noises in the daytime.

With regard to the second factor, individuals tend to judge the annoyance of an unwanted noise in terms of its relationship to noise from other sources (background noise). A car horn blowing at night when background noise levels are low would generally be more objectionable than one blowing in the afternoon when background noise levels are typically higher. The response to noise stimulus is analogous to the response to turning on an interior light. During the daytime an illuminated bulb simply adds to the ambient light, but when eyes are conditioned to the dark of night, a suddenly illuminated bulb can be temporarily blinding.

The third factor – situational noise – is related to the interference of noise with activities of individuals. In a 60 dB(A) environment such as is commonly found in a large business office, normal conversation would be possible, while sleep might be difficult. Loud noises may easily interrupt activities that require a quiet setting for greater mental concentration or rest; however, the same loud noises may not interrupt activities requiring less mental focus or tranquility.

As shown in **Figure 2**, most individuals are exposed to fairly high noise levels from many sources on a regular basis. To perceive sounds of greatly varying pressure levels, human hearing has a non-linear sensitivity to sound pressure exposure. Doubling the sound pressure results in a three decibel change in the noise level; however, variations of three decibels [3 dB(A)] or less are commonly considered “barely perceptible” to normal human hearing. A five decibel [5 dB(A)] change is more readily noticeable. A ten-fold increase in the sound pressure level correlates to a 10 decibel [10 dB(A)] noise level increase; however, it is judged by most people as only sounding “twice as loud”.

Figure 2: Common Noise Levels



Over time, individuals tend to accept the noises that intrude into their lives on a regular basis. However, exposure to prolonged and/or extremely loud noise(s) can prevent use of exterior and interior spaces and has been theorized to pose health risks.

Local Regulations

The Woodstock Community Energy Initiative LLC Solar Site is in an unincorporated portion of McHenry County, IL. Neither the McHenry County Code of Ordinances nor the McHenry County Unified Development Ordinance includes noise regulations regarding solar energy facilities; therefore, the Illinois Pollution Control Board (IPCB) regulations were used.

The IPCB noise regulations are based on allowable octave band sound pressure levels during daytime and nighttime hours. According to Title 35 (Environmental Protection), Subtitle H (Noise), Chapter I (Pollution Control Board), Part 901 (Sound Emission Standards and Limitations for Property Line-Noise Sources), a facility operating in an agricultural field (Class C Land) cannot cause an exceedance of sound levels at any point within a residential land use (Class A Land) during daytime hours as shown in **Table 1**.

Table 1: Maximum Allowable Sound Emitted to Class A Land During Daytime Hours

Octave Band Center Frequency (Hertz)	Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from		
	Class C Land	Class B Land	Class A Land
31.5	**75**	72	72
63	**74**	71	71
125	**69**	65	65
250	**64**	57	57
500	**58**	51	51
1000	**52**	45	45
2000	**47**	39	39
4000	**43**	34	34
8000	**40**	32	32

The IPCB has also established the allowable octave band sound pressure levels for nighttime hours shown in **Table 2**. However, these values are not applicable to the proposed solar site as it will not be operational during nighttime hours. These values are included for reference purposes only.

Table 2: Maximum Allowable Sound Emitted to Class A Land During Nighttime Hours

Octave Band Center Frequency (Hertz)	Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from		
	Class C Land	Class B Land	Class A Land
31.5	**69**	63	63
63	**67**	61	61
125	**62**	55	55
250	**54**	47	47
500	**47**	40	40
1000	**41**	35	35
2000	**36**	30	30
4000	**32**	25	25
8000	**32**	25	25

Noise Analysis

Sound levels from the proposed Woodstock Community Energy Initiative LLC Solar Site were evaluated using SoundPLAN. This program computes predicted sound levels at noise-sensitive areas through a series of adjustments to reference sound levels. SoundPLAN also accounts for topography, groundcover type, and intervening structures. Sound levels generated from the inverter and transformer equipment are anticipated to be the main source of sound from the proposed solar photovoltaic project site. Note that intervening features such as trees and structures were not included in the model as a conservative measure.

It should be noted that noise from surrounding roadways was not modeled in this analysis although US-14, Washington Street/IL-120, North Rose Farm Road, and other roadways are anticipated to contribute to the ambient noise environment throughout the entire day. Additionally, according to the Federal Railroad Administration (FRA) Crossing Inventory, the UP railroad tracks north/east of the project site are anticipated to have thirteen (13) train pass-by events during daytime hours and nine (9) train pass-by events during nighttime hours, which are anticipated to contribute to the ambient noise environment but were not modeled in this analysis.

Inverters

Photovoltaic (PV) inverter equipment can generate steady, unvarying sound that may create issues when located near noise-sensitive areas. It was assumed that twenty (20) string inverters would be located on two (2) equipment pads near the central portion of the site, with ten (10) string inverters on each equipment pad. Based on provided noise emission levels for Solectria XGI 1500-250-DCG string inverter equipment, a maximum operational sound level of 81 dB(A) at 1 meter for each of the PV string inverters was used. **Table 3** shows the octave band emission levels for a single PV inverter used for reference. The sound from the simultaneous operation of the PV inverter equipment was calculated at the closest noise-sensitive receptors surrounding the project area using SoundPLAN.

Table 3: Sound Emissions for PV Inverter

Octave Band Center Frequency	12.5 Hz	16 Hz	20 Hz	25 Hz	31.5 Hz	40 Hz	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz
Frequency Sound Level	2.8	7.8	11.5	15.0	17.3	21.4	26.2	27.5	28.2	39.7	51.1
Center Frequency	**160 Hz**	**200 Hz**	**250 Hz**	**315 Hz**	**400 Hz**	**500 Hz**	**630 Hz**	**800 Hz**	**1 kHz**	**1.25 kHz**	**1.6 kHz**
Sound Level	46.3	49.4	53.2	56.1	60.7	58.8	60.5	66.6	58.9	59.5	61.6
Center Frequency	**2 kHz**	**2.5 kHz**	**3.15 kHz**	**4 kHz**	**5 kHz**	**6.3 kHz**	**8 kHz**	**10 kHz**	**12.5 kHz**	**16 kHz**	**20 kHz**
Sound Level	58.8	59.4	62.5	64.9	68.0	79.5	59.1	65.2	62.7	45.5	47.0

Sound generated by the inverters is not anticipated to significantly contribute to the existing environmental sound levels surrounding the site. Also, sound generated by the inverters is expected

to be mitigated by providing sufficient offsets between the inverters and surrounding noise-sensitive land uses as well as by the physical presence of the solar arrays, which are anticipated to shield and disperse some of the sound generated by the inverters.

Transformers

Transformer equipment can also generate steady, unvarying noise that may create issues when located near noise-sensitive uses. It was assumed that two (2) 3,500 kVA transformers would be located within the proposed solar site. Based on the National Electrical Manufacturers Association (NEMA) average decibel ratings for a 3,500 kVA transformer, a reference sound level of 64 dB(A) at 1 meter was used. **Table 4** shows the octave band emission levels for the proposed transformer. The sound from the operation of the transformers was calculated using SoundPLAN.

Table 4: Sound Emissions for a 3,500 kVA Transformer

Octave Band Center Frequency	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Frequency Sound Level	21	41	53	55	61	58	54	49	40

Sound generated by the transformers is not anticipated to significantly contribute to the existing environmental sound levels surrounding the site.

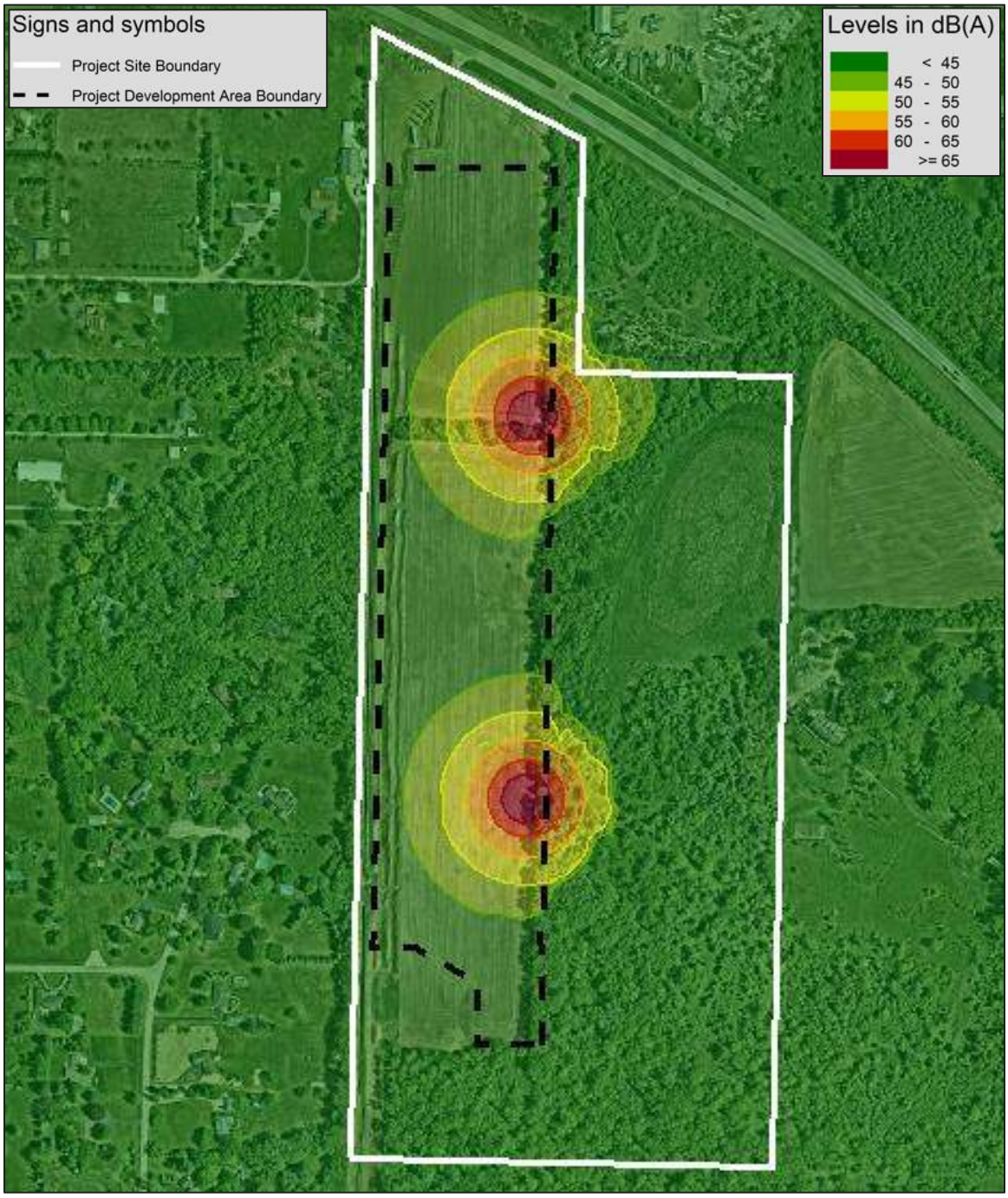
Results

The SoundPLAN-predicted overall maximum operational sound levels at the surrounding noise-sensitive land uses are anticipated to remain near or below approximately 35 dB(A). Also, the SoundPLAN-predicted maximum octave band noise levels at surrounding Class A properties are not anticipated to exceed the applicable limits established by IPCB; therefore, noise mitigation measures do not need to be considered in the project design at this time. See **Table 5.** Note that if noise mitigation measures are implemented, such as the use of sound barriers, the maximum octave band sound levels would likely be further reduced and would remain below the IPCB allowable octave band noise levels. The anticipated operational sound contours are shown in **Figure 3**.

Table 5: Predicted Maximum Sound Emissions at Class A Properties

Octave Band Center Frequency	31 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Maximum Octave Band SPLs from Inverters	9.1	7.3	17.2	8.1	10.3	22.4	25.9	22.8	1.1
IPCB Allowable Octave Band SPLs	*75*	*74*	*69*	*64*	*58*	*52*	*47*	*43*	*40*

Figure 3: Operational Sound Contours



Conclusions

The site is generally located south/west of US-14 and Washington Street/IL-120 and east of North Rose Farm Road. The solar site will be located on agricultural land with rural residential properties west, south, and east of the project site. Additionally, Union Pacific Railroad Company (UP) railroad tracks are located less than a mile north/east of the site.

After modeling and analyzing the anticipated operational sound levels throughout the proposed solar site, it was determined that noise mitigation measures are not needed at this time since the anticipated operational octave band sound levels will remain below the IPCB allowable octave band noise levels at the surrounding Class A land uses during daytime hours. If noise mitigation measures are implemented, such as the use of sound barriers, the maximum operational octave band sound levels would likely be further reduced and would still remain below the IPCB allowable noise levels.

EXHIBIT Q: GLARE STUDY

Solar Glare and Glint Analysis Report

for

Woodstock Community Energy Initiative LLC

McHenry County, Illinois

July 2025

118938000

© 2025 Kimley-Horn and Associates, Inc.

Kimley»Horn

Introduction

The US Highway 14 Solar Project (Project) is a 25.4 acres of proposed solar panels, which are represented in **Figure 1** as shaded blue area, is located north of Woodstock in McHenry County, Illinois. The use of the data is up to the client, including the determination if any glare is allowed for this development and if further steps should mitigation be required for any glare identified. See **Figure 1** for vicinity map with receptors and Project location. All observation points are indicated with yellow pins, all routes are indicated with orange paths and all obstruction components are indicated with purple borders.

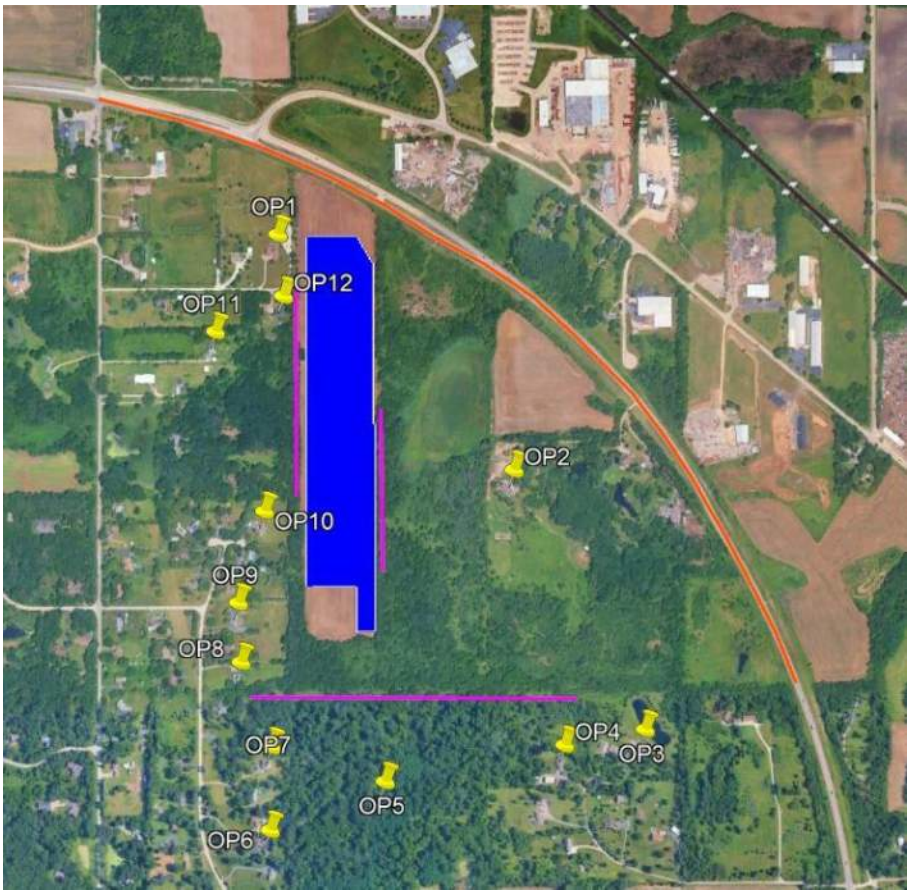


Figure 1: Project Location

Kimley Horn completed a glare analysis using the Solar Glare Hazard Analysis Tool (SGHAT) software, developed by Sandia Laboratories, now hosted by ForgeSolar. The SGHAT software is considered an industry-best practice and conservative model that effectively models the potential for glare at defined receptors from defined solar energy generating facilities.

Receptors & Methodology

Kimley Horn included as part of the analysis the 12 observation points within one mile of the Project, US Highway 14 and existing vegetation buffers. The points used for observation points were modeled without restricting the field of view, to ensure the results were conservative in nature. The receptors for roadways were limited to a 50-degree field of view to the left and right

simulating the extent of peripheral vision. Glare that is beyond 50 degrees left or right from a driver's line-of-sight is not considered a safety hazard. The PV array was modeled with single axis tracking, smooth glass with anti-reflective coating, and shade backtracking. The panel specifications, roadways, observation points, and obstruction specifications can be found in **Appendix A**. All receptors analyzed are listed below including route receptors, and observation points, shown in **Table 1**.

Receptors	Location	Description
US Highway 14	Roadway northeast of Project	Analyzed west to east
12 Observation Points	Single family homes identified all around site	Analyzed within one mile of Project

Table 1: Receptor Descriptions

Parameter	Value
Rotation Axis Height	10'
Axis Tracking	Single-axis rotation
Tracking Axis Orientation	180°
Max Tracking Angle	60°
Backtracking Strategy	Shade
Ground Coverage Ratio	0.383
Panel Material	Smooth glass with Anti-Reflective Coating
Resting Angle	5°

Table 2: Panel Specifications

Kimley Horn utilized the ForgeSolar Glare Gauge software tool to perform the glare analysis. If any receptor showed signs of glare, the tool calculated the retinal irradiance (brightness) and subtended angle (size divided by distance) of the glare source. By considering retinal irradiance and subtended angle, the analysis could predict ocular hazards ranging from low potential for temporary after-image to retinal burn. Based on the predicted retinal irradiance (intensity) and the subtended angle (size/distance) of the glare source to the receptor, the software categories glare into three levels shown by colors. The three glare levels are: "green" grade indicating a low potential for temporary after-image, "yellow" grade indicating the potential for temporary after-image, and "red" grade indicating the potential for retinal damage. For comparison, viewing the unfiltered sun is in the upper region of yellow glare near the red border, while solar panel glare tends to be on the border of green and yellow, approximately three orders of magnitude less than direct viewing of the sun. The three levels of glare were determined in "Ho, 2011". The different levels are displayed in **Figure 2**, with viewing unfiltered sun shown as a reference point.

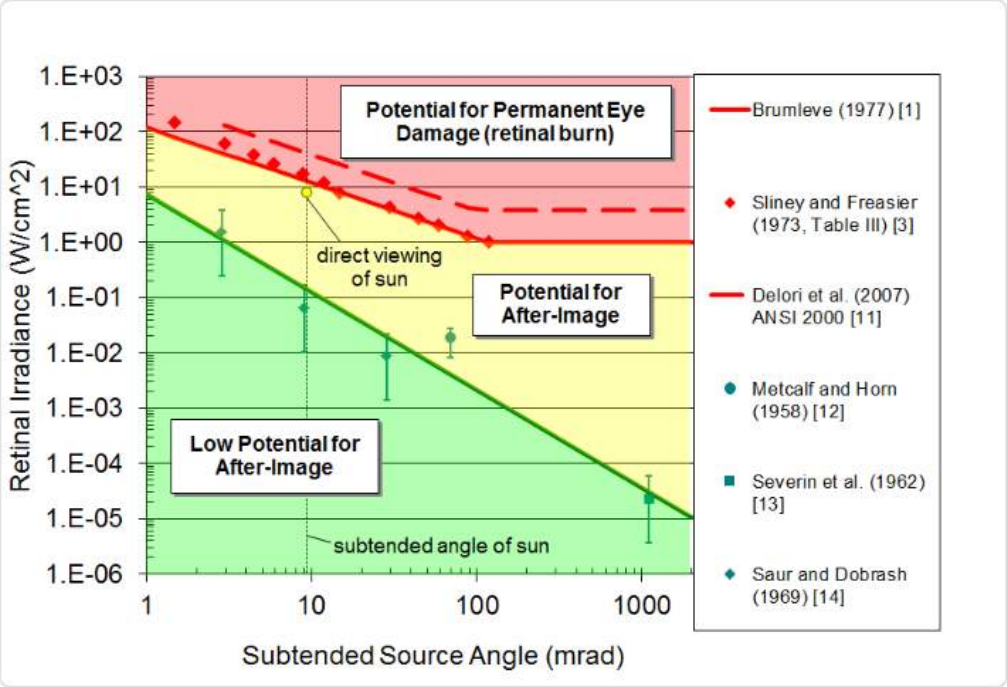


Figure 2: Glare Level Determined from "Ho, 2011"

Green and yellow glare is common from bodies of water, glass facades, and solar panel arrays. Red glare is extremely rare for PV arrays because solar panels do not concentrate glare.

According to the Federal Aviation Administration's (FAA) 2021 Final Policy, in previous years, pilots have reported glare from bodies of water and glass façades, resembling the glare produced by solar panels. The software analyzes pilot's similarly to motorists; therefore, results are like those found when analyzing pilots near bodies of water or existing building facades. Mitigating glare remains the focus, but it is not as significant an issue as initially thought in 2013 when the initial policy was formulated. The amount of light reflected by a surface, increases as the sunlight's angle of incidence from the surface increases as illustrated in **Figure 3**. The red angle of incidence yields 50% light reflected while the blue angle of incidence yields only two percent of light reflected.

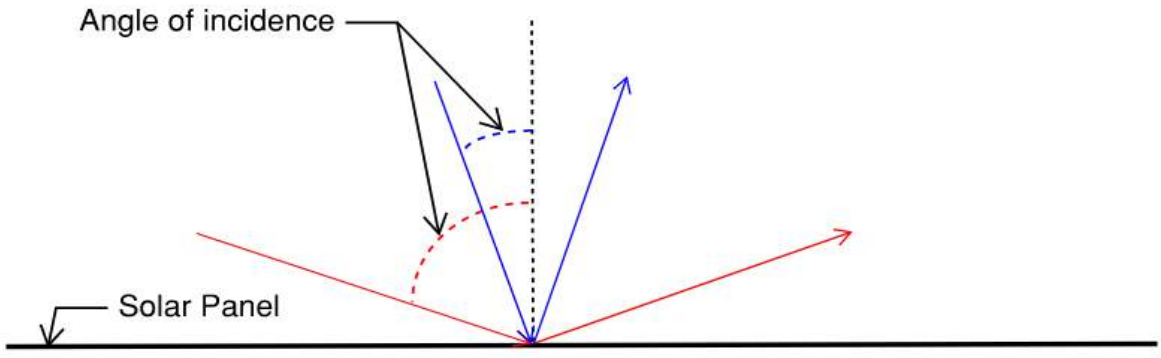


Figure 3: Reflected Light and Angle of Incidence (illustration only) on a panel

Analysis Results

The Project is not anticipated to produce any green, yellow or red glare. The tables below summarize the results for the observation points and routes. Glare is reflected in hours per year with time of day in standard time assuming clear skies, no existing topography, or manmade objects to block line of sight.

Observation Points

The observation points were modeled at a height of six feet to simulate an individual in a single-story building within one mile of the Project. The site has no obstructions other than those modeled in existing vegetative buffers adjacent to the Project. All observation points observed no glare, see **Table 3.**

Receptor	Hazard Level	Hours (per year)
OP 1-12	Green	0
	Yellow	0
	Red	0

Table 3: Total Yearly Glare Hazard per Observation Point Receptors

Routes

The routes were modeled with a driver height of five feet to simulate an individual in a sedan vehicle. All routes observed no glare, see **Table 4.**

Receptor	Hazard Level	Hours (per year)
US Highway 14	Green	0
	Yellow	0
	Red	0

Table 4: Total Yearly Glare Hazard per Drive Path Receptors

Conclusion

In summary, there was no glare identified. The model is shown in the most conservative scenario assuming there is no terrain or man-made objects blocking the line of sight from the PV arrays and receptors. Three existing tree lines were identified through a desktop review and included in the model based on the height and density. The panel specifications should resemble those shown in **Appendix A** to aim for the same results shown in this report.

APPENDIX A

ForgeSolar Glare Analysis Report

FORGESOLAR GLARE ANALYSIS

Project: **US Highway 14 Solar**
Site configuration: **US Highway 14 Solar**

Created 07 Jul, 2025
Updated 07 Jul, 2025
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 1 MW to 5 MW
Site ID 154142.25779

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route 1	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV array 1
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 5.0°
Ground Coverage Ratio: 0.383
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.335917	-88.486536	925.24	10.00	935.24
2	42.335909	-88.485307	930.53	10.00	940.53
3	42.335620	-88.484937	930.66	10.00	940.66
4	42.328449	-88.484871	919.69	10.00	929.69
5	42.328457	-88.485413	915.45	10.00	925.45
6	42.329115	-88.485445	912.00	10.00	922.00
7	42.329111	-88.486636	911.23	10.00	921.23

Route Receptors

Name: Route 1
Path type: Two-way
Azimuthal view angle: 50.0°
Downward view angle: 0.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.338432	-88.491812	912.96	5.00	917.96
2	42.337996	-88.489859	919.92	5.00	924.92
3	42.337520	-88.487874	923.37	5.00	928.37
4	42.336782	-88.485632	920.14	5.00	925.14
5	42.335410	-88.482446	901.89	5.00	906.89
6	42.334680	-88.481040	899.74	5.00	904.74
7	42.333817	-88.479692	908.60	5.00	913.60
8	42.332690	-88.478244	922.36	5.00	927.36
9	42.331699	-88.477257	933.00	5.00	938.00
10	42.330922	-88.476656	940.90	5.00	945.90
11	42.329938	-88.475916	950.83	5.00	955.83
12	42.328439	-88.474896	965.84	5.00	970.84
13	42.327360	-88.474296	976.33	5.00	981.33

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	42.335523	-88.487442	927.24	6.00
OP 2	2	42.331085	-88.481590	914.76	6.00
OP 3	3	42.326277	-88.478222	991.59	6.00
OP 4	4	42.325999	-88.480292	977.68	6.00
OP 5	5	42.325346	-88.484825	934.39	6.00
OP 6	6	42.324523	-88.487794	922.75	6.00
OP 7	7	42.326015	-88.487708	924.89	6.00
OP 8	8	42.327624	-88.488425	931.87	6.00
OP 9	9	42.328735	-88.488492	927.16	6.00
OP 10	10	42.330405	-88.487821	929.58	6.00
OP 11	11	42.333719	-88.488998	928.13	6.00
OP 12	12	42.334385	-88.487287	925.28	6.00

Obstruction Components

Name: Obstruction 1
Top height: 25.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.327225	-88.488046	921.45
2	42.327240	-88.479818	980.99

Name: Obstruction 2
Top height: 25.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.334819	-88.486800	928.34
2	42.330899	-88.486785	923.46

Name: Obstruction 3
Top height: 25.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.332287	-88.484825	899.22
2	42.329375	-88.484768	906.29

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route 1	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0

PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Route 1	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0

PV array 1 and Route: Route 1

No glare found

PV array 1 and OP 1

No glare found

PV array 1 and OP 2

No glare found

PV array 1 and OP 3

No glare found

PV array 1 and OP 4

No glare found

PV array 1 and OP 5

No glare found

PV array 1 and OP 6

No glare found

PV array 1 and OP 7

No glare found

PV array 1 and OP 8

No glare found

PV array 1 and OP 9

No glare found

PV array 1 and OP 10

No glare found

PV array 1 and OP 11

No glare found

PV array 1 and OP 12

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

© Sims Industries d/b/a ForgeSolar, All Rights Reserved.

EXHIBIT R: PRODUCT CUT SHEETS

nextracker
NX Horizon XTR™

NX Horizon XTR™

Break free from traditional tracker constraints and follow the grade

By following native land contours to eliminate or massively reduce grading, NX Horizon XTR saves construction cost, minimizes environmental impacts, and reduces project risk for terrain-challenged projects. Horizon XTR features an innovative approach to terrain following built on NX Horizon's™ existing, proven technology, and may be paired with TrueCapture™ energy yield optimization to maximize energy generation for each project's unique topography. The latest version, XTR 1.5, doubles Horizon XTR's ability to conform to undulating terrain, further expanding opportunities for solar development on challenging sites.

Key Features and Benefits

Cut Construction Costs and Timeline

Grading can be time consuming and expensive.
NX Horizon XTR can deliver up to:

- 100% grading reduction, cutting 1,000-3,000 cubic yards / MW of cut and fill
- 36" pile length reduction, saving 5,000-9,000 lbs / MW steel consumption
- 100% re-vegetation reduction, cutting 5 acres / MW of re-seeding

Minimize Environmental Impacts

Grading can be damaging to the local ecosystem.
NX Horizon XTR helps protect the land by:

- Avoiding destruction of native topsoil and vegetation
- Preventing habitat disruption from non-native re-vegetation
- Preventing long-term soil erosion and storm runoff

We are seeing more and more projects these days having undulating terrain, and Horizon XTR allows us to build up and over a hill, without having to flatten it out.

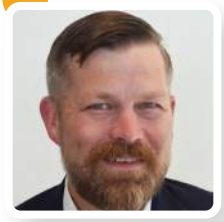
– Donny Gallagher
VP Engineering,
SOLV Energy

© Nextracker Inc. Contents subject to change without notice.
6200 Paseo Padre Parkway | Fremont, CA 94555 | USA | +1 510 270 2500 | nextracker.com

Mitigate Project Risk

Grading introduces risks throughout the project lifecycle. NX Horizon XTR helps mitigate by:

- Simplifying permitting, improving community acceptance, and mitigating topographic study inaccuracies during the development phase
- Avoiding grading-related delays and cost overruns due to unforeseen conditions, inclement weather, and remediations during the construction phase
- Preventing escalating land maintenance and project remediations due to soil erosion during operations phase



Horizon XTR allows us to decouple some of the earthwork that used to be mandatory and allows us to build the best structure for the land as it is now.

– Nick de Vries
CTO, Silicon Ranch

SILICON RANCH®

Proven Technology

NX Horizon XTR is based on NX Horizon's proven core architecture, uniquely suited for terrain-following applications without the use of complex joints. Risks associated with other tracker technology may include:

- Loss of tracker row torsional stiffness
- Friction or binding of bearing components, wearing of articulating joints
- Complex drive mechanisms
- Limited track records

© Nextracker Inc. Contents subject to change without notice.
6200 Paseo Padre Parkway | Fremont, CA 94555 | USA | +1 510 270 2500 | nextracker.com

GENERAL AND MECHANICAL

Architecture	Horizontal single-axis, independent row, mechanically balanced
Configuration	1 x module in portrait
Tracking range of motion	±60° standard ±50°, ±75° available
Row size	Configurable per module type, string length, and site layout
Drive type	High accuracy slew gear
Modules supported	All utility-scale crystalline and thin-film modules
Bifacial design	High-rise mounting rails, bearing and driveline gaps, round torque tube
Materials	Galvanized steel; other coatings available
Structural connections	Engineered fastening system, vibration proof
Wind protection	Intelligent wind stowing with symmetric damping system

ELECTRONICS AND CONTROLS

Solar tracking method	Astronomical algorithm with backtracking standard. TrueCapture™ available for enhanced energy yield
Tracker controller	Self-Powered Controller (SPC) with integrated inclinometer and UPS
Motor	Brushless DC
Power supply	Standalone smart solar panel
Site-level control and communications	Network control units (NCUs) at inverter pads/skids Self-powered weather stations Centralized data hub Encrypted Zigbee wireless mesh communications
Defensive stowing functions	Wind, hail, hurricane, snow, flood, loss of grid power
Operator interface	NX Navigator™ advanced HMI available, with SCADA integration

SITE CONDITIONS

N-S site slope	Up to 15%
N-S terrain following	Conformance to native land contours Angular tolerance configured to site conditions
E-W site slope	Up to 15%
Ground coverage ratio (GCR)	No specific limit. Typical range 25-45%
Operating temperature range	-40°C to 55°C (-40°F to 131°F)
Wind speed	Configurable up to 240 kph (150 mph) 10m, 3-second gust
Snow load	Configurable up to 4800 Pa (100 psf) ground load
Flooding	Standard module elevation 1.3 to 1.8 m (4'3" to 5'10"). All drive and control components at torque tube elevation. Increased elevation available with additional engineering
Soils	Complete range of foundation solutions available

SERVICE, WARRANTY, AND STANDARDS

Tracker engineering and PE stamped design package	Standard
Foundation engineering and PE stamped design package	Available
Onsite construction support and commissioning service	Available
Warranty	10-year structural, 5-year drive and controls standard Extended warranty available
Certifications	UL 2703, UL 3703, IEC 62817, CSA

© Nextracker Inc. Contents subject to change without notice.
6200 Paseo Padre Parkway | Fremont, CA 94555 | USA | +1 510 270 2500 | nextracker.com

Q.TRON XL-G2 SERIES

610 - 635 Wp | 156 Cells
22.7 % Maximum Module Efficiency

MODEL Q.TRON XL-G2.3 / BFG

High performance Qcells N-type solar cells

Q.ANTUM NEO Technology with optimized module layout boosts module efficiency up to 22.7 %.

Bifacial energy yield gain of up to 21%

Bifacial Q.ANTUM NEO solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.

A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty[1].

Enduring high performance

Long-term yield security with Anti LeTID and Anti PID Technology[2], Hot-Spot Protect.

Frame for versatile mounting options

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (3750 Pa)[3].

Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behavior.

[1] See data sheet on rear for further information.
[2] APT test conditions according to IEC / TS 62804-1:2015 method B (–1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)
[3] See Installation Manual for instructions

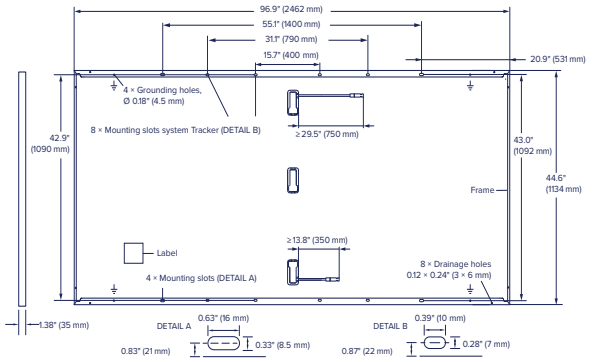
The ideal solution for:

Ground mounted solar panels

Q.TRON XL-G2 SERIES

Mechanical Specification

Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	78.0 lbs (35.4 kg)
Front Cover	0.08 in (2.0 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2.0 mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM NEO solar half cells
Junction box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 29.5 in (750 mm), (−) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4-Evo2, Stäubli MC4 ; IP68



Electrical Characteristics

POWER CLASS				610		615		620		625		630		635	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)					BSTC*		BSTC*		BSTC*		BSTC*		BSTC*		BSTC*
Minimum	Power at MPP[1]	P_{MPP}	[W]	610	675.4	615	681.0	620	686.5	625	692.0	630	697.6	635	703.1
	Short Circuit Current[1]	I_{SC}	[A]	13.65	15.13	13.71	15.19	13.76	15.25	13.82	15.31	13.88	15.38	13.93	15.44
	Open Circuit Voltage[1]	V_{OC}	[V]	56.11	56.34	56.39	56.62	56.67	56.90	56.95	57.18	57.23	57.46	57.51	57.74
	Current at MPP	I_{MPP}	[A]	12.95	14.34	13.00	14.40	13.05	14.46	13.10	14.51	13.15	14.57	13.21	14.62
	Voltage at MPP	V_{MPP}	[V]	47.10	47.09	47.30	47.29	47.50	47.49	47.70	47.69	47.89	47.88	48.09	48.08
	Efficiency[1]	η	[%]	≥ 21.8		≥ 22.0		≥ 22.2		≥ 22.4		≥ 22.6		≥ 22.7	

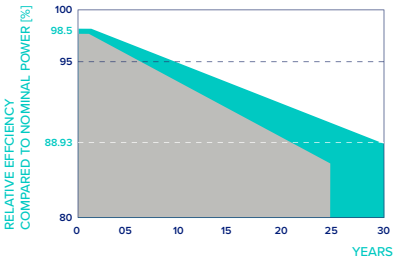
Bifaciality of P_{MPP} and I_{SC} 80 % ± 5 % • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2

[1] Measurement tolerances P_{MPP} ± 3 %; I_{SC}, V_{OC} ± 5 % at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 80 %, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]								
Minimum	Power at MPP	P_{MPP}	[W]	461.1	464.9	468.7	472.5	476.2	480.0
	Short Circuit Current	I_{SC}	[A]	11.00	11.05	11.09	11.14	11.18	11.23
	Open Circuit Voltage	V_{OC}	[V]	53.24	53.51	53.77	54.04	54.31	54.58
	Current at MPP	I_{MPP}	[A]	10.18	10.22	10.26	10.30	10.34	10.38
	Voltage at MPP	V_{MPP}	[V]	45.28	45.48	45.67	45.86	46.05	46.24

[2] 800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

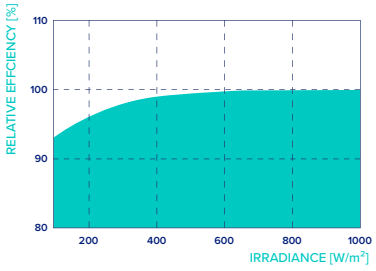


At least 98.5% of nominal power during first year. Thereafter max. 0.33 % degradation per year. At least 95.53% of nominal power up to 10 years. At least 88.93 % of nominal power up to 30 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective country.

*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.24
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.30	Nominal Module Operating Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3 °C)

Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1500
Maximum Series Fuse Rating		[A DC]	30
Max. Push Load[3], Test / Design		[lbs / ft²]	113 (5400 Pa) / 75 (3600 Pa)
Max. Pull Load[3], Test / Design		[lbs / ft²]	78 (3750 Pa) / 52 (2500 Pa)

[3] See Installation Manual for instructions

PV module classification	Class II
Fire Rating based on ANSI / UL 61730	TYPE 29[4]
Permitted Module Temperature on Continuous Duty	−40 °F up to +185 °F (−40 °C up to +85 °C)

[4] New Type is similar to Type 3 but with metallic frame

Qualifications and Certificates

UL 61730-1 & UL 61730-2, CE-compliant,
Quality Controlled PV - TUV Rheinland,
IEC 61215:2016, IEC 61730:2016,
U.S. Patent No. 9,893,215(solar cells)

www.tuv.com
ID 1111220277

* Contact your Qcells Sales Representative for details regarding the module's eligibility to be Buy American Act (BAA) compliant.

Specifications subject to technical changes © Qcells QTRON_XL-G2-BFG_series_610-635_DA_2024-02_Rev03_NA

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.
Hanwha Q CELLS America Inc. 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL hqc-inquiry@qcells.com | WEB www.qcells.com

Maddox

THREE PHASE PADMOUNT TRANSFORMERS

Maddox padmount transformers are constructed of the highest quality materials and built in the US to heavy duty industrial standards. Our padmounts are built and tested in accordance with industry standards (NEMA, ANSI, DOE, and IEEE as applicable). Maddox padmounts are ideal for commercial and industrial applications such as data centers, solar step-up, utility projects, manufacturing facilities, shopping centers, etc.

Maddox has the manufacturing ability to produce almost any custom design, we also stock all standard configurations. With thousands of new and reconditioned units in stock and ready-to-ship, Maddox is ready to meet your transformer needs.

DESIGN

HV Bushing Config:
1. Dead front or live front
2. Loop feed or radial feed

Fluid Options:
1. Type II Mineral Oil
2. Envirotemp™ FR3™

Standard Gauge/Accessory Package:
1. Pressure relief valve
2. Pressure vacuum gauge
3. Liquid temp & level gauges
4. Drain & sample valve
5. Adjustment taps

Switch Options:
1. 2 Position LBOR Switch
2. 4 Position LBOR Switch (V-blade or T-blade)
3. (3) 2 Position LBOR Switches

Fusing Options:
Bayonets w/ isolation links or CLFs

Construction:
1. 5-legged core
2. Rectangular wound copper or aluminum windings
3. Carbon reinforced or stainless steel tank
4. Steel divider between HV and LV cabinets
5. Penta-head captive bolt

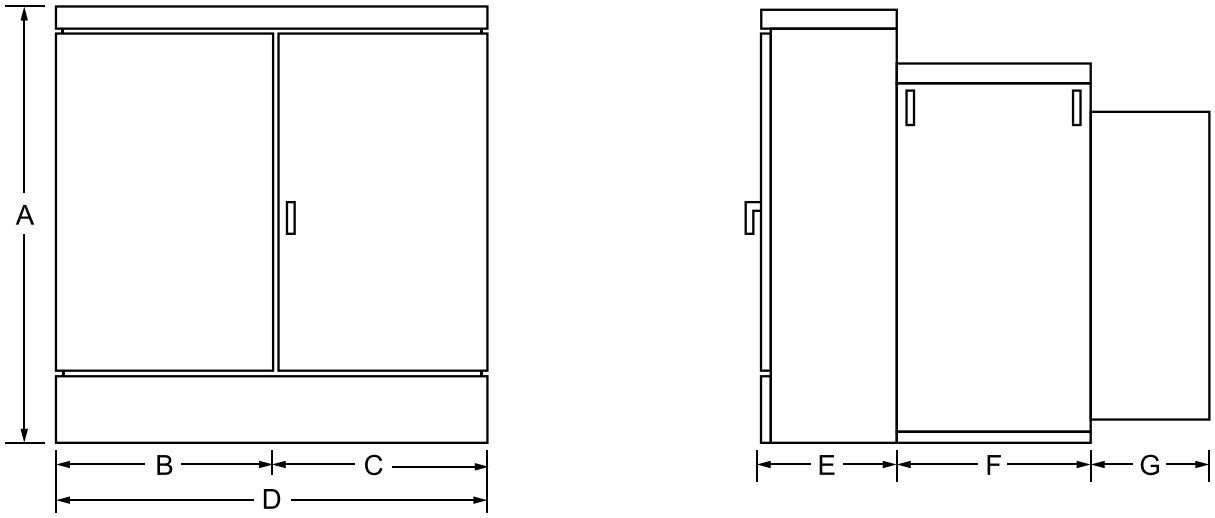
Optional Design Features & Accessories:
1. Gauges w/ Contacts
2. External drain and sample valve
3. Electrostatic Shielding
4. K-Factor Design
5. Step-up Design
6. Surge-Arresters

AVAILABLE RATINGS

Sizes (kVA)	45, 75, 112.5, 150, 225, 300, 500, 750, 1000, 1250, 1500, 1750, 2000, 2250, 2500, 2750 3000, 3750, 5000
Frequency	60 Hz or 50 Hz
Cooling Class	ONAN or KNAN
Temp Rise	55°C, 65°C, 55/65°C
Voltages	Available in Δ or Y configuration
600V	208 240 416 480 600
2.5kv – 5kv	2400 4160 4800
15kV	12000 12470 13200 13800 14400
25kV	20780 21600 22900 24940 26400
35kV	33000 34500

Maddox

PADMOUNT TRANSFORMER OUTLINE



APPROXIMATE TRANSFORMER DIMENSIONS

kVA	A	B	C	D	E	F	G	Gallons	Weight (Lbs)
300	59”	29.5”	22”	51.5”	20.5”	24”	10”	196	4,056
500	59”	33”	26.5”	59.5”	24”	26.5”	10”	210	5,023
750	73”	36”	29”	65”	24”	26.5”	10”	358	7,664
1000	73”	36”	29”	65”	24”	27”	10”	354	8,530
1500	73”	36”	35.5”	71.5	24”	33.5”	10”	410	10,782
2000	75”	39.5”	28”	67.5	24”	35”	27”	433	12,490
2500	78”	39.5”	35.5”	75.5”	24”	37.5”	22.5”	545	14,246
3000	84”	30.5”	32”	62.5”	24”	37.5”	38”	550	14,014
3750	75”	50.5”	30”	80.5”	25.5”	42”	38”	730	17,785

THREE PHASE MADDOX PADMOUNT TRANSFORMER

COMMON ACCESSORIES

1. Bayonet Fuses

2. Loadbreak Switch

3.Tap-changer

4. Bushings

5. Parking Stand

6. Gauges

SOLECTRIA® XGI 1500-250 SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

FEATURES

- NEW and MORE POWERFUL!
  - XGI 1500-250/250-600
  - XGI 1500-225-600 (Selectable: 225kW/225kVA or 225kW/250kVA)
  - XGI 1500-200/200-480
  - XGI 1500-175-480 (Selectable: 175kW/175kVA or 175kW/200kVA)
- Industry-leading maximum DC/AC Ratio of 2.0
- Accepts two input PV Output Circuits, with no overcurrent protection required
- Made in the USA with global components
- Buy American Act (BAA) compliant
- 99.0% peak efficiency
- Flexible solution for distributed and centralized system architecture
- Advanced grid-support functionality Rule 21/UL1741SB
- Robust, dependable and built to last
- Lowest O&M and installation costs
- Access all inverters on site via WiFi from one location
- Remote diagnostics and firmware upgrades
- SunSpec Modbus Certified

OPTIONS

- PV Source Circuit Combiners
- Web-based monitoring
- Extended warranty

MADE IN THE USA
With U.S. and Global Components

Yaskawa Solectria Solar is pleased to introduce its most powerful XGI 1500 inverters, with the XGI 1500-250 models at 600 Vac, and the XGI 1500-200 models for 480 Vac service.

The XGI 1500-250 and XGI 1500-200 feature SiC technology, high power and high efficiency that places them at the top end of the utility-scale string inverters in the market.

Yaskawa Solectria Solar designs all XGI 1500 utility-scale string inverters for high reliability and builds them with the highest quality components -- selected, tested and proven to last beyond their warranty. The XGI 1500 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL 1741 standards for safety.

The XGI 1500 inverters provide ideal solutions for ground-mounted utility-scale PV systems, with models available for service connections at 600 Vac and 480 Vac. Designed and engineered in Lawrence, MA, the SOLECTRIA XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL. The XGI 1500 inverters are Made in the USA with global components, and are compliant with the Buy American Act.

YASKAWA
SOLECTRIA SOLAR

SPECIFICATIONS

PRODUCT SPECIFICATION		XGI 1500 INVERTER MODEL			
		XGI 1500 250/250-600	XGI 1500 225-600	XGI 1500 200/200-480	XGI 1500 175-480
DC Input	Absolute Maximum Input Voltage	1500 VDC			
	Maximum Power Voltage Range (MPPT)	860-1250 VDC		750-1250 VDC	
	Operating Voltage Range (MPPT)	860-1450 VDC		750-1450 VDC	
	Number of MPP Trackers	1 MPPT			
	Maximum Operating Input Current	296.7 A	267 A	237.3 A	207.6 A
	Maximum Operating PV Power	255 kW	230 kW	204 kW	179 kW
	Maximum DC/AC Ratio | Max Rated PV Power	2.0 | 500 kW	2.22 | 500 kW	2.5 | 500 kW	2.86 | 500 kW
	Max Rated PV Short-Circuit Current (∑Isc x 1.25)	800 A			
AC Output	Nominal Output Voltage	600 VAC, 3-Phase		480 VAC, 3-Phase	
	AC Voltage Range	-12% to +10%			
	Continuous Real Output Power	250 kW	225 kW	200 kW	175 kW
	Continuous Apparent Output Power (kVA)	250	250 225	200	200 175
	Maximum Output Current (A_{RMS})	240.6	XGI 1500-225/225: 216.5 225/250: 240.6	240.6	XGI 1500-175/175: 210.5 175/200: 240.6
	Fault Current Contribution (1 cycle RMS)	390 A	390 A 351 A	312 A	312 A 273 A
	Conductor Compatibility	600 kcmil max, Cu or Alum, 1 or 2 conductors with lugs			
	Nominal Output Frequency	60 Hz			
	Power Factor (Unity default)	+/- 0.80 Adjustable			
	Total Harmonic Distortion (THD) @ Rated Load	< 3%			
	Grid Connection Type	3-Ph + N/GND			
Efficiency	Peak Efficiency	99.0%			
	CEC Average Efficiency	98.5%			
	Tare Loss	<1 W			
Temperature	Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)			
	De-Rating Temperature	113°F (45°C)	127°F (53°C)	113°F (45°C)	131°F (55°C)
	Storage Temperature Range	-40°F to 167°F (-40°C to 75°C)			
	Relative Humidity (non-condensing)	0 - 95%			
	Operating Altitude	9,840 ft (3 km)			
Communications	Advanced Graphical User Interface	WiFi			
	Communication Interface	Ethernet			
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP			
	Web-Based Monitoring	Optional			
	Firmware Updates	Remote and Local			
Testing & Certifications	Safety Listings & Certifications	UL 1741, IEEE 1547, UL 1998, UL 1699b Photovoltaic Arc-Fault Circuit Protection Certified			
	Advanced Grid Support Functionality	Rule 21, UL 1741SB			
	Testing Agency	ETL			
	FCC Compliance	FCC Part 15 (Subpart B, Class A)			
Warranty	Standard and Options	5 Years Standard; Option for 10 Years			
Enclosure	Acoustic Noise Rating	73 dBA @ 1 m ; 67dBA @ 3 m			
	DC Disconnect	Integrated 2-Pole 400 A DC Disconnect			
	Mounting Angle	Vertical only			
	Dimensions	Height: 29.5 in. (750 mm) | Width: 44.3 in. (1125 mm) | Depth: 15.4 in. (390 mm)			
	Weight	290 lbs (131.5 kg)			
	Enclosure Rating and Finish	NEMA 4X, IEC IP66, Type 3R, Polyester Powder-Coated Aluminum			

IT'S PERSONAL

EXHIBIT S: HEALTH & SAFETY STUDIES

WHITE PAPER

Health and Safety Impacts of Solar Photovoltaics

By Tommy Cleveland
May 2017

Contents

1.1 • Project Installation / Construction.....4
1.2 • System Components | 1.2.1 Solar Panels: Construction and Durability.....5
1.2.2 • Photovoltaic (PV) Technologies.....7
1.2.3. • Panel End-of-Life Management.....10
1.2.4 • Non-Panel System Components (racking, wiring, inverter, transformer)..12
1.4 • Operations and Maintenance – Panel Washing and Vegetation Control....13
2 • Electromagnetic Fields (EMF).....14
3 • Electric Shock and Arc Flash Hazards 16
4 • Fire Safety.....16
Summary.....17

Health and Safety Impacts of Solar Photovoltaics

The increasing presence of utility-scale solar photovoltaic (PV) systems (sometimes referred to as solar farms) is a rather new development in North Carolina's landscape. Due to the new and unknown nature of this technology, it is natural for communities near such developments to be concerned about health and safety impacts. Unfortunately, the quick emergence of utility-scale solar has cultivated fertile grounds for myths and half-truths about the health impacts of this technology, which can lead to unnecessary fear and conflict.

Photovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to their neighbors. The most important dangers posed are increased highway traffic during the relative short construction period and dangers posed to trespassers of contact with high voltage equipment. This latter risk is mitigated by signage and the security measures that industry uses to deter trespassing. As will be discussed in more detail below, risks of site contamination are much less than for most other industrial uses because PV technologies employ few toxic chemicals and those used are used in very small quantities. Due to the reduction in the pollution from fossil-fuel-fired electric generators, the overall impact of solar development on human health is overwhelmingly positive. This pollution reduction results from a partial replacement of fossil-fuel fired generation by emission-free PV-generated electricity, which reduces harmful sulfur dioxide (SO2), nitrogen oxides (NOx), and fine particulate matter (PM2.5). Analysis from the National Renewable Energy Laboratory and the Lawrence Berkeley National Laboratory, both affiliates of the U.S. Department of Energy, estimates the health-related air quality benefits to the southeast region from solar PV generators to be worth 8.0 ¢ per kilowatt-hour of solar generation.[1] This is in addition to the value of the electricity and suggests that the air quality benefits of solar are worth more than the electricity itself.

Even though we have only recently seen large-scale installation of PV technologies, the technology and its potential impacts have been studied since the 1950s. A combination of this solar-specific research and general scientific research has led to the scientific community having a good understanding of the science behind potential health and safety impacts of solar energy. This paper utilizes the latest scientific literature and knowledge of solar practices in N.C. to address the health and safety risks associated with solar PV technology. These risks are extremely small, far less than those associated with common activities such as driving a car, and vastly outweighed by health benefits of the generation of clean electricity.

This paper addresses the potential health and safety impacts of solar PV development in North Carolina, organized into the following four categories:
(1) Hazardous Materials
(2) Electromagnetic Fields (EMF)
(3) Electric Shock and Arc Flash
(4) Fire Safety

1 • Hazardous Materials

One of the more common concerns towards solar is that the panels (referred to as "modules" in the solar industry) consist of toxic materials that endanger public health. However, as shown in this section, solar energy systems may contain small amounts of toxic materials, but these materials do not endanger public health. To understand potential toxic hazards coming from a solar project, one

must understand system installation, materials used, the panel end-of-life protocols, and system operation. This section will examine these aspects of a solar farm and the potential for toxicity impacts in the following subsections:

(1.2) Project Installation/Construction
(1.2) System Components
  1.2.1 Solar Panels: Construction and Durability
  1.2.2 Photovoltaic technologies
    (a) Crystalline Silicon
    (b) Cadmium Telluride (CdTe)
    (c) CIS/CIGS
  1.2.3 Panel End of Life Management
  1.2.4 Non-panel System Components
(1.3) Operations and Maintenance

1.1 Project Installation/ Construction

The system installation, or construction, process does not require toxic chemicals or processes. The site is mechanically cleared of large vegetation, fences are constructed, and the land is surveyed to layout exact installation locations. Trenches for underground wiring are dug and support posts are driven into the ground. The solar panels are bolted to steel and aluminum support structures and wired together. Inverter pads are installed, and an inverter and transformer are installed on each pad. Once everything is connected, the system is tested, and only then turned on.

Figure 1: Utility-scale solar facility (5 MWAC) located in Catawba County. *Source: Strata Solar*

1.2 · System Components

1.2.1 Solar Panels: Construction and Durability

Solar PV panels typically consist of glass, polymer, aluminum, copper, and semiconductor materials that can be recovered and recycled at the end of their useful life.[2] Today there are two PV technologies used in PV panels at utility-scale solar facilities, silicon, and thin film. As of 2016, all thin film used in North Carolina solar facilities are cadmium telluride (CdTe) panels from the US manufacturer First Solar, but there are other thin film PV panels available on the market, such as Solar Frontier's CIGS panels. Crystalline silicon technology consists of silicon wafers which are made into cells and assembled into panels, thin film technologies consist of thin layers of semiconductor material deposited onto glass, polymer or metal substrates. While there are differences in the components and manufacturing processes of these two types of solar technologies, many aspects of their PV panel construction are very similar. Specifics about each type of PV chemistry as it relates to toxicity are covered in subsections a, b, and c in section 1.2.2; on crystalline silicon, cadmium telluride, and CIS/CIGS respectively. The rest of this section applies equally to both silicon and thin film panels.

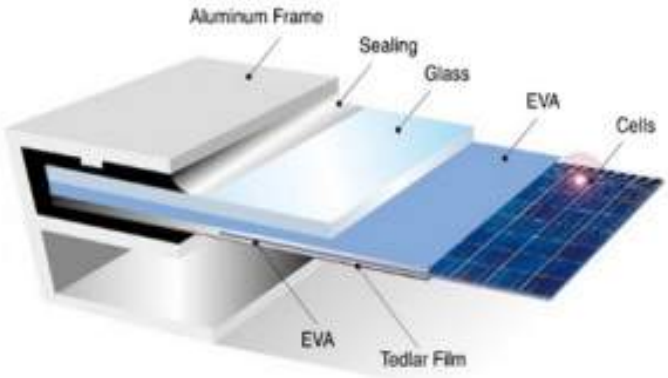


Figure 2: Components of crystalline silicon panels. The vast majority of silicon panels consist of a glass sheet on the topside with an aluminum frame providing structural support. Image Source: www.riteksolar.com.tw

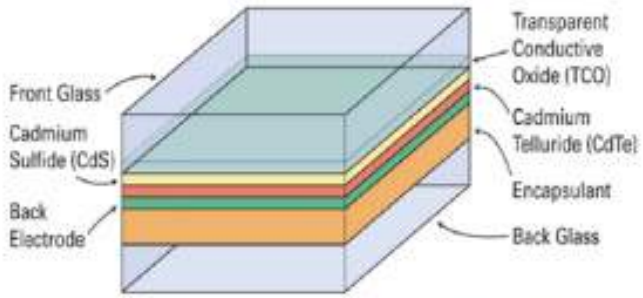


Figure 3: Layers of a common frameless thin-film panel (CdTe). Many thin film panels are frameless, including the most common thin-film panels, First Solar's CdTe. Frameless panels have protective glass on both the front and back of the panel. Layer thicknesses not to scale. Image Source: www.homepower.com

To provide decades of corrosion-free operation, PV cells in PV panels are encapsulated from air and moisture between two layers of plastic. The encapsulation layers are protected on the top with a layer of tempered glass and on the backside with a polymer sheet. Frameless modules include a protective layer of glass on the rear of the panel, which may also be tempered. The plastic ethylene-vinyl acetate (EVA) commonly provides the cell encapsulation. For decades, this same material has been used between layers of tempered glass to give car windshields and hurricane windows their great strength. In the same way that a car windshield cracks but stays intact, the EVA layers in PV panels keep broken panels intact (see Figure 4). Thus, a damaged module does not generally create small pieces of debris; instead, it largely remains together as one piece.

Figure 4: The mangled PV panels in this picture illustrate the nature of broken solar panels; the glass cracks but the panel is still in one piece. Image Source: http://img.alibaba.com/photo/115259576/broken_solar_panel.jpg

PV panels constructed with the same basic components as modern panels have been installed across the globe for well over thirty years.[3] The long-term durability and performance demonstrated over these decades, as well as the results of accelerated lifetime testing, helped lead to an industrystandard 25-year power production warranty for PV panels. These power warranties warrant a PV panel to produce at least 80% of their original nameplate production after 25 years of use. A recent SolarCity and DNV GL study reported that today's quality PV panels should be expected to reliably and efficiently produce power for thirty-five years.[4]

Local building codes require all structures, including ground mounted solar arrays, to be engineered to withstand anticipated wind speeds, as defined by the local wind speed requirements. Many racking products are available in versions engineered for wind speeds of up to 150 miles per hour, which is significantly higher than the wind speed requirement anywhere in North Carolina. The strength of PV mounting structures were demonstrated during Hurricane Sandy in 2012 and again during Hurricane Matthew in 2016. During Hurricane Sandy, the many large-scale solar facilities in New Jersey and New York at that time suffered only minor damage.[5] In the fall of 2016, the US and Caribbean experienced destructive winds and torrential rains from Hurricane Matthew, yet one leading solar tracker manufacturer reported that their numerous systems in the impacted area received zero damage from wind or flooding.[6]

In the event of a catastrophic event capable of damaging solar equipment, such as a tornado, the system will almost certainly have property insurance

that will cover the cost to cleanup and repair the project. It is in the best interest of the system owner to protect their investment against such risks. It is also in their interest to get the project repaired and producing full power as soon as possible. Therefore, the investment in adequate insurance is a wise business practice for the system owner. For the same reasons, adequate insurance coverage is also generally a requirement of the bank or firm providing financing for the project.

1.2.2 Photovoltaic (PV) Technologies

a. Crystalline Silicon

This subsection explores the toxicity of silicon-based PV panels and concludes that they do not pose a material risk of toxicity to public health and safety. Modern crystalline silicon PV panels, which account for over 90% of solar PV panels installed today, are, more or less, a commodity product. The overwhelming majority of panels installed in North Carolina are crystalline silicon panels that are informally classified as Tier I panels. Tier I panels are from well-respected manufacturers that have a good chance of being able to honor warranty claims. Tier I panels are understood to be of high quality, with predictable performance, durability, and content. Well over 80% (by weight) of the content of a PV panel is the tempered glass front and the aluminum frame, both of which are common building materials. Most of the remaining portion are common plastics, including polyethylene terephthalate in the backsheet, EVA encapsulation of the PV cells, polyphenyl ether in the junction box, and polyethylene insulation on the wire leads. The active, working components of the system are the silicon photovoltaic cells, the small electrical leads connecting them together, and to the wires coming out of the back of the panel. The electricity generating and conducting components makeup less than 5% of the weight of most panels. The PV cell itself is nearly 100% silicon, and silicon is the second most common element in the Earth's crust. The silicon for PV cells is obtained by high-temperature processing of quartz sand (SiO2) that removes its oxygen molecules. The refined silicon is converted to a PV cell by adding extremely small amounts of boron and phosphorus, both of which are common and of very low toxicity.

The other minor components of the PV cell are also generally benign; however, some contain lead, which is a human toxicant that is particularly harmful to young children. The minor components include an extremely thin antireflective coating (silicon nitride or titanium dioxide), a thin layer of aluminum on the rear, and thin strips of silver alloy that are screen-printed on the front and rear of cell.[7] In order for the front and rear electrodes to make effective electrical contact with the proper layer of the PV cell, other materials (called glass frit) are mixed with the silver alloy and then heated to etch the metals into the cell. This glass frit historically contains a small amount of lead (Pb) in the form of lead oxide. The 60 or 72 PV cells in a PV panel are connected by soldering thin solder-covered copper tabs from the back of one cell to the front of the next cell. Traditionally a tin-based solder containing some lead (Pb) is used, but some manufacturers have switched to lead-free solder. The glass frit and/or the solder may contain trace amounts of other metals, potentially including some with human toxicity such as cadmium. However, testing to simulate the potential for leaching from broken panels, which is discussed in more detail below, did not find a potential toxicity threat from these trace elements. Therefore, the tiny amount of lead in the grass frit and the solder is the only part of silicon PV panels with a potential to create a negative health impact. However, as described below, the very limited amount of lead involved and its strong physical and chemical attachment to other components of the PV panel means that even in worst-case scenarios the health hazard it poses is insignificant.

As with many electronic industries, the solder in silicon PV panels has historically been a leadbased solder, often 36% lead, due to the superior properties of such solder. However, recent advances in lead-free solders have spurred a trend among PV panel manufacturers to reduce or remove the lead in their panels. According to the 2015 Solar Scorecard from the Silicon Valley Toxics Coalition, a group that tracks environmental responsibility of photovoltaic panel manufacturers, fourteen companies (increased from twelve companies in 2014) manufacture PV panels certified to meet the European Restriction of Hazardous Substances (RoHS) standard. This means that the amount of cadmium and lead in the panels they manufacture fall below the RoHS thresholds, which are set by the European Union and serve as the world's de facto standard for hazardous substances in manufactured goods.[8] The Restriction of Hazardous Substances (RoHS) standard requires that the maximum concentration found in any homogenous material in a produce is less than 0.01% cadmium and less than 0.10% lead, therefore, any solder can be no more than 0.10% lead.[9]

While some manufacturers are producing PV panels that meet the RoHS standard, there is no requirement that they do so because the RoHS Directive explicitly states that the directive does not apply to photovoltaic panels.[10] The justification for this is provided in item 17 of the current RoHS Directive: "The development of renewable forms of energy is one of the Union's key objectives, and the contribution made by renewable energy sources to environmental and climate objectives is crucial. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources (4) recalls that there should be coherence between those objectives and other Union environmental legislation. Consequently, this Directive should not prevent the development of renewable energy technologies that have no negative impact on health and the environment and that are sustainable and economically viable."

The use of lead is common in our modern economy. However, only about 0.5% of the annual lead consumption in the U.S. is for electronic solder for all uses; PV solder makes up only a tiny portion of this 0.5%. Close to 90% of lead consumption in the US is in batteries, which do not encapsulate the pounds of lead contained in each typical automotive battery. This puts the lead in batteries at great risk of leaching into the environment. Estimates for the lead in a single PV panel with lead-based solder range from 1.6 to 24 grams of lead, with 13g (less than half of an ounce) per panel seen most often in the literature.[11] At 13 g/panel[12], each panel contains one-half of the lead in a typical 12-gauge shotgun shell. This amount equates to roughly 1/750th of the lead in a single car battery. In a panel, it is all durably encapsulated from air or water for the full life of the panel.[14]

As indicated by their 20 to 30-year power warranty, PV modules are designed for a long service life, generally over 25 years. For a panel to comply with its 25-year power warranty, its internal components, including lead, must be sealed from any moisture. Otherwise, they would corrode and the panel's output would fall below power warranty levels. Thus, the lead in operating PV modules is not at risk of release to the environment during their service lifetime. In extreme experiments, researchers have shown that lead can leach from crushed or pulverized panels.[15, 16] However, more real-world tests designed to represent typical trash compaction that are used to classify waste as hazardous or non-hazardous show no danger from leaching.[17,18] For more information about PV panel end-of-life, see the Panel Disposal section.

As illustrated throughout this section, silicon-based PV panels do not pose a material threat to public health and safety. The only aspect of the panels with potential toxicity concerns is the very small amount of lead in some panels. However, any lead in a panel is well sealed from environmental exposure for the operating lifetime of the solar panel and thus not at risk of release into the environment.

b. Cadmium Telluride (CdTe) PV Panels

This subsection examines the components of a cadmium telluride (CdTe) PV panel. Research demonstrates that they pose negligible toxicity risk to public health and safety while significantly reducing the public's exposure to cadmium by reducing coal emissions. As of mid-2016, a few hundred MWs of cadmium telluride (CdTe) panels, all manufactured by the U.S. company First Solar, have been installed in North Carolina.

Questions about the potential health and environmental impacts from the use of this PV technology are related to the concern that these panels contain cadmium, a toxic heavy metal. However, scientific studies have shown that cadmium telluride differs from cadmium due to its high chemical and thermal stability.[19] Research has shown that the tiny amount of cadmium in these panels does not pose a health or safety risk.[20] Further, there are very compelling reasons to welcome its adoption due to reductions in unhealthy pollution associated with burning coal. Every GWh of electricity generated by burning coal produces about 4 grams of cadmium air emissions.[21] Even though North Carolina produces a significant fraction of our electricity from coal, electricity from solar offsets much more natural gas than coal due to natural gas plants being able to adjust their rate of production more easily and quickly. If solar electricity offsets 90% natural gas and 10% coal, each 5-megawatt (5 MWAC, which is generally 7 MWDC) CdTe solar facility in North Carolina keeps about 157 grams, or about a third of a pound, of cadmium *out* of our environment.[22, 23]

Cadmium is toxic, but all the approximately 7 grams of cadmium in one CdTe panel is in the form of a chemical compound cadmium telluride,[24] which has 1/100th the toxicity of free cadmium.[25] Cadmium telluride is a very stable compound that is non-volatile and non-soluble in water. Even in the case of a fire, research shows that less than 0.1% of the cadmium is released when a CdTe panel is exposed to fire. The fire melts the glass and encapsulates over 99.9% of the cadmium in the molten glass.[27]

It is important to understand the source of the cadmium used to manufacture CdTe PV panels. The cadmium is a byproduct of zinc and lead refining. The element is collected from emissions and waste streams during the production of these metals and combined with tellurium to create the CdTe used in PV panels. If the cadmium were not collected for use in the PV panels or other products, it would otherwise either be stockpiled for future use, cemented and buried, or disposed of.[28] Nearly all the cadmium in old or broken panels can be recycled which can eventually serve as the primary source of cadmium for new PV panels.[29]

Similar to silicon-based PV panels, CdTe panels are constructed of a tempered glass front, one instead of two clear plastic encapsulation layers, and a rear heat strengthened glass backing (together >98% by weight). The final product is built to withstand exposure to the elements without significant damage for over 25 years. While not representative of damage that may occur in the field or even at a landfill, laboratory evidence has illustrated that when panels are ground into a fine powder, very acidic water is able to leach portions of the cadmium and tellurium,[30] similar to the process used to recycle CdTe panels. Like many silicon-based panels, CdTe panels are reported (as far back ask 1998[31] to pass the EPA's Toxic Characteristic Leaching Procedure (TCLP) test, which tests the potential for crushed panels in a landfill to leach hazardous substances into groundwater.[32] Passing this test means that they are classified as non-hazardous waste and can be deposited in landfills.[33,34] For more information about PV panel end-of-life, see the Panel Disposal section.

There is also concern of environmental impact resulting from potential catastrophic events involving CdTe PV panels. An analysis of worst-case scenarios for environmental impact from CdTe PV

panels, including earthquakes, fires, and floods, was conducted by the University of Tokyo in 2013. After reviewing the extensive international body of research on CdTe PV technology, their report concluded, "Even in the worst-case scenarios, it is unlikely that the Cd concentrations in air and sea water will exceed the environmental regulation values."[35] In a worst-case scenario of damaged panels abandoned on the ground, insignificant amounts of cadmium will leach from the panels. This is because this scenario is much less conducive (larger module pieces, less acidity) to leaching than the conditions of the EPA's TCLP test used to simulate landfill conditions, which CdTe panels pass.[36]

First Solar, a U.S. company, and the only significant supplier of CdTe panels, has a robust panel take-back and recycling program that has been operating commercially since 2005.[37] The company states that it is "committed to providing a commercially attractive recycling solution for photovoltaic (PV) power plant and module owners to help them meet their module (end of life) EOL obligation simply, costeffectively and responsibly." First Solar global recycling services to their customers to collect and recycle panels once they reach the end of productive life whether due to age or damage. These recycling service agreements are structured to be financially attractive to both First Solar and the solar panel owner. For First Solar, the contract provides the company with an affordable source of raw materials needed for new panels and presumably a diminished risk of undesired release of Cd. The contract also benefits the solar panel owner by allowing them to avoid tipping fees at a waste disposal site. The legal contract helps provide peace of mind by ensuring compliance by both parties when considering the continuing trend of rising disposal costs and increasing regulatory requirements.

c. CIS/CIGS and other PV technologies

Copper indium gallium selenide PV technology, often referred to as CIGS, is the second most common type of thin-film PV panel but a distant second behind CdTe. CIGS cells are composed of a thin layer of copper, indium, gallium, and selenium on a glass or plastic backing. None of these elements are very toxic, although selenium is a regulated metal under the Federal Resource Conservation and Recovery Act (RCRA).[38] The cells often also have an extremely thin layer of cadmium sulfide that contains a tiny amount of cadmium, which is toxic. The promise of high efficiency CIGS panels drove heavy investment in this technology in the past. However, researchers have struggled to transfer high efficiency success in the lab to low-cost full-scale panels in the field.[39] Recently, a CIGS manufacturer based in Japan, Solar Frontier, has achieved some market success with a rigid, glass-faced CIGS module that competes with silicon panels. Solar Frontier produces the majority of CIS panels on the market today.[40] Notably, these panels are RoHS compliant,[41] thus meeting the rigorous toxicity standard adopted by the European Union even thought this directive exempts PV panels. The authors are unaware of any completed or proposed utility-scale system in North Carolina using CIS/CIGS panels.

1.2.3 Panel End-of-Life Management

Concerns about the volume, disposal, toxicity, and recycling of PV panels are addressed in this subsection. To put the volume of PV waste into perspective, consider that by 2050, when PV systems installed in 2020 will reach the end of their lives, it is estimated that the global annual PV panel waste tonnage will be 10% of the 2014 global e-waste tonnage.[42] In the U.S., end-of-life disposal of solar products is governed by the Federal Resource Conservation and Recovery Act (RCRA), as well as state policies in some situations. RCRA separates waste into hazardous (not accepted at ordinary landfill) and solid waste (generally accepted

at ordinary landfill) based on a series of rules. According to RCRA, the way to determine if a PV panel is classified as hazardous waste is the Toxic Characteristic Leaching Procedure (TCLP) test. This EPA test is designed to simulate landfill disposal and determine the risk of hazardous substances leaching out of the landfill.[43,44,45] Multiple sources report that most modern PV panels (both crystalline silicon and cadmium telluride) pass the TCLP test.[46,47] Some studies found that some older (1990s) crystalline silicon panels, and perhaps some newer crystalline silicon panels (specifics are not given about vintage of panels tested), do not pass the lead (Pb) leachate limits in the TCLP test.[48,49]

The test begins with the crushing of a panel into centimeter-sized pieces. The pieces are then mixed in an acid bath. After tumbling for eighteen hours, the fluid is tested for forty hazardous substances that all must be below specific threshold levels to pass the test. Research comparing TCLP conditions to conditions of damaged panels in the field found that simulated landfill conditions provide overly conservative estimates of leaching for field-damaged panels.[50] Additionally, research in Japan has found no detectable Cd leaching from cracked CdTe panels when exposed to simulated acid rain.[51]

Although modern panels can generally be landfilled, they can also be recycled. Even though recent waste volume has not been adequate to support significant PV-specific recycling infrastructure, the existing recycling industry in North Carolina reports that it recycles much of the current small volume of broken PV panels. In an informal survey conducted by the NC Clean Energy Technology Center survey in early 2016, seven of the eight large active North Carolina utility-scale solar developers surveyed reported that they send damaged panels back to the manufacturer and/or to a local recycler. Only one developer reported sending damaged panels to the landfill.

The developers reported at that time that they are usually paid a small amount per panel by local recycling firms. In early 2017, a PV developer reported that a local recycler was charging a small fee per panel to recycle damaged PV panels. The local recycling firm known to authors to accept PV panels described their current PV panel recycling practice as of early 2016 as removing the aluminum frame for local recycling and removing the wire leads for local copper recycling. The remainder of the panel is sent to a facility for processing the non-metallic portions of crushed vehicles, referred to as “fluff” in the recycling industry.[52] This processing within existing general recycling plants allows for significant material recovery of major components, including glass which is 80% of the module weight, but at lower yields than PV-specific recycling plants. Notably almost half of the material value in a PV panel is in the few grams of silver contained in almost every PV panel produced today. In the long-term, dedicated PV panel recycling plants can increase treatment capacities and maximize revenues resulting in better output quality and the ability to recover a greater fraction of the useful materials.[53] PV-specific panel recycling technologies have been researched and implemented to some extent for the past decade, and have been shown to be able to recover over 95% of PV material (semiconductor) and over 90% of the glass in a PV panel.[54]

A look at global PV recycling trends hints at the future possibilities of the practice in our country. Europe installed MW-scale volumes of PV years before the U.S. In 2007, a public-private partnership between the European Union and the solar industry set up a voluntary collection and recycling system called PV CYCLE. This arrangement was later made mandatory under the EU’s WEEE directive, a program for waste electrical and electronic equipment.[55] Its member companies (PV panel producers) fully finance the association. This makes it possible for end-users to return the member companies’ defective panels for recycling at any of the over 300 collection points around

Europe without added costs. Additionally, PV CYCLE will pick up batches of 40 or more used panels at no cost to the user. This arrangement has been very successful, collecting and recycling over 13,000 tons by the end of 2015.[56]

In 2012, the WEEE Directive added the end-of-life collection and recycling of PV panels to its scope.[57] This directive is based on the principle of extended-producer-responsibility. It has a global impact because producers that want to sell into the EU market are legally responsible for end-of-life management. Starting in 2018, this directive targets that 85% of PV products "put in the market" in Europe are recovered and 80% is prepared for reuse and recycling.

The success of the PV panel collection and recycling practices in Europe provides promise for the future of recycling in the U.S. In mid-2016, the US Solar Energy Industry Association (SEIA) announced that they are starting a national solar panel recycling program with the guidance and support of many leading PV panel producers.[58] The program will aggregate the services offered by recycling vendors and PV manufacturers, which will make it easier for consumers to select a cost-effective and environmentally responsible end-of-life management solution for their PV products. According to SEIA, they are planning the program in an effort to make the entire industry landfill-free. In addition to the national recycling network program, the program will provide a portal for system owners and consumers with information on how to responsibly recycle their PV systems.

While a cautious approach toward the potential for negative environmental and/or health impacts from retired PV panels is fully warranted, this section has shown that the positive health impacts of reduced emissions from fossil fuel combustion from PV systems more than outweighs any potential risk. Testing shows that silicon and CdTe panels are both safe to dispose of in landfills, and are also safe in worst case conditions of abandonment or damage in a disaster. Additionally, analysis by local engineers has found that the current salvage value of the equipment in a utility scale PV facility generally exceeds general contractor estimates for the cost to remove the entire PV system.[59,60,61]

1.2.4 Non-Panel System Components

(racking, wiring, inverter, transformer)

While previous toxicity subsections discussed PV panels, this subsection describes the non-panel components of utility-scale PV systems and investigates any potential public health and safety concerns. The most significant non-panel component of a ground-mounted PV system is the mounting structure of the rows of panels, commonly referred to as "racking". The vertical post portion of the racking is galvanized steel and the remaining aboveground racking components are either galvanized steel or aluminum, which are both extremely common and benign building materials. The inverters that make the solar generated electricity ready to send to the grid have weather-proof steel enclosures that protect the working components from the elements. The only fluids that they might contain are associated with their cooling systems, which are not unlike the cooling system in a computer. Many inverters today are RoHS compliant.

The electrical transformers (to boost the inverter output voltage to the voltage of the utility connection point) do contain a liquid cooling oil. However, the fluid used for that function is either a nontoxic mineral oil or a biodegradable non-toxic vegetable oil, such as BIOTEMP from ABB. These vegetable transformer oils have the additional advantage of being much less flammable than traditional mineral oils. Significant health hazards are associated with old transformers containing cooling oil with toxic PCBs. Transfers with PCB-containing oil were common before PCBs were outlawed in the U.S. in 1979. PCBs still exist in older transformers in the field across the country.

Other than a few utility research sites, there are no batteries on- or off-site associated with utility-scale solar energy facilities in North Carolina, avoiding any potential health or safety concerns related to battery technologies. However, as battery technologies continue to improve and prices continue to decline we are likely to start seeing some batteries at solar facilities. Lithium ion batteries currently dominate the world utility-scale battery market, which are not very toxic. No non-panel system components were found to pose any health or environmental dangers.

1.4 Operations and Maintenance – Panel Washing and Vegetation Control

Throughout the eastern U.S., the climate provides frequent and heavy enough rain to keep panels adequately clean. This dependable weather pattern eliminates the need to wash the panels on a regular basis. Some system owners may choose to wash panels as often as once a year to increase production, but most in N.C. do not regularly wash any PV panels. Dirt build up over time may justify panel washing a few times over the panels' lifetime; however, nothing more than soap and water are required for this activity.

The maintenance of ground-mounted PV facilities requires that vegetation be kept low, both for aesthetics and to avoid shading of the PV panels. Several approaches are used to maintain vegetation at NC solar facilities, including planting of limited-height species, mowing, weed-eating, herbicides, and grazing livestock (sheep). The following descriptions of vegetation maintenance practices are based on interviews with several solar developers as well as with three maintenance firms that together are contracted to maintain well over 100 of the solar facilities in N.C. The majority of solar facilities in North Carolina maintain vegetation primarily by mowing. Each row of panels has a single row of supports, allowing sickle mowers to mow under the panels. The sites usually require mowing about once a month during the growing season. Some sites employ sheep to graze the site, which greatly reduces the human effort required to maintain the vegetation and produces high quality lamb meat.[62]

In addition to mowing and weed eating, solar facilities often use some herbicides. Solar facilities generally do not spray herbicides over the entire acreage; rather they apply them only in strategic locations such as at the base of the perimeter fence, around exterior vegetative buffer, on interior dirt roads, and near the panel support posts. Also unlike many row crop operations, solar facilities generally use only general use herbicides, which are available over the counter, as opposed to restricted use herbicides commonly used in commercial agriculture that require a special restricted use license. The herbicides used at solar facilities are primarily 2-4-D and glyphosate (Round-up®), which are two of the most common herbicides used in lawns, parks, and agriculture across the country. One maintenance firm that was interviewed sprays the grass with a class of herbicide known as a growth regulator in order to slow the growth of grass so that mowing is only required twice a year. Growth regulators are commonly used on highway roadsides and golf courses for the same purpose. A commercial pesticide applicator license is required for anyone other than the landowner to apply herbicides, which helps ensure that all applicators are adequately educated about proper herbicide use and application. The license must be renewed annually and requires passing of a certification exam appropriate to the area in which the applicator wishes to work. Based on the limited data available, it appears that solar facilities in N.C. generally use significantly less herbicides per acre than most commercial agriculture or lawn maintenance services.

2. Electromagnetic Fields (EMF)

PV systems do not emit any material during their operation; however, they do generate electromagnetic fields (EMF), sometimes referred to as radiation. EMF produced by electricity is non-ionizing radiation, meaning the radiation has enough energy to move atoms in a molecule around (experienced as heat), but not enough energy to remove electrons from an atom or molecule (ionize) or to damage DNA. As shown below, modern humans are all exposed to EMF throughout our daily lives without negative health impact. Someone outside of the fenced perimeter of a solar facility is not exposed to significant EMF from the solar facility. Therefore, there is no negative health impact from the EMF produced in a solar farm. The following paragraphs provide some additional background and detail to support this conclusion.

Since the 1970s, some have expressed concern over potential health consequences of EMF from electricity, but no studies have ever shown this EMF to cause health problems.[63] These concerns are based on some epidemiological studies that found a slight increase in childhood leukemia associated with average exposure to residential power-frequency magnetic fields above 0.3 to 0.4 μT (microteslas) (equal to 3.0 to 4.0 mG (milligauss)). μT and mG are both units used to measure magnetic field strength. For comparison, the average exposure for people in the U.S. is one mG or 0.1 μT, with about 1% of the population with an average exposure in excess of 0.4 μT (or 4 mG).[64] These epidemiological studies, which found an association but not a causal relationship, led the World Health Organization's International Agency for Research on Cancer (IARC) to classify ELF magnetic fields as "possibly carcinogenic to humans". Coffee also has this classification. This classification means there is limited evidence but not enough evidence to designate as either a "probable carcinogen" or "human carcinogen". Overall, there is very little concern that ELF EMF damages public health. The only concern that does exist is for long-term exposure above 0.4 μT (4 mG) that may have some connection to increased cases of childhood leukemia. In 1997, the National Academies of Science were directed by Congress to examine this concern and concluded:

"Based on a comprehensive evaluation of published studies relating to the effects of power-frequency electric and magnetic fields on cells, tissues, and organisms (including humans), the conclusion of the committee is that the current body of evidence does not show that exposure to these fields presents a human-health hazard. Specifically, no conclusive and consistent evidence shows that exposures to residential electric and magnetic fields produce cancer, adverse neurobehavioral effects, or reproductive and developmental effects."[65]

There are two aspects to electromagnetic fields, an electric field and a magnetic field. The electric field is generated by voltage and the magnetic field is generated by electric current, i.e., moving electrons. A task group of scientific experts convened by the World Health Organization (WHO) in 2005 concluded that there were no substantive health issues related to electric fields (0 to 100,000 Hz) at levels generally encountered by members of the public.[66] The relatively low voltages in a solar facility and the fact that electric fields are easily shielded (i.e., blocked) by common materials, such as plastic, metal, or soil means that there is no concern of negative health impacts from the electric fields generated by a solar facility. Thus, the remainder of this section addresses magnetic fields. Magnetic fields are not shielded by most common materials and thus can easily pass through them. Both types of fields are strongest close to the source of electric generation and weaken quickly with distance from the source.

The direct current (DC) electricity produced by PV panels produce stationary (0 Hz) electric and magnetic fields. Because of minimal concern about potential risks of stationary fields, little scientific research has examined stationary fields' impact on human health.[67] In even the largest PV facilities, the DC voltages and currents are not very high. One can illustrate the weakness of the EMF generated by a PV panel by placing a compass on an operating solar panel and observing that the needle still points north.

While the electricity throughout the majority of a solar site is DC electricity, the inverters convert this DC electricity to alternating current (AC) electricity matching the 60 Hz frequency of the grid. Therefore, the inverters and the wires delivering this power to the grid are producing non-stationary EMF, known as extremely low frequency (ELF) EMF, normally oscillating with a frequency of 60 Hz. This frequency is at the low-energy end of the electromagnetic spectrum. Therefore, it has less energy than other commonly encountered types of non-ionizing radiation like radio waves, infrared radiation, and visible light.

The wide use of electricity results in background levels of ELF EMFs in nearly all locations where people spend time – homes, workplaces, schools, cars, the supermarket, etc. A person's average exposure depends upon the sources they encounter, how close they are to them, and the amount of time they spend there.[68] As stated above, the average exposure to magnetic fields in the U.S. is estimated to be around one mG or 0.1 μT, but can vary considerably depending on a person's exposure to EMF from electrical devices and wiring.[69] At times we are often exposed to much higher ELF magnetic fields, for example when standing three feet from a refrigerator the ELF magnetic field is 6 mG and when standing three feet from a microwave oven the field is about 50 mG.[70] The strength of these fields diminish quickly with distance from the source, but when surrounded by electricity in our homes and other buildings moving away from one source moves you closer to another. However, unless you are inside of the fence at a utility-scale solar facility or electrical substation it is impossible to get very close to the EMF sources. Because of this, EMF levels at the fence of electrical substations containing high voltages and currents are considered "generally negligible".[71,72]

The strength of ELF-EMF present at the perimeter of a solar facility or near a PV system in a commercial or residential building is significantly lower than the typical American's average EMF exposure.[73,74] Researchers in Massachusetts measured magnetic fields at PV projects and found the magnetic fields dropped to very low levels of 0.5 mG or less, and in many cases to less than background levels (0.2 mG), at distances of no more than nine feet from the residential inverters and 150 feet from the utility-scale inverters.[75] Even when measured within a few feet of the utility-scale inverter, the ELF magnetic fields were well below the International Commission on Non-Ionizing Radiation Protection's recommended magnetic field level exposure limit for the general public of 2,000 mG.[76] It is typical that utility scale designs locate large inverters central to the PV panels that feed them because this minimizes the length of wire required and shields neighbors from the sound of the inverter's cooling fans. Thus, it is rare for a large PV inverter to be within 150 feet of the project's security fence.

Anyone relying on a medical device such as pacemaker or other implanted device to maintain proper heart rhythm may have concern about the potential for a solar project to interfere with the operation of his or her device. However, there is no reason for concern because the EMF outside of the solar facility's fence is less than 1/1000 of the level at which manufacturers test for ELF EMF interference, which is 1,000 mG.[77] Manufacturers of potentially affected implanted devices often provide advice on electromagnetic interference that includes avoiding letting the implanted device get too close to certain sources of fields such as some

household appliances, some walkie-talkies, and similar transmitting devices. Some manufacturers' literature does not mention high-voltage power lines, some say that exposure in public areas should not give interference, and some advise not spending extended periods of time close to power lines.[78]

3. Electric Shock and Arc Flash Hazards

There is a real danger of electric shock to anyone entering any of the electrical cabinets such as combiner boxes, disconnect switches, inverters, or transformers; or otherwise coming in contact with voltages over 50 Volts.[79] Another electrical hazard is an arc flash, which is an explosion of energy that can occur in a short circuit situation. This explosive release of energy causes a flash of heat and a shockwave, both of which can cause serious injury or death. Properly trained and equipped technicians and electricians know how to safely install, test, and repair PV systems, but there is always some risk of injury when hazardous voltages and/or currents are present. Untrained individuals should not attempt to inspect, test, or repair any aspect of a PV system due to the potential for injury or death due to electric shock and arc flash, The National Electric Code (NEC) requires appropriate levels of warning signs on all electrical components based on the level of danger determined by the voltages and current potentials. The national electric code also requires the site to be secured from unauthorized visitors with either a six-foot chain link fence with three strands of barbed wire or an eight-foot fence, both with adequate hazard warning signs.

4. Fire Safety

The possibility of fires resulting from or intensified by PV systems may trigger concern among the general public as well as among firefighters. However, concern over solar fire hazards should be limited because only a small portion of materials in the panels are flammable, and those components cannot self-support a significant fire. Flammable components of PV panels include the thin layers of polymer encapsulates surrounding the PV cells, polymer backsheets (framed panels only), plastic junction boxes on rear of panel, and insulation on wiring. The rest of the panel is composed of non-flammable components, notably including one or two layers of protective glass that make up over three quarters of the panel's weight.

Heat from a small flame is not adequate to ignite a PV panel, but heat from a more intense fire or energy from an electrical fault can ignite a PV panel.[80] One real-world example of this occurred during July 2015 in an arid area of California. Three acres of grass under a thin film PV facility burned without igniting the panels mounted on fixed-tilt racks just above the grass.[81] While it is possible for electrical faults in PV systems on homes or commercial buildings to start a fire, this is extremely rare.[82] Improving understanding of the PV-specific risks, safer system designs, and updated fire-related codes and standards will continue to reduce the risk of fire caused by PV systems.

PV systems on buildings can affect firefighters in two primary ways, 1) impact their methods of fighting the fire, and 2) pose safety hazard to the firefighters. One of the most important techniques that firefighters use to suppress fire is ventilation of a building's roof. This technique allows superheated toxic gases to quickly exit the building. By doing so, the firefighters gain easier and safer access to the building, Ventilation of the roof also makes the challenge of putting out the fire easier. However, the placement of rooftop PV panels may interfere with ventilating the roof by limiting access to desired venting locations.

New solar-specific building code requirements are working to minimize these concerns. Also, the

latest National Electric Code has added requirements that make it easier for first responders to safely and effectively turn off a PV system. Concern for firefighting a building with PV can be reduced with proper fire fighter training, system design, and installation. Numerous organizations have studied fire fighter safety related to PV. Many organizations have published valuable guides and training programs. Some notable examples are listed below.

- The International Association of Fire Fighters (IAFF) and International Renewable Energy Council (IREC) partnered to create an online training course that is far beyond the PowerPoint click-andview model. The self-paced online course, "Solar PV Safety for Fire Fighters," features rich video content and simulated environments so fire fighters can practice the knowledge they've learned. www.iaff.org/pvsafetytraining
- Photovoltaic Systems and the Fire Code: Office of NC Fire Marshal
- Fire Service Training, Underwriter's Laboratory
- Firefighter Safety and Response for Solar Power Systems, National Fire Protection Research Foundation
- Bridging the Gap: Fire Safety & Green Buildings, National Association of State Fire Marshalls
- Guidelines for Fire Safety Elements of Solar Photovoltaic Systems, Orange County Fire Chiefs Association
- Solar Photovoltaic Installation Guidelines, California Department of Forestry & Fire Protection, Office of the State Fire Marshall
- PV Safety & Firefighting, Matthew Paiss, Homepower Magazine
- PV Safety and Code Development: Matthew Paiss, Cooperative Research Network

Summary

The purpose of this paper is to address and alleviate concerns of public health and safety for utility-scale solar PV projects. Concerns of public health and safety were divided and discussed in the four following sections: (1) Toxicity, (2) Electromagnetic Fields, (3) Electric Shock and Arc Flash, and (4) Fire. In each of these sections, the negative health and safety impacts of utility-scale PV development were shown to be negligible, while the public health and safety benefits of installing these facilities are significant and far outweigh any negative impacts.

---

1 Wiser, Ryan, Trieu Mai, Dev Millstein, Jordan Macknick, Alberta Carpenter, Stuart Cohen, Wesley Cole, Bethany Frew, and Garvin A. Heath. 2016. On the Path to SunShot: The Environmental and Public Health Benefits of Achieving High Penetrations of Solar Energy in the United States. Golden, CO: National Renewable Energy Laboratory. Accessed March 2017, www.nrel.gov/docs/fy16osti/65628.pdf

2 IRENA and IEA-PVPS (2016), "End-of-Life Management: Solar Photovoltaic Panels," International Renewable Energy Agency and International Energy Agency Photovoltaic Power Systems.

3 National Renewable Energy Laboratory, *Overview of Field Experience – Degradation Rates & Lifetimes*. September 14, 2015. Solar Power International Conference. Accessed March 2017, www.nrel.gov/docs/fy15osti/65040.pdf

4 Miesel et al. *SolarCity Photovoltaic Modules with 35 Year Useful Life*. June 2016. Accessed March 2017. http://www.solarcity.com/newsroom/reports/solarcity-photovoltaic-modules-35-year-useful-life

5 David Unger. *Are Renewables Stormproof? Hurricane Sandy Tests Solar, Wind*. November 2012. Accessed March 2017. http://www.csmonitor.com/Environment/Energy-Voices/2012/1119/Are-renewables-stormproof-Hurricane-Sandy-tests-solarwind & http://www.csmonitor.com/Environment/Energy-Voices/2012/1119/Are-renewables-stormproof-Hurricane-Sandytests-solar-wind

6 NEXTracker and 365 Pronto, *Tracking Your Solar Investment: Best Practices for Solar Tracker O&M*.

Accessed March 2017.
www.nextracker.com/content/uploads/2017/03/NEXTracker_OandM-WhitePaper_FINAL_March-2017.pdf
7 Christiana Honsberg, Stuart Bowden. *Overview of Screen Printed Solar Cells*. Accessed January 2017.
www.pveducation.org/pvcdrom/manufacturing/screen-printed
8 Silicon Valley Toxics Coalition. *2015 Solar Scorecard*. Accessed August 2016.
www.solarscorecard.com/2015/2015-SVTC-Solar-Scorecard.pdf
9 European Commission. *Recast of Reduction of Hazardous Substances (RoHS) Directive*. September 2016. Accessed August 2016.
http://ec.europa.eu/environment/waste/rohs_eee/index_en.htm
10 Official Journal of the European Union, *DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011* on the restriction of the use of certain hazardous substances in electrical and electronic equipment. June 2011. Accessed May 2017.
http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32011L0065&from=en
11 Giancarlo Giacchetta, Mariella Leporini, Barbara Marchetti. *Evaluation of the Environmental Benefits of New High Value Process for the Management of the End of Life of Thin Film Photovoltaic Modules*. July 2013. Accessed August 2016.
www.researchgate.net/publication/257408804_Evaluation_of_the_environmental_benefits_of_new_high_value_process_for_the_management_of_the_end_of_life_of_thin_film_photovoltaic_modules
12 European Commission. *Study on Photovoltaic Panels Supplementing The Impact Assessment for a Recast of the Weee Directive*. April 2011. Accessed August 2016.
http://ec.europa.eu/environment/waste/weee/pdf/Study%20on%20PVs%20Bio%20final.pdf
14 The amount of lead in a typical car battery is 21.4 pounds. Waste 360. Chaz Miller. *Lead Acid Batteries*. March 2006. Accessed August 2016.
http://waste360.com/mag/waste_leadacid_batteries_3
15 Okkenhaug G. *Leaching from CdTe PV module material results from batch, column and availability tests*. Norwegian Geotechnical Institute, NGI report No. 20092155-00-6-R; 2010
16 International Journal of Advanced Applied Physics Research. Renate Zapf-Gottwick1, et al. *Leaching Hazardous Substances out of Photovoltaic Modules*. January 2015. Accessed January 2016.
www.cosmosscholars.com/phms/index.php/ijaapr/article/download/485/298
17 ibid
18 Parikhit Sinha, et al. Evaluation of Potential Health and Environmental Impacts from End-Of-Life Disposal of Photovoltaics, Photovoltaics, 2014. Accessed May 2016
19 Bonnet, D. and P. Meyers. 1998. *Cadmium-telluride—Material for thin film solar cells*. J. Mater. Res., Vol. 13, No. 10, pp. 2740-2753
20 V. Fthenakis, K. Zweibel. *CdTe PV: Real and Perceived EHS Risks*. National Center ofr Photovoltaics and Solar Program Review Meeting, March 24-26, 2003. www.nrel.gov/docs/fy03osti/33561.pdf. Accessed May 2017
21 International Energy Agency Photovoltaic Power Systems Programme. *Life Cycle Inventories and Life Cycle Assessments of Photovoltaic Systems*. March 2015. Accessed August 2016.
http://iea-pvps.org/index.php?id=315
22 Data not available on fraction of various generation sources offset by solar generation in NC, but this is believed to be a reasonable rough estimate. The SunShot report entitled The Environmental and Public Health Benefits of Achieving High Penetrations of Solar Energy in the United States analysis contributes significant (% not provided) offsetting of coal-fired generation by solar PV energy in the southeast.
23 7 MWDC * 1.5 GWh/MWDC * 25 years * 0.93 degradation factor * (0.1 *4.65 grams/GWh + 0.9*0.2 grams/GWh)
24 Vasilis Fthenakis. *CdTe PV: Facts and Handy Comparisons*. January 2003. Accessed March 2017.
https://www.bnl.gov/pv/files/pdf/art_165.pdf
25 Kaczmar, S., *Evaluating the Read-Across Approach on CdTe Toxicity for CdTe Photovoltaics*, SETAC North America 32nd Annual Meeting, Boston, MA, November 2011. Available at:
ftp://ftp.co.imperial.ca.us/icpds/eir/campo-verdesolar/final/evaluating-toxicity.pdf, Accessed May 2017
27 V. M. Fthenakis et al, *Emissions and Encapsulation of Cadmium in CdTe PV Modules During Fires* Renewable Progress in Photovoltaics: Research and Application: Res. Appl. 2005; 13:1–11, Accessed March 2017, www.bnl.gov/pv/files/pdf/abs_179.pdf
28 Fthenakis V.M., *Life Cycle Impact Analysis of Cadmium in CdTe Photovoltaic Production*, Renewable

and Sustainable Energy Reviews, 8, 303-334, 2004. www.clca.columbia.edu/papers/Life_Cycle_Impact_Analysis_Cadmium_CdTe_Photovoltaic_production.pdf, Accessed May 2017
29 International Renewable Energy Agency. Stephanie Weckend, Andreas Wade, Garvin Heath. *End of Life Management: Solar Photovoltaic Panels*. June 2016. Accessed November 2016.
30 International Journal of Advanced Applied Physics Research. Renate Zapf-Gottwick1, et al. *Leaching Hazardous Substances out of Photovoltaic Modules*. January 2015. Accessed January 2016. www.cosmosscholars.com/phms/index.php/ijaapr/article/download/485/298
31 Cunningham D., Discussion about TCLP protocols, Photovoltaics and the Environment Workshop, July 23-24, 1998, Brookhaven National Laboratory, BNL-52557
32 Parikhit Sinha, et al. Evaluation of Potential Health and Environmental Impacts from End-Of-Life Disposal of Photovoltaics, Photovoltaics, 2014. Accessed May 2016
33 Practical Handbook of Photovoltaics: Fundamentals and Applications. T. Markvart and L. Castaner. *Chapter VII-2: Overview of Potential Hazards*. December 2003. Accessed August 2016. https://www.bnl.gov/pv/files/pdf/art_170.pdf
34 Norwegian Geotechnical Institute. *Environmental Risks Regarding the Use and End-of-Life Disposal of CdTe PV Modules*. April 2010. Accessed August 2016. https://www.dtsc.ca.gov/LawsRegsPolicies/upload/Norwegian-Geotechnical-InstituteStudy.pdf
35 First Solar. Dr. Yasunari Matsuno. December 2013. August 2016. *Environmental Risk Assessment of CdTe PV Systems to be considered under Catastrophic Events in Japan*. http://www.firstsolar.com/-/media/Documents/Sustainability/PeerReviews/Japan_Peer-Review_Matsuno_CdTe-PV-Tsunami.ashx
36 First Solar. Parikhit Sinha, Andreas Wade. *Assessment of Leaching Tests for Evaluating Potential Environmental Impacts of PV Module Field Breakage*. 2015 IEEE
37 See p. 22 of First Solar, Sustainability Report. Available at: www.firstsolar.com/-/media/FirstSolar/Sustainability-Documents/03801_FirstSolar_SustainabilityReport_08MAR16_Web.ashx, Accessed May 2017
38 40 CFR §261.24. *Toxicity Characteristic*. May 2017. Accessed May 2017. https://www.ecfr.gov/cgi-bin/textidx-?node=se40.26.261_124&rgn=div8
39 Office of Energy Efficiency & Renewable Energy. *Copper Indium Gallium Diselenide*. Accessed March 2017. https://www.energy.gov/eere/sunshot/copper-indium-gallium-diselenide
40 Mathias Maehlum. *Best Thin Film Solar Panels – Amorphous, Cadmium Telluride or CIGS?* April 2015. Accessed March 2017. http://energyinformative.org/best-thin-film-solar-panels-amorphous-cadmium-telluride-cigs/
41 RoHS tested certificate for Solar Frontier PV modules. TUVRheinland, signed 11.11.2013
42 International Renewable Energy Agency. Stephanie Weckend, Andreas Wade, Garvin Heath. *End of Life Management: Solar Photovoltaic Panels.* June 2016. Accessed November 2016. http://www.irena.org/DocumentDownloads/Publications/IRENA_IEAPVPS_End-of-Life_Solar_PV_Panels_2016.pdf
43 40 C.F.R. §261.10. *Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste*. November 2016. Accessed November 2016 http://www.ecfr.gov/cgi-bin/textidx?SID=ce0006d-66da40146b490084ca2816143&mc=true&node=pt40.26.261&rgn=div5#sp40.28.261.b
44 40 C.F.R. §261.24 *Toxicity Characteristic*. November 2016. Accessed November 2016. http://www.ecfr.gov/cgi-bin/textidx?SID=ce0006d-66da40146b490084ca2816143&mc=true&node=pt40.26.261&rgn=div5#se40.28.261_124
45 International Renewable Energy Agency. Stephanie Weckend, Andreas Wade, Garvin Heath. *End of Life Management: Solar Photovoltaic Panels*. June 2016. Accessed November 2016. http://www.irena.org/DocumentDownloads/Publications/IRENA_IEAPVPS_End-of-Life_Solar_PV_Panels_2016.pdf
46 TLCP test results from third-party laboratories for REC, Jinko, and Canadian Solar silicon-based panels. Provided by PV panel manufacturers directly or indirectly to authors
47 Sinovoltaics, Introduction to *Solar Panel Recycling*, March 2014. Accessed October 2016. http://sinovoltaics.com/solarbasics/introduction-to-solar-panel-recycling/
48 Brookhaven National Laboratory. Vasilis Fthenakis,

Regulations on Photovoltaic Module Disposal and Recycling. January 29, 2001.
49 Parikhit Sinha, et al. Evaluation of Potential Health and Environmental Impacts from End-Of-Life Disposal of Photovoltaics, Photovoltaics, 2014.
50 First Solar. Parikhit Sinha, Andreas Wade. *Assessment of Leaching Tests for Evaluating Potential Environmental Impacts of PV Module Field Breakage*. October 2015. Accessed August 2016. http://www.firstsolar.com/-/media/Documents/Sustainability/PVSC42-Manuscript-20150912--Assessment-of-Leaching-Tests-for-Evaluating-PotentialEnvironmental-Impa.ashx
51 First Solar. Dr. Yasunari Matsuno. December 2013. *Environmental Risk Assessment of CdTe PV Systems to be considered under Catastrophic Events in Japan*. http://www.firstsolar.com/-/media/Documents/Sustainability/PeerReviews/Japan_Peer-Review_Matsuno_CdTe-PV-Tsunami.ashx
52 Phone interview, February 3, 2016, TT&E Iron & Metal, Garner, NC www.ncscrapmetal.com
53 Wen-His Huang, et al. *Strategy and Technology To Recycle Water-silicon Solar Modules*. Solar Energy, Volume 144, March 2017, Pages 22-31
54 International Renewable Energy Agency. Stephanie Weckend, Andreas Wade, Garvin Heath. *End of Life Management: Solar Photovoltaic Panels*. June 2016. Accessed November 2016. http://www.irena.org/DocumentDownloads/Publications/IRENA_IEAPVPS_End-of-Life_Solar_PV_Panels_2016.pdf
55 Official Journal of the European Union. *Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on Waste Electrical and Electronic Equipment*. July 2012. Accessed November 2016. http://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012L0019
56 PV CYCLE. *Annual Report 2015*. Accessed November 2016. https://pvcyclepublications.cld.bz/Annual-Report-PV-CYCLE-2015/6-7
57 Official Journal of the European Union. *Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on Waste Electrical and Electronic Equipment*. July 2012. Accessed November 2016. http://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012L0019
58 SEIA National PV Recycling Program: www.seia.org/seia-national-pv-recycling-program
59 RBI Solar, Decommissioning Plan submitted to Catawba County associated with permitting of a 5MW solar project in June 2016. Accessed April 2017. www.catawbacountync.gov/Planning/Projects/Rezonings/RZ2015-05_DecommissioningPlan.pdf
60 Birdseye Renewables, Decommissioning Plan submitted to Catawba County associated with permitting of a 5MW solar project in May 2015. Accessed April 2017. www.catawbacountync.gov/Planning/Projects/Rezonings/RZ2015-04_DecommissioningPlan.pdf
61 Cypress Creek Renewables, Decommissioning Plan submitted to Catawba County associated with permitting of a 5MW solar project in September 2016. Accessed April 2017. www.catawbacountync.gov/Planning/Projects/Rezonings/RZ2016-06decommission.pdf
62 Sun Raised Farms: http://sunraisedfarms.com/index.html
63 National Institute of Environmental Health Sciences and National Institutes of Health, EMF: Electric and Magnetic Fields Associated with Electric Power: Questions and Answers, June 2002
64 World Health Organization. *Electromagnetic Fields and Public Health: Exposure to Extremely Low Frequency Fields*. June 2007. Accessed August 2016. http://www.who.int/peh-emf/publications/facts/fs322/en/
65 Committee on the Possible Effects of Electromagnetic Fields on Biologic Systems, National Research Council, Possible Health Effects of Exposure to Residential Electric and Magnetic Fields, ISBN: 0-309-55671-6, 384 pages, 6 x 9, (1997) This PDF is available from the National Academies Press at: http://www.nap.edu/catalog/5155.html
66 World Health Organization. *Electromagnetic Fields and Public Health: Exposure to Extremely Low Frequency Fields*. June 2007. Accessed August 2016. http://www.who.int/peh-emf/publications/facts/fs322/en/
67 World Health Organization. *Electromagnetic Fields and Public Health: Static Electric and Magnetic Fields*. March 2006. Accessed August 2016. http://www.who.int/peh-emf/publications/facts/fs299/en/
68 Asher Sheppard, Health Issues Related to the Static and Power-Frequency Electric and Magnetic Fields (EMFs) of the Soitec Solar Energy Farms, April

30, 2014. Accessed March 2017: www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/Appendix_9.0-1_EMF.pdf
69 Massachusetts Clean Energy Center. *Study of Acoustic and EMF Levels from Solar Photovoltaic Projects*. December 2012. Accessed August 2016.
70 Duke Energy Corporation. *Frequently Asked Questions: Electric and Magnetic Fields*. Accessed August 2016. https://www.duke-energy.com/about-energy/frequently_asked_questions.asp
71 National Institute of Environmental Health Sciences, *Electric and Magnetic Fields Associate with the use of Electric Power: Questions and Answers*, 2002. Accessed November 2016 www.niehs.nih.gov/health/materials/electric_and_magnetic_fields
72 Duke Energy Corporation. *Frequently Asked Questions: Electric and Magnetic Fields*. Accessed August 2016. https://www.duke-energy.com/about-energy/frequently_asked_questions.asp
73 R.A. Tell et al, *Electromagnetic Fields Associated with Commercial Solar Photovoltaic Electric Power Generating Facilities*, Journal of Occupational and Environmental Hygiene, Volume 12, 2015,- Issue 11. Abstract Accessed March 2016: http://www.tandfonline.com/doi/full/10.1080/15459624.2015.1047021
74 Massachusetts Department of Energy Resources, Massachusetts Department of Environmental Protection, and Massachusetts Clean Energy Center. *Questions & Answers: Ground-Mounted Solar Photovoltaic Systems*. June 2015. Accessed August 2016. http://www.mass.gov/eea/docs/doer/renewables/solar/solar-pv-guide.pdf
75 Ibid.
76 Ibid.
77 *EMFs and medical devices*, Accessed March 2017. www.emfs.info/effects/medical-devices/
78 ibid.
79 Damon McCluer. *Electrical Construction & Maintenance: NFPA 70E's Approach to Considering DC Hazards*. September 2013. Accessed October 2016. http://ecmweb.com/safety/nfpa-70e-s-approach-considering-dc-hazards
80 Hong-Yun Yang, et. al. *Experimental Studies on the Flammability and Fire Hazards of Photovoltaic Modules, Materials*. July 2015. Accessed August 2016. http://www.mdpi.com/1996-1944/8/7/4210/pdf
81 Matt Fountain. The Tribune. *Fire breaks out at Topaz Solar Farm*. July 2015. Accessed August 2016. www.sanluisobispo.com/news/local/article39055539.html
82 Cooperative Research Network. Matthew Paiss. *Tech Surveillance: PV Safety & Code Developments*. October 2014. Accessed August 2016. http://www.nreca.coop/wp-content/uploads/2013/06/ts_pv_fire_safety_oct_2014.pdf

Solar Panels. Photo by Mariana Proenca on Unsplash

"Clean Energy in Michigan" Series, Number 12

Facts about solar panels: PFAS contamination

By Dr. Annick Anctil, Michigan State University

Q: Do solar panels contribute to PFAS contamination?

Multiple states have raised concerns about PFAS contamination from solar farms, largely citing academic research on how PFAS could *potentially* be used in photovoltaic (PV) solar panels.[1] The fact is that PFAS is *not* customarily used in solar panels because safer, effective alternatives have already been developed and commercialized. Moreover, no studies have shown the presence or leaching of PFAS from PV panels—either while they are in active use or at the end of their life (e.g., in a landfill).

Anatomy of a solar panel

These three parts of a solar panel cause confusion about the presence of PFAS.

Self-Cleaning Coat

A self-cleaning coating on the top of a solar panel helps reduce dust, pollen, and snow adhesion, extending both the power output and the lifetime of the panel.[2] Multiple self-cleaning coating options are available on the market, many of which make use of non-hazardous silicon-based chemistry.[3] Confusion comes from the fact that some other commercialized self-cleaning coating options do make use of PFAS-based chemicals, although even those do not degrade under normal use.

Adhesives

PV panels are sealed from the elements to maximize power output and lifetime. While PFAS chemicals are found in certain adhesives, such as carpentry glues, they are not typically used in sealant adhesives for solar panels.[4] Instead, solar adhesives are based on silicone polymers, which are well known for their lack of negative health impacts and remarkable stability.[5]

Substrate

PV modules are housed in a weather-resistant substrate that offers additional protection from the elements. Thin-film PV units use glass as the substrate, while crystalline silicon PV units use a polymer substrate, which has led to the rumors of

EGLE
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

GRAHAM SUSTAINABILITY INSTITUTE
UNIVERSITY OF MICHIGAN

Acknowledgement

This material is based upon work supported by the Department of Energy and the Michigan Energy Office (MEO) under Award Number EE00007478.

The Clean Energy in Michigan series provides case studies and fact sheets answering common questions about clean energy projects in Michigan.

Find this document and more about the project online at graham.umich.edu/climate-energy/energy-futures.

potential PFAS use in solar panels. The most common polymer used in silicon PV units is Tedlar, a weather resistant polymer that is *not* a PFAS compound itself and makes no use of PFAS during its manufacturing process.[6] Far more common materials, like those used in construction projects and weather resistant fabrics, present a higher risk of PFAS exposure than PV. In fact, a recent study found that these more common materials release PFAS under conditions where solar panels do not, indicating that PFAS exposure risk may be higher sitting on outdoor furniture, for example, than living next to a solar farm.[7]

What is PFAS anyway?

Per/Poly Fluoro-Alkyl Substances, PFAS for short, are a class of chemical compounds. PFAS are used in several industries for their unique properties, notably their ability to create coatings that are highly water repellent.

PFAS are extremely persistent within the environment, not breaking down over time. Certain PFAS compounds have been linked to human health issues–notably low infant birth weights, increased risk of certain cancers, and thyroid issues. As a result of their persistence and toxicity, those PFAS compounds that pose a significant risk have been banned from use and production, and subsequently replaced with safer alternatives.

It's important to note that not all PFAS compounds are dangerous. Some PFAS compounds, such as Teflon, are much more stable and present no risk to human health under normal conditions of use.[8]

1 S. Maharjan *et al.*, "Self-cleaning hydrophobic nanocoating on glass: A scalable manufacturing process," Mater. Chem. Phys., vol. 239, Jan. 2020.; . Son *et al.*, "A practical superhydrophilic self cleaning and antireflective surface for outdoor photovoltaic applications," *Sol. Energy Mater. Sol. Cells*, 2012.; H. C. Han *et al.*, "Enhancing efficiency with fluorinated interlayers in small molecule organic solar cells," *J. Mater. Chem.*, vol. 22, no. 43, 2012.

2 "How a solar cell works – American Chemical Society." [Online]; H. C. Han *et al.*, "Enhancing efficiency with fluorinated interlayers in small molecule organic solar cells," *J. Mater. Chem.*, vol. 22, no. 43, 2012.; M. Simon and E. L. Meyer, "Detection and analysis of hot-spot formation in solar cells," Solar Energy Materials and Solar Cells. pp. 106–113, 2010.

3 "Say Goodbye To Solar Panel Cleaning | Ultimate Efficiency | Solar Sharc®." [Online].

4 "Electronics Product Catalog | Dow Inc." [Online]; B. J. Henry *et al.*, "A critical review of the application of polymer of low concern and regulatory criteria to fluoropolymers," Integrated Environmental Assessment and Management, vol. 14, no. 3. pp. 316–334, May-2018.

5 "Electronics Product Catalog | Dow Inc."; "Properties of Silicones." [Online]; A. M. Bueche, "The curing of silicone rubber with benzoyl peroxide," *J. Polym. Sci.*, vol. 15, no. 79, pp. 105–120, Jan. 1955.

6 M. H. Alaaeddin, S. M. Sapuan, M. Y. . Zuhri, E. . Zainudin, and F. M. AL-Oqla, "Polyvinyl fluoride (PVF); Its Properties, Applications, and Manufacturing Prospects," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 538, p. 012010, Jun. 2019.

7 R. M. Janousek, S. Lebertz, and T. P. Knepper, "Previously unidentified sources of perfluoroalkyl and polyfluoroalkyl substances from building materials and industrial fabrics," *Environ. Sci. Process. Impacts*, vol. 21, no. 11, pp. 1936–1945, Nov. 2019.

8 "Per- and Polyfluoroalkyl Substances (PFAS) | US EPA." [Online].; B. J. Henry *et al.*, "A critical review of the application of polymer of low concern and regulatory criteria to fluoropolymers"

Health and Safety Impacts of Solar Photovoltaics:

A California-Focused Forward to the Health and Safety Impacts of Solar Photovoltaics white paper published by the N.C. Clean Energy Technology Center at North Carolina State University in May 2017

By: Thomas H. Cleveland, P.E., lead author of the North Carolina white paper
RE: Soscol Ferry Road Solar, a proposed 1.98 MW_{AC} PV facility in Napa, CA
Date: July 31, 2019

For the last several years North Carolina (NC) has trailed only California in the capacity of annual solar photovoltaic (PV) installed. For most of that time North Carolina's PV development was nearly entirely distribution-connected ground-mounted solar facilities, most commonly 5 MW_{AC} projects. More recently, North Carolina is developing a mixture of transmission-connected PV facilities between 20 and 75 MW_{AC} and distribution-connected facilities of 1 to 5 MW_{AC}, but still has relatively few commercial or residential PV projects. As the state quickly transitioned from zero utility-scale solar facilities to over 400 utility-scale solar facilities concerns about the health and safety impacts of photovoltaics were raised at countless public hearings across the state and in many meetings of state officials and regulators, including several NC general assembly committee meetings. These concerns led to several years of engagement on this topic by the NC Clean Energy Technology Center at North Carolina State University that resulted in a detailed, peer-reviewed university white paper on the latest scientific understanding regarding PV health and safety impacts, with a focus on North Carolina.

Naturally, there is also interest in the potential health and safety impacts of PV in California, where there is significantly more installed solar capacity than in North Carolina, in a mixture of residential, commercial, and small- and large-scale ground-mounted utility-scale solar projects. While there are massive similarities between the PV installations and their potential health and safety impacts in each state, there are some differences in policy, climate, industry practices, electricity regulation, and more that are worth highlighting. This forward is an attempt by the lead researcher and author of the North Carolina white paper to provide a supplement to the original paper that clearly demonstrates the applicability of the paper to PV in California and to offer California-specific supplements or modifications where the original paper had a North Carolina focus.

Most importantly, all the white paper's conclusions about the negligible negative health and safety impacts of photovoltaics apply fully in California, as well as anywhere in the United States. Similarly, there is nothing unique about the 1.98 MW_{AC} Soscol Ferry Road Solar project that would cause any health or safety impacts different than those discussed in the N.C. white paper.

Throughout the white paper there are instances of North Carolina-specific information, or issues where the situation in California is different than it is in North Carolina. The following is a list of the significant instances of either situation, in the order they appear in the white paper, along with the relevant California-specific information.

- Type of PV Technology Used: Crystalline silicon, Cadmium Telluride (CdTe), and CIGS are all being installed in California as they are in N.C. Since the publication of the N.C. report the author has confirmed the recent installation of utility-scale projects using CIGS modules, but these are still not common. Like in NC, the majority of the current PV installation capacity in California is crystalline silicon, also like NC these are generally Tier I modules. The Soscol Ferry Rd. project will use Tier I crystalline silicon modules.
- Design Wind Speed: The ASCE 7-2016 design wind speed in the vast majority of California, including in Napa County where the Soscol Ferry Road Solar project is located, is 90-95 MPH, which is much lower than the design wind speeds of hurricane-prone eastern N.C. where most PV development in the state is located. A few mountainous regions of California have design wind speeds over 100 MPG, however these extreme

terrains are unlikely to install ground-mounted PV systems.

- Offset Electricity Fuel Mix: The white paper includes a rough estimation that the fuel mix of the generators offset by PV energy production in N.C. is 90% natural gas and 10% coal. From this mix an estimate of the reduction in cadmium emissions due to PV was calculated. The 10% coal estimate is certainly too high for California. An offset fuel mix for California could be reasonably estimated as 100% natural gas, resulting in about 75% of the cadmium emissions savings calculated for NC.
- PV Module Recycling: The white paper included local reports from PV developers in North Carolina of recycling damaged PV modules. It is quite possible that the same is occurring in California, but the author does not have data on the current common waste management practices for damaged PV modules in California. The Electric Power Research Institute (EPRI) published two extensive reports on the Photovoltaic Module Recycling in the United States (April 2018) and Insights in Photovoltaic Recycling Processes in Europe (December 2017), which are great sources for current information on PV module recycling. The EPRI report on recycling in the U.S. states that there are commercial recyclers in the U.S. accepting and recycling PV modules, using processes not unlike those described in the white paper.
- PV Module Washing: Unlike North Carolina, many regions of California regularly experience long periods of time with little to no rain, which can result in enough accumulation of dirt on the PV modules that it justifies occasionally washing the modules to renew their performance. In North Carolina there is generally a heavy rain often enough to keep the panels clean enough to not require manual panel washing. This difference does not have an impact on the health or safety impact of the photovoltaic modules other than perhaps some increased risk of electric shock when washing the modules. Proper installation, maintenance, and washing techniques should reduce this risk to near zero.
- Vegetation Maintenance: The climate in many regions of California, including Napa County where the Soscol Ferry Road Solar project is located, cause the growth of vegetation requiring maintenance to be less vigorous than the vegetation in moist North Carolina. Thus, PV sites in California use similar vegetation maintenance techniques to North Carolina however they need to spend less time and make fewer trips to adequately maintain vegetation on site.
- California Hazardous Waste Policy:
  - As explained in the white paper, in the United States a waste material is considered hazardous waste if the results of a Toxicity Characteristic Leaching Procedure (TCLP) test find concentrations of any of 40 hazardous chemicals above the allowed EPA concentration limit for that chemical. However, in California, materials must additionally meet the more stringent Hazardous Waste Control Law (HWCL), which is like the Reduction of Hazardous Substances (ROHS) directive, adopted in February 2003 by the European Union (EU).[i]
  - In 2015, California passed SB-489 directing the CA DTSC (Department of Toxic Substances Control) to write rules to reclassify PV modules as universal waste, even if they fail TCLP. These rules exclude physically damaged, fractured, or fragmented PV modules that are no longer recognizable as PV modules.[ii] A primary goal of the legislation is to allow producers of waste PV modules to avoid difficult and costly waste determination procedures. In April 2019 the CA DTSC proposed rules to implement SB-489. After the public comment period that ended in June 2019 DTSC may adjust and adopt the rules.[iii]

[i] *Program on Technology Innovation: Feasibility Study on Photovoltaic Module Recycling in the United States, Technical Update, April 2018*; Electric Power Research Institute (EPRI); April 2018.
[ii] ibid
[iii] (webpage) Beveridge & Diamond law firm; News alert: California Department of Toxic Substances Control Proposes Regulation Classifying Discarded Solar Panels as Universal Waste ; https://www.bdlaw.com/publications/california-department-of-toxic-substances-control-proposes-regulation-classifying-discarded-solar-panels-as-universal-waste/ (last accessed 7/22/2019)

EXHIBIT T: PHASE I ENVIRONMENTAL SITE ASSESSMENT

SCI ENGINEERING, INC.
650 Pierce Boulevard
O'Fallon, Illinois 62269
618-624-6969
www.sciengineering.com

Phase I Environmental Site Assessment

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
WOODSTOCK, ILLINOIS

March 13, 2025

Prepared For:

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC

SCI No. 2025-0239.20

SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

March 13, 2025

Tiffany Grace
Woodstock Community Energy Initiative LLC
203 Crescent Street #106
Waltham, Massachusetts 02453

RE: Phase I Environmental Site Assessment
Woodstock Community Energy Initiative LLC
Woodstock, Illinois
SCI No. 2025-0239.20

Dear Tiffany Grace:

SCI Engineering, Inc. (SCI) has completed the Phase I Environmental Site Assessment (Phase I) at the above-referenced subject property, the report of which is contained herein. Phase I activities consisted of historical and public records research, historical review, interviews, and a reconnaissance survey.

Based on the activities which were performed in general accordance with the ASTM Practice E 1527-21 for Phase I Environmental Site Assessments, SCI identified no evidence of Recognized Environmental Conditions in connection with the subject property.

SCI appreciates being of service to you on this project. Please contact us if you have any questions or comments regarding this report.

Respectfully,

SCI ENGINEERING, INC.

Travis S. Clayton
Project Scientist

Benjamin K. Butterfield, CHMM
Senior Scientist

TSC/BKB/bmw/rah

C: Ben Dykema; ECA Solar
Hobart Anderson; ECA Solar

\\Scistcfps01\Projects\2025\2025-0239 Woodstock Community Energy Initiative LLC\ES\20\Report\250239.20 Woodstock Solar - Phase I Report.docx

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 SITE RECONNAISSANCE 2
2.1 Subject Property Use 2
2.2 Heating and Cooling Systems 3
2.3 Water and Sewage Systems 3
2.4 Interior and Exterior Observations 3
2.5 Adjacent Property Use 4

3.0 PHYSICAL SETTING 5
3.1 Topography 5
3.2 Hydrology and Hydrogeology 5

4.0 HISTORICAL USE INFORMATION 6
4.1 Owner Interview 6
4.2 Key Subject Property Manager and/or Occupant Interview 8
4.3 User Interview 8
4.4 Past Owner Interview 9
4.5 Local Fire Department Interview 9
4.6 Title Review 9
4.7 Historical Document Review 10
4.7.1 Sanborn Map Review 10
4.7.2 Historical Aerial Photograph Review 10
4.7.3 City Directory Review 12
4.7.4 Historical Topographic Map Review 12
4.7.5 City Permits 14
4.7.6 Undermining 14
4.8 Summary of Historical Use 14

5.0 REGULATORY AGENCY RECORDS REVIEW 15
5.1 Federal NPL 16
5.1.1 Federal Delisted NPL 16
5.2 Federal SEMS 16
5.2.1 Federal SEMS-ARCHIVE 17
5.3 Federal RCRIS 17
5.4 Federal CORRACTS 17
5.5 Federal ERNS 18
5.6 Federal IC/EC 18
5.7 Illinois Hazardous Waste Sites List 18
5.8 Illinois Solid Waste Landfill List 18
5.9 Illinois LUST List 18
5.10 Illinois Registered UST List 19
5.11 Illinois IC/EC 19
5.12 Additional Environmental Record Sources 19

6.0 VAPOR ENCROACHMENT SCREENING 20

7.0 NON-ASTM SCOPE ITEMS 20
7.1 Emerging Contaminants 20

8.0 ADDITIONAL INVESTIGATIONS 21

9.0 FINDINGS 21
10.0 DATA GAPS 21
11.0 CONCLUSIONS 22
12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT 22
13.0 REFERENCES CITED 23
14.0 LIMITATIONS 23

TABLES

Table 1.1 - Table of Critical Dates 1
Table 2.1 - General Subject Property and Building Information 2
Table 2.2 - Summary of Interior and Exterior Observations 3
Table 4.1 - User Questionnaire Responses 8
Table 4.2 - Historical Aerial Photograph Summary 11
Table 4.3 - Historical Topographic Map Summary 13
Table 5.1 - Environmental Record Sources 15

FIGURES

Figure 1 - Vicinity and Topographic Map
Figure 2 - Subject Property/Surrounding Properties Map
Figure 3 - ISGS Mine Map

APPENDICES

Appendix A - Photographic Documentation
Appendix B - Questionnaires
Appendix C - Fire Department Correspondence
Appendix D - Sanborn Maps
Appendix E - Aerial Photographs
Appendix F - City Directory
Appendix G - Topographic Maps
Appendix H - EDR Radius Map Report
Appendix I - Professional Staff Resumes

Phase I Environmental Site Assessment

WOODSTOCK COMMUNITY ENERGY INIATIVE LLC
WOODSTOCK, ILLINOIS

1.0 INTRODUCTION

SCI Engineering, Inc. (SCI) was retained by Tiffany Grace with Woodstock Community Energy Initiative LLC to conduct a Phase I Environmental Site Assessment (Phase I) for the approximately 88-acre project area located south of Highway 14 and north of Kishwaukee Valley Road in Woodstock, Illinois (subject property). Our services were performed in accordance with our proposal dated February 6, 2025.

Table 1.1 – Table of Critical Dates

Report Issuance Date	March 13, 2025
Date of Interview of Past and Present Owners and Occupants Identified in Section 10 of ASTM E 1527-21	February 26, 2025
Date of Government Record Review	February 21, 2025
Date of Visual Inspection of Subject and Adjoining Properties	February 27, 2025
Earliest Date of Interviews, Lien Search, Record Reviews, and Inspections	February 20, 2025
Report Viability Date	August 19, 2025

The purpose of this assessment was to explore for evidence of the presence of Recognized Environmental Conditions (RECs), in accordance with the ASTM Practice E 1527-21 for Phase Is. A REC means: (1) the presence of any hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies.

The performance of this assessment may also identify Historical Recognized Environmental Conditions (HRECs) and/or Controlled Recognized Environmental Conditions (CRECs). An HREC is defined as "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting

the subject property to any controls (for example, activity and use limitations or other property use limitations). An HREC is not a REC." A CREC is identified as a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations).

Phase I activities included historical and public records research, interviews, and a reconnaissance (walkover) survey. The details of these activities are outlined herein.

Furthermore, Phase I activities may identify issues that represent a Business Environmental Risk (BER), which is "a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not related to those environmental issues required to be investigated."

2.0 SITE RECONNAISSANCE

On February 27, 2025, a site reconnaissance was conducted by SCI's Staff Scientist, Justin Loos, under the direction of SCI's Environmental Professional, Benjamin K. Butterfield. The reconnaissance was performed by walking the perimeter and across portions of the remainder of the subject property. The purpose of the site reconnaissance was to assess the physical conditions at, and adjacent to, the subject property. A *Vicinity and Topographic Map*, Figure 1, and a *Subject Property/Surrounding Properties Map*, Figure 2, are enclosed. Photographic documentation is contained in Appendix A.

2.1 Subject Property Use

At the time of the site reconnaissance, the western portion of the subject property consisted of agricultural land used to produce row-crops in the most recent growing season, while the eastern part of the property was undeveloped and wooded. A vegetated depression was present in the northeastern part of the property. General subject property information is provided in Table 2.1

Table 2.1 – General Subject Property Information

Category	Description
Subject Property Address:	Not Addressed – Woodstock, Illinois 61944
Parcel ID:	07-36-326-003
Parcel Size:	~88 acres
Subject Property Escort/Contact:	N/A

2.2 Heating and Cooling Systems

No structures were observed on the subject property during the site reconnaissance. Therefore, no heating or cooling systems were found on the subject property.

2.3 Water and Sewage Systems

No structures were observed on the subject property during the site reconnaissance. Therefore, no water or sewage systems were observed on the subject property. Water and sewage systems in the vicinity of the subject property were operated by the City of Woodstock, Illinois.

2.4 Interior and Exterior Observations

A summary of the observations from the subject property reconnaissance is tabulated in Table 2.2. Detailed information for any of the identified conditions are further discussed after the table.

Table 2.2 – Summary of Interior and Exterior Observations

Description of Item	Identified? (check if yes)
Underground Storage Tanks (USTs)	☐
Aboveground Storage Tanks (ASTs)	☐
Drums	☐
Unidentified Substance Containers	☐
Landfills	☐
Solid Waste/Farm Dumps	☐
Suspect Fill Materials	☐
Hazardous Substances and/or Petroleum Products	☐
Chemical Odors	☐
Drains or Sumps	☐
Wells	☐
Pools of Liquid	☐
Electrical Transformers	☐
Hydraulic Lifts	☐
Elevators	☐
Other Hydraulic Equipment	☐
Interior Stains or Corrosion	☐
Pits, Ponds, or Lagoons	☐

Table 2.2 – Summary of Interior and Exterior Observations (Continued)

Description of Item	Identified? (check if yes)
Stained Soil or Pavement	☐
Stressed Vegetation	☐
Wastewater Systems	☐
Railroad Spurs/Tracks	☐
Pipeline Markers	☐
Other Uses of Concern	☐

At the time of the subject property reconnaissance, SCI did not observe any of the above items in connection with the subject property.

Although no evidence of a farm dump was observed during the subject property reconnaissance or the historical review, a farm dump which has been subsequently covered over could be present on the subject property. Municipal trash service was typically not available in most rural areas until recently. Dumps of this nature are typically small and consist of household trash and scrap metal and lumber. Dumps of this nature are generally not an environmental concern, but some cost can be incurred for their removal if required for subject property development. If trash from off-site sources has been dumped on the subject property, the potential size of a dump, if present, is much larger. Intrusive investigations would need to be performed to ascertain dump quantities, if present, and these investigations were not part of our assessment. In the event a farm dump is encountered during subject property development, SCI would be pleased to assist you with quantity estimation and disposal options.

2.5 Adjacent Property Use

The subject property was bound to the north by U.S. Highway 14, beyond which was an undeveloped, grass-covered lot and a commercial property that appeared to be occupied by a trucking company and commercial truck repair facility at 14719 Washington Street. Adjacent to the northeast, was grass-covered and wooded land which hosted a small shed, beyond which was U.S. Highway 14. Adjacent to the east was agricultural land and a barn and residence on a wooded lot. To the south of the subject property was wooded land, beyond which were residential properties to the southeast and southwest and a former scout camp to the south. Adjacent to the west were a residential subdivision and undeveloped, wooded lots.

One of the properties to the north of the subject property, beyond the adjacent highway, was occupied by a trucking company that appeared to perform automotive maintenance on diesel equipment. However, as discussed below in Section 3.2, this facility was located down-gradient relative to the subject property. As such, it does not represent a REC. This property was also identified during review of regulatory agency records and is discussed further below in Section 5.10.

Based on the nature of the other adjoining properties, the uses of those properties do not represent a REC.

3.0 PHYSICAL SETTING

3.1 Topography

The elevation of the subject property ranged from approximately 960 feet above mean sea level (msl) in the southeastern portion of the property to approximately 890 feet above msl in the northeastern corner of the property, according to the *Vicinity and Topographic Map*, contained as Figure 1. This map is a reproduction of a portion of the United States Geological Survey (USGS) topographic map for the Marengo North, Illinois quadrangle, dated 1970 (photo revised 1975) and Woodstock, Illinois quadrangle, dated 1992.

Undulating terrain was present on the subject property, with terrain on the northern portion of the subject property trending away from a high point located in the agricultural part of the property towards the north, south, east, and west. On the southern portion of the subject property, terrain trended down-gradient towards the central part of the property from higher ridges located to the southeast and west of the subject property.

A boundary survey for the subject property in which topographic contours are depicted was not provided for review. Therefore, the actual surveyed topography could not be compared to that shown on the USGS map, which is useful in determining whether substantial filling has occurred.

3.2 Hydrology and Hydrogeology

A depression that appeared to seasonally contain water was observed on the northeastern part of the subject property during the site reconnaissance. No other evidence of ponds, lakes, rivers, or streams was observed on the subject property during the site reconnaissance. On the northern part of the property, surface runoff flowed primarily away from a high point on the northeastern part of the property to the north, east, south, and west. On the southern part of the property, runoff appeared to flow towards the central part of the property from ridges that crested southeast and west of the property. The subject property may receive

surface water runoff from the adjacent properties to the southeast and west, which consisted of undeveloped, wooded lots and residential properties. Based on the nature of these properties, surface runoff onto the subject property does not represent a REC.

The presence and flow direction of a perched groundwater table can only be conclusively verified by subsurface investigation. However, if present, its flow direction would normally parallel the undisturbed surface topography. Therefore, groundwater flow on the subject property would trend towards the southern part of the subject property from the southeast and west. There is potential for the subject property to receive groundwater flow from the adjacent properties to the west and southeast of the southern part of the property, which consisted of undeveloped, wooded lots and residences. Based on the current uses of the properties, potential groundwater flow from these properties is not a concern to the subject property.

According to the United States Geological Survey, *National Water Summary 1986,* the subject property is located in the Shallow Dolomite aquifer. This aquifer yields water that typically has elevated amounts of dissolved solids and variable hardness.

4.0 HISTORICAL USE INFORMATION

Historical records and interviews are used to determine past uses of the subject property and whether these past uses may be an environmental concern. The standard to which this report was conducted requires the identification of all past uses of the subject property, from the present to the first developed use, or back to 1940, whichever is earlier. However, review of standard historical sources at less than approximately 5-year intervals is not required. SCI used as many practically reviewable sources as necessary to identify the past uses of the subject property.

4.1 Owner Interview

SCI submitted an *Environmental Assessment Questionnaire* (EAQ) to Luke Chang, one of the current owners of the subject property, who completed the questionnaire. According to Luke, the property was owned by themselves, Jae Chul Chang, Soon Jin Chang, Eun Seong Chang, and Eun Ji Kim, who purchased the property four years ago. According to Luke, the subject property consisted of farmland and, to the best of their knowledge, had no other previous uses and hosted no previous structures. Luke stated the subject property was located in the service area of the Woodstock Fire Department and received electrical service from Commonwealth Edison. Additionally, Luke stated they were not aware of any wells or cisterns on the subject property, to the best of their knowledge.

Furthermore, Luke was not sure of previous environmental and/or hydrogeologic/geotechnical reports that had been prepared for the subject property. However, they stated a gas pipeline was going to be installed on the property in 2025 or 2026. A release from a natural gas pipeline system would be to the atmosphere. Furthermore, the pipeline had not been constructed at the time of this report. Therefore, this issue does not represent a REC. Luke stated there were no environmental permits, hazardous waste generator notices or reports or notices or other correspondence from any government agency relating to past or current violations or environmental laws with respect to the property or relating to environmental liens encumbering the property, to the best of their knowledge. According to Luke, there were no pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property to the best of their knowledge. Luke also stated, to the best of their knowledge, there were no notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Luke was not aware of any ASTs or USTs on the subject property, to the best of their knowledge. To the best of Luke's knowledge, there were not now and had not in the past been any damaged or discarded automobile or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gallons in volume or 50 gallons in aggregate stored on the property. To Luke's knowledge, there was not currently and never had been any drums or sacks of chemicals located on the subject property. According to Luke, there was not currently and never had been any soil, flooring drains, or walls located on the property that are stained by substances other than water or emitting foul odors, to the best of their knowledge. To the best of Luke's knowledge, they were not aware of any equipment on the subject property for which records indicated the presence of PCBs and, that there were no hydraulic lifts, oil/water separators, or pipelines located on the property. According to Luke, there was no reason to suspect that dioxin had been applied on the subject property, to the best of their knowledge. To the best of Luke's knowledge, there were no hazardous substances, petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials had been discharged, dumped above grade, buried, disposed of, or burned on the property. Additionally, to Luke's knowledge, there were no burn pits, sink holes, or known farm dumps on the property and no fill materials had been placed on the subject property or moved from one portion of the subject property to another, to the best of their knowledge.

Finally, SCI inquired about whether Luke had any knowledge of biosolids from wastewater treatment facilities being placed, applied, or spread on the subject property as an agricultural fertilizer. Luke stated no such substances had been applied to the property to the best of their knowledge.

A copy of the completed EAQ is contained in Appendix B.

4.2 Key Subject Property Manager and/or Occupant Interview

The subject property consisted of fallow agricultural land and undeveloped, wooded land at the time of the site reconnaissance; therefore, no occupant or key site manager was available for interview. Please refer to the responses provided by the owner above in Section 4.1.

4.3 User Interview

SCI submitted an Assessment User Questionnaire (AUQ) to Tiffany Grace, Director of Operations, Woodstock Community Energy Initiative LLC, the user of this report. The following responses (Table 4.1) were provided by the user. A copy of the completed questionnaire is contained in Appendix B.

Table 4.1 – User Questionnaire Responses

Question	Response
Why is the Phase I required and/or which of the following Landowner Liability Protections do you seek?	☐ Innocent Landowner ☐ Contiguous property owner ☒ Bona fide prospective purchaser ☐ Other:
Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?	No
Are you aware of any Activity and Use Limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?	No
As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	No
Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?	Yes
Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user:	
Do you know the past uses of the property?	No
Do you know of specific chemicals that are present or once were present at the property?	No
Do you know of spills or other chemical releases that have taken place at the property?	No
Do you know of any environmental cleanups that have taken place at the property?	No

Table 4.1 – User Questionnaire Responses (Continued)

Question	Response
As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?	No
Do you have any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* (for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the property and its environmental condition)?	No

No responses of potential environmental concern were identified during review of the AUQ.

4.4 Past Owner Interview

As mentioned above, the current owner of the subject property acquired the property four years ago. However, they were unable to provide contact information for the previous owner. SCI attempted to locate information about any previous owners; however, these attempts were unsuccessful.

4.5 Local Fire Department Interview

SCI submitted a letter of request to the Woodstock Fire/Rescue District regarding storage or spillage of petroleum, toxic, or hazardous materials on or adjacent to the subject property. As of the date of this report, SCI has not received a response. Should a response of concern be received, SCI will notify the client. A copy of SCI's request to the fire department is contained in Appendix C.

4.6 Title Review

Land title records contain information about historical fee ownership, which may include leases, contracts, and/or AULs. This information is recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the property is located. Often this source will provide only names of previous owners, lessees, easement holders, etc. but when employed in combination with another source may provide helpful information about uses of the property.

SCI was provided with the current title commitment for the subject property prepared by Westcor Land Title Insurance Company with a commitment date of February 4, 2025. Review of the title documentation did not reveal evidence of environmental liens or AULs on the subject property. Additionally, as indicated in the attached AUQ, Tiffany Grace, Woodstock Community Energy Initiative LLC, indicated they were

not aware of any environmental clean-up liens against the subject property that were filed under federal, tribal, state, or local law. Tiffany also indicated that they are not aware of AULs, engineering controls, or land use restrictions that have been recorded on the title for the property.

An easement and right-of way agreement in favor of ANR Pipeline Company was disclosed in the title documentation. However, as stated above in Section 4.1, this pipeline had not yet been constructed and was intended to carry natural gas. As such, the proposed pipeline does not represent a REC.

4.7 Historical Document Review

4.7.1 Sanborn Map Review

Sanborn fire insurance maps were produced for the insurance industry starting in the late-1800s to assist in evaluating the fire risks of a building or area. Sanborn maps show structure locations and typically indicate the usage of the structure, whether it be a dwelling, store, or a manufacturing plant. The actual name of the company operating the facility is also sometimes given. These maps show the type of construction of buildings and also show locations of USTs and ASTs used for the storage of highly flammable materials including solvents, paint, and motor fuels. The identification of USTs on Sanborn maps often makes them one of the only ways to identify past UST sites. Most large older towns and cities have some Sanborn coverage. Typically, the larger and older the area, the better the coverage.

SCI obtained a *Certified Sanborn® Map Report* for the subject property and surrounding properties from Environmental Data Resources, Inc. (EDR). The EDR Sanborn Map report indicated that no fire insurance maps were available for the subject property. A copy of the report is contained in Appendix D.

4.7.2 Historical Aerial Photograph Review

Aerial photographs are an important source for showing past conditions on a site. Vegetation and developments like structures, water bodies, or land disturbance are generally readily apparent. However, vegetation can often obscure from view activities taking place under the canopy of trees. The aerial photographs typically available for review as part of a Phase I are usually large-scale black and white photographs. For these reasons, small details may be difficult to discern.

SCI reviewed *The Aerial Photo Decade Package* from EDR. The EDR report indicated there were aerial photographs available for the years 2019, 2015, 2012, 2009, 2006, 2002, 1999, 1993, 1988, 1980, 1975, 1972, 1966, 1961, 1958, 1953, and 1939. Copies of the reviewed aerial photographs are contained in Appendix E. A summary of this review is contained in Table 4.2.

Table 4.2 - Historical Aerial Photograph Summary

Year	Observations
2019	The subject property appeared to be wooded and agricultural land. A pond was present on the northeastern portion of the subject property. Adjacent to the north of the subject property was a roadway, beyond which was undeveloped land and a commercial property. Adjacent to the east, were what appeared to be residences, outbuildings, and undeveloped grass-covered and wooded land, Adjacent to the south and west were wooded land and what appeared to be residential properties.
2015	The subject property and surrounding properties appeared similar to the 2019 aerial photograph, except no water was noted in the pond on the northeastern part of the property, and instead this area appeared to host emergent vegetation.
2012, 2009, 2006	The subject property and surrounding properties appeared similar to the 2015 aerial photograph. Water was intermittently present in the pond area on the northeastern part of the property.
2002	The subject property and surrounding properties appeared similar to the 2012 aerial photograph, except the eastern part of the subject property was less densely wooded.
1999, 1993	The subject property and surrounding properties appeared similar to the 2002 aerial photograph, with the exception that the subject property was less wooded.
1988	The subject property appeared similar to the 1993 aerial photograph. The surrounding properties appeared similar to the 1993 aerial photograph, with the following exceptions: • The residence and outbuildings on the easter adjacent property were not observed and that area appeared to be undeveloped and wooded; and • Fewer apparently residential structures were observed to the west of the subject property and those areas appeared to be wooded and used for agricultural purposes.
1980	The subject property appeared similar to the 1988 aerial photograph, except the eastern part of the property appeared to be grass covered. The surrounding properties appeared similar to the 1988 aerial photograph, except the commercial facility to the north of the subject property beyond the adjacent roadway was not observed. That area appeared to host an undeveloped lot.
1975	The subject property and surrounding properties appeared similar to the 1980 aerial photograph.
1972	The subject property appeared similar to the 1975 aerial photograph. The surrounding properties appeared similar to the 1975 aerial photograph, except the properties to the west appeared to be primarily used for agricultural purposes or were undeveloped.
1966	The subject property and surrounding properties appeared similar to the 1972 aerial photograph, except an area of ground disturbance was noted on the northeast adjacent property.
1961	The subject property and surrounding properties appeared to be agricultural land with a pond in the northeastern part of the property. A highway appeared to be under construction to the north of the subject property. Furthermore, an area of ground disturbance was noted on the property adjacent to the northeast of the subject property. This ground disturbance appeared to be associated with the roadway construction to the north of the property. Adjacent to the east of the subject property was agricultural land and undeveloped, wooded land. Wooded and grass-covered land bound the property to the south. Agricultural land and wooded land bound the property to the west, beyond which was what appeared to be a residence or farmstead.

Table 4.2 - Historical Aerial Photograph Summary (Continued)

Year	Observations
1958	The subject property and surrounding properties appeared similar to the 1961 aerial photograph, except the roadway construction area and area of ground disturbance to the north and northeast of the subject property were not observed and instead the property was bound to the north and northeast by agricultural land and a roadway was located further to the north.
1953, 1939	The subject property and surrounding properties appeared similar to the 1958 aerial photograph.

Review of historical aerial photographs identified no potential environmental concerns. The subject property appears to have been undeveloped or used for agricultural purposes throughout the period historical aerial photographs were available.

4.7.3 City Directory Review

City directories, such as Polk or Hanes Criss-Cross directories are useful tools in determining the past use of urban properties. Most larger urban areas have had city directories published. City directories were published from the late-1800s until today. The most useful portion of the city directory for property research is the Criss-Cross directory which lists each street within the municipality and what is located at each address on that street. City directories are only useful for urban areas and are generally not published for rural or small municipalities.

SCI obtained a *City Directory Image Report* for the subject property and surrounding properties from EDR. A copy of the EDR report is contained in Appendix F. Chronological listings for the subject property and immediately adjacent properties located along U.S. Highway 14, Kishwaukee Valley Road, N. Rose Farm Road, N. Shannon Drive, and Washington Street were reviewed. The only notable listing was for the property located adjacent to the north of the subject property at 14719 Washington Street, which hosted Consolidated Freightways, McLean Trucking Co., CF Motorfreight, Dukes Trucking, Hercorp Transport, Inc. and Illinois Pacific Inc., all trucking companies, between 1995 and 2014 and M&A Maintenance & Repair Diesel in 2020. As discussed above in Section 2.5, this facility does not represent a REC. This property is discussed further below in Section 5.10.

4.7.4 Historical Topographic Map Review

Historical topographic maps can be used to identify changes in subject property topography as well as subject property development and usage. Differences in the topographic lines on the maps from one edition to the next can indicate areas where fill may have been placed on the subject property or show areas where

soil may have been removed or cut. Most topographic maps depict man-made structures as well as natural features including wooded areas, streams, rivers, lakes, and ponds. However, if a property is located in an urban setting, the topographic map may not show individual structures.

SCI obtained *The Historical Topographic Map Report* from EDR for the subject property and adjacent properties. A copy of the EDR report is contained in Appendix G. SCI reviewed 7.5-minute topographic maps for the years 2021, 2018, 2015, 2012, 1992 (photo revised 1988), 1978 (photo revised 1972), and 1963 (photo revised 1961). SCI also reviewed the 15-minute topographic maps for the years 1944 and 1926. A summary of this review is contained in Table 4.3.

Table 4.3 - Historical Topographic Map Summary

Year	Observations
2021	The elevation of the subject property ranged from approximately 890 feet above msl near a marshy depression on the northeastern part of the property to approximately 960 feet above msl in the southeastern corner of the property. The subject property appeared to be partially wooded. U.S. Highway 14 bound the property to the north, beyond which was Highway 120/Washington Street. Adjacent to the east were three ponds and wooded land, beyond which was U.S. Highway 14. Adjacent to the south was wooded land. Adjacent to the west were S. Shannon Drive, two ponds, and wooded land, beyond which was N Rose Farm Road. Individual structures were not depicted on the map as it was intended to be viewed over an aerial photograph.
2018	The subject property and surrounding properties appeared similar to the 2021 topographic map.
2015	The subject property and surrounding properties appeared similar to the 2021 topographic map, except the marshy depression on the northeastern part of the subject property was depicted as a small pond.
2012	The subject property and surrounding properties appeared similar to the 2015 topographic map.
1992 (photo revised 1988)	The subject property appeared similar to the 2012 topographic map, except the pond on the subject property was depicted as an intermittent pond. Although individual structures were depicted on the map, no structures were depicted on the subject property. The surrounding properties appeared similar to the 2012 topographic map, with the following exceptions: • Beyond U.S. Highway 14 to the north was what appeared to be a commercial structure with associated outbuilding, beyond which was Highway 120, • A small structure typical of a residence was depicted to the east, • Small structures typical of residences were depicted to the south, and • What appeared to be a residential subdivision was depicted to the west.
1978 (photo revised 1972)	The subject property appeared similar to the 1992 (photo revised 1988) except the pond on the subject property was larger is size and was not depicted as an intermittent waterbody. The surrounding properties appeared similar to the 1992 (photo revised 1988) topographic map, with the following exceptions: • The commercial structure to the north, beyond U.S. Highway 14, was not depicted, and • Only one small structure, typical of a residence, was depicted to the west of the subject property.

Table 4.3 - Historical Topographic Map Summary (Continued)

Year	Observations
1963 (photo revised 1961)	The subject property and surrounding properties appeared similar to the 1978 (photo revised 1972) topographic map with the following exceptions: • The properties to the east and south appeared to be undeveloped, and • The ponds to the east were no longer present.
1944 (15-minute)	The subject property and surrounding properties appeared to be undeveloped land or agricultural land. U.S. Highway 14 was no longer present to the north.
1926 (15-minute	The subject property and surrounding properties appeared similar to the 1944 topographic map.

Review of historical topographic maps identified no potential environmental concerns. The subject property did not appear to have been developed with any structures dating back to 1926.

4.7.5 City Permits

Historic building permits were not reviewed for the subject property due to the historically rural nature of the area.

4.7.6 Undermining

The Illinois State Geological Survey (ISGS) maintains records of active and abandoned coal mines in the state. Much of the mining activity in the region occurred between 1880 and 1940. Mines operated by various companies in the vicinity of the subject property were room and pillar panel mines and strip mines.

The ISGS provides on-line maps of the mine locations. A review of the map for the area of the subject property did not identify mines on or near the subject property. The *ISGS Mine Map* is enclosed as Figure 3.

4.8 Summary of Historical Use

An intermittent pond was present on the subject property and the property appeared to be used for agricultural purposes or was undeveloped dating back to 1926. The subject property appeared to be used for agricultural purposes dating back to at least 1939, based on review of historical aerial photographs.

The property continued to be used for agricultural purposes until the 1980s when the eastern and southern parts of the property became wooded. The western part of the property continued to be used for agricultural purposes up the date of this report.

The surrounding properties appeared to be undeveloped or used for agricultural purposes dating to 1926. The surrounding properties appeared largely unchanged until the 1960s when a highway was built to the north of the property. The northeast adjacent property appeared to have been used as a borrow area for soil to construct the highway at that time. The properties to the east and west were developed for residential purposes between the 1960s and 1980s, and the property to the north was also developed for commercial purposes in the 1980s. Commercial occupants of the property to the north of the subject property included trucking companies and a diesel repair facility. Additional properties to the west of the subject property were developed for residential purposes in the 1990s, otherwise, the surrounding properties appeared relatively unchanged up to the date of this report.

5.0 REGULATORY AGENCY RECORDS REVIEW

SCI reviewed environmental records obtained from EDR. A copy of the report is contained in Appendix H. This search covered all lists required by ASTM E 1527-21 to the required approximate minimum search distance as shown on Table 5.1.

Table 5.1 - Environmental Record Sources

Records Sources	Approximate Minimum Search Distance	Properties Identified
Federal National Priorities List (NPL)	1.0 Mile	0
Federal Delisted NPL	0.5 Mile	0
Federal Superfund Enterprise Management System (SEMS)	0.5 Mile	0
Federal Superfund Enterprise Management System Archive (SEMS-ARCHIVE)	0.5 Mile	0
Federal Resource Conservation & Recovery Information System (RCRIS): Treatment, Storage, and Disposal (TSD)	0.5 Mile	0
Federal Resource Conservation & Recovery Information System (RCRIS): Facilities List and Generators List	Subject Property and Adjacent Properties	0
Federal RCRA TSD Facilities with Corrective Action Activities (CORRACTS)	1.0 Mile	0
Federal Emergency Response Notification System (ERNS)	Subject Property Only	0
Federal Institutional/Engineering Control (IC/EC) Registries	Subject Property Only	0
Illinois Hazardous Waste Sites List	1.0 Mile	0
Illinois Solid Waste Landfill List	0.5 Mile	0
Illinois Leaking Underground Storage Tank (LUST) List	0.5 Mile	0
Illinois Registered UST List	Subject Property and Adjacent Properties	1
Illinois Institutional/Engineering Control (IC/EC) Registries	Subject Property Only	0
Additional Environmental Record Sources	Various	3

When identified, the EDR report also contains listings of orphan sites, which are listings in a database that could not be mapped due to poor or inadequate information. However, no orphan sites were identified in the EDR report for the subject property.

5.1 Federal NPL

Section 105(a)(8)(B) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requires the preparation of the NPL. The NPL is a list of national priorities among the known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. The identification of a site for the NPL is intended to guide the USEPA in: determining which sites warrant further investigation to assess the nature and extent of the human health and environmental risks associated with a site; identifying what CERCLA-financed remedial actions may be appropriate; notifying the public of sites USEPA believes warrant further investigation; and serving notice to potentially responsible parties that USEPA may initiate CERCLA-financed remedial action.

No listings were encountered during the review of the NPL database within the ASTM-prescribed minimum search distance of the subject property.

5.1.1 Federal Delisted NPL

The National Oil and Hazardous Substance Pollution Contingency Act (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

No listings were encountered during the review of the delisted NPL database within the ASTM-prescribed minimum search distance of the subject property.

5.2 Federal SEMS

The Superfund Enterprise Management System (SEMS) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program. This list was formerly known as the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). This list contains data on potentially hazardous waste sites that have been reported to the EPA by states, municipalities, private companies, and private persons pursuant to Section 103 of CERCLA. The dataset also contains sites which are either proposed to or on the NPL and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

No listings were encountered during the review of the SEMS database within the ASTM-prescribed minimum search distance of the subject property.

5.2.1 Federal SEMS-ARCHIVE

The Superfund Enterprise Management System Archive (SEMS-ARCHIVE) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP. SEMS-ARCHIVE sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

No listings were encountered on the SEMS-ARCHIVE list within the ASTM-prescribed minimum search distance of the subject property.

5.3 Federal RCRIS

Hazardous waste data is contained in the Resource Conservation and Recovery Information System (RCRIS) in support of the Resource Conservation and Recovery Act (RCRA). RCRA requires that generators and transporters of hazardous waste, as well as hazardous waste treatment, storage, and disposal (TSD) facilities provide information concerning their activities to state environmental agencies. These agencies then provide information to regional and national USEPA offices. RCRIS is used by the USEPA to support its implementation of RCRA.

No listings were encountered during the review of the RCRIS database within the ASTM-prescribed minimum search distance of the subject property.

5.4 Federal CORRACTS

The EPA maintains this database of RCRA TSD facilities that are undergoing corrective action. A corrective action order is issued pursuant to RCRA section 3008(h) if there has been a release of hazardous waste into the environment from a RCRA facility.

No listings were encountered during the review of the CORRACTS database within the ASTM-prescribed minimum search distance of the subject property.

5.5 Federal ERNS

The Emergency Response Notification System (ERNS) is a database used to store information on notifications of oil discharges and hazardous substance releases. The ERNS program is a cooperative data sharing effort among the USEPA, the Department of Transportation, and the National Response Center. ERNS provides the most comprehensive data compiled on notifications of oil discharges and hazardous substance releases in the United States.

No listings were encountered during the review of the ERNS database within the ASTM-prescribed minimum search distance of the subject property.

5.6 Federal IC/EC

Databases of institutional controls or engineering controls maintained by a federal agency for purposes of tracking sites that may contain residual contamination and activity and use limitations (AULs).

No listings were encountered during review of the IC/EC database within the ASTM-prescribed minimum search distance of the subject property.

5.7 Illinois Hazardous Waste Sites List

The Illinois Environmental Protection Agency (IEPA) maintains hazardous waste site records within State Sites Unit Listing (SSU) database.

No listings were encountered during the review of the SSU database within the ASTM-prescribed minimum search distance of the subject property.

5.8 Illinois Solid Waste Landfill List

The IEPA Solid Waste Management Program publishes and regularly updates permitted Solid Waste Facilities.

No listings were encountered during the review of the landfill lists within the prescribed minimum search distance of the subject property.

5.9 Illinois LUST List

The IEPA LUST Program publishes and regularly updates a List of Leaking Underground Storage Tanks Active Sites.

No listings were encountered during the review of the List of Leaking Underground Storage Tanks within the ASTM-prescribed minimum search distance of the subject property.

5.10 Illinois Registered UST List

The Office of the State Fire Marshal maintains a regularly updated database of registered USTs.

One listing was encountered during the review of the registered UST database within the ASTM-prescribed minimum search distance of the subject property. This listing was for a facility with unknown name located at 14719 Washington Street, the north-adjacent property beyond U.S. Highway 14. According to the listing, one 10,000-gallon UST containing diesel fuel and one 500-gallon UST containing gasoline were removed from this property in April 1990. No release of petroleum products was reported for this facility. As discussed above in Section 2.5, this facility hosted a trucking company and automotive repair facility at the time of this report. Based on the down-gradient position of this facility relative to the subject property, it does not represent a REC.

5.11 Illinois IC/EC

Databases of institutional controls or engineering controls maintained by a state agency for purposes of tracking sites that may contain residual contamination and AULs.

No listings were encountered during review of the IC/EC database within the ASTM-prescribed minimum search distance of the subject property.

5.12 Additional Environmental Record Sources

SCI reviewed listings of Additional Environmental Records Sources, as outlined in the EDR Radius Report, attached as Appendix H. These records include various state and federal databases, as well as proprietary records maintained by EDR. As a conservative approach, in accordance with ASTM E 1527-21, Additional Environmental Records were searched at various distances up to one-mile from the subject property. Three listings were identified within the searched records. Each of these listings appeared be associated with the industrial facility at 14512 Washington Street, located approximately 930 feet northeast of the subject property. This facility was listed as Wheelabrator Technologies Inc. on the Per- and polyfluoroalkyl substances (PFAS) Enforcement and Compliance History Online (ECHO) database and Evans Products Co. on the PFAS ECHO and Site Remediation Program (SRP) databases. According to the listings, this facility operated as a chemical and machinery manufacturer, industries known to handle or generate PFAS.

The site was enrolled in the SRP program, a voluntary remediation program for sites with environmental impact not regulated by other state or federal programs, in June 1990; however, the property was terminated from the SRP due to lack of response. However, based on the down-gradient position of this facility relative to the subject property, it does not represent a REC.

6.0 VAPOR ENCROACHMENT SCREENING

In accordance with ASTM Practice E 1527-21, SCI conducted an initial vapor encroachment screening to determine if there is a potential for chemical of concern vapors to be present in the subsurface of the subject property due to the release of vapors from contaminated soil or groundwater either on, or near, the subject property. The initial vapor encroachment screening was performed using a "non-invasive" screening process which consists of a subject property reconnaissance as well as a review of regulatory database and historical resources. If the initial vapor encroachment screening determines that there is a potential vapor encroachment condition (pVEC), the environmental professional further evaluated the pVEC to determine if it represents a REC in connection with the subject property. The pVEC will be identified as a REC where the potential for vapor migration into existing and/or proposed on-site structures is considered likely or where the contaminant concentrations in soil, groundwater, or soil vapor on the subject property are significant and may result in enforcement against the responsible parties.

Based on the results of the vapor encroachment screening as outlined above, no pVECs were identified in connection with the subject property.

7.0 NON-ASTM SCOPE ITEMS

7.1 Emerging Contaminants

While evaluating the subject property and surrounding properties for use or storage of hazardous substances or petroleum products, SCI also evaluated these properties for the presence or likely presence of per- and polyfluoroalkyl substances (PFAS) not currently regulated by CERCLA. PFAS were historically and continue to be used in numerous commercial and industrial applications. The U.S. EPA has published a list of potentially affected industries, which includes various manufacturing industries, mining, sewage treatment, home furnishings, transportation, car washes, laundries, and fire protection, amongst others. One facility located to the northeast of the subject property, Wheelabrator Technologies Inc at 14512 Washington Street was identified on the PFAS ECHO database as a facility that may have handled or generated PFAS; however, the facility was located over 900 feet from the subject property and down-gradient relative to the subject property and does not represent a concern.

Furthermore, according to Luke Chang, the owner of the subject property, no biosolids from a wastewater treatment plant had been applied on the subject property. Furthermore, no records were identified indicating biosolids from wastewater treatment facilities had been placed, applied, or spread on the property. As such, SCI does not expect PFAS to represent a concern for the subject property.

8.0 ADDITIONAL INVESTIGATIONS

SCI is unaware of any additional environmental or geotechnical assessments previously or currently being conducted on the subject property.

9.0 FINDINGS

Phase I activities consisted of historical and public records research, historical review, interviews, and a reconnaissance survey. In the course of SCI's scope of service, we have identified the following environmental conditions in connection with the subject property, which includes all RECs, CRECs, HRECs, BERs, and *de minimis* conditions:

- One of the properties to the north of the subject property, beyond the adjacent highway, was occupied by a trucking company that appeared to perform automotive maintenance on diesel equipment. Furthermore, this facility historically hosted diesel and gasoline USTs that were removed in 1990. No release was reported in association with these USTs. This facility was located down-gradient relative to the subject property. As such, it does not represent a REC. (Sections 2.5, 4.7.3, and 5.10)

- An easement and right-of way agreement in favor of ANR Pipeline Company was disclosed in the title documentation for the subject property. However, according to Luke Chang, the owner of the subject property, this pipeline had not yet been constructed and was intended to carry natural gas. As such, the proposed pipeline does not represent a REC. (Sections 4.1 and 4.6)

- Three listings were identified during review of additional environmental record sources. Each of these listings appeared be associated with the industrial facility at 14512 Washington Street, located approximately 930 feet northeast of the subject property. This facility was listed as Wheelabrator Technologies Inc. on the PFAS ECHO database and Evans Products Co. on the PFAS ECHO and SRP databases. According to the listings, this facility operated as a chemical and machinery manufacturer, industries known to handle or generate PFAS. The site was enrolled in the SRP program, a voluntary remediation program for sites with environmental impact not regulated by other state or federal programs, in June 1990; however, the property was terminated from the SRP due to lack of response. Based on the down-gradient position of this facility relative to the subject property, it does not represent a REC. (Sections 5.12 and 7.1)

10.0 DATA GAPS

A data gap is a lack of or inability to obtain information required by this practice despite good faith efforts to gather such data. In completing this Phase I, SCI encountered the following data gaps:

- An interview with the previous property owner could not be obtained. However, based on the review of historical aerial photographs and topographic maps, the subject property was undeveloped or used for agricultural purposes dating back to at least 1926. Therefore, this data gap is not significant as it is unlikely that the previous owner would provide any information which would lead to the identification of RECs.

- No response from the fire department was received regarding the storage or spillage of petroleum, toxic, or hazardous materials on the subject property. However, based on the identified past uses of the property, this gap is not significant since the fire department would be unlikely to provide any records that might lead to the identification of RECs.

- SCI was unable to verify subject property usage to the first developed use of the subject property. SCI was able to verify subject property usage to 1939 at which time the western portion of the subject property was used for agricultural purposes. This data gap is not significant because the pre-1939 use of the subject property for agricultural purposes is unlikely to have resulted in any RECs.

- Several gaps of greater than five years were identified during review of available historical information for the subject property. However, this data gap is not significant because the data reviewed showed the subject property relatively unchanged throughout these gaps; therefore, significant changes to the property during the time gap appear unlikely.

11.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527-21 of the approximately 88-acre project area located south of Highway 14 and north of Kishwaukee Valley Road in Woodstock, Illinois, the subject property. Any exceptions to, or deletions from, this practice are described in Section 9.0 of this report. This assessment has revealed no evidence of RECs, CRECs, or significant data gaps in connection with the subject property.

12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Professional Staff Resumes are contained in Appendix I.

Benjamin K. Butterfield, CHMM
Senior Scientist

13.0 REFERENCES CITED

ASTM International, 2021, *Standard Practice for Environmental Assessments: Phase I Environmental Site Assessment Process*, "Designation: E 1527-21," West Conshohocken, PA.

Environmental Data Resources, Inc., February 20, 2025, *Certified Sanborn® Map Report*.

Environmental Data Resources, Inc., February 21, 2025, *Aerial Photo Decade Package.*

Environmental Data Resources, Inc., March 4, 2025, *The EDR-City Directory Abstract.*

Environmental Data Resources, Inc., February 20, 2025, *EDR Historical Topographic Map Report.*

Environmental Data Resources, Inc., February 20, 2205, *The EDR Radius Map™ Report with GeoCheck®.*

United States Geological Survey, Marengo North, Illinois Quadrangle, dated 1970 (photo revised 1975), 7.5-Minute Series (Topographic).

United States Geological Survey, Woodstock, Illinois Quadrangle, dated 19927.5-Minute Series (Topographic).

United States Geological Survey, 1988, "State Summaries of Ground-Water Quality," *National Water Summary 1986: Hydrologic Events and Ground-Water Quality,* U.S. Geological Survey Water-Supply Paper 2325*,* pp. 237-244.

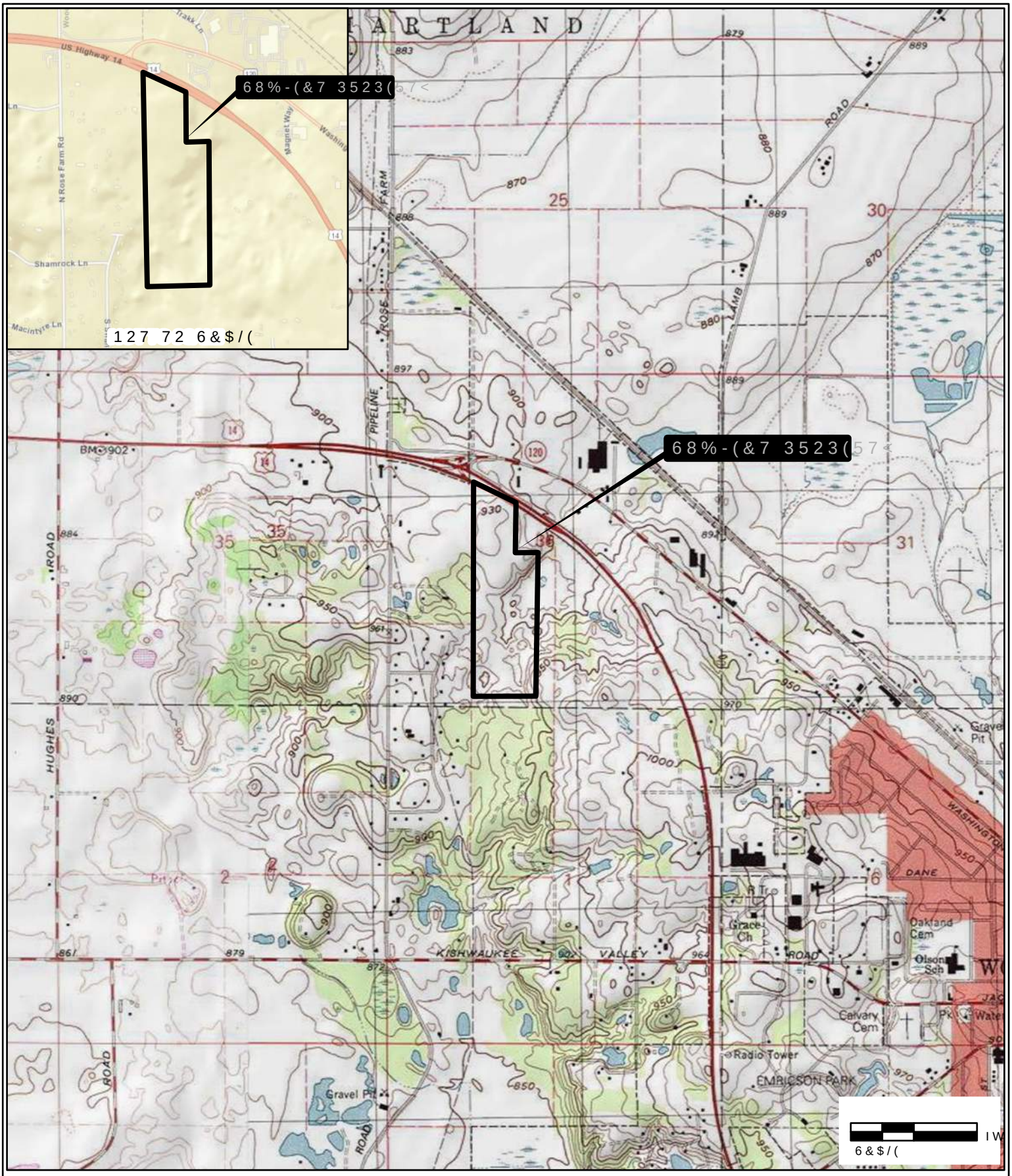
14.0 LIMITATIONS

This report has been prepared for the exclusive use of Woodstock Community Energy Initiative LLC. Our services were performed in accordance with a specific scope of work and are subject to the terms and conditions agreed to as part of that scope of work. SCI is not responsible for independent conclusions or recommendations made by others. Furthermore, written consent must be provided by SCI should anyone other than our client wish to excerpt, or rely on, the contents of this report. The services performed are generally consistent with those outlined in ASTM Practice E 1527-21. The findings of this report are valid as of the present date of the assessment.

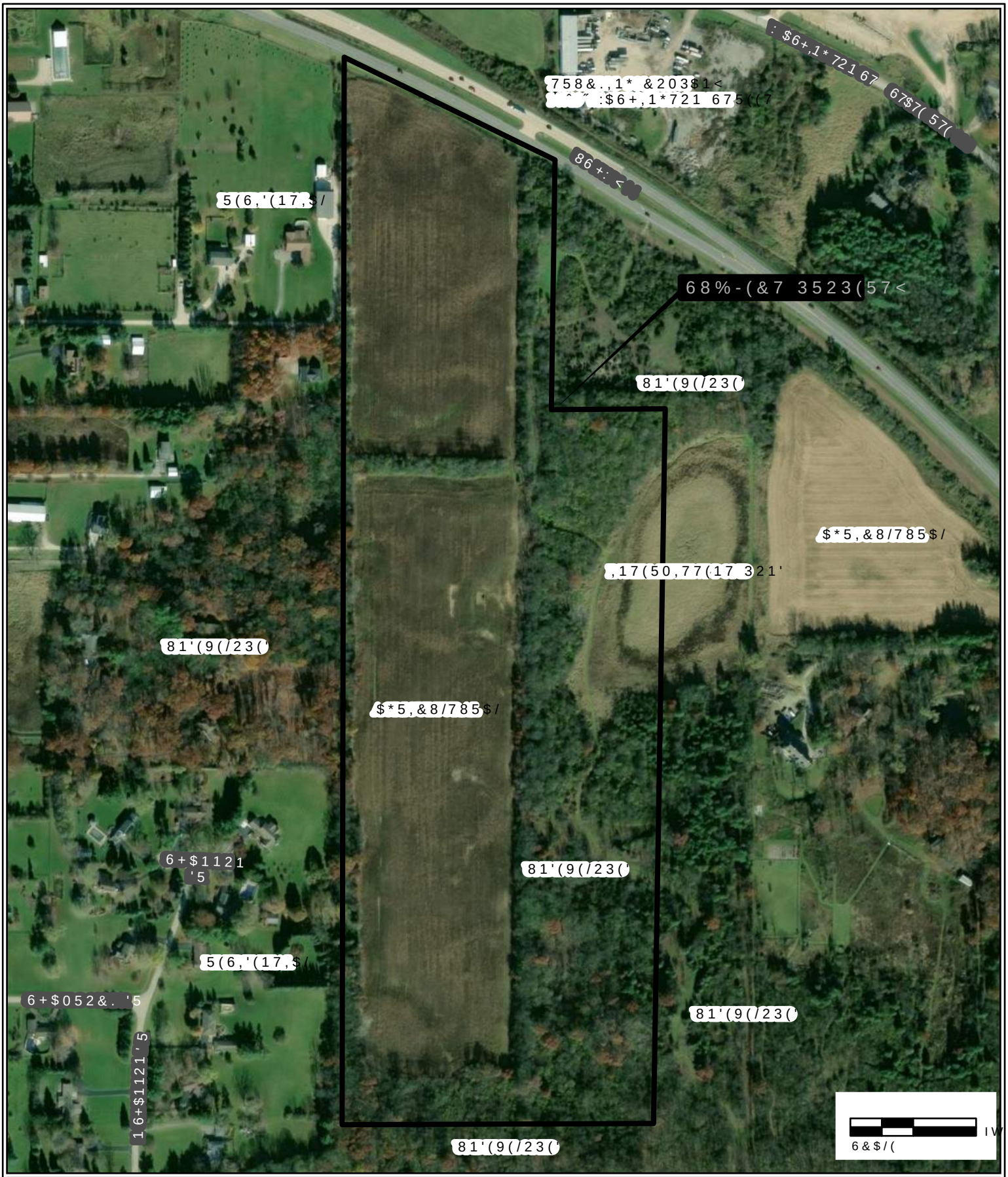
Changes in surface and subsurface conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, the broadening of knowledge, or other reasons. Accordingly, the findings of this report may be invalidated in whole or in part by changes outside our control.

SCI should be contacted with any known or suspected variations from the conditions described herein. If further development of this subject property indicates the presence of hazardous, toxic, or petroleum materials, or other concerns of an environmental nature, SCI should be notified to perform a re-evaluation of the environmental conditions.

The following assumptions are made by SCI in this report. SCI relied on information derived from secondary sources including government agencies, the client, designated representatives of the client, property contact, property owner, property owner representatives, computer databases, and personal interviews. Except as set forth in this report, SCI has made no independent investigation as to the accuracy and completeness of the information derived from secondary sources including government agencies, the client, designated representatives of the client, property contact, property owner, property owner representatives, computer databases, or personal interviews and has assumed that such information is accurate and complete. SCI assumes information provided by or obtained from governmental agencies including information obtained from government websites is accurate and complete. Groundwater flow and depth to groundwater, unless otherwise specified by on-property well data, are assumed based on contours depicted on the United States Geological Survey topographic maps. SCI assumes the property has been correctly and accurately identified by the client, designated representative of the client, property contact, property owner, and property owner’s representatives.



	352-(&7 1$0(:22'672&. &20081,7< (1(5*< ,1, //& 62/$5 352-(&7 :22'672&. ,//,12,6		*(1(5$/ 127(6 /(*(1' 9,&,1,7< $1' 7232*5$3+,& 0$3 0$5(1*2 1257+ ,//,12,6 48$'5$1*/('$7(' ~~ &2172856	
	9,&,1,7< $1' 7232*5$3+,& 0$3			
'5$:1 %< $&9 &+(&.(' %< 76&	),*85('$7(	-2% 180%(5		),*85(



	352-(&7 1$0(:22'672&. &20081,7< (1(5*< ,1,7 //& 62/$5 352-(&7 :22'672&. ,//,12,6	*(1(5$/ 127(6 /(*(1' $7,9(	
	68%-(&7 3523(57 6855281',1* 3523(57,(6 0$3	$(5,$/ 3+272*5$3+ 2%7$,1(')520 $5&*,6 21/,1(:25/' ,0$*(5<	
	'5$:1 %< $&9),*85('$7(-2% 180%(5 &+(&.(' %< 76&	',0(16,216 $1' /2&$7,216 $5($3352;,0$7(° $&78$/ 0$< 9$5< '5$: 1* 6+$// 127 %(86(' 2876,'(7+(&217(;7 2) 7+(5(3257)25 85(	

352-(&7 1$0(
:22'672&. &20081,7< (1(5*< ,1,7
//& 62/$5 352-(&7
:22'672&. ,//,12,6

,6*6 0,1(0$3

'5$:1 %<	$&9	),*85('$7(	-2% 180%(5
&+(&.(' %<	76&		

(1(5$/ 127(6 /((1'

0,1(/2&$7,21 ,1)250$7,21 2%7$,1(')520 +773 ::: ,6*6 8,8& ('8

Appendix A

Photo 1. Overview of the subject property facing southeast.

Photo 2. Overview of the subject property facing southwest.

Photo 3. Overview of pond area on the subject property.

Photo 4. Overview of wooded area on the eastern portion of the subject property.

Photo 5. Overview of the subject property facing northwest.

Photo 6. Overview of the subject property facing northeast.

Photo 7. North adjacent property as viewed from the subject property.

Photo 8. Northeast adjacent properties as viewed from the subject property.

Photo 9. Additional northeast adjacent property as viewed from the subject property.

Photo 10. East adjacent properties as viewed from the subject property.

Photo 11. South adjacent properties as viewed from the subject property.

Photo 12. West adjacent properties as viewed from the subject property.

Photo 13. Additional west adjacent properties as viewed from the subject property.

Photo 14. Additional west adjacent properties as viewed from the subject property.

Appendix B

SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

February 26, 2025

Luke Chang
lukechg@aol.com

RE: Environmental Assessment Questionnaire
0 U.S. Highway 14
Woodstock, Illinois
SCI No. 2025-0239.20

Dear Luke Chang:

Please complete the following questionnaire to the best of your knowledge regarding the above-referenced site. The questionnaire is being provided to obtain information needed to complete an environmental assessment being performed at the above-reference location. Please attach copies of any documents or additional pages as needed. Completion of this questionnaire is necessary to finalize our environmental assessment, which is in turn necessary for the impending property transfer (if applicable).
Therefore, it is necessary that this form be completed and returned to me as soon as possible. Your cooperation is greatly appreciated.

1. If you are the owner or partial owner, how long have you owned the subject site? If you are not the property owner, please indicate who is and provide contact information including telephone number and email address.

   We have owned the property for over 4 years
   Chang Family LLC
   1782 Millburne Rd
   Lakeforest IL 60045
   Contact: Luke Chang / Cell Phone 847-877-2316 / lukechg@aol.com

2. If you are a partial owner, please indicate the names of the other owners.

   LLC owners : Jae Chul Chang , Soon Jin Chang , Eun Seong Chang , Eun Ji Kim

3. If you are the owner or partial owner, please indicate the legal ownership name as presented on the property deed. **Chang Family LLC**

4. If you are the owner or partial owner, **from whom did you acquire the property?**
   Not Available
5. Provide contact information for the previous property owner, including telephone number and email address. **Not Available.**

5. Please include a statement that describes the current and/or past (if known) use of the site or any structures located on the site. **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND.**

6. How long has the current structure been on-site? **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND.**

7. How is/was the structure heated and describe its water/sewage system (e.g. well/septic tank)? **NONE TO THE BEST OF OUR KNOWLEDGE NONE. THIS IS FARM LAND.**

8. Are there any wells or cisterns located on the subject site? If so, please detail below. **NONE TO THE BEST OF OUR KNOWLEDGE**

9. Have there ever been any structures on the site which are no longer present? If so, please detail below. **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND.**

10. If the site has a structure or structures, are you aware of any sampling or remediation relative to mold that has previously been performed? **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND.**

11. Are you aware of any current or former water distribution systems on site? If so, are you aware of it containing any asbestos containing materials? **NONE TO THE BEST OF OUR KNOWLEDGE**

12. Please indicate the fire department/district servicing your property. **Woodstock Fire Department.**

14 Please indicate the electric utility/cooperative utility servicing your property. **Commonwealth Edison**

15. Are any other environmental site assessments currently being performed or have previously been performed for this property? If so, please detail below. **We are not sure. There will be gas pipe line to the west end of the property that will be installed in 2025 or 2026**

16. Have any reports regarding hydrogeologic or geotechnical conditions (soil borings, foundation studies, water movement, etc.) on the property been performed? If so, please detail below. **NONE TO THE BEST OF OUR KNOWLEDGE**

17. Have any environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, land disturbance permits) been issued or requested? If so, please detail below. **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND.**

18. If a permit has been obtained for the site, who will be responsible for maintaining it after the transaction is complete? **NOT APPLICABLE.**

19. Are there any hazardous waste generator notices or reports? If so, please detail below. **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND**

20. Are there any notices or other correspondence from any government agency relating to past or current violations or environmental laws with respect to the property or relating to environmental liens encumbering the property? If so, please detail below.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

21. Is there any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property? If so, please detail below.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

22 Are there any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property? If so, please detail below.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

23. Are there any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? If so, please detail below.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

24. Are there any and/or have there ever been any underground or above-ground storage tanks on the property or on adjoining properties? If so, please provide information regarding location, contents, and storage capacities. If a Spill Prevention, Control, and Countermeasure (SPCC) plan exists for the site, please provide a copy of this document for review.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

25. Are you aware that any of the current or former structures on the site utilized heating oil? If so, please describe how the heating oil was stored.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

26. Are there currently or to the best of your knowledge have there ever been any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gallons in volume or 50 gallons in the aggregate stored on the property or at the facility? If so, please detail below. Please also provide copies of Safety Data Sheets (SDS) for chemicals currently in use on the site.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

27. Are there currently, or to the best of your knowledge have there ever been any drums (typically 55gallon) or sacks of chemicals (fertilizer, pesticide, etc.) located on the property or at the facility? If so, please detail below. NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARMLAND

28. Are there currently, or to the best of your knowledge, is there or has there ever been any soil, flooring drains, or walls located on the property that are stained by substances other than water or are emitting foul odors? If so, please detail below.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

29. Is there or has there ever been a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs? If so, please detail below.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

30. Are there currently, or to the best of your knowledge have there ever been, any hydraulic lifts or oil/water separators located on the property? If so, during what years were they in service?
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

31. Are you aware of a pipeline crossing the property? If so, have you, any of your employees, or equipment ever come in contact with the pipe? If so, please detail below.
NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND

32. Please indicate whether you have any reason to suspect dioxin may have been applied on site. For instance, indicate whether any form of waste oil or other compounds were used for dust control. **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND**

33. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been discharged, dumped above grade, buried, disposed, and/or burned on the property? If so, please detail below. **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARMLAND**

34. Have fill materials (soil, rock, concrete rubble, garbage, yard waste, etc.) been placed on the property? (If this is affirmative, you will be contacted by an SCI representative to ascertain the source, location, and depth of this material.) **NONE TO THE BEST OF OUR KNOWLEDGE.**

35. Have fill materials (soil, rock, concrete, rubble, garbage, yard waste, etc.) been moved from one portion of the property to another? **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND**

36. Are there currently, or to the best of your knowledge have there ever been, any burn pits located on the property? **NONE TO THE BEST OF OUR KNOWLEDGE. THIS IS FARM LAND**

37. Please describe the locations and anticipated depths of current/former farm dumps. Farm dumps include areas where household garbage/refuse were placed as well as any demolition debris, farming implements, scrap lumber/metal, etc. **NONE TO THE BEST OF OUR KNOWLEDGE.**

38. Are there currently, or to the best of your knowledge have there ever been, any sink holes located on the property? If yes, please describe. **NONE TO THE BEST OF OUR KNOWLEDGE**

39. To the best of your knowledge, have biosolids from wastewater treatment facilities been placed, applied, or spread on the subject property? **NONE TO THE BEST OF OUR KNOWLEDGE**

Completed By (Please Print): JAE CHUL CHANG

Signature and Title: PRESIDENT

Date: 02/28/25 Phone: (847) 877-2316

Email: LUKECHG@AOL.COM

Respectfully,

SCI ENGINEERING, INC.

Travis S. Clayton Project
Scientist

TSC/bmw

\\Scistcfps01\Projects\2025\2025-0239 Woodstock Community Energy Initiative LLC\ES\20\EAQ-Chang.docx

SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

February 13, 2025

Tiffany Grace
ECA Solar
203 Crescent Street #106
Waltham, Massachusetts 02453

RE: Assessment User Questionnaire
Woodstock Community Energy Initiative LLC Solar Project
Woodstock, Illinois
SCI No. 2025-0239.20

Dear Tiffany Grace:

Please complete the following questionnaire to the best of your knowledge regarding the above-referenced site. The questionnaire is being provided to obtain information needed to complete an environmental assessment being performed at the above-referenced location. Please attach copies of any documents or additional pages as needed. Completion of this questionnaire is necessary to finalize our environmental assessment, which is in turn necessary for the impending property transfer (if applicable). Therefore, it is necessary that this form be completed and returned to me as soon as possible. Your cooperation is greatly appreciated.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments") the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

1. Why is the Phase I required and/or which of the following Landowner Liability Protections do you seek?

   Circle one: Innocent landowner[1], contiguous property owner[2], bona fide prospective purchaser[3] or other (if other, please explain).

[1] Innocent landowner – a person may qualify as one of three types of innocent landowners (i) a person who "did not know and had no reason to know" that contamination existed on the *property* at the time the purchaser acquired the *property*; (ii) a government entity which acquired the *property* by escheat, or through any other involuntary transfer or acquisition, or though the exercise of eminent domain authority by purchase or condemnation; and (iii) a person who "acquired the facility by inheritance or bequest." To qualify for the first type of innocent landowner LLP, such person must have made *all appropriate inquiry* on or before the date of purchase. Furthermore, the *all appropriate inquiry* must not have resulted in knowledge of the contamination. If it does, then such person did "know" or "had reason to know" of contamination and would not be eligible for the *innocent landowner defense.*

[2] Contiguous property owner – a person may qualify if such person owns real *property* that is contiguous to, and that is or may be contaminated by *hazardous substances* from other real *property* and did not know or have reason to know that the *property* was or could be contaminated by a release or threatened release from the contiguous *property*. The *all appropriate inquiry* must not result in knowledge of contamination.

[3] Bona fide prospective purchaser – a person may qualify if such person made "all appropriate inquiries" into the previous ownership and use of the facility in accordance with generally accepted good commercial and customary standards and practices." Knowledge of contamination resulting from *all appropriate inquiry* would not generally preclude this liability protection. (The Bona Fide Prospective Purchaser LLP indicates that you may have knowledge of environmental impacts on the property.)

2. Based on your review of the title, are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

No

3. Are you aware of any activity and use limitations (AULs) such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

No

4. As the user of this environmental site assessment (ESA) do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No

5. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

Yes

6. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

   a. Do you know the past use of the property?

   No

   b. Do you know of any specific chemicals that are present or once were present at the property?

   No

   c. Do you know of spills or other chemical releases that have taken place at the property?

   No

   d. Do you know of any environmental cleanups that have taken place at the property?

   No

7. As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   No

8. Do you have any other knowledge of experience with the *property* that may be pertinent to the *environmental professional* (for example, copies of any available prior *environmental site assessment reports,* documents, correspondence, etc., concerning the property and its environmental condition)?

   No

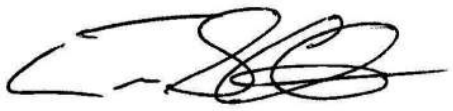
Completed By: Tiffany Grace

Date: 2/25/25 Phone: 978-609-6862

Title: Director, Operations Email: tg@ecasolar.com

Respectfully,

SCI ENGINEERING, INC.



Travis S. Clayton
Project Scientist

TSC/bmw

C: Ben Dykema, ECA Solar

\\Scistcfps01\Projects\2025\2025-0239 Woodstock Community Energy Initiative LLC\ES\20\AUQ-ECA Solar.docx

Appendix C

Woodstock Fire/Rescue District

Freedom Of Information Act Request

"Service Before Self"

INSTRUCTIONS

To request records, fill out this form and submit to the Woodstock Fire/Rescue District's Freedom of Information Officer using one of the three methods described below.

The Freedom of Information Act (5 ILCS 140) requires a written response to non-commercial requests within five (5) business days after the receipt of the request. Commercial requests require a response within 21 business days. The District's response may include a request for an extension of another five (5) business days or to a date agreed upon by the requestor and the District.

Date Requested: 2/24/2025

Requestors Name: Bethany Walter

Organization or Business Name: SCI Engineering, Inc.

Address: 130 Point West Blvd

City: St. Charles, Missouri 63301

Phone: (636) 757-1070 Fax: _____ Email: bwalter@sciengineering.com

Check here if records requested are to be used for commercial purposes: _____

DESCRIPTION OF RECORDS REQUESTED:

Please provide any records the fire department may have on file for this property pertaining to chemical spills or releases, hazardous material incidents or releases, and any knowledge of the storage or pillage of petroleum products.

Thank you!

SUBMITTAL OF REQUESTS SHOULD BE SENT TO:

Mail: Woodstock Fire/Rescue District
Freedom of Information Officer
PO Box 423
435 E. Judd Street
Woodstock, IL 60098

OR E-mail to: FOIA@wfrd.org
Please include:
"Freedom of Information Request"
in the subject line of the e-mail

OR Fax to: 815-334-2010
Please put the attention to:
Freedom of Information Officer

Bethany Walter

From: Bethany Walter
Sent: Monday, February 24, 2025 3:11 PM
To: 'FOIA@wfrd.org'
Cc: Travis Clayton
Subject: Freedom of Information Request - Parcel 07-36-326-003
Attachments: FOIA Request Form 2019 - Fire.pdf; Parcel Info.pdf; Parcel Details for 0736326003.pdf

Good afternoon,

SCI Engineering, Inc. is currently conducting a Phase One Environmental Site Assessment on Parcel 07-36-326-003 in Woodstock, Illinois. I have attached the FOIA request form and property information just in case you need it. If you have any questions or require further clarification, please let us know.

Thank you in advance for your cooperation!

Appendix D

Woodstock Community Energy Initiative

0 US Hwy 14

Woodstock, IL 60098

Inquiry Number: 7904069.3

February 20, 2025

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

02/20/25

Site Name:	Client Name:
Woodstock Community Energy	SCI Engineering, Inc.
0 US Hwy 14	130 Point West Blvd
Woodstock, IL 60098	St. Charles, MO 63301
EDR Inquiry # 7904069.3	Contact: Bethany Walter

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by SCI Engineering, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # A5E4-4EF3-81AF

PO # 2025-0239.20

Project Woodstock Community Energy

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: A5E4-4EF3-81AF

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

SCI Engineering, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT. Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2025 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

Appendix E

Woodstock Community Energy Initiative

0 US Hwy 14

Woodstock, IL 60098

Inquiry Number: 7904069.8

February 21, 2025

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

02/21/25

Site Name:

Woodstock Community Energy
0 US Hwy 14
Woodstock, IL 60098
EDR Inquiry # 7904069.8

Client Name:

SCI Engineering, Inc.
130 Point West Blvd
St. Charles, MO 63301
Contact: Bethany Walter

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2019	1"=625'	Flight Year: 2019	USDA/NAIP
2015	1"=625'	Flight Year: 2015	USDA/NAIP
2012	1"=625'	Flight Year: 2012	USDA/NAIP
2009	1"=625'	Flight Year: 2009	USDA/NAIP
2006	1"=625'	Flight Year: 2006	USDA/NAIP
2002	1"=625'	Flight Date: April 10, 2002	USGS
1999	1"=625'	Acquisition Date: January 01, 1999	USGS/DOQQ
1993	1"=625'	Flight Date: March 30, 1993	NAPP
1988	1"=625'	Acquisition Date: April 19, 1988	USGS/DOQQ
1980	1"=625'	Flight Date: October 21, 1980	NHAP
1975	1"=625'	Flight Date: October 02, 1975	USGS
1972	1"=625'	Flight Date: October 26, 1972	USGS
1966	1"=625'	Flight Date: May 01, 1966	USGS
1961	1"=625'	Flight Date: March 01, 1961	USGS
1958	1"=625'	Flight Date: June 27, 1958	USGS
1953	1"=625'	Flight Date: May 11, 1953	USGS
1939	1"=625'	Flight Date: July 16, 1939	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

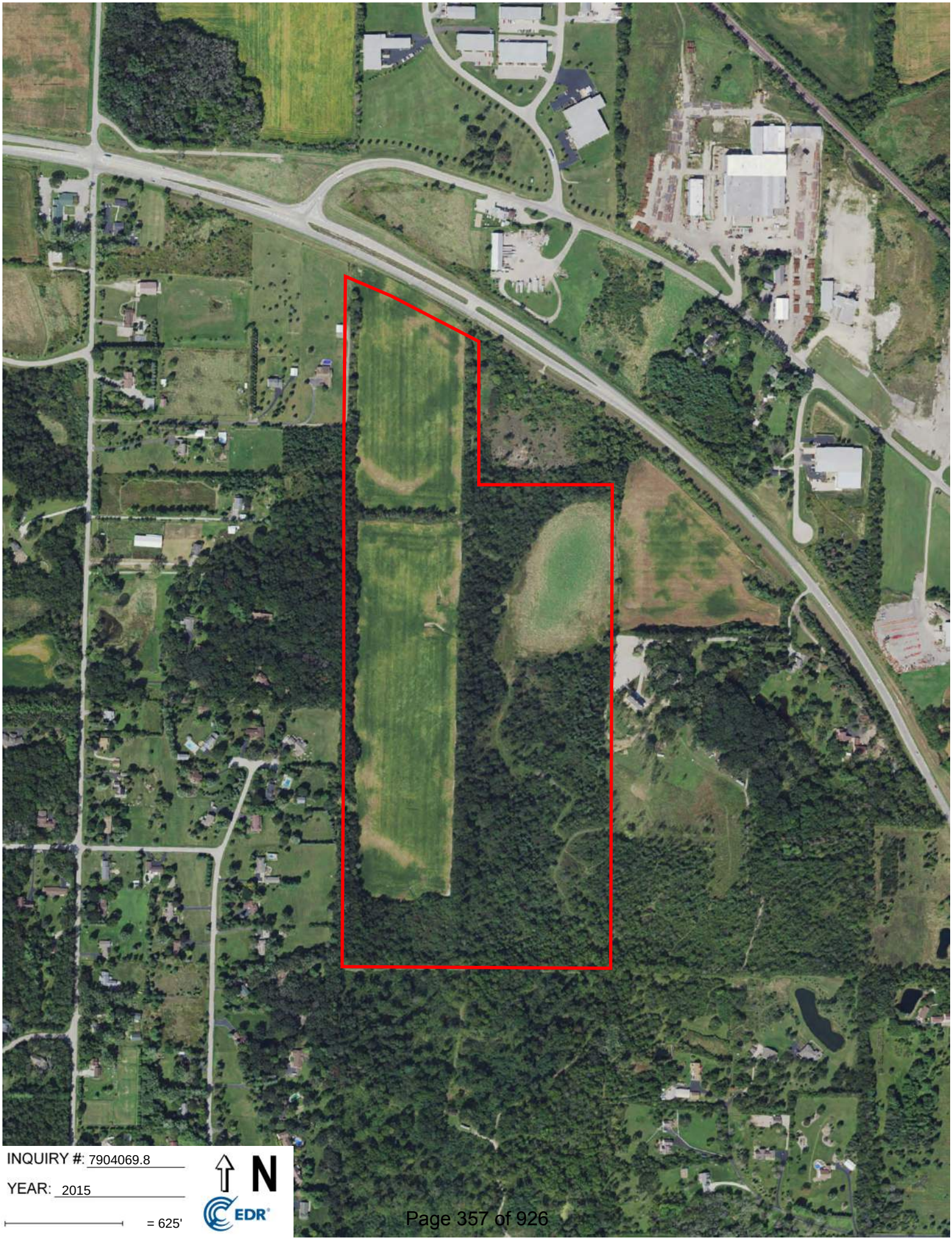
This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT.

Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2025 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

INQUIRY #: 7904069.8
YEAR: 2019
= 625'
N
EDR


INQUIRY #: 7904069.8
YEAR: 2015
= 625'
N
EDR

INQUIRY #: 7904069.8
YEAR: 2012
= 625'
N
EDR

INQUIRY #: 7904069.8
YEAR: 2009
= 625'
N
EDR

INQUIRY #: 7904069.8
YEAR: 2006
= 625'
N
EDR

INQUIRY #: 7904069.8

YEAR: 2002

= 625'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 7904069.8
YEAR: 1999
= 625'
N
EDR

INQUIRY #: 7904069.8

YEAR: 1993

= 625'

N

EDR

INQUIRY #: 7904069.8

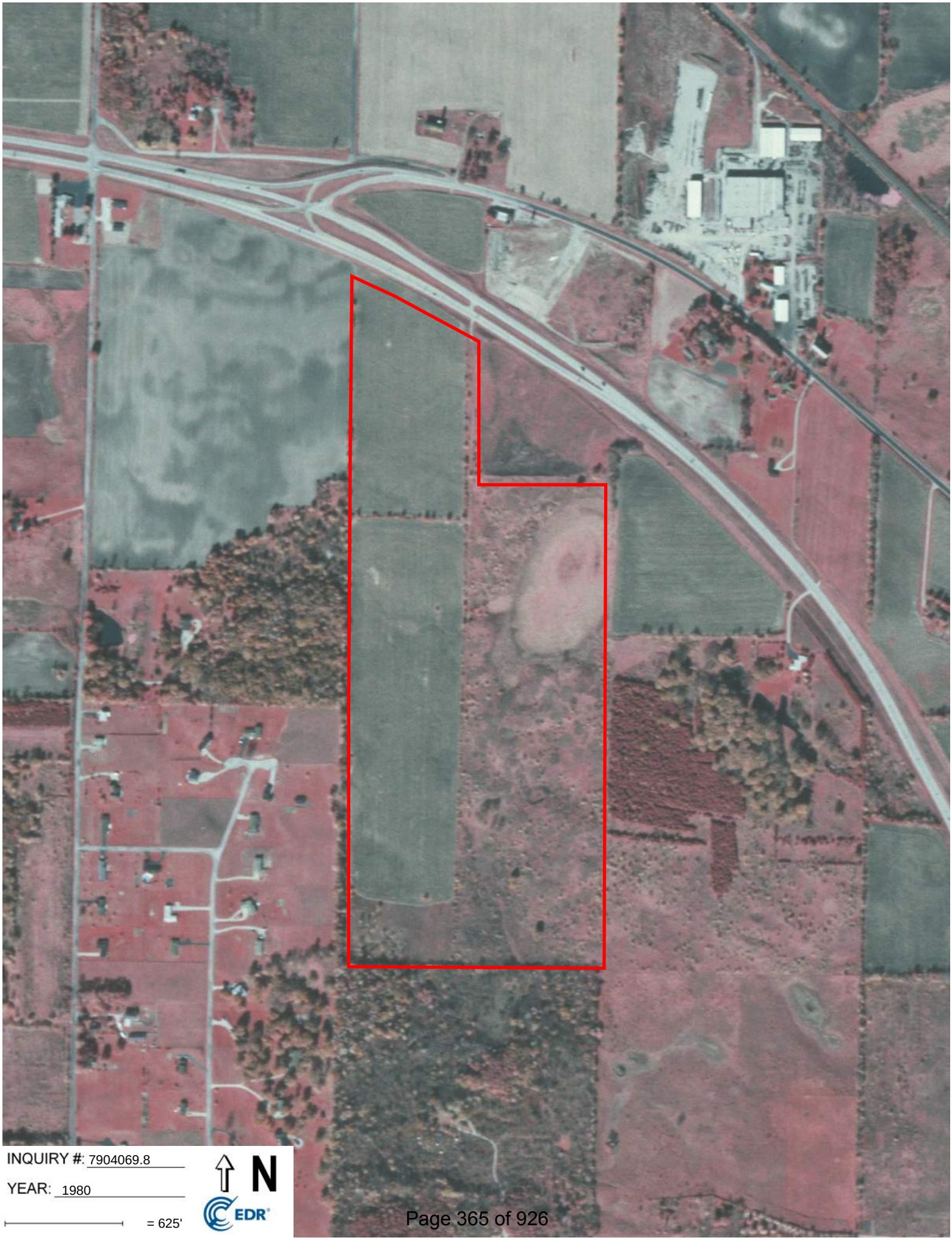
YEAR: 1988

= 625'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.


INQUIRY #: 7904069.8
YEAR: 1980
= 625'
N
EDR

INQUIRY #: 7904069.8

YEAR: 1975

= 625'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 7904069.8

YEAR: 1972

= 625'

N

EDR

INQUIRY #: 7904069.8

YEAR: 1966

= 625'

N

EDR

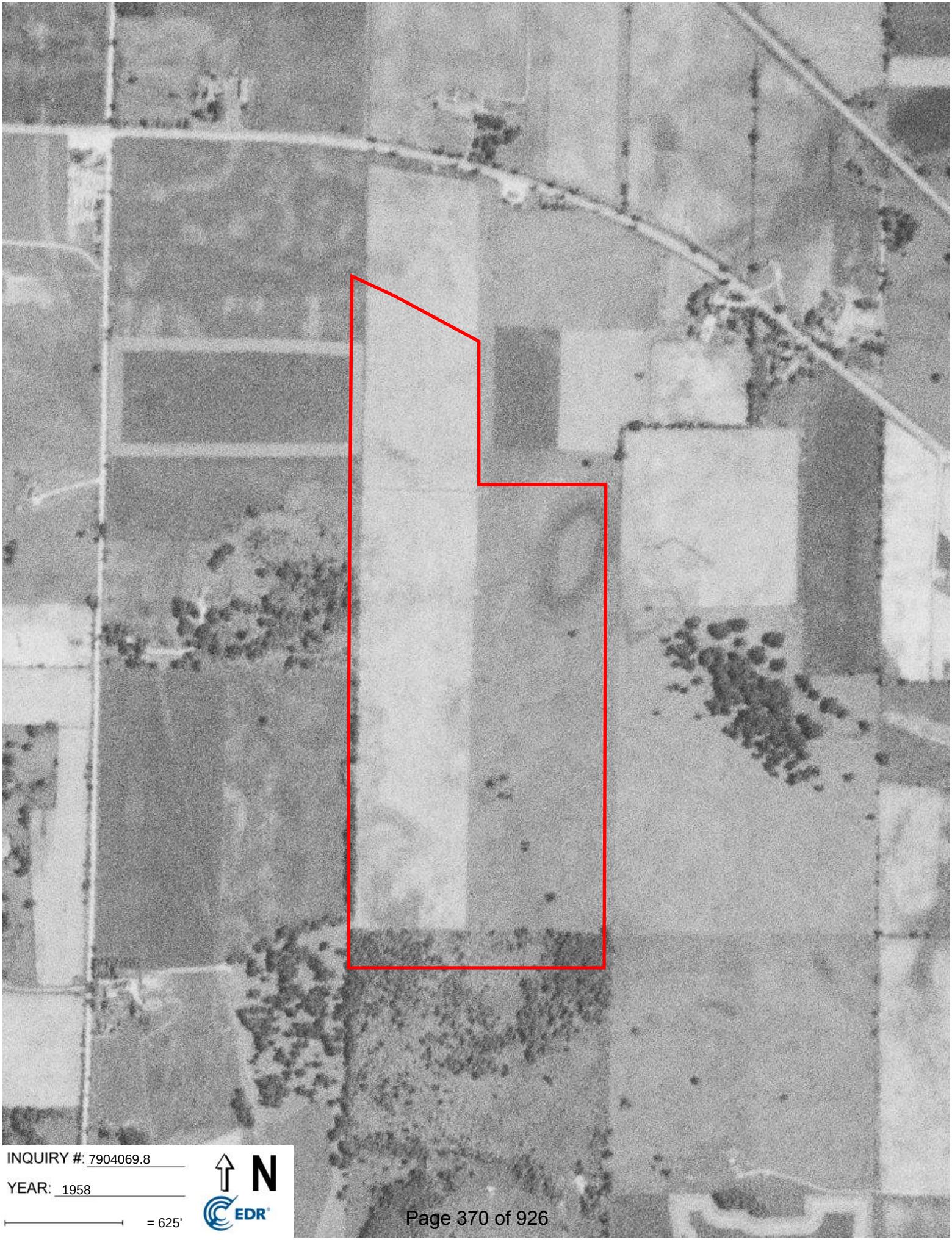
INQUIRY #: 7904069.8

YEAR: 1961

= 625'

N

EDR


INQUIRY #: 7904069.8
YEAR: 1958
= 625'
N
EDR

INQUIRY #: 7904069.8

YEAR: 1953

= 625'

N

EDR

INQUIRY #: 7904069.8
YEAR: 1939
= 625'
N
EDR

Appendix F

Woodstock Community Energy Initiative
0 US Hwy 14
Woodstock, IL 60098

Inquiry Number: 7904069.5
March 04, 2025

The EDR-City Directory Image Report

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

Environmental Data Resources Inc

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. **NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT.** Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, LLC. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, LLC, or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2020	☑	☑	EDR Digital Archive
2017	☑	☑	Cole Information
2014	☑	☑	Cole Information
2010	☑	☑	Cole Information
2005	☑	☑	Cole Information
2000	☑	☑	Cole Information
1995	☑	☑	Cole Information
1992	☑	☑	Cole Information
1986	☑	☑	Haines Criss-Cross Directory
1981	☑	☑	Haines Criss-Cross Directory
1978	☑	☑	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

0 US Hwy 14
Woodstock, IL 60098

Year	*CD Image*	*Source*
US HIGHWAY 14		
2020	pg A8	EDR Digital Archive
2017	pg A21	Cole Information
2014	pg A30	Cole Information
2010	pg A41	Cole Information
2005	pg A52	Cole Information
2000	pg A63	Cole Information
1995	pg A72	Cole Information
1992	pg A80	Cole Information
1986	pg A89	Haines Criss-Cross Directory
1981	pg A94	Haines Criss-Cross Directory
1978	pg A100	Haines Criss-Cross Directory
1978	pg A99	Haines Criss-Cross Directory

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*
KISHWAUKEE VALLEY RD		
2020	pg. A2	EDR Digital Archive
2017	pg. A18	Cole Information
2014	pg. A26	Cole Information
2010	pg. A37	Cole Information
2005	pg. A48	Cole Information
2000	pg. A59	Cole Information
1995	pg. A69	Cole Information
1992	pg. A78	Cole Information
1986	pg. A86	Haines Criss-Cross Directory
1981	pg. A91	Haines Criss-Cross Directory
1978	pg. A96	Haines Criss-Cross Directory
N ROSE FARM RD		
2020	pg. A5	EDR Digital Archive
2017	pg. A19	Cole Information
2014	pg. A28	Cole Information
2010	pg. A39	Cole Information
2005	pg. A50	Cole Information
2000	pg. A61	Cole Information
1995	pg. A70	Cole Information
1992	pg. A79	Cole Information
1986	pg. A87	Haines Criss-Cross Directory
1981	pg. A92	Haines Criss-Cross Directory
1978	pg. A97	Haines Criss-Cross Directory
N SHANNON DR		
2020	pg. A7	EDR Digital Archive
2017	pg. A20	Cole Information

FINDINGS

Year	CD Image	Source	
2014	pg. A29	Cole Information	
2010	pg. A40	Cole Information	
2005	pg. A51	Cole Information	
2000	pg. A62	Cole Information	
1995	pg. A71	Cole Information	
1992	-	Cole Information	Target and Adjoining not listed in Source
1986	pg. A88	Haines Criss-Cross Directory	
1981	pg. A93	Haines Criss-Cross Directory	
1978	pg. A98	Haines Criss-Cross Directory	

WASHINGTON ST

2020	pg. A11	EDR Digital Archive	
2017	pg. A22	Cole Information	
2014	pg. A32	Cole Information	
2010	pg. A43	Cole Information	
2005	pg. A54	Cole Information	
2000	pg. A64	Cole Information	
1995	pg. A73	Cole Information	
1992	pg. A82	Cole Information	
1986	pg. A90	Haines Criss-Cross Directory	
1981	pg. A95	Haines Criss-Cross Directory	
1978	pg. A101	Haines Criss-Cross Directory	

City Directory Images

KISHWAUKEE VALLEY RD 2020

1050	ALYSSA ROBINETT
	DAVID ROBINETT
	TAMALEE ROBINETT
1060	ROGER BLACK
1176	GEOFF CORRADO
	HEATHER CORRADO
	LACKEY WILSON
	SUSAN WILSON
1300	GRACE LUTHERAN CHR-PRESCHOOL
1313	WOODSTOCK WATER WORKS
13610	JANE COLLINS
	JOSE BANUELOS
	SARA SAMOLITIS
13611	JAN WARD
	NATALIE WARD
	SAM WARD
13619	DUANE SCHOOLCRAFT
	HOLLY BARRETT
	JAMES CAMPBELL
	JULIE SCHOOLCRAFT
	LAURA SCHOOLCRAFT
	MATTHEW SCHOOLCRAFT
	MINDY SCHOOLCRAFT
	VIRGINIA CAMPBELL
13620	MELANIE GOLEMBESKI
	MINDY JULIUS
13801	TIMOTHY LUKSTEIN
14212	NICHOLAS SELLECK
	ROBERT SELLECK
	WILLIAM MCBURNEY
14304	DANETTE BITTINGER
14307	LUCILLE AUSTIN
14315	HECTOR FLORES
	JUAN FLORES
14325	KEVIN BRYAN
	MARY BRYAN
14411	ANGELA CHAVEZ
	AUBRI FOX
	DANIEL CASELLA
	DIVELBISS JOE
	ELIZABETH KUHN
	GARY BANDEMER
	HEATHER HOWERTON
	MIANCA SPIKES
	PIONEER CENTER
	SARAH MOSS
	SMITH CARLY
	SMITH MCKENNA
	SUZANNE LECLAIR
	TARA STEPHANY

KISHWAUKEE VALLEY RD 2020 (Cont'd)

14414	ADELINA MIRANDA
	DELFINO MIRANDA
	ITZEL MIRANDA
	JONATHAN MIRANDA
14511	ALLISSA CARROLL
	ARNOLD SPIETZ
	BARBRA SPIETZ
14513	LAUREL ROSSA
14515	DAVID STACK
	DIANE STACK
	JMH CHIMNEY
14604	SHERWIN PORTNOY
14715	DONNA LEIDY
	KEITH LEIDY
14804	BARBARA MICELI
	JOHN MICELI
	QUALITY COMMERCIAL INSTLTN CRP
14816	DEBRA BRUNETTI
	JOSEPH BRUNETTI
	VITO BRUNETTI
14819	SABRINA BOONE
	STEVEN SCHMIEDING
15108	LEONA MORITZ
	MARK MORITZ
	PAIGE MORITZ
	RONALD MORITZ
	SHERRIE MORITZ
15115	JONATHAN O'BRIEN
	KAITLYN JOHNSON
	ZACHARY JOHNSON
15150	CHRISTOPHER SCILUFFO
	LEONA MORITZ
15200	CORINNE DISHAW
	JOSHUA SANCHEZ
15204	ALENA MESZAROSOVA
	K9 GUIDANCE
	KAREL FLUGR
	KATERINA EHLOVA
	L MESZAROS
	MESZAROS MESZAROSOVA
	NIKOLA KRALOVA
15215	CATHERINE ALLISON
	ERIN DISERIO
	MICHELLE ALLISON
	P ALLISON
15309	GAIL MC DONALD
	OLEG SIMKOVIC
15314	LUDVIK KAPCZI
	MALGORZATA ZAWADA
	TERESA DROZD

KISHWAUKEE VALLEY RD 2020 (Cont'd)

15408 LAWRENCE O'CONNOR
NANNETTE CHERNIK
RUTH JENSEN
15508 KRISTEN CLARK
PATRICK MARTENS
15520 CHRISTOPHER BRATANICK
16306 CYNTHIA FOX
STEVEN SPITSON
16313 E & J MERCADO LANDSCAPE INC
EVER LANDSCAPING
MARIA CASTANEDA
16401 AMANDA PASSMORE
DAVID KOST
KARL PASSMORE
THERESA PASSMORE
16505 BRYAN NIPPS
NEDJMIJEN SELJMANI
16509 DONNIE HEELEIN
JULIE HEELEIN
17603 DOUGLAS YOUMANS
MANUEL CARRANZA
PAULA MIELKE
PAULA YOUMANS
WADE SUTHERLAND
17808 AARON SABEL
MARY WINKLEMAN
18104 PATRICIA WOODS
18110 COUNTY-MCHENRY STATE
MARY MCCANN
MCCANN'S BERRY FARM
18111 BENJAMIN KAGEL
JAMES KAGEL
ROSEMARY KAGEL
18520 JOSE MOCTEZUMA
MOCTEZUMA STABLES

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

N ROSE FARM RD 2020

104	ABBY EMRICSON
	MARJORIE EMRICSON
	VALERIE EMRICSON
112	STEVEN STAES
118	BENJAMIN DEUERLING
	LUCRETIA DEUERLING
	WILLIAM DEUERLING
208	WILLIAM MANKE
214	SARAH PARKER
302	CAROLINE CERTIK
	CYNTHIA CERTIK
	EDDIE CERTIK
	EJ CERTIK
	JOHN CERTIK
305	WILLIAM MERKEL
308	DORIS BRIETZKE
	HEINZ BRIETZKE
318	MARK MCCORMICK
406	ERDELY SEVERS
	JAMES SEVERS
	MARILEE SEVERS
420	AGATA MISZCZAK
	KRZYSZTOF MISZCZAK
	LUKE MISZCZAK
	RICHARD MISZCZAK
	RYSZARD MISZCZAK
	TOM MISZCZAK
506	CARMEN GOODMON
	DAVID ROBBINS
	JENNIFER ROBBINS
	KATHLEEN WIGMAN
602	CATHY DAVIS
	CHRISTOPHER JACKWIAK
	SCOTT DAVIS
604	BRIAN BERRETTINI
	CHRIS MARCH
	DONALD CAMPBELL
	FRANK BERRETTINI
	JAMES MARCH
	JESSICA MARCH
	LAURA BERRETTINI
	LORI MARCH
	NICHOLE BERRETTINI
	STEPHANIE PRIDE
606	LEAH PORTER
	MATTHEW CAMP
612	MALEAH OLANDESE
	MARCELLA MASON
	MELEAH OLANDESE
	NICK OLANDESE

N ROSE FARM RD 2020 (Cont'd)

704	SPRING MOON SIGNS & DESIGNS
803	ANGELICA MARTINEZ
	ARMANDO ARZOLA
	SERGIO MARTINEZ
1017	MARLENA DANNEHY
	MARLENA MURPHY
1103	NANCY ZIMMERMAN
	ROBERT ZIMMERMAN
1150	SOTOS PALLETS INC
1200	FALCON WASTE & RECYCLING INC
1250	CREASY EXTERIORS
	MICHAEL MILES
	MILES MOTORS
	PETERSON WOODWORKING INC
1258	NGK PINGREE GROVE LLC
	SPORTS SURFACING
1309	ERIC HETTINGA
	MINDY KONKEL
	SCOTT HETTINGA
1313	BUNTING BRISCOE
	JENNIFER BUNTING
	JM BRISCOE
	TODD BUNTING
1317	STACEY MUNGLE
1401	JESSICA KELAHAN
	JUDITH KELAHAN
1413	JENNIFER ARNDT
	LAWRENCE MACHEROUX
	MARY MACHEROUX
1500	EDWINA YOUNG
	LAVERNE YOUNG
	RICHARD BEHLING
	STEPHANIE WILLNEY
1501	FRANK HAUCK
	MARGARET HAUCK
1505	CHARLOTTE MESS
	KIMBERLY ZAMBRANO
	ROLAND MESS
	SHANNON KUGIA
2305	KATIE HARRIGAN
	TRENT VARVIL
2307	PAMELA ROSENQUEST
	STEPHEN ROSENQUEST

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

N SHANNON DR 2020

104	DAVID ARVIDSON
	MARY BARTNIK
	PATRICIA ARVIDSON
105	JOHN STASSEN
	MARYANN STASSEN
	SUSAN STASSEN
111	MARY SMITH
	STEVEN SMITH
112	CAROLYN LIGHT
	MARY LIGHT
118	CHRISTINE RICHARDS
211	KAREN HAYES
	PATRICK HAYES
219	ANDREA DOERDELMANN
	DOERDELMANN AB
	KEN DOERDELMANN
	SIEGFRIED DOERDELMANN
220	CHRISTOPHER POLLACK
222	COLLEEN LITTLE
302	DOLORES MORRIS
305	MICHAEL KNIOLA
	THERESE KNIOLA
310	DEANNA OLEXIA
	MICHAEL OLEXIA

US HIGHWAY 14 2020

9307	MOLLY BUCK
9309	JANET VANNATTER
	MARQUARDT MARVIN
10200	AARON VANALSTINE
	CODY HILL
	COLIN MACDONALD
	COWAN MCKINNEY
	DAVID DETTLOFF
	JAMES GORMAN
	JEFFREY HUNT
	JIM DAVIDSON
	JOE LOJPUR
	JOHN WOOD
	JULIE DURAN
	KENNETH HUNTER
	KENNY HUNTER
	LAURENT CURTIL
	PATTY SALGADO
	PAUL GRESSER
	PHIL HARRISON
	REGINALD LEE
	ROBERT GIBBS
	RON ARGUIEN
	STUART ROSS
	TAMMY YANG
	TERRY NEELY
	TOM CAROLIN
	TOM SMITH
	VALERI MAI
10210	JEFFREY ENGELMAN
	KELLY ENGELMAN
10215	LINDA KESTELEYN
	MARGARET KESTELEYN
	THOMAS KESTELEYN
10625	CHERYL GROH
	NATHAN GROH
	TRICIA BROCK
11109	ANTHONY CHRISOS
	BETTY CHRISOS
11127	JEFF HAENEL
	WAYNE MAAS
11501	LARRY FRISINGER
13212	DEBRA SILKER
	DONALD PERKINS
	JOHN SILKER
	JOYCE PERKINS
	KATE SILKER
13911	DARLENE SARBAUGH
14315	ROSINA BRUNHOEFER
	RYAN REDDEN

US HIGHWAY 14 2020 (Cont'd)

14315	TIMOTHY REDDEN
14413	SHAWN TILLMAN
15015	AMANDA VERHAGEN
	ERIC GENGE
	JEROME GENGE
	KATHRYN WRIGHT
	WANIETA GENGE
15219	ANNETTE DERER
	HEATHER KLATT
	JOHN DERER
15315	JUSTIN ADAMS
	LUCIA GARCIA
	MARGARET JENSEN
15616	ALEXANDER HENRICY
	MARLENE HENRICY
	PETER WILSON
	RICHARD HENRICY
15700	MICHAEL HART
	SANDRA HART
15702	ALEXANDER HENRICY
	RICHARD CAMILIERE
15704	ANNETTE ZANDER
	DANIEL GOAD
	GREGORY ZANDER
	PRINYA BUNYASARANAND
15706	DAVID BORCOVAN
	MARY BORCOVAN
15815	JAMES FURST
	LISA FURST
	MICHAEL HERRON
	SARAH FURST
15910	KARL NATSCHKE
16210	MICHAEL EVERTSEN
	NANCY RYAN
	RUSSELL EVERTSEN
16220	CODY EVERTSEN
	DAWN ADAMS
	JAMIE JAEGER
16608	CHRISTINA PETERSON
	DAWN PETERSON
	MICHELLE PETERSON
	SCOTT PETERSON
16702	TRACY NEWTON
16806	MARK LINDGREN
	PEGGY SCHULDT
	WILLIAM SCHULDT
17202	HUGH FRISBIE
	MARLENE FRISBIE
17203	JAMES ENGELBRECHT
	MARY ENGELBRECHT

US HIGHWAY 14 2020 (Cont'd)

17221	MICHAEL OJEDA
	SYNTHIA OJEDA
17421	DANIEL FEHRMAN
17422	RYAN CHENEY
17817	MARY BOWMAN
18410	ANDREW ZEIGER
	ANDY DYLAK
	ANNE ABRAMAVICIUS
	AUSTIN TAYLOR
	BEN ODEA
	BERRY GLASS
	BETH JARVIS
	BJORN MATHISEN
	BRAD WOODSON
	BRYSON CALVIN
	CLAYTON COOPER
	CRAIG HUBERT
	CRYSTAL GUY
	DAVE BRANDT
	DEB CHAPMAN
	DENICE BECKAT
	DOMINIC LORENZ
	DONNA ATKINS
	DUSTIN WIRE
	ED COLLINS
	ELIZABETH COREY
	ELIZABETH KESSLER
	JENNY HEIDER
	JOHN AAVANG
	JOHN BERG
	JOHN KREMER
	JOHN PETERS
	KEN TALAGA
	KENNETH FISKE
	KEVIN IVERS
	LESLIE KREBS
	LYN DRATHRING
	MARIA DE LA LUZ FLORES
	MARY BEYER
	MARY KOZUB
	MATT EYLES
	ROBERT KLING
	RUSS ROGERS
	SHELLY NICHOLSON
	STACEY MEDINA
	STEPHEN BARRETT
	SUE HAYDEN
	TOM SIMPSON
	WENDY KUMMERER

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WASHINGTON ST 2020

108	PLATFORM 108
130	PAULA FRANKLIN
	SCHMIDT PRINTING
132	SHARON BURNS
136	VICKI OATES
142	USA FEDERATION-PANKRATION
144	EHRKE'S USED APPLIANCE & MORE
207	RICK FARR
217	KATY WATT
	MEGAN WATT
222	ZOIA MONUMENT CO
226	CONWAY DENTAL
	LEXI ALGRIM
	TIMOTHY CONWAY
230	ATM
	KRISTENSEN SERVICE CTR
233	DONNA EDWARDS
	FAMILY EYE CARE OF WOODSTOCK
	HEINKE JESSICA D OD
307	HELENE KALBFLEISCH
	STEVEN KALBFLEISCH
310	DAIRY QUEEN
	DAVID HAHN
311	DRAMATIC PUBLISHING CO
	TREMATIC PUBLISHING
321	ALLEN BEYER
	LINDA BEYER
326	PACE BUS
	WOODSTOCK PUBLIC WORKS ADMIN
327	ANDREA SCHROEDER
	EILEEN SCHROEDER
	GREGORY SCHROEDER
	NORMAN SCHROEDER
347	JOSAFAT CARBAJAL
403	JERRY SADLER
	MARK SADLER
	MICHAEL SADLER
	MICHELLE SADLER
	TANYA SADLER
409	MELISSA GOUDREAU
	RONALD DARNELL
	WILLIAM GOUDREAU
415	DANIEL HART
	KATHERINE DAY
419	ANDREW SCHNEIDER
420	LEE LOCKWOOD
424	DINA BETTS
	JOSE HERNANDEZ
	LAZARO AYALA
	STEVEN BETTS

WASHINGTON ST 2020 (Cont'd)

424	TANYA BETTS
	TETYANA BETTS
430	HEATHER DARNELL
	RON DARNELL
	TINA JONKE
431	ANTHONY INTRAVARTOLO
	SANDRA REYES
435	JOAN ZGODA
	LAWRENCE ZGODA
	RICHARD ZGODA
436	ELOY RODRIGUEZ
	JUAN ORTIZ
441	GENE WIWCZARYK
	IRENE WIWCZARYK
	STEVEN WIWCZARYK
501	ATM
	WOODSTOCK FOOD & LIQUOR
511	FRANCISCA SOLIS
	GERARDO JAY
	JS FLORA
	REBECCA STRANDBERG
514	BARRY VERMETT
	JANICE VERMETT
	SHANNON VERMETT
	YVONNE GARCIA
520	COLLEEN BIENEMAN
	MICHAEL BIENEMAN
523	CHRISTOPHER ROBBINS
	DEBORAH GIBBON
	RUSSELL BELL
526	JAMES SHEPARD
	KRISTI SHEPARD
529	AIMEE GUERRA
	DENNIS BOEHART
	HEATHER DILDINE
	JAMES BREEN
	RENA GUERRA
	STEVEN BREEN
530	AARON YOUNG
	PAULA YOUNG
	PF MCAULIFFE
	YOUNG AB
532	BRIAN CISNER
	FLORENCE CISNER
	KEVIN CISNER
	MICHAEL CISNER
	MICHAEL GASIAMIS
539	ALFONSO MENDIOLA
	MELISSA NOWMAN
540	NANCY RIDGE

WASHINGTON ST 2020 (Cont'd)

540	NATHAN RIDGE
	REBECCA RIDGE
	REED RIDGE
542	BAUMAN HERB
543	MELISSA ANDERS
549	MICHAEL DIENHART
	NAOMI SNYDER
	REBECCA DIENHART
	STACEY WALLER
554	HARLAND WAGNER
	LEONA WAGNER
	MICHAEL WAGNER
561	JAMES ROSPOPO
	PAULA RECKAMP
	ROBERT RECKAMP
	SUSAN TAYLOR
	VICKI CLARK
562	MARIA VALDEZ
	NATHAN KOMOSA
	ROBERT VALDEZ
566	BRIAN DEAK
	KATHRYN DEAK
571	STEVEN FREUND
575	KATHLEEN STONEKING
576	GARY DEUTSCHLE
	MAITIU SEXTON
	ML HALES
	PETER SEXTON
	WILLA SEXTON
585	ANA RIVAS
	CARLOS RIVAS
	ENRIQUE CORTEZ
588	BENJAMIN BIGSBY
	JAMES PLATEK
	REGINA VICTORY
604	BTM INDUSTRIES INC
	TIM PORTER
605	RAYMUNDO GONZALEZ
	VERONICA LAGUNAS
615	KAYLA BRADY
	MICHAEL JOHNSTON
621	JAMES FREDERICK
	JASON SCHMIDT
	JOHN DANIELSON
	MARGARET FREDERICK
629	ACW 3374
	ELIVERIA MONSIVAIS
641	JM LAURANCE
	ND JOLLY
644	ARELLANO GERARDO

WASHINGTON ST 2020 (Cont'd)

644 L GERARDO ARELLANO
647 CYNTHIA TOTEMEIER
651 WILLIAM PFEIFFER
WJ PFEIFFER
655 CYNTHIA STRUDEMAN
DEBORAH CANALINI
JILLIAN CANALINI
STEVEN STRUDEMAN
WESLEY HODGES
WILLIAM HODGES
656 BENJAMIN KOZLAK
KRISTIN KOZLAK
660 EVARISTO TAPIA
MARTHA TAPIA
669 AMANDA RANK
BRANDON RANK
701 MIRTA SANCHEZ
703 JULIAN ARREGUIN
JULIAN REA
708 ADULT & CHILD REHAB CTR
IRAZOQUE ALEXIS M
709 ALAN SWANSON
717 REBECCA WINDHAM
721 EDWARD HARRISON
ERIC BURGGRAF
JOHNNY KENTGEN
MOLLIE PIPPENGER
724 REBECCA HANNAH
ZERIE MOORE
725 EDWARD FIALA
727 HONA MATTSON
KELLY EGLINTON
728 BONNIE SCHMIDT-SWETLAN
PAUL SWETLAND
729 FRANCISCO MARTINEZ
KENNY BRANDT
730 JESUS ORTIZ
RYAN ZENT
735 ROMER GUILLET
739 FERNANDO CRUZ
MINERVA SOTELO
SANDRA CARBAJAL
741 FERNANDO CRUZ
746 LINTNER AUTOMOTIVE
747 ANDREW BUSS
ANDY WHITING
RYAN WHITING
SARAH WHITING
751 JUDITH KAISER
752 CHRISTINE LEARMAN

WASHINGTON ST 2020 (Cont'd)

752	MICHAEL LEARMAN
754	BEE BROWN
	DARBY BROWN
	DEE BROWN
	DOREEN BROWN
	DYLAN BROWN
761	ANDREW JARVIS
762	MARYANN MCQUEEN
	TERRY MCQUEEN
765	JENNIFER CARTER
767	CATHIE HARDT
768	ALISON MEINDL
	ALYSSA MEINDL
	CANDYCE SCHULER
800	ROBERT KAUFMANN
	VALERIE ALLEN
801	ALFRED FABORITO
	CAROLYN AXELL
	DIANE KOLBINGER
	ERIN KOLBINGER
	HANNAH RIBAR
	JEFFREY MCCOY
	JUSTIN BOLLIG
	NYATURI GRAY
	PATTY FIUMETTO
	WOODSTOCK NORTHWEST APARTMENTS
804	DEBRA PRYBIL
	LYNN MAAS
805	ROBERT CLAUSEN
	SCARLETT COOK
	VIRGINIA CLAUSEN
809	ANN SULLIVAN
	TIMOTHY SULLIVAN
811	DEBBIE DECHANT
	STANLEY DECHANT
813	PAUL GARIEPY
	SIBYLLE GARIEPY
815	ERVIN DISCH
	PATRICIA DISCH
818	KELLI KURTZ
820	EMILY SLATEN
	JOSEPH SLATEN
822	FREDERICK LEARMAN
	KATHLEEN LEARMAN
824	CARYN'S
825	DAVID OHLRICH
827	TRACIE ALVAREZ
828	EDWIN THUROW
	NOVA SCOTT
830	DOUGLAS GLENN

WASHINGTON ST 2020 (Cont'd)

830	NOEL CAMPBELL
831	DONNA MALLEY
	MALLORY PASIEKA
833	ANGIE SCHMUCK
	FRANK SCHMUCK
	RYAN PETERS
	VALERIE SCHMUCK
835	JAHAIRA TRIPLETT
837	CAROLE WILK
	CHRISTOPHER WILK
	KEVIN GARZA
839	CINDY PHALEN
848	CATALINA CASTANEDA
	FRANCISCO CASTANEDA
	RAFAEL CASTANEDA
849	JENNIFER ZULAWSKI
851	KELLY ARRIGO
	TRACI EDMONDS
852	LINDSAY GARMON
	MARIA KORDOPITOULAS
857	DENISE BARROWS
	DONALD BARROWS
858	CHRISTINE LEARMAN
859	MARIA LOPEZ
	MARIO LOPEZ
860	ABIGAIL ZANGE
	BRUCE ZANGE
861	KEVIN GARCIA
901	CITY LIMITS AUTO INC
13704	CYNTHIA DALBY
	NEIL DALBY
13706	LINDSAY METAL MADNESS INC
13712	IRENE PETERS
	OXI FRESH-WOODSTOCK CARPET
13717	RAFAEL CASTANEDA
	SHANE PLUCINSKI
13718	B & C PAVERS & LANDSCAPING INC
13802	A TIMBERWORKS
	EXCAVATING CONCEPTS
	FIRBIMATIC
	M-P MANUFACTURING INC
	TIERNEY BUILDERS
13814	ALDEN QUICK MART
	AUTO PROS
13825	JERRY STOERP
	SALLY RENDELL
13826	BOJANA BLAGOJEVIC
13911	JOHNSON EMILY
13914	IRON & METAL
13917	JANINA BABECKY

WASHINGTON ST 2020 (Cont'd)

13917 PAUL BABECKY
13921 DARLENE BEIL
ELIZABETH DEEHRING
RAYMOND DEEHRING
14020 ROUTE 14 AUTO PARTS
14200 ALTAIRUS LTD
B & R ERECTORS INC
B R BLEACHERS
FACILISERV INC
RE/MAX GREAT MOVES
ROGER BEU
14212 FALCON GREEN RESOURCES
14213 CLYDE MORTER
FARM POWER IMP
GUY FARM MACHINERY CO INC
GUY MACHINERY
14400 CONVEY MOTORS
MICHAEL MCKAY
14408 SPINCO TOOL & FABRICATING INC
14410 ALVAREZ TIRES & AUTO REPAIR
14417 ANTHONY KEISLING
MARY KEISLING
14510 LORA SCHOLER
14513 MARY SULLIVAN
14600 ARNTZEN CORP
14719 ALFONSO HERRERA
LYNETTE HERRERA
M & A MNTNC & REPAIR DIESEL
MAURO HERRERA
PORFIRIO HERRERA

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 2017

1050 ROBINETT, DAVID R
1060 BLACK, ROGER W
1176 CORRADO, GEOFFREY F
1300 GRACE LUTHERAN CHURCH
1313 WOODSTOCK CITY OF WATER MAINT
13610 COLLINS, JOHN T
14212 MATTHES, RUSSELL
SELLECK, ROBERT B
14307 AUSTIN, DWIGHT H
14315 FLORES, HECTOR
14325 BRYAN, KEVIN D
14411 MCHENRY COUNTY PADS
14511 HALDEMAN, JEFFREY S
14513 ROSSA, ROBERT G
14515 STACK, DAVID G
14604 PORTNOY, SHERWIN D
14715 LEIDY, DONNA M
14804 MICELI, JOHN J
14816 BRUNETTI, DEBRA L
14819 BOONE, SABRINA D
15108 MORITZ, MARK R
15150 MORITZ FIRE EXTINGUISHER INC
PAULEY, STEPHEN V
15200 CHASE, CYLDE L
15204 MESZAROS, LUDEK M
15215 ALLISON, DAVID P
15304 CARPENTER, JASON S
15309 SIMKOVIC, OLEG R
15314 ZAWADA, MALGORZATA
15508 MARTENS, PATRICK L
15520 HENRY, JOSEPH D
16306 FOX, CINDY A
16313 E & J MERCADO LANDSCAPE INC
EVER LANDSCAPING
REYES, PATRICIA
16401 FLYNN, MEIGHAN
16505 CAHILL, JACK
16509 HEELEIN, DONNIE J
16710 MEAD, LARKIN C
17603 YOUMANS, DOUGLAS A
18104 WOODS, HAROLD E
18110 MCCANN, ROBERT G
MCCANNS BERRY FARM
18111 KAGEL, JAMES C
18316 LUCZANICH, KIMBERLY A
18520 MOCTEZUMA STABLES

Target Street	Cross Street	Source
-	✓	Cole Information

N ROSE FARM RD 2017

112	STAES, STEVEN M
118	DEUERLING, WILLIAM W
208	MANKE, WILLIAM S
214	MORGAN, DWIGHT L
305	RUIZ, JEFFERY S
308	BRIETZKE, HEINZ O
310	BRIGHTWELL, DENNIS R
318	MCCORMICK, MARK H
406	SEVERS, JAMES L
420	MISZCZAK, THOMAS J
506	ROBBINS, DAVID A
	THE ROBBINS NEST INTERIORS
602	DAVIS, SCOTT G
606	PORTER, JOHN S
612	ANDRUS, DANIEL P
704	INVEST FORCLOSURES FINANCIAL LLC
	PENSKE TRUCK RENTAL
	SPRING MOON SIGNS & DESIGNS
803	VIEYRA, BRIBIESCA G
1017	MURPHY, SAMANTHA
1103	ZIMMERMAN, ROBERT N
1150	SOTOS PALLETS INC
1200	FALCON WASTE & RECYCLING INC
1250	ADCO SIGNS
	CREASY EXTERIORS
	MILES MOTORS INC
	PETERSON WOODWORKING INC
	ROSE FARM CLASSICS
1258	ROSE FARM PAVING
	SPORTS SURFACING
1313	BUNTING, TODD C
1317	SCHAID, RYAN M
1401	KELAHAN, JUDY L
1413	MACHEROUX, LAWRENCE A
1500	YOUNG, EDWINA D
1501	HAUCK, FRANK A
1505	MESS, ROLAND V
2305	VARVIL, TRENT J
2307	ROSENQUEST, STEPHEN J

Target Street	Cross Street	Source
-	✓	Cole Information

N SHANNON DR 2017

104	ARVIDSON, PATRICIA T
105	STASSEN, JOHN E
111	SMITH, WILLARD D
112	LIGHT, CAROLYN H
118	RICHARDS, DAVID A
211	HAYES, PATRICK W
219	DOERDELMANN, SIEGFRIED W
220	POLLACK, CHRISTOPHER D
302	MORRIS, WILLIAM W

Target Street	Cross Street	Source
✓	-	Cole Information

US HIGHWAY 14 2017

10200	PACIFIC ELECTRONICS CORP
11019	TURNING POINT
11023	TURNING POINT
11501	BLAINS FARM & FLEET
	FARM & FLEET CO
15105	CLASSICO BANQUETS
16210	SUBURBAN SCREW MACHINE PRODUCTS INC
16608	NORTHERN ILLINOIS WHOLESALE NURSERY
	ONEYS TREE FARM
17112	OLD RIVERS INN
17221	GC MILL
18410	MCHENRY COUNTY CONSERVATION DIST

WASHINGTON ST 2017

108	PLATFORM 108
110	WOODSTOCK STUTTERING SPECIALIST
130	FRANKLIN, PAULA K
	SCHMIDT PRINTING
132	HANSEN, JENNIFER K
134	CRUZ, JULIE
	EVERSOLE, KENNETH R
135	CALOGEROS
136	MORAN, ROXANNE C
142	FAMILY DENTISTRY OF WOODSTOCK
144	EHRKES USED APPLIANCE & MORE
200	CENTURY SUPPLY
	CENTURY TILE & CARPET
207	FARR, RICK S
217	WATT, LAWRENCE H
222	ZOIA MONUMENT CO
226	CONWAY DENTAL
	CONWAY TIMOTHY D DDS PC
230	KRISTENSENS SERVICE CENTER
233	EDWARDS, DONNA M
	FAMILY EYE CARE OF WOODSTOCK L
	IMAGE OPTICAL
	MOGDANS, MELISSA B
	WILES, MARYANNE
310	DAIRY QUEEN
311	DRAMATIC PUBLISHING CO INC
326	PACE BUS
327	SCHROEDER, NORMAN E
347	COLE, KEVIN
403	SADLER, MICHAEL J
405	ORTIZ, JOSE
409	GOUDREAU, WILLIAM D
415	HART, DANIEL P
419	SCHNEIDER, ANDREW W
420	LOCKWOOD, LEE L
424	HERNANDEZ, JOSE S
425	DISH NETWORK
430	RHODENBAUGH, SAMANTHA
	STRISSEL, ROBERT A
431	INTRAVARTOLO, SALVATORE
435	ZGODA, LAWRENCE
436	ORTIZ, JUAN
441	WIWCZARYK, STEVEN P
501	WOODSTOCK FOOD & LIQUOR
511	FLORA, JS
520	BIENEMAN, WILLIAM K
526	SHEPARD, JAMES J
529	LOBUE, SCOTT
532	CISNER, MICHAEL H
539	GROTH, DENNIS

WASHINGTON ST 2017 (Cont'd)

540	RIDGE, RYAN W
542	REDDY MFG
549	DIENHART, MICHAEL J
554	WAGNER, HARLAN J
561	CLARK, VICKI L
566	DEAK, BRIAN E
571	FREUND, STEVEN A
575	STONEKING, DILLON
576	SEXTON, PETER P
588	SEELING, BRETT R
604	B T M INDUSTRIES INCORPORATED
605	LAGUNAS, MAYRA A
	QUICK, DAWN
615	JOHNSTON, MICHAEL
621	FREDERICK, JAMES A
629	HANSEN, JOANNA L
641	ONEILL, SAVANA
644	GERARDO, ARELLANO L
647	TOTEMEIER, CYNTHIA M
651	PFEIFFER, WILLIAM J
655	HODGES, WESLEY S
656	KOZLAK, KRIS L
660	TAPIA, EVARISTO B
672	GOMEZ, ANTONIO
701	SANCHEZ, MIRTA A
703	MANN, GYASI
709	NUNAMAKER, CAROLYN
721	BURGGRAF, ERIC L
722	FUDALA, JEFFREY E
724	PERCENTE, JOANNE K
725	FIALA, EDWARD J
727	BRANDT, NICOLE L
	MARY, SIKORA
	MATTSON, TIM A
728	SWETLAND, PAUL A
730	FRISBY, TIMOTHY T
735	CARRION, RUPERTA
	GARCIA, JOBITA I
739	SOTELO, BRIAN
741	CRUZ, FERNANDO
746	LINTNER AUTOMOTIVE
751	KAISER, JUDITH A
752	PILGRIM, AMBER
754	BROWN, DYLAN
762	KUBERSKI, MARY A
765	LEE, MICHELLE A
767	HARDT, CATHIE R
770	FELGENHOUR, MEGAN B
800	ALLEN, VALERIE J
	FINGER, MIKE E

WASHINGTON ST 2017 (Cont'd)

800	KAUFMANN, MARVIN E
801	BOLLIG, JUSTIN M
	FABORITO, JAMES A
	FINER CONCEPTS
	KAZEL, ANDREW J
	KOLBINGER, JASON A
	LESTER, CONNIE
	MCCOY, JEFFREY H
	MUNDT, PATRICIA N
	SCHOENINGER, JEREMY
	WHITE, JIM
	ZALKE, DALE L
804	ROSS, STEVEN
805	COOK, SCARLETT L
809	SULLIVAN, TAMMY L
811	DECHANT, STANLEY B
813	GARIEPY, SIBYLLE E
815	DISCH, ERVIN F
817	COLANGELO, PAUL
818	MCINERNEY, HOWARD D
822	LEARMAN, FRED J
824	GREENE, JULIE F
825	OHLRICH, DAVID E
827	ALVAREZ, TRACIE L
828	THUROW, EDWIN H
829	HENKE, EDWARD H
830	ORTIZ, ANTONIO
835	GUZMAN, GREGORIO M
837	HORTSMAN, NICOLE S
839	PHALEN, GARY L
848	BERNAL, JOSE
849	ZULAWSKI, JENNIFER L
851	ARRIGO, KELLY A
	EDMONDS, TRACI
852	KORDOPITOULAS, MARIA
853	LEGG, CAROLYN A
857	BARROWS, DONALD V
858	DUARTE, ADRIANA
859	SAMOLITIS, SARA
860	ZANGE, KEVIN A
861	GARCIA, LALO
901	CITY LIMITS AUTO INC
13704	GARCIA, MARIA L
	MOICES SEAL COATING
13712	OXI FRESH OF WOODSTOCK CARPET CLEANI
	PETERS MOTORS
13723	WHITING, RANDY D
13802	EXCAVATING CONCEPTS
	FIRBIMATIC
	TIERNEY BUILDERS

WASHINGTON ST 2017 (Cont'd)

13814 AUTO PROS
COMMERCIAL LEASING INC
UHAUL
13825 STOERP, JERRY R
13826 LOMBARDO, AMY
13911 NELSON, WILLIAM G
13914 AUTO PARTS INC
BEHR IRON & METAL
13921 DEEHRING, RAYMOND H
14020 AQUEBRADO AUTO GLASS
ROUTE 14 AUTO PARTS
14101 GRAFF, MM M
14200 ALTAIRUS LTD
B R BLEACHERS
D FIVE IRON WORKS
D5 RANGES
14212 K II ELECTRICAL CONTRACTORS INC
MERRYMAN COMPANIES
THE LAW OFFICE OF ROBERT T HANLON
14213 GUY FARM MACHINERY CO INC
14408 SPINCO TOOL & FABRICATING INC
14410 ALVAREZ TIRES & AUTO REPAIR
14417 KEISLING, ANTHONY J
14510 SCHOLER, LORA A
14513 SULLIVAN, ROBERT M
14600 ARNTZEN CORPORATION
14801 WASHINGTON STREET STATION

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 2014

1050 ROBINETT, DAVID R
1060 BLACK, CHRISTOPHER T
1070 ARCH WIRELESS
METROCALL
1176 OCCUPANT UNKNOWN,
1300 GRACE LUTHERAN CHURCH & PRESCHOOL EL
WOODSTOCK AREA COMMUNITY MINISTRY
13610 COLLINS, JOHN T
13611 OCCUPANT UNKNOWN,
13620 OCCUPANT UNKNOWN,
13801 PLUSA, JOHN A
14115 KELLY, WARREN H
14212 SELLECK, ROBERT B
14304 HOGUE, AMON C
STAHLECKER, KAREN L
14307 AUSTIN, DWIGHT H
14315 FLORES, HECTOR
14325 BRYAN, KEVIN D
14411 MCHENRY COUNTY PADS
MCHENRY COUNTY PADS FAX LINE
TULLY, SAMANTHA
14414 OCCUPANT UNKNOWN,
14511 HALDEMAN, JEFFREY S
14513 ROSSA, ROBERT J
14515 STACK, DAVID G
14516 BBBD LLC
14604 PORTNOY, SHERWIN D
14715 LEIDY, KEITH R
14804 MICELI, JOHN J
14816 BRUNETTI, VITO F
14819 OCCUPANT UNKNOWN,
14910 SUMA, MARK M
15108 MORITZ, RON E
15115 JOHNSON, RANDALL C
15150 MORITZ FIRE EXTINGUISHER INC
MORITZ, LEONA M
15200 CHASE, CYLDE
15214 OLSON, DONALD G
15215 ALLISON, DAVID P
15309 SIMKOVIC, OLEG R
15312 OCCUPANT UNKNOWN,
15313 SIMKOVIC, OLEG
15314 KAPCZI, LUDVIK
15408 CHERNIK, ZACHARY A
15508 MILLS, HEATHER
15520 HENRY, JOSEPH
15917 RIVERA, SILVIA
16306 FOX, CINDY A
16313 CASTANEDA, ELOY
E & J MERCADO LANDSCAPE INC

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 2014 (Cont'd)

16401	SZYDLO, MICHAEL C
16505	OCCUPANT UNKNOWN,
16509	HEELEIN, DONNIE J
16710	MEAD, LARKIN C
17603	CARRANZA, MANUEL
17808	OCCUPANT UNKNOWN,
18104	WOODS, HAROLD E
18110	MCCANN, ROBERT G
	MCCANNS BERRY FARM
18111	KAGEL, JAMES C
18309	MULLEN, JOHN C
18316	LUCZANICH, KIMBERLY A
18520	MOCTEZUMA STABLES

N ROSE FARM RD 2014

104	OCCUPANT UNKNOWN,
106	DONOVAN, MICHAEL P
112	RYAN, DANIEL R
118	DEUERLING, WILLIAM W
208	MANKE, WILLIAM E
214	MORGAN, DWIGHT L
302	THOMAS, TROY J
305	RUIZ, DANNY S
308	BRIETZKE, HEINZ O
310	BRIGHTWELL, DENNIS R
318	MCCORMICK, MARK H
406	SEVERS, JAMES L
420	EXTREME LOGISTIC CORP
505	WIGMAN, JAMES B
506	OCCUPANT UNKNOWN,
511	MCLAUGHLIN, RANDY N
602	JACKOWIAK, ROBERT C
604	MARCH, JAMES F
606	RELIABLE REMODELING
	WARNKE, MICHAEL J
612	MASON, MARCELLA A
704	SPRING MOON SIGNS & DESIGNS
803	ARZOLA, ARMANDO
1017	MURPHY, JOHN G
1103	ZIMMERMAN, ROBERT A
1150	SOTOS PALLETS INC
1200	FALCON WASTE & RECYCLING INC
1201	OCCUPANT UNKNOWN,
1250	ADCO SIGNS
	CREASY EXTERIORS
	MILES MOTORS INC
	PETERSON WOODWORKING INC
	ROSE FARM CLASSICS
1258	PARKING LOT SERVICES INC
	ROSE FARM PAVING
	SPORTS SURFACING
1309	OCCUPANT UNKNOWN,
1313	BUNTING, TODD C
1317	SCHAID, RYAN M
1401	KELAHAN, JUDY L
1413	OCCUPANT UNKNOWN,
1500	YOUNG, EDWINA D
1501	HAUCK, FRANK A
1505	MESS, CHARLOTTE A
2305	HARRIGAN, JEANETTE M
2307	ROSENQUEST, STEPHEN J

Target Street	Cross Street	Source
-	✓	Cole Information

N SHANNON DR 2014

104	ARVIDSON, DAVID L
105	STASSEN, JOHN E
106	SCHWANK, WILLIAM K
111	OCCUPANT UNKNOWN,
112	LIGHT, CAROLYN H
118	RICHARDS, DAVID A
211	OCCUPANT UNKNOWN,
219	DOERDELMANN, SIEGFRIED W
220	POLLACK, CHRISTOPHER D
222	LITTLE, JEREMY C
229	RICHARDS, DAVID A
302	MORRIS, WILLIAM W
305	KNIOLA, MICHAEL E
310	OCCUPANT UNKNOWN,

9307 BUCK, MOLLY E
9309 VANNATTER, JANET R
9414 SMITH, DARREN I
10017 KNUDSEN, JAMES L
THRUN, MARK W
10200 PACIFIC ELECTRONICS CORP
10210 FORMAN, JAMES E
10214 HUNTER, KENNETH
10215 KESTELEYN, THOMAS A
10216 OCCUPANT UNKNOWN,
10625 BROCK, TRICIA A
11019 TURNING POINT
11109 CHRISOS, ANTHONY E
11125 REEVES, CAL E
11127 HAENEL, RICK J
11501 FARM & FLEET CO
13212 SLIKER, JOHN D
13910 KLING, FRANK F
13911 OCCUPANT UNKNOWN,
14315 BRUNHOEFER, RUDOLPH J
14413 HILL, STEVEN C
14511 ALVAREZ, JUAN C
15015 GENGE JEROME O DVM
HARTLAND VETERINARY CLINIC PC
15219 LILES, DEANNA R
15616 HENRICY, ALEXANDER W
15700 HART, MICHAEL T
15702 DAEHLER, KELLY J
15704 OCCUPANT UNKNOWN,
15706 BORCOVAN, DAVID
15815 OCCUPANT UNKNOWN,
15917 OCCUPANT UNKNOWN,
16210 EVERSEAL SEALCOATING
EVERTSEN, MIKE T
SUBURBAN SCREW MACHINE PRODUCTS INC
16220 JAEGER, JAMIE
16608 NORTHERN ILLINOIS WHOLESALE NURSERY
OCCUPANT UNKNOWN,
ONEYS TREE FARM
16702 OCCUPANT UNKNOWN,
16806 SCHULDT, PEGGY S
16915 LEIBERT, ARLO W
16919 LEIBERT, DIANA
17112 OLD RIVERS INN
17201 OCCUPANT UNKNOWN,
17202 FRISBIE, BRANDON
17203 OCCUPANT UNKNOWN,
17221 GC MILL
WHITE, JEAN
17421 FEHRMAN, DAN W

Target Street	Cross Street	Source
✓	-	Cole Information

US HIGHWAY 14 2014 (Cont'd)

17422 FEHRMAN, VERNON E
17817 BOWMAN, MARY J
18226 OCCUPANT UNKNOWN,
18410 MCHENRY COUNTY CONSERVATION DIST

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 2014

108	PLATFORM 108
110	WOODSTOCK STUTTERING SPECIALIST
130	FRANKLIN, PAULA M
	SCHMIDT PRINTING
131	WOODSTOCK GAS MART INC
132	DVONCH, DAVID J
	TOLA, BESNIK
135	CALOGEROS
136	HOOPER, MICHAEL S
	WOODS, JEFFREY L
142	FAMILY DENTISTRY OF WOODSTOCK
	LEE DAVID DDS
	VEGA, JOSE F
144	EHRKES USED APPLIANCE & MORE
200	CENTURY SUPPLY
	CENTURY TILE
213	SWANSON, ALAN J
217	WATT, LAWRENCE
222	ZOIA ANTHONY J MONUMT
	ZOIA JAS A MONUMT
	ZOIA MONUMENT CO
226	CONWAY DENTAL
	CONWAY TIMOTHY D DDS PC
230	CHRISTENSEN SERVICE CENTER
233	EDWARDS, DONNA M
	FAMILY EYE CARE OF WOODSTOCK
	IMAGE OPTICAL
	MOGDANS, MELISSA B
	SCHUBERTH EYE CARE CENTER LTD
	SCHUBERTH, LINDA J
	WILES, MARYANNE
310	DAIRY QUEEN
311	DRAMATIC PUBLISHING CO INC
321	OCCUPANT UNKNOWN,
326	PACE BUS
327	SCHROEDER, NORMAN E
347	COLE, KEVIN
403	SADLER, MICHAEL J
405	OCCUPANT UNKNOWN,
409	NICHOLS, LEN
415	DICIECO, LEONARD R
419	GIBSON, DALE M
424	SERRATO, JOSEPH
425	OCCUPANT UNKNOWN,
430	CROWCROFT, DESIREE
	PINO, KATHLEEN
	RHODENBAUGH, SAMANTHA
	SILVA, JOSE R
431	INTRAVARTOLO, SALVATORE
435	OCCUPANT UNKNOWN,

WASHINGTON ST 2014 (Cont'd)

436	COLE, MELISSA M
	OLMO, IVAN A
	ORTIZ, JUAN
441	REEB, SUSAN E
501	WOODSTOCK FOOD & LIQUOR
511	OCCUPANT UNKNOWN,
	SANFILLIPPO, EDITH M
	ZERIN, STEVEN
514	VERMETT, BARRY
520	OCCUPANT UNKNOWN,
523	JOHNSON, TAMMI L
	RASCHICK, JONATHON
	RASCHKE, JEFFREY J
	ROBBINS, CHRISTOPHER K
526	SHEPARD, JAMES J
529	LOBUE, SHERRIANN
530	YOUNG, ROGER A
532	CISNER, MICHAEL H
539	RASMUSEN, RICKLAND K
540	RIDGE, RYAN W
542	BAUMAN HERB
	REDDY MANUFACTURING
543	OCCUPANT UNKNOWN,
549	DIENHART, REBECCA A
554	WAGNER, HARLAN J
561	ROSPOPO, JAMES P
562	OCCUPANT UNKNOWN,
566	DEAK, ALEXANDER W
571	FREUND, STEVEN A
575	OCCUPANT UNKNOWN,
576	SEXTON, PETER P
585	RIVAS, CARLOS A
588	OCCUPANT UNKNOWN,
604	B T M INDUSTRIES INCORPORATED
605	CHABALOWSKI, MICHAEL
	LAGUNAS, VERONICA
621	OCCUPANT UNKNOWN,
629	HANSEN, JOANNA L
	MONSIVAIS, ELIVERIA R
	OCCUPANT UNKNOWN,
638	DOMINGUEZ, RAFAEL
641	LAURANCE, MICHAEL S
644	GERARDO, ARELLANO L
647	TOTEMEIER, CYNTHIA M
651	PFEIFFER, WILLIAM J
655	OCCUPANT UNKNOWN,
656	KOZLAK, KRIS
660	TAPIA, EVARISTO T
672	GOMEZ, ANTONIO
701	CAROLAN, NATE

WASHINGTON ST 2014 (Cont'd)

703	ARREGUIN, JULIAN
705	JUAN, REYES
	ORTIZ, NELLY
	ORTIZ-TEPEXPA, JUANA
	SMITH, MEGAN
709	OCCUPANT UNKNOWN,
713	WARREN, CHRIS S
717	CLARK, CHERIE
	DEFRATES, DEREK D
	OCCUPANT UNKNOWN,
	WHITING, JAMES P
721	PIPPENGER, LEVI C
722	BORIAS, NELSON
724	KNUTSON, BURNELL P
725	FIALA, EDWARD J
727	MATTSON, TIM A
	SHAFFER, ANGIE
728	SWETLAND, PAUL A
729	MARTINEZ, FRANCISCO N
730	FRISBY, TIMOTHY T
739	SOTELO, BRIAN
740	SCHLEGEL SELF STORAGE
741	CRUZ, FERNANDO
746	LINTNER AUTOMOTIVE
747	WHITING, DAVID G
750	OCCUPANT UNKNOWN,
751	CABRERA, MARIO A
752	RUSSELL, LISA
754	LENZINI, AMIE
761	MACELLA, FRED O
762	BORCOVAN, KATRINA A
	MCQUEEN, TERRY M
	VIDALES, ABUNDIA G
763	OCCUPANT UNKNOWN,
765	HOLTZEE, BRENDA S
767	BARRANCO, JOSHUA
768	SCHULER, CANDYCE L
780	LUGO, TELLEZ
800	ALLEN, VALERIE J
	FINGER, MIKE E
	KAUFMANN, MARVIN E
801	CAREY, JOE
	CASSIDY, AMBER
	FINER CONCEPTS
	GASOL, PAUL
	LESTER, CONNIE
	LIRA, CASSIE
	MUNDT, PATRICIA N
	RATZ, DIANE L
	WALSH, LISA

WASHINGTON ST 2014 (Cont'd)

801	WHITE, JIM
804	WIWCZARYK, STEVEN P
805	ESCOBAR, FERNANDO
	HACKL, TRISTAN
809	SULLIVAN, TIM P
810	OCCUPANT UNKNOWN,
811	DECHANT, STANLEY B
813	GERIEPY, PAUL L
815	DISCH, ERVIN F
817	COLANGELO, PAUL
818	KURTZ, KELLI R
819	OCCUPANT UNKNOWN,
820	OCCUPANT UNKNOWN,
822	LEARMAN, FRED J
824	OCCUPANT UNKNOWN,
825	DIAMOND, BRITTANY N
827	OCCUPANT UNKNOWN,
829	FREUND, JANINE I
830	ORTIZ, ANTONIO
835	OCCUPANT UNKNOWN,
837	VELA, TEOFILO G
839	KANE, SHELLAS A
848	BERNAL, JOSE
849	OCCUPANT UNKNOWN,
	PIERCE, JAMIE L
851	ARRIGO, KELLY A
	EDMONDS, TRACI
	SANTILLAN, LISSETTE
852	BREDA, JESSICA
853	OCCUPANT UNKNOWN,
854	OCCUPANT UNKNOWN,
857	BARROWS, DONALD V
858	DUARTE, ADRIANA
859	SCHWARTZ, DALE
860	ZANGE, KEVIN A
861	GARCIA, GERARDO B
901	CITY LIMITS AUTO INC
13704	BILLINGHAM, JACQ
	MOICES SEAL COATING
13706	L & M SHEET METAL
13712	PETERS MOTORS
13717	NOBLE, MARK M
13720	TIERNEY, THOMAS M
13723	WHITING, RANDY D
13802	EXCAVATING CONCEPTS
	FIRBIMATIC
13814	ACTION INSTALLERS
	COMMERCIAL LEASING INC
	UHAUL
13825	RENDELL, SALLY M

WASHINGTON ST 2014 (Cont'd)

13826 LAUF, PHILIP
13911 JOHNSON, E
13914 AUTO PARTS INC
BEHR IRON & METAL
13917 OCCUPANT UNKNOWN,
13921 DEEHRING, RAYMOND H
14019 OCCUPANT UNKNOWN,
14020 AQUEBRADO AUTO GLASS
ROUTE 14 AUTO PARTS
ROUTE 14 USED & NEW AUTO PARTS
14101 GRAFF, MM M
14200 ALTAIRUS LTD
BR BLEACHERS
D FIVE IRON WORKS
14212 K II ELECTRICAL CONTRACTORS INC
LAW OFFICES OF ROBERT HANLON & ASSOC
MERRYMAN COMPANIES
14213 GUY FARM MACHINERY CO INC
MORTER, CLYDE W
14400 AMERICAST CONCRETE PRODUCTS CORP
14408 SPINCO TOOL & FABRICATING INC
14410 ALVAREZ TIRES & AUTO REPAIR
14417 KEISLING, ANTHONY J
14419 MINEAR, JODY
14510 HERRING, JEREMY
14513 SULLIVAN, MARTIN J
14600 ARNTZEN CORPORATION
14719 HERCORP TRANSPORT INC
ILLINOIS PACIFIIC INC
14801 WASHINGTON STREET STATION

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 2010

1050	ROBINETT, DAVID R
1060	BLACK, ROGER W
1070	USA MOBILITY INC
1176	LACKEY, MICHAEL J
1300	GRACE LUTHERAN CHURCH
13610	COLLINS, JOHN T
13611	OCCUPANT UNKNOWN,
13620	OCCUPANT UNKNOWN,
13801	PLUSA, JOHN A
14115	KELLY, WARREN H
14212	LETIZIA, JOHN C
	SELLECK, ROBERT N
14304	FREEMAN, DUTCH
	STAHLECKER, KAREN
14307	AUSTIN, DWIGHT H
	OAKLAND CEMETERY
14315	FLORES, JUAN D
14325	BRYAN, KEVIN D
14411	BANDEMER, GARY C
	BRECHEL, BRIAN
	BRENDLE, MICHELLE
	BROWN, CHANETHA
	CRAWFORD, AMANDA L
	FISCHER, ANGELA
	HALES, PATRICK T
	HASTINGS, SONYA
	HIGGIN, SAMANTHA
	JANES, CHRISTY L
	LEWIS, HOLLI L
	MC HENRY COUNTY PADS
	MORRISON, EDNA
	NOVAK, THOMAS M
	PASEK, PATRICE
	RATZ, DIANE L
	ROBERTS, DAVID
	ROELING, JULIE M
	SIKORSKI, LAURA
	SIMPSON, MARK W
	TULLY, SAMANTHA
	VANDERSTELT, S J
14414	GAULTIER, MICHAEL R
14511	HALDEMAN, JEFFREY S
14513	ROSSA, ROBERT J
14515	STACK, DAVID
14516	B BBD LLC
14604	PORTNOY, SHERWIN D
14715	LEIDY, KEITH R
14804	MICELI, JOHN J
14816	BRUNETTI, VITO F
14819	SCHMIEDING ENTERPRISES

14819 SCHMIEDING, STEVEN T
14910 SUMA, EDWARD M
15108 MORITZ, RON E
15115 JOHNSON, RANDALL C
15150 OCCUPANT UNKNOWN,
15200 OCCUPANT UNKNOWN,
15204 KRAL, PETR E
15214 PRINTING & THEN SOME
SCHUSTER, EDWARD A
15215 ALLISON, DAVID P
15304 OCCUPANT UNKNOWN,
15309 OCCUPANT UNKNOWN,
15311 ALLISON, DAVID
15312 BROWN, WAYNE V
15313 SIMKOVIC, OLEG
15314 KAPCZI, LUDVIK
15408 CHERNIK, NANNETTE I
15508 DEPOWSKI, BRIAN R
15520 HENRY, DANIEL J
15917 RIVERA, SILVIA
16306 CUSTOM LOG STRUCTURES
OCCUPANT UNKNOWN,
16313 E J MERCADO LANDSCAPE INC
OCCUPANT UNKNOWN,
16401 KOST, DAVID A
16505 BOCARI, DRITAN G
16506 GOOD, ROBERT
16509 HEELEIN, DONNIE J
16710 MEAD, LARKIN C
17603 ROMINE, JONATHAN
17808 OCCUPANT UNKNOWN,
18104 WOODS, HAROLD E
18110 MC CANNS BERRY FARM
MCCANN, ROBERT G
18111 KAGEL, JAMES C
18309 MULLEN, JOHN C
18316 LUCZANICH, GEORGE C
18520 MOCTEZUMA STABLES
MOCTEZUMA, JOSE P

Target Street	Cross Street	Source
-	✓	Cole Information

N ROSE FARM RD 2010

104	OCCUPANT UNKNOWN,
106	DONOVAN, KELLY J
112	RYAN, DANIEL R
118	DEUERLING, WILLIAM W
208	MANKE, WILLIAM E
214	MORGAN, DWIGHT L
302	FISH FACE GOODS LTD
	THOMAS, TROY J
305	RUIZ, DANNY S
308	BRIETZKE, HEINZ O
310	BRIGHTWELL, DENNIS R
318	MCCORMICK, MARK H
406	SEVERS, JAMES L
420	VLAHOS, RICHARD S
506	WIGMAN, JAMES L
511	HOBBS, ALONZO G
602	JACKOWIAK, ROBERT C
604	MARCH, JAMES F
606	RELIABLE REMODELING FLOORING
	WARNKE, JOHN W
704	ZAWILLA, JILL M
803	ARZOLA, ARMANDO
1017	MURPHY, MARLENA A
1103	ZIMMERMAN, ROBERT N
1150	SOTOS PALLETS INC
1200	FALCON WASTE & RECYCLING INC
1201	OCCUPANT UNKNOWN,
1250	ADCO SIGNS
	CREASY EXTERIORS
	MILES MOTORS INC
	PETERSON WOODWORKING INC
	ROSE FARM CLASSICS
1258	NORTH AMERICAN SPEC FLOORING
	NORTHWEST MECHANICAL CONTR INC
	PARKING LOT SVC INC
	SPORTS SURFACING
1309	HART VERNON R
	HETTINGA, SCOTT L
1313	OCCUPANT UNKNOWN,
1317	SCHAID, RYAN M
1401	KELAHAN, JUDY L
1413	MACHEROUX, LAWRENCE A
1500	YOUNG, EDWINA D
1501	HAUCK, FRANK A
1505	ZAMBRANO, RICARDO V
1606	OCCUPANT UNKNOWN,
	P & S SENIOR CARE INC
2305	HARRIGAN, MICHAEL J
2307	ROSENQUEST, STEPHEN J

Target Street	Cross Street	Source
-	✓	Cole Information

N SHANNON DR 2010

104	ARVIDSON, DAVID L
105	STASSEN, JOHN E
106	SCHWANK, WILLIAM K
111	SMITH, STEVEN V
112	LIGHT, CAROLYN H
118	RICHARDS, DAVID A
211	OCCUPANT UNKNOWN,
219	DOERDELMANN, SIEGFRIED W
220	PRIBLA, WESLEY R
222	LITTLE, TIM J
302	MORRIS, WILLIAM W
305	KNIOLA, MICHAEL E
310	OCCUPANT UNKNOWN,

9307 THOMAS, JULIETTE I
9309 OCCUPANT UNKNOWN,
9414 SMITH, DARREN I
9604 TALAVERA, SILVESTRE
10017 KNUDSEN, JAMES L
THRUN, MARK W
10200 PACIFIC ELECTRONICS CORP
10210 COUNTRY CRITTERS LAWN ORNAMENT
FORMAN, JAMES E
10214 OCCUPANT UNKNOWN,
10215 ALBERT KESTELEYN CO INC
KESTELEYN, THOMAS A
10216 SHERMAN, HAROLD J
11109 CHRISOS, ANTHONY E
11125 REEVES, CAL E
11127 HAENEL, RICK J
11501 BLAINS FARM & FLEET
13202 SILKER, JOHN D
13212 SLIKER, JOHN D
13910 KLING, FRANK F
13911 OCCUPANT UNKNOWN,
14315 REDDEN, TIMOTHY J
14413 BRUNHOEFER, RUDOLPH J
14511 MANARCHY, DENNIS F
15015 HARTLAND VETERINARY CLINIC
15105 DEETERS RESTAURANT INC
15211 GREELEY, PATRICK J
15219 LILES, LAWRENCE E
15315 CORTES, CARLOS
JAD TREE SVC
15616 HENRICY, ALEXANDER W
15702 DAEHLER, CARL B
15704 ZENDER, GREGORY S
15706 BORCOVAN, MARY
15812 HAY, PAUL S
15815 SCHMIDT, JULIUS T
15917 CARPENTER, JOE G
16210 SUBURBAN SCREW MACHINE PRODUCT
16220 EVERTSEN, MIKE T
WILLIAMS, ANDY S
16608 NRTHRN ILLINOIS WHOLESALE NSRY
OCCUPANT UNKNOWN,
ONEYS TREE FARM
16702 NEWTON, TRACY A
16806 SCHULDT, PEGGY S
16915 LEIBERT, ARLO W
16919 LEIBERT, DIANA
17112 OLD RIVERS INN
17201 FYFE, BEYE
17202 FRISBIE, HUGH D

Target Street	Cross Street	Source
✓	-	Cole Information

US HIGHWAY 14 2010 (Cont'd)

17203 ENGELBRECHT, JAMES T
17221 WHITE, JEAN
17421 FEHRMAN, DAN W
17422 FEHRMAN, VERNON E
17817 BOWMAN, DAVID E
18226 OCCUPANT UNKNOWN,
18410 MC HENRY COUNTY CONSERVATION

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 2010

130	STECHMULLER, NATALIE C
131	CLARK SQUARE
132	DVONCH, DAVID J
	TOLA, BESNIK
134	BURNS, SHARON A
	HUME, BRAD
135	LA SALSA
136	HOOPER, MICHAEL
142	FAMILY DENTISTRY OF WOODSTOCK
	USA FEDERATIONPANKRATION
	VEGA, JOSE F
200	CENTURY TILE & CARPET SUPPLY
207	STOCK, RICHARD A
213	SWANSON, ALAN J
217	WATT, LAWRENCE
222	ZOIA MONUMENT CO
226	CONWAY TIMOTHY D DDS
	WOODSTOCK FOOD PANTRY
230	A 1 AUTHORIZED SECURITY DEALER
	KRISTENSEN SERVICE CTR
233	EDWARDS, DONNA M
	FAMILY EYE CARE OF WOODSTOCK
	MOGDANS, MELISSA
	SCHUBERTH, LINDA J
	WILES, ROBERT Y
310	DAIRY QUEEN
311	DRAMATIC PUBLISHING CO
321	GREENE, JOESPH L
326	PACE BUS
	WOODSTOCK PUBLIC WORKS ADMIN
	WOODSTOCK WATER TREATMENT PLNT
327	SCHROEDER, NORMAN E
347	COLE, KEVIN
403	SADLER, GERALDINE L
405	AMLIN, TRACY
409	OCCUPANT UNKNOWN,
415	JACKSON, RICHARD
416	SAVORD, WILFRED L
419	GIBSON, DALE M
420	OCCUPANT UNKNOWN,
424	SERRATO, JOSE H
425	OCCUPANT UNKNOWN,
430	KELLY, KRISTAL
	PINO, PAUL
	STONEKING, KATHLEEN
431	AMV KITCHEN & BATH
	INTRAVARTOLO, ANTHONY
435	REED, STEVEN P
436	OLMO, IVAN A
	ORTIZ, JUAN

WASHINGTON ST 2010 (Cont'd)

436 TORRES, CHRISTIAN
441 REEB, SUSAN E
501 WOODSTOCK FOOD & LIQUOR
506 HOWARD, VERONICA
511 OCCUPANT UNKNOWN,
514 B J CARPET CLEANING
VERMETT, BARRY D
520 BOLDA, COLLEEN
523 JOHNSON, EDDIE J
SCHADE, CHRISTOPHER
526 SHEPARD, JAMES J
530 YOUNG, ROGER A
532 CISNER, MICHAEL H
540 OCCUPANT UNKNOWN,
542 REDDY MANUFACTURING
543 OCCUPANT UNKNOWN,
549 KYROUAC, BRYAN D
554 WAGNER, HARLAN J
561 ROSPOPO, JAMES P
562 OCCUPANT UNKNOWN,
SFAFFER, LUCAS
566 OCCUPANT UNKNOWN,
571 FREUND, STEVEN R
576 SEXTON, PETER P
585 OCCUPANT UNKNOWN,
604 BTM INDUSTRIES INC
605 CHABALOWSKI, MICHAEL
JACKSON, PHILIP
621 DANIELSON, STAN J
629 MONSIVAIS, ELIVERIA R
OCCUPANT UNKNOWN,
SANCHEZ, PEDRO M
638 SONNENBERG, WILLIAM P
641 LAURANCE, JEAN
644 ARELLANO, GERARDO L
647 TOTEMEIER, CYNTHIA M
651 PFEIFFER, WILLIAM J
655 OCCUPANT UNKNOWN,
656 KOZLAK, KRIS
660 TAPIA, EVARISTO T
701 CAROLAN, CHRISTIANNE
703 OCCUPANT UNKNOWN,
705 JUAN, REYES
ORTIZ, NELLY
ORTIZ-TEPEXPA, JUANA
SMITH, MEGAN
708 ADULT & CHILD REHAB CTR
709 BEGLEY, ROGER J
713 SWANSON, DANNY C
717 CLARK, SHANNON

WASHINGTON ST 2010 (Cont'd)

717 JOHNSON, RYAN M
OCCUPANT UNKNOWN,
QUINNEY, SAMANTHA J
WATSON, SHANNON
WHITING, JAMES P
721 KENTGEN, JOHNNY J
722 OCCUPANT UNKNOWN,
724 FOSNAUGH, KIMBERLY
725 NOVY, ANTON G
727 BRADLEY, CAROLE
BRANDT, PAT A
MONTERN, ALFREDO
728 SWETLAND, PAUL A
729 MARTINEZ, FRANCISCO N
730 WEIMER, MAUREEN K
735 LUIS, STEVEN
VAZQUEZ, LETICIA
739 CRUZ, FERNANDO
740 SCHLEGEL SELF STORAGE
741 CRUZ, FERNANDO
746 CONSTRUCTION AHEAD INC
MIKES GARAGE
747 WHITING, DAVID G
750 GALLARDO, MICHAEL
OCCUPANT UNKNOWN,
751 CABRERA, MARIO A
754 OCCUPANT UNKNOWN,
761 OCCUPANT UNKNOWN,
762 MCQUEEN, TERRY M
PHILLIPS, ERIC R
VIDALES, ABUNDIA G
763 BIBEAU, NATALIE
765 HOLTZEE, BRENDA S
767 BARRANCO, JOSHUA
770 OCCUPANT UNKNOWN,
780 CRUZ, SANTOS
801 BIRCHSIELT, JAMIE
CHAPMAN, RAYMOND H
FABORITO, ALFRED L
GRINCHUK, EDWARD
JORDAN, ANDREW
MOORE, RUTH A
NADOLNY, ROGER
WHITE, JIM
YENINAS, LAURA J
804 SMITH, GARY C
805 CLAUSEN, ROBERT O
ESCOBAR, MARTIN
GAZDA, GEORGE E
809 SULLIVAN, TIM

WASHINGTON ST 2010 (Cont'd)

810	OCCUPANT UNKNOWN,
811	DECHANT, STANLEY B
813	GERIEPY, PAUL
815	DISCH, ERVIN F
817	COLANGELO, FRANK G
818	KURTZ, KELLI R
819	JOHNSON, T
820	FARRENKOPF, LAWRENCE A
822	OCCUPANT UNKNOWN,
825	CUEVAS, LYNN
827	OCCUPANT UNKNOWN,
828	PETO, LES A
829	OCCUPANT UNKNOWN,
830	CAMPBELL, LAWRENCE E
831	LOCHER, DONNA
835	OCCUPANT UNKNOWN,
837	EBY, MICHAEL R
839	KANE, SHELLAS A
848	BERNAL, JOSE
849	PIERCE, JAMIE S
	SPLITT, DIANNE J
851	EDMONDS, TRACI
852	NOLAN, RICHARD P
853	LEGG, CAROLYN A
854	OCCUPANT UNKNOWN,
857	BARROWS, DONALD V
859	KULESZA, MATTHEW P
860	ZANGE, KEVIN A
861	GARCIA, GERARDO B
901	CITY LIMITS AUTO INC
13704	OCCUPANT UNKNOWN,
13712	PETERS MOTORS
13717	NOBLE, FREDERICK W
13723	WHITING, RANDY D
13802	MP MFG INC
13814	ACTION INSTALLERS INC
	B & Z ELECTRICAL
	NATIONAL AUTO TOWING
	NORTHERN ILLINOIS TAXI SVC
	NORTHERN ILLINOIS TRNSPRTN
	UHAUL CO
13826	OCCUPANT UNKNOWN,
13828	STOERP, HENRY P
13914	AUTO PARTS INC
	BEHR WOODSTOCK
	JOSEPH BEHR & SONS
13917	OCCUPANT UNKNOWN,
13921	DEEHRING, RAYMOND H
14019	PIPPENGER, CURTIS J
14020	AQUEBRADO AUTO GLASS

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 2010 (Cont'd)

14020 ROUTE 14 AUTO PARTS
14101 GRAFF, MM M
14200 B & R ERECTORS INC
14212 K II ELECTRICAL CONTRACTORS
M BROTHERS DEVELOPMENT
MERRYMAN AGGREGATES
ROBERT T HANLON LAW OFFICE
14213 GUY MACHINERY
MORTER, CLYDE W
14400 AMERICAST CONCRETE
14410 ALVAREZ TIRES & AUTO REPAIR
14417 OCCUPANT UNKNOWN,
14419 YOUNG, CLARK A
14510 MILLER, SANDRA M
14513 SULLIVAN, ROBERT J
14600 ARNTZEN CORP
14719 HERCORP TRANSPORT INC
ILLINOIS PACIFIC INC
14801 WASHINGTON STREET

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 2005

1050 ROBINETT, DAVID R
1060 BLACK, ROGER W
1070 ARCH WIRELESS OPERATING CO INC
1176 WILSON, LACKEY M
13610 COLLINS, JOHN T
13611 OCCUPANT UNKNOWN,
13613 OCCUPANT UNKNOWN,
13620 JULIUS, JON C
13707 FRANK M WERDERITCH
LAURA BUTHOD MD
MARCEL T HOFFMAN MD
SIMMONS SABRINA MD
13801 PLUSA, JOHN A
13902 GONZALEZ, DILBER
14115 KELLY, WARREN H
14212 SELLECK, ROBERT N
SIEROSLAWSKI, FRANK H
14304 CALZAVARA, HEIDI H
COOLEY, THOMAS
CORRALES, CIPRIANO
FREEMAN, DUTCH
LEFEBVRE, LOUIS R
OKEY, JIM
STAHLECKER, SHARON E
TAYLOR, MARVIN J
URBAS, RUTH A
14307 AUSTIN, CHRISTOPHER L
14315 FLORES, JUAN D
14411 MCHENRY COUNTY PADS
14414 GUALTIER, PATRICIA K
14513 ROSSA, ROBERT G
14515 KURTZ, PHILIP R
14516 OCCUPANT UNKNOWN,
14604 PORTNOY, SHERWIN D
14715 HE ELITE GROUP
LEIDY, KEITH R
14804 MICELI, JOHN J
14816 BRUNETTI, VITO F
14819 SCHMIEDING STEVEN T
SCHMIEDING, STEVEN T
14910 SUMA, EDWARD M
15108 OCCUPANT UNKNOWN,
15115 JOHNSON, RANDALL C
15150 MORITZ, RON E
15200 OCCUPANT UNKNOWN,
15204 KRAL, PETR
15214 ER SEL ENTERPRISES INC
PRINTING & THEN SOME
SCHUSTER, EDWARD A
15215 OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 2005 (Cont'd)

15304 SUNDERLAGE, TRACY L
15311 ALLISON, DAVID
15312 BROWN, WAYNE V
15314 OCCUPANT UNKNOWN,
15408 ALLSEAFOOD COM INC
OCCUPANT UNKNOWN,
15508 BEAUDOIN, KENNETH J
15520 OCCUPANT UNKNOWN,
15917 WOLFE, RANDALL B
16306 CUSTOM LOG STRUCTURES
FOX, STEVEN H
16313 THOME, HELEN A
16401 FLYNN, MICHAEL J
16505 ROBERT, ROBERT O
16506 GOOD, ROBERT
16509 HEELEIN, DONNIE J
16710 MEAD, LARKIN G
17603 WITT, FREDERICK E
17808 OCCUPANT UNKNOWN,
18104 WOODS, HAROLD E
18110 MCCANN, ROBERT G
MCCANNS BERRY FARM
18111 KAGEL, JAMES C
18309 MULLEN, JOHN C
18316 LUCZANICH, GEORGE C
18520 MOCTEZUMA STABLES
MOCTEZUMA, JOSE A

Target Street	Cross Street	Source
-	✓	Cole Information

N ROSE FARM RD 2005

104 EMRICSON, MARJORIE E
106 DONOVAN, KELLY J
112 DURBIN, DONALD L
118 DEUERLING, WILLIAM W
208 MANKE, TODD M
214 GARCIA, MARY E
302 FISH FACE GOOD LIMITED
THOMAS, TROY J
305 RUIZ, DANNY S
308 BRIETZKE, HEINZ O
310 OCCUPANT UNKNOWN,
318 MCCORMICK, MARK H
406 SEVERS, JAMES L
420 VLAHOS, RICHARD S
506 WIGMAN, JAMES L
511 DIEHL, ELIZABETH T
602 JACKOWIAK, DONNA M
604 MARCH, JAMES F
606 RELIABLE REMODELING FLOORING
WARNKE, JOHN W
612 BRATTA, JOHN E
ESARCO ANN
704 SIEMASZKO, JUSTYNA L
803 ARZOLA, ARMANDO
1017 MURPHY, MARLENA A
1103 ZIMMERMAN FARM DRAINAGE
ZIMMERMAN, ROBERT
1201 ERICKSON, SUSAN
1250 ADCO SIGNS
PARKING LOT SERVICES INC
TURF CONSULTANTS INC
1309 HETTINGA, ERIC A
1313 BRISCOE, JENNIFER M
1317 METRAS, BETSY K
1401 KELAHAN, JUDY A
1413 MACHEROUX, LAWRENCE A
1500 YOUNG, LAVERNE D
1501 HAUCK, FRANK A
1505 KUGIA, MARTY V
1606 P & S SENIOR CARE INC
PODERYS, ZYGIS B
2305 HARRIGAN, MICHAEL J
2307 ROSENQUEST, STEPHEN J

Target Street	Cross Street	Source
-	✓	Cole Information

N SHANNON DR 2005

104	OCCUPANT UNKNOWN,
105	OCCUPANT UNKNOWN,
106	OCCUPANT UNKNOWN,
111	SMITH, STEVEN V
112	LIGHT, RUPERT E
118	COCONATE, JOSEPH P
120	LEE, NOLEN G
211	OCCUPANT UNKNOWN,
219	DOERDELMANN, SIEGFRIED W
220	PRIBLA, WESLEY R
222	LITTLE, TIM J
302	GOIN PLACES TRAVEL
	MORRIS, WILLIAM W
305	RONAN, JEAN J
307	STALLMAN, LYNN C
310	ABANDO, ERIC F
312	GS SURFACES INC
	SPETHMAN, GREGORY A
316	TEMPIM, ALAN M

9307 CASTILLERO, YVONNE M
9309 MARQUARDT SERVICES
OCCUPANT UNKNOWN,
9414 CAL AND SHANS CHRISTMAS TREE FARM
DARREN SMITH FARMS
SMITH, DARREN I
9602 VILLARREAL, GUSTAVO M
9604 LATEJANITA RESTAURANT INC
TALAVERA, SILVESTRE
10017 KNUDSEN, JAMES L
THURN, MARK W
10200 PACIFIC ELECTRONICS CORP
10210 FORMAN, JAMES E
10214 CHELLBERG, KENNETH
10215 ALBERT KESTELEYN CO
OCCUPANT UNKNOWN,
10216 SHERMAN, HAROLD J
10520 HAROLD SMITH FARMS
SMITH, LOIS E
10625 BORS, PATRICIA
11019 TURNING POINT INC
11023 TURNING POINT INC
11109 CHRISOS, ANTHONY E
11125 REEVES, CAL E
11127 HAENEL, JEFFREY N
11501 FARM BLAINS FLEET
13212 SLIKER, JOHN D
13910 BOTTCHER, OTTO H
13911 SARBAUGH, RALPH A
14315 QUIENTLY WILD YARN AND CRAFT SHOPPE
QUIETLY WILD YARN & CRAFT SHOP
REDDEN, TIMOTHY J
14413 BRUNHOEFER, RUDOLPH J
14511 MANARCHY, DENNIS F
15015 GENGE, JEROME O
HARTLAND VETERINARY CLINIC PC
15105 DEETERS
15211 GREELEY, PATRICK J
15219 LILES, LAWRENCE E
15315 KERN, JOSHUA
KERNES, JANAE
15616 HENRICY, MARLENE L
15702 REECE, JAMES E
15704 ZENDER, GREGORY S
15706 BORCOVAN, MARY
15815 SCHMIDT, JULIUS T
15910 CARPENTER, JOE G
15917 OCCUPANT UNKNOWN,
16210 SURBURBAN SCREW MACHINE INC
16220 EVERTSEN, MIKE

Target Street	Cross Street	Source
✓	-	Cole Information

US HIGHWAY 14 2005 (Cont'd)

16220 MCGLONE, THERESA
RYAN, NANCY M
SALERNO, GREGORY W
16608 NORTHERN IL WHOLESALE NURSERY
OCCUPANT UNKNOWN,
16702 NEWTON, TRACY A
16806 SCHULDT, PEGGY S
16915 LEIBERT, ARLO W
16919 LEIBERT, DIANA
17112 DADS PLACE INC
FINGERS JOYNT
17201 OCCUPANT UNKNOWN,
17202 FRISBIE, HUGH D
17203 FYFE, MARY P
17221 OJEDA, GERARDO C
17421 FEHRMAN, DAN W
17422 CHENEY, JACK M
JAKX CARPENTRY INC
17817 BOWMAN, DAVID E
18226 OCCUPANT UNKNOWN,
18410 MCHENRY COUNTY CONSERVATION DIST
PACKET AVAILABILITY

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 2005

108 DENTAL DYNAMICS
110 FAT TONYS COMICS
130 SCHMIDT PRINTING
STIEG, B
131 CLARK
MINUTEMAN GAS & PANTRY
132 GRAMIGNA, KEVIN M
PFUND, C M
135 EL PALMAR RESTAURANT
136 CREIGHTON, DAVID R
142 PAPA DADDY DETAIL
STAHLECKER, K
VEGA, JOSE F
144 NEELEY, WILLIAM
207 HANSON, CHAD E
MACK, JOHNIE
217 WATT, LAWRENCE
222 ZOIA MONUMENT CO
226 CONWAY TIMOTHY D DDS PC
WOODSTOCK FOOD PANTRY
230 KRISTENSEN SERVICE CENTER
233 EDWARDS, DONNA
IMAGE OPTICAL
MOGDANS, MELISSA
SCHUBERTH EYE CARE CENTER LTD
SCHUBERTH, WILLIAM A
310 WOODSTOCK DAIRY QUEEN
311 TREMATIC PUBLISHING
321 GREENE, JOESPH L
327 SCHROEDER, NORMAN E
347 CARBAJAL, JOSAFAT
JC LAWN SERVICE
JOHNSON, ETHEL G
403 BEARDSLEY, ROBERT J
405 GEHRKE, GENE
409 BILODEAU, JOSEPH D
415 JACKSON, RICHARD
416 SAVORD, WILFRED L
419 SARICH, BETH M
420 STREIT, MICHAEL R
424 AYALA, LAZARO A
430 STRISSEL, ROBERT A
435 REED, STEVEN P
436 LEWIS, MAUREEN E
441 REEB, LEONARD J
501 WOODSTOCK FOOD & LIQUOR
506 CARRANZA, MARTHA
COLANGELO, PAUL A
CRUZ, JORGE
SHKRED, MARIAN

WASHINGTON ST 2005 (Cont'd)

511 GIBBONS, SHAWN W
514 BJ CARPET CLEANING
VERMETT, BARRY D
523 BOCHETTE, BETTY
HOLTZEE, BRENDA S
526 SHEPARD, JAMES J
529 KELLY, EDWARD L
532 CISNER, MICHAEL H
539 KRALL, CHRISTOPHER
SLATTERY, JENNIFER
THATCHER, ROY R
540 OCCUPANT UNKNOWN,
542 TO MARKET TO MARKET
543 FIORITO, BRIAN A
549 KYROUAC, BRYAN D
554 WAGNER, HARLAN J
558 STERN BILT
560 ALLIED PRINTING CO
ATLAS ART GLASS
561 YEGGE, LOUIS V
562 HODARY, DONALD
566 OCCUPANT UNKNOWN,
571 KIEFER, JENNIFER
575 SMITH, DEBBIE L
576 SEXTON, PETER P
585 CORTEZ, ENRIQUE
604 BTM INDUSTRIES INC
605 CHABALOWSKI, MICHAEL
KUREI, BUJAR
MUNSON, ROBERT
THIBADEAU, CHRIS
615 SIPOLT, KATHY M
621 DANIELSON, STANLEY J
629 HANSEN, JOANNA L
VASQUEZ, GUADALUPE D
638 OCCUPANT UNKNOWN,
641 KEARNS, MICHAEL J
647 TOTEMEIER, CYNTHIA M
651 COOK, SHARON A
655 NULLE, BRUCE C
656 AUSTIN, ALLEN E
660 TAPIA, EVARISTO B
670 JACKSON, HENRY C
672 PORTER, BRYAN L
705 LUGO, BEATRIZ
708 ADULT & CHILD REHAB CENTER FOR MCHEN
709 OCCUPANT UNKNOWN,
713 SWANSON, DANNY C
717 CLARK, SHANNON
FISCHER, LYNETTE G

WASHINGTON ST 2005 (Cont'd)

717	OCCUPANT UNKNOWN,
721	KENTGEN, JOHNNY J
722	MEYER, VIOLET Y
724	NELSON, JOYCE P
725	NOVY, ANTON G
727	MONTERN, ALFREDO
	MONTERO, CYNTHIA
728	SWETLAND, PAUL A
729	MARTINEZ, FRANCISCO N
735	GATZ, ALLAN J
739	SOTELO, MINERVA
740	SCHLEGEL SELF STORAGE LLC
741	CRUZ, FERNANDO
746	KOHL R L FLOOR COVERING CONTRACTORS
	MIDAS TOUCH DETAILING
	MIKES GARAGE
	WILLIAMS, THOMAS M
747	WHITING, DAVID G
750	LOCKWOOD, COREEN L
751	CABRERA, MARIO A
752	VIDALES, KATHY M
754	OCCUPANT UNKNOWN,
762	MCQUEEN, MARY A
763	VANCE, CAMERON L
765	OCCUPANT UNKNOWN,
767	HARDT, CATHIE R
768	DRINKWATER, JEFFREY R
770	FELGENHOUR, MALINDA J
780	VASQUEZ, OSCAR
782	SMITH ROBT L CONSTRUCTION CO INC
800	FINGER, MIKE E
	KAUFMANN, M
801	ADAMS, DAN
	AMELIANOVICH, ALLISON
	CAREY, SEAN K
	HEDMAN, STEPHEN K
	JOHNSON, MAUREEN C
	MCCLAIN, JAMES T
	MCKIM, DEANNA M
	MOORE, RUTH A
	MULCAHY, KRISTEN L
	OROURKE, DONALD M
	ROUNDS, JD D
	SCHILACI, KIM
	TAYLOR, JOANNE
	THOMPSON, BRYCE
805	CLAUSEN, ROBERT O
	ESCOBAR, MARTIN
	GAZDA, GEORGE E
	TARNOW, KIMBERLY M

WASHINGTON ST 2005 (Cont'd)

809 SULLIVAN, TIMOTHY P
810 OCCUPANT UNKNOWN,
811 DECHANT, STANLEY B
813 GEBBIA, MICHAEL
815 LEOPOLD, JOSEPH J
817 COLANGELO, FRANK G
818 OCCUPANT UNKNOWN,
819 OCCUPANT UNKNOWN,
820 ARCHITECTS 127 & ASSOCS INC
822 LEARMAN, FRED J
824 STORLIE, ERIC M
TRIER TRANSPORT
827 SCHAUPP, KEVIN M
828 THUROW, MARION L
829 FREUND, JANINE I
830 CAMPBELL, LAWRENCE E
831 MALLEY, DONNA J
833 VICK, BRENDA S
835 SCHENK, MICHAEL D
837 SCHNULLE, MARY E
839 KANE, SHELLAS
848 CASTANEDA, FRANCISCO O
849 OCCUPANT UNKNOWN,
TEDESCO, PRESTON J
851 HASTEN, BRYANT
HONEY, TJ J
INIGUEZ, RAMIRO
SCHMIDT, MELISSA K
852 NOLAN, RICHARD P
853 LEGG, CAROLYN A
854 OCCUPANT UNKNOWN,
857 BARROWS, DONALD V
858 RIZZO, MARY R
859 FISCHER, WAYNE P
860 ZANGE, KEVIN A
861 GARCIA, GERARDO P
13704 OCCUPANT UNKNOWN,
13706 L & M SHEET METAL
13712 PETERS MOTORS
13717 NOBLE, FREDERICK W
13723 WHITING, RANDALL D
13802 EXCAVATING CONCEPTS INC
HRNCAR, STEPHEN J
M P MFG
UB TOOLING
13813 OCCUPANT UNKNOWN,
13814 ACTION INSTALLERS S CAR
ALL STAR TOWING
B AND Z ELECTRICAL CONTRACTORS
JIREH MACHINING INC

WASHINGTON ST 2005 (Cont'd)

13825 STOERP, JERRY R
13826 LAUF, PHILIP F
13828 STOERP, HENRY P
13911 LONG, JACOB
13914 MCKELE SITE DEVELOPMENT INC
MCNULTY TRUCKING & FEED SUPPLIES
13917 BABECKY, PAUL W
13921 DEEHRING, RAYMOND H
14019 RATHMANN, DEBORA J
14020 AQUEBRADO AUTO GLASS
ROUTE 14 AUTO PARTS
14101 GRAFF, MM
14200 B & R ERECTORS INC
14213 GUY FARM MACHINERY CO INC
MORTER, CLYDE W
14400 AMERICAST CONCRETE PRODUCTS CORP
14417 CONWAY, ROBERT J
WOODSTOCK LAND SURVEYORS INC
14419 YOUNG, CLARK A
14510 WILLE, ALVIN W
14512 US FILTER / ENGNRD SYSTEM
WACHS VALVE & HYDRANT
14513 SULLIVAN, ROBERT
14600 ARNTZEN CORP
14719 HERCORP TRANSPORT INC
14801 M W H G
WASHNOK, ROBERT D

KISHWAUKEE VALLEY RD 2000

1050 ROBINETT, DAVID
1060 BLACK, ROGER W
1070 BECKER BEEPER
METROCALL
1176 WILSON, COLLEEN
1300 GRACE EVANGELICAL LUTHERAN CHURCH ELCA
13610 COLLINS, JOHN T
13611 WARD, JAN
13619 CAMPBELL, JIM
13620 OCCUPANT UNKNOWN,
13801 PLUSA, JOHN
13902 MCARTOR, TRACIE L
14115 KELLY, WARREN H
14212 SCHMIEDING, STEVEN T
SIEROSLAWSKI, FRANK H
14303 OCCUPANT UNKNOWN,
14304 CALZAVARA, HEIDI H
COOLEY, THOMAS
CORRALES, C
HEISLER, RICHARD
KILTZ, MAUDE J
KNILL, RONALD
KOWALSKI, CASIMIR
LYONS, LORNA M
SOMMER, OSCAR
STAHLECKER, HELMUTH A
STOCK, GEORGE
TAYLOR, MARVIN J
URBAS, RUTH
WRIGHT, JAMES
14315 OCCUPANT UNKNOWN,
14414 GUALTIER, HELEN
14513 ROSSA, ROBERT
14516 CAMP MORAINE INCORPORATED
OCCUPANT UNKNOWN,
14604 DAVIDSON, KEITH
14715 LEIDY, DONNA M
14816 BARRECA, L
14910 SUMA, EDWARD M
15108 MORITZ, DAVID H
15115 JOHNSON, RANDALL
15150 OCCUPANT UNKNOWN,
15200 MORITZ, RAYMOND
15204 BONDLOW, DONALD J
15214 PRINTING & THEN SOME
SCHUSTER, EDWARD A
15304 PROFESSIONAL BENEFIT TRUST
SUNDERLAGE RESOURCE GROUP
SUNDERLAGE, TRACY
15312 BROWN, WAYNE V

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 2000 (Cont'd)

15314	MIKKALI, HOWARD W
15408	OCCUPANT UNKNOWN,
15508	BEAUDOIN, KENNETH J
15520	OCCUPANT UNKNOWN,
15917	DOUBLE D FARM
16313	THOME, JOSEPH J
16401	FLYNN, NANCY E
16505	GOAD, ROBERT
16509	MESSAM, GREG E
16616	HAYDEN ILLINOIS LIMITED
16710	MEAD, DOROTHY M
17603	WITT, FREDK E
17808	WINKELMAN, HAROLD
18104	WOODS, HAROLD W
18110	MCCANN, ROBERT
	MCCANNS BERRY FARM
18309	MULLEN, JOHN C
18316	LUCZANICH, GEORGE C
18520	EVERETT, CRYSTAL M

Target Street	Cross Street	Source
-	✓	Cole Information

N ROSE FARM RD 2000

104	EMRICSON, RONALD C
106	DONOVAN, MICHAEL P
112	OCCUPANT UNKNOWN,
118	DEUERLING, WILLIAM W
208	MANKE, WILLIAM E
214	STEPHAN, EDWIN
302	BENNETT, THOMAS
	KLOTZ, SANDRA
308	BRIETZKE, HEINZ
310	HANSEN, LEONARD W
318	MCCORMICK, MARK
406	OCCUPANT UNKNOWN,
420	VLAHOS, RICHARD
506	WIGMAN, JAMES B
511	QUINN, JEFFREY L
602	JACKOWIAK, LILLIAN A
604	MARCH, JAMES F
606	DMI INDUSTRIES
	RELIABLE REMODELING FLOORING
	WARNKE, JOHN
612	OCCUPANT UNKNOWN,
704	THOMAS CONCRETE COMMERCIAL & RESIDENTIAL
	THOMAS, ALLISON
803	ARZOLA, ARMANDO
1017	MURPHY, JOHN G
1103	ZIMMERMAN, ROBERT
1201	OCCUPANT UNKNOWN,
1309	HETTINGA, BRUCE
1313	SEXTON, FRANK J
1317	TOUSEY, GUY
1401	KELAHAN, JUDITH A
1413	MACHEROUX, L
1500	YOUNG, LAVERNE D
1501	HAUCK, FRANK
1505	MESS, ROLAND A
1585	SUMOSKI, SCOTT J
1606	OCCUPANT UNKNOWN,
	P & S SENIOR CARE INCORPORATED
2012	OCCUPANT UNKNOWN,
2305	HARRIGAN, MIKE
2307	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
-	✓	Cole Information

N SHANNON DR 2000

14	GONZALEZ, ELOISE
104	ROCUS, CYNTHIA O
111	SMITH, STEVEN W
112	LIGHT, R E
118	COCONATE, JOSEPH
120	RICHARDSON, B G
211	HAYES, PATRICK W
	REMSHAK, MARK
219	OCCUPANT UNKNOWN,
220	PRIBLA, RHEA
222	LITTLE, J C
302	MORRIS, WILLIAM W
305	RONAN, JEAN J

Target Street	Cross Street	Source
✓	-	Cole Information

US HIGHWAY 14 2000

9309	SMITH MARKETING
9604	LATEJANITA NUMBER TWO
10210	COUNTRY CRITTERS LAWN ORNAMENTS INCORPORATED
10625	LONGNECK RANCH
15015	HARTLAND VETERINARY CLINIC PC
16806	CRAFTSMAN MIDWEST INCORPORATED
18410	WOODSTOCK CONFERENCE CENTER

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 2000

108	TAPIA, REYES
110	GOLDYLOCKS HAIR DESIGN THATS JUST RIGHT
130	RICHARDSON, GORDON
	SCHMIDT PRNTG
131	MINUTEMAN GAS & PANTRY
132	SOLES, J
135	EL PALMAR RESTUARANT
136	CREIGHTON, RICK
142	FAUBL JOHN DDS
	OCCUPANT UNKNOWN,
	WILLERT VERNON R DDS
144	PASCOE CONSTRUCTION
	SUPREME SOFTWARE
200	CENTURY TILE & CARPET SUPPLY
207	AHRBECK, WILLIAM
	OBENCHAIN, VALERIE
217	ROGALSKI, LINDA S
222	ZOIA MONUMENT COMPANY ESTABLISHED SINCE 1890
226	CONWAY TIMOTHY D DDS PC
	SCHULZ, G
	WOODSTOCK FOOD PANTRY
230	KRISTENSENS AMOCO
	STANDARD OIL SERVICE STATION KRISTENSEN
233	IMAGE OPTICAL
	SCHUBERTH EYE CARE CENTER LIMITED
235	CROSS RICHARD R LAWYER
	OCCUPANT UNKNOWN,
240	OCCUPANT UNKNOWN,
	PIONEER CENTER OF MCHENRY COUNTY
	PNR CENTER OF MCHENRY CNTY RESIDENTIAL SERVICES
307	KALBFLEISCH, STEVE
	OLD CHURCH MARKETPLACE & HALL
310	WOODSTOCK DAIRY QUEEN
311	DRAMATIC PUBLISHING COMPANY INCORPORATED
321	GREENE, JOSEPH L
326	WOODSTOCK CITY OF DIAL A RIDE
327	SCHROEDER, NORMAN E
347	CARBAJAL, JOSAFAT F
403	BEARDSLEY, ROBERT J
405	GEHRKE, FRANCES R
409	MILES, MICHAEL
415	FARRIS, BRUCE M
	JACKSON, RICHARD
416	BROWN, LAUREN
419	MEYERS, GEORGE O
420	STREIT, MICHAEL
424	OCCUPANT UNKNOWN,
425	GAY, R
430	STRISSEL, ROBERT
435	REED STEVEN

435	REED, STEVEN
436	RODRIGUEZ, ELOY
441	REEB, SUSAN E
501	PIERCES LITTLE STORE
504	CARR, PAMELA C
506	BIRCH, CARRIE A
	CASTANEDA, MIGUEL
514	VERMETT, BARRY
517	OCCUPANT UNKNOWN,
520	MALONEY, HEIDI R
523	BOCHETTE, BETTY G
	GIBSON, RUSSELL R
	WAY, DARLENE M
526	DHOM, DAVID C
529	MAJOR, STEPHEN
	STEPHEN, MANITA M
532	CISNER, MICHAEL H
539	OLMSTED, STEVEN
540	MARUNDE, KIP
542	BENTON, VERNON
543	FIORITO, BRIAN
549	HASTINGS, KENDALL D
554	WAGNER, HARLAN J
561	ROSPOPO, JAMES
	YEGGE, LOUIS
562	PADERA, RICHARD
566	OCCUPANT UNKNOWN,
571	FREUND, STEVEN R
	SLATTERY, ALIX
576	SEXTON, PETER P
588	GREEN, EUGENE R
604	B T M INDUSTRIES INCORPORATED
	LITTLE LIFT INCORPORATED
605	ANTHONY, DORIS
	NELSON, C S
	VIDALES, ABBY G
615	HASSETT, ANNETTE H
621	DANIELSON, STANLEY
629	CRUZ, JUAN
	HANSEN, JOANNA
638	CARROLL, CHARLES
641	KEARNS, MICHAEL J
644	ERNST, ROBERT
	GEISTER, ELEANOR
651	COOK, BARBARA K
	DONELIN, BARBARA
655	NULLE, BRUCE C
656	AUSTIN, ALLEN
660	BERNAL, E
	LUGO, TELLEZ L

WASHINGTON ST 2000 (Cont'd)

660 TAPIA, EVARIST
669 FINNEGAN, WILLIAM A
670 DIETZ, M A
672 GROH, EDWARD
NELSON, LISA K
708 ADULT & CHILD REHAB CENTER FOR MCHENRY COUNTY
709 JAMIESON, C
713 SWANSON, RAYMOND C
717 RATCLIFFE, JEFF
STRZALKO, ROBERT
721 HAAGER, FRED
722 UNGARO, ROBERT T
724 OCCUPANT UNKNOWN,
725 NOVY, ANTON G
727 NIHAN, P
728 SCHMIDT, M
SWETLAND, PAUL
729 MARTINEZ, FRANCIS
730 HOLLANDS, DENNIS W
735 KAMASINSKI, RICHARD
SCUDDER, SERENA S
TAPIA, SERGIO
739 PERKINS, GAIL
741 OCCUPANT UNKNOWN,
746 KOHL R L FLOOR & WINDOW COVERING
MIDAS TOUCH AUTOMOTIVE SERVICE CENTER
MIDAS TOUCH DETAILING
MIKES GARAGE
TOWS ARE US
TOWS ARE US A MIDAS TOUCH CO
WOODSTOCK WEST SIDE MINI STORAGE
747 WHITING, DAVID G
750 NORD, DEBRA
TIFFANY, LAURA
751 HAHN, MARY P
752 RITTER, DANEAL L
761 OCCUPANT UNKNOWN,
762 JOHNSON, JACKIE
KUBERSKI, MARY A
763 DICKSON, JUSTIN E
765 HERSCHA, J
767 DESCHER, JEREMY
770 OCCUPANT UNKNOWN,
780 TAPIA, JOSE
782 SMITH ROBERT L CONSTRUCTION COMPANY INCORPORATED
800 FINGER, MIKE
HENNING, C
KAUFMANN, MARVIN
801 ALONZO, L
BRISCOE, ROBERT J

WASHINGTON ST 2000 (Cont'd)

801	COX, ROBERT
	EGGUM, ANDREW A
	ELLIOTT, MARTIN K
	HACKNEY, RAYMOND J
	HENNESSY, THOMAS M
	JIMMO, DAVID
	KING, JESS
	KNICK, DARLENE M
	LEE, KRISTA J
	MOLINA, L
	PYTER, G
	RILEY, C L
	SANTOS, C
	SLOCUM, LINDSAY
	STOCKMAN, DANIEL
	WHITE, D
	WOLFE, JAMES
804	GOLDSBERRY, DONALD
	MASON, NEIL
809	SULLIVAN, TIMOTHY
810	OCCUPANT UNKNOWN,
811	DECHANT, STANLEY
813	LANMAN, GARY A
815	BICKEL, GAIL
817	AELLIG, J J
818	WHELAN, PATRICK A
819	GREEN, NICOLE
822	LEARMAN, FRED
824	WEISS, FRED R
825	OCCUPANT UNKNOWN,
827	SCHAUPP, KEVIN M
828	THUROW, MARION L
829	REICHENBACH, WENDY
830	CAMPBELL, L E
831	DRABEK, LORI J
	MALLEY, DONNA
833	OCCUPANT UNKNOWN,
835	SCHENK, CINDY
839	OCCUPANT UNKNOWN,
848	BERNAL, JOSE
	CASTANEDA, FRANCIS
	NAJERA, RODRIGO
849	PIERCE, JAMIE
	TEDESCO, PAT J
851	ESQUIBEL, DENISE
852	NOLAN, RICHARD
853	LEGG, HOWARD
854	OCCUPANT UNKNOWN,
857	BARROWS, DONALD L
858	MCKIM, DOUGLAS R

859 FISCHER, WAYNE P
860 SCHNEIDERMAN, MELVIN
901 AVATAR INCORPORATED
13704 OCCUPANT UNKNOWN,
13706 L & M SHEET METAL
13712 PETERS MOTORS
13717 NOBLE, FREDK W
13723 OCCUPANT UNKNOWN,
13802 DAKEN MANUFACTURING CORPORATION
WOODSTOCK CRANE & HOIST COMPANY INCORPORATED
13813 ANDERSON, LEAH
13814 JIREH MACHINING INCORPORATED
13825 STOERP, JERRY
13826 OCCUPANT UNKNOWN,
13911 FISH, JAMIE
13917 BABECKY, WALTER
13921 DEEHRING, ELIZABE
14019 OCCUPANT UNKNOWN,
14020 OCCUPANT UNKNOWN,
ROUTE 14 USED & NEW AUTO PARTS
14101 KNAACK, HENRY
14200 B & R ERECTORS INCORPORATED
14212 ALL STAR TOWING
14213 MORTER, CLYDE W
14400 DEANS CONCRETE SPECIALTIES INCORPORATED
14408 GREEN SOLUTIONS INCORPORATED
MAGNA INSPECTION SYSTEMS
14410 B & B RACING
14417 CONWAY, ROBERT J
WOODSTOCK LAND SURVEYORS INCORPORATED
14419 YOUNG, CLARK A
14510 ARNTZEN CORPORATION
WILLE, ALVIN W
14512 US FILTER ENGINEERED SYSTEMS
14513 MEYER, ROBERT L
14801 RUSHMORE INN
WASHNOK, ROBERT D

Target Street	Cross Street	Source
-	✓	Cole Information

KISHWAUKEE VALLEY RD 1995

1300	GRACE EVANGELICAL LUTHERAN
13711	GRAF AIR FREIGHT INC
14411	TOBIAS HOUSE
15214	PRINTING & THEN SOME
15917	DOUBLE D FARM
16616	HAYDEN IL LTD
16710	MEAD RESOURCE TECHNOLOGIES
18110	MCCANNS BERRY FARM

Target Street	Cross Street	Source
-	✓	Cole Information

N ROSE FARM RD 1995

104	EMRICSON, RONALD C
106	SZMUC, JERRY
118	NYGAARD, LOWELL M
208	MANKE, WILLIAM E
302	KLOTZ, SANDRA
308	OCCUPANT UNKNOWNN
310	THACKER, JAMES E
318	MCCORMICK, MARK
406	MINOTT, BRUCE
420	OCCUPANT UNKNOWNN
506	WIGMAN, JAMES B JR
511	HICKMAN, GLENN
602	JACKOWIAK, LILLIAN A
604	OCCUPANT UNKNOWNN
606	WARNKE, JOHN
612	SCHMETZKO, ERICH
704	PAGLIARULO, FRANK
803	OCCUPANT UNKNOWNN
1017	MURPHY, JOHN G
1103	ZIMMERMAN, ROBERT
1201	OCCUPANT UNKNOWNN
1309	HETTINGA, BRUCE
	VERNON R HART
1313	STROH, ALFRED
1317	OCCUPANT UNKNOWNN
1401	RAFALSKI, JAMES G
	WEILER, AMY R
1413	MACHEROUX, HARRY
1501	HAUCK, FRANK
1505	CAMEN, ALEX
1606	HILL, JOHN B
	P & S SENIOR CARE
2305	STENOIEN, VERNON S
2307	FRASIK, JOHN

Target Street	Cross Street	Source
-	✓	Cole Information

N SHANNON DR 1995

111 SMITH, STEVEN W

US HIGHWAY 14 1995

9414	SMITH, DARREN
9604	LA TEJANITA NUMBER TWO
	SILVA, JESUS M
10017	KNUDSEN CRANE SVC INC
	KNUDSEN, JAMES
10200	ACME WILEY CORP
10210	FORMAN, JAMES
	MASTER BLASTERS THE
10214	BANUSHI, D
10215	KESTELEYN, ALBERT
10216	STREIT, BRYAN
10520	SMITH, HAROLD C
10625	BOS, JOHN
10806	HARRIS, T
	LIND, STANLEY
11109	BLACKETER, RICHARD M
11125	REEVES, CAL
11127	HAENEL, HAROLD
13212	SILKER, JOHN D
13910	CRYSTAL LAKE SEPTIC SVC
	KRICH, HAROLD
13911	SARBAUGH, RALPH
15015	HARTLAND VET CLINIC
	HARTLAND VETERINARY CLINIC
	PATTI KLEIN DVM
15105	DEETERS
15211	HOWELLS CARPET
15219	GUY FARM MACHINERY CO
16210	MIKES WOOD SHOP
	SUBURBAN SCREW MACHINE PRODUCT
16608	FOXS, TERRY
	ONEYS CHRISTMAS TREE FARM
16806	CRAFTSMAN MIDWEST INC
17112	FINGERS JOYNT
18410	WOODSTOCK CONFERENCE CTR

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 1995

108	DONS PIZZA ETC
110	GOLDYLOCKS HAIR DESIGN
130	RICHARDSON, GORDON
	SCHMIDT PRINTING
131	MINUTEMAN GAS&PNTRY
132	ARELLANO, IDALUZ
	SODE, JOHN
	SOLES, J
134	MOLLOY, LAURA
135	NOODLES ITALIAN GRILL
136	CREIGHTON, RICK
142	KIRK H CHRISTENSEN DDS
	KIRK H CHRISTENSEN LTD
	VERNON R WILLERT DDS
	WILLERT, VERNON R
200	CENTURY TILE & CARPET SUPPLY
207	THOMSEN, MARK E
217	BIER, ALBERT W
222	ZOIA MONUMENT CO
	ZOIA, ANTHONY J
226	HEAVER, A
	TIMOTHY D CONWAY DDS
	WOODSTOCK FOOD PNTY
230	KRISTENSENS SERVICE CTR
233	IMAGE OPTICAL
	SCHUBERTH EYE CARE CTR
	SIMCOE, NANCY
	TORRES, DONNA
	WEAVER, PATTY
235	OCCUPANT UNKNOWNN
	RICHARD R CROSS
240	PIONEER CENTER
307	HALEYS ANTIQUES
	WOODSTOCK ANTIQUES
310	DAIRY QUEEN
311	DRAMATIC PUBLISHING CO
321	COLEMAN, CURTIS
326	WOODSTOCK DIAL RIDE
327	SCHROEDER, NORMAN E
347	CARBAJAL, JOSAFAT F
	TAPIA, JOSE
403	BEARDSLEY, R L
405	OCCUPANT UNKNOWNN
406	PETTY, JOSEPH N
409	OCCUPANT UNKNOWNN
415	FARRIS, BRUCE M
416	OCCUPANT UNKNOWNN
419	MEYERS, GEORGE C
420	STREIT, MICHAEL R
424	SERRATO, JOSE

WASHINGTON ST 1995 (Cont'd)

430	KENYON, JOHN A
	LUDOVISSIE, SUSAN
	SULLIVAN, JOHN P
435	OCCUPANT UNKNOWNN
436	GILLESPIE, THOMAS
	STEJSKAL, KAREN
441	OCCUPANT UNKNOWNN
501	PIERCES LITTLE STORE
	WATT, DENISE M
506	BROWN, SHAWN
	KNOLL, MATTHEW
	SABO, MARCUS
511	STEINBURG, MARK
	STONE, CHARLES A
	ZALAIS, KARLIS
514	VERMETT, BARRY
520	BROKER, CRAIG
523	BOCHETTE, LEWIS E
526	DHOM, DAVID C
529	MAJOR, STEPHEN
532	CISNER, MICHAEL
539	SAUNDERS, HORACE
543	FIORITO, BRIAN A
549	JENNER, ELMER
554	WAGNER, HARLAN J
558	C T STORAGE
560	ALLIED PRINTING CORP
	WOODSTOCK ROOFING
561	CASPER, MIKE
	LISENBY, BONNIE
	YEGGE, LOUIS
562	HOWE, M J
	PADERA, RICHARD
566	OCCUPANT UNKNOWNN
571	FREUND, STEVEN R
575	SEXTON, PETER P
576	OCCUPANT UNKNOWNN
585	OCCUPANT UNKNOWNN
588	OCCUPANT UNKNOWNN
604	BTM INDUSTRIES INC
	LITTLE LIFT INC
	PORTER, WAYNE
605	BRIGGS, GEORGE F JR
615	GREEN, DANIEL E
	MATLOCK, REGINA M
	THIEDE, ROBERT
621	DANIELSON, STANLEY
629	ALVORD, MARK S
	CARBAJAL, ALFREDO
638	LUEDTKE, FRED

641 KEARNS, MICHAEL J
644 ERNST, ROBERT
SHALLENBARGER, CHETT
647 HESSMAN, BRIAN
651 DONELIN, PAUL
655 YOUNG, RICHARD
656 AUSTIN, ALLEN
660 TAPIA, E
669 FINNEGAN, WILLIAM A
670 DIGGINS, DEBORAH A
MAGNUSON, RICHARD
672 MULHOLLAND, L
THOMPSON, JOSEPH
705 CRUZ, ENRIQUE
708 ADULT & CHILD REHAB CTR
EASTER SEAL SOCIETY
714 DEVINGER, SHANNON
722 SWANSON, RAYMOND C
724 CAMPBELL, RICHARD
725 NOVY, ANTON G
727 NIHAN, P
728 SWETLAND, BONNIE
729 ORTIZ, ADAN
730 JUSTEN, PAUL
739 PERKINS, GAIL
741 OCCUPANT UNKNOWNN
747 WHITING, DAVID G
750 AMARO, CESAR
CARRENO, LETICIA
751 HAHN, MARY P
752 FOOTE, CHRIS
754 SKELTON, TAMMY
761 OCCUPANT UNKNOWNN
762 VIDALES, HENRY
763 LISTON, EILEEN M
765 CROHN, GERALD P
767 SIMCOE, M R
768 FREUND, LORI
770 CARLSON, DAVE
780 THOMPSON, GLEN S
782 ROBERT L SMITH CONSTRUCTION CO
SMITH, ROBERT L JR
800 BENNETT, STEVEN M
FINGER, MIKE
SWEET, AMY
801 AYRES, K
BRISCOE, ROBERT J
DALLESKA, MIKE
FEFFER, WILLIAM
GIBSON, DALE

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 1995 (Cont'd)

801	HENNESSY, THOMAS M
	JEFKO, KELLY
	KUPIETZ, KENNETH E
	LEWELLYN, PHIL
	MECCIA, MICHAEL
	MISHLER, JASON
	OMALLEY, COLLEEN
	OTTERSON, JOHN
	REMMERS, RICHARD
	SYMONS, R E
804	MASON, NEIL
	YOE, NORBERT
809	SULLIVAN, TIMOTHY
811	DECHANT, STANLEY
813	OCCUPANT UNKNOWNN
817	WICK, LOIS A
819	OCCUPANT UNKNOWNN
822	LEARMAN, FRED
824	NORMAND, S
	WEISS, FRED R
825	OHLRICH, DAVID
827	KELLY, GREG
829	HAUGEN, MARK B SR
830	CAMPBELL, L E
831	DRABEK, LORI J
	MALLEY, DONNA
833	SOUVIGNY, BRANDI
835	LEAF, MARTIN
837	OCCUPANT UNKNOWNN
839	LUEHR, MATTHEW
848	GAMINO, ESTAVAN
849	TEDESCO, PAT J
851	MERLE, J M
	VILCHIS, SERAFIN S
852	GARCIA, HUGO
853	LEGG, HOWARD
857	BARROWS, DONALD L
858	WAGENER, RICHARD
859	FISCHER, WAYNE P
860	SCHNEIDERMAN, MELVIN
861	RICO, RAUL
901	AVATAR INC
13704	CRISTY, EUGENE T
13706	L & M SHEET METAL
13712	OCCUPANT UNKNOWNN
	PETERS MOTORS
13723	OCCUPANT UNKNOWNN
13813	ANDERSON, JAMES
13825	STOERP, JERRY
13826	BENTZ, RON

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 1995 (Cont'd)

13911 DICK, JOHN
13917 BABECKY, WALTER
13921 DRAFFKORN, SUZANNE
14019 WALLIS, MILFORD F
14020 ROUTE 14 AUTO PARTS
14101 KNAACK, HENRY
14200 B & R ERECTORS INC
BEU, ROGER
14213 MORTER, CLYDE W
14410 JRW AUTOMOTIVE
OCCUPANT UNKNOWNN
14417 CONWAY, ROBERT J
14419 SIMES, CHARLES J
14510 FISCHER TIRE SVC
14512 A R I INTERNATIONAL
FAB SYSTEMS
WOODSTOCK AREA RECYCLING CTR
XYLOCRAFT FINE FURNITURE
14513 MEYER, ROBERT L
14719 C F MOTORFREIGHT
DUKES TRUCKING
VANCLEVE, JOHN W

KISHWAUKEE VALLEY RD 1992

1060 LEIBERT, KENNETH
1176 JONES, MICHAEL
1300 GRACE EVANGLCL LUTH
13610 COLLINS, JOHN T
13611 STOCK, THOMAS L
13613 BELCHER, MELVIN T
13619 CAMPBELL, JIM
13620 MEISINGER, LARRY M
13711 GRAF AIR FREIGHT
13902 ZIBELL, WILLIAM E
14115 KELLY, WARREN H
14212 SCHMIEDING, STEVEN T
SORENSEN, DAVID W
14304 BERRY, JESSE J
DANIELSON, MERLIN
KOWALSKI, CASIMIR
OLMSTEAD, DAWN
SCHOLPP, HAROLD J
SHERRY, E R
SOMMER, OSCAR
STAHLECKER, HELMUTH A JR
TIBBITTS, GORDON
WALKINGTON, GLENN
WILLE, GEORGE
14307 AUSTIN, DWIGHT
14411 TOBIAS HOUSE
14414 GUALTIER, MICHAEL
14513 ROSSA, ROBERT
14515 MCGRATH, THOMAS W
14516 BURKETT, DANNY W
14604 DAVIDSON, KEITH
14715 GUERRA, JOHN
14816 CHERECK, EDWARD J
15108 KLINE, WILLIAM J
15150 MORITZ FIRE EXTNGSH
MORITZ, DAVID
15200 MORITZ, RAY S
15204 BONDLOW, DONALD J
15214 SCHUSTER, EDWARD A
15312 BROWN, WAYNE V
15520 GEORGI, DAVID
15917 DOUBLE D FARM
MINER, KEITH D
16505 GOAD, ROBERT
16616 HAYDEN IL LTD
18110 MCCANNS BERRY FARM
18309 MULLEN, JOHN C
18316 LUCZANICH, GEORGE C
18520 BOETTGER, L
RANDOLPH, CHARLES

Target Street	Cross Street	Source
-	✓	Cole Information

N ROSE FARM RD 1992

104	EMRICSON, RONALD C
118	NYGAARD, LOWELL M
208	MANKE, WILLIAM E
302	KLOTZ, SANDRA
310	THACKER, JAMES E
318	MCCLEERY, LEE
	TANDON CORP
420	MCMINN, MIKE
602	JACKOWIAK, ROBERT C
612	SCHMETZKO, ERICH
803	ARZOLA, ARMANDO
1017	MURPHY, JOHN G
1103	WALSH, RAY
1309	HETTINGA, BRUCE
1313	STROH, ALFRED
1317	GOAD, JAMES
1401	WEILER, AMY R
1413	MACHEROUX, HARRY
1501	REESE, CHARLES
1505	CAMEN, ALEX
1606	NIENABER, T W
2305	STENOIEN, VERNON S
2307	FRASIK, JOHN

US HIGHWAY 14 1992

9307 TIMM, ROLLIN
9309 MARQUARDT, MARVIN
9414 SMITH, DARREN
9604 LA TEJANITA TWO
SILVA, JESUS M
10017 KNUDSEN CRANE SERV
KNUDSEN, JAMES
10200 ACME WILEY CORP
10210 FORMAN, JAMES
MASTER BLASTERS THE
10214 SMITH, THOMAS A
10215 KESTELEYN, ALBERT
10520 SMITH, HAROLD C
10625 BOS, JOHN
10806 PISHA, ADOLPH
11109 BLACKETER, RICHARD M
11125 SZMUC, JERRY
11127 HAENEL, HAROLD
11214 WOODSTOCK BRCK&SPLY
13907 KRICH, HAROLD R
13910 CRYSTL LK SEPTC SV
13911 SARBAUGH, RALPH
14315 REDDEN, TIMOTHY
14413 BRUNHOEFER, RUDOLPH
14511 MANARCHY, DENNIS
15015 GENGE JEROME O DVM
GENGE, JEROME O
15105 DEETERS
15211 HOWELL, KENNETH A
HOWELLS CARPET
15219 GUY FARM MACHINERY
KELLOGG, WARREN
15315 HERRERA, K
TRADER, DOUG
15706 FICEK, FRANK
15812 SCHMIDT, JULUIS
15910 CARPENTER, JOE
16210 EVERTSEN, HERBERT R
SUBURBN SCREW MACH
16220 HASSELMANN, ALVIN
16608 ONEYS CHRISTMAS FRM
PETERSON, RON
16702 NIENHUIS, JOHN
16806 CRAFTSMAN MIDWEST
CROCKER, FRANCIS H
16915 LEIBERT, ARLO
17112 FINGERS JOYNT
17201 FYFE, BEYE
17203 FYFE, WILLIAM
17221 BOGDAN, S E

17221 HARRISON, STEVE
17421 FEHRMAN, DANIEL W
17422 FEHRMAN, VERNON E
17817 PAULSEN, MARY M
18226 PHILLIPS, K
18410 WINTERS, SAMUEL
WOODSTOCK CONF CNTR

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 1992

108 SMOKEHOUSE EXPRESS
110 GOLDY LOCKS HAIR
130 OLEJNIK, BARBARA
SCHMIDT PRNTG
131 MINUTEMAN GAS&PNTRY
132 ON GUARD FENCE CO
SALASH, MELANIE
134 COLLINS, MARY L
135 NOODLES ITALN GRILL
136 CREIGHTON, RICK
142 CHRISTENSEN K H DDS
WILLERT VERNON DDS
WILLERT, VERNON
144 JUST KIDS
PAUL JOHN C MD SC
200 CENTURY TILE SUPPLY
207 THOMSEN, MARK E
217 BIER, ALBERT W
226 CONWAY TIMOTHY DDS
CONWAY, TIMOTHY D
WILLE, AUGUST
WOODSTOCK PANTRY
230 STANDRD OIL SV STA
233 DOLESY, D
IMAGE OPTICAL
LEAHY, N
SCHUBERTH EYE CARE
235 CROSS RICHARD LWYR
NEESE MICHAEL ATTY
240 PIONEER CTR TRNSTNL
307 WOODSTOCK ANTIQUES
310 WOODSTOCK DAIRY QN
311 DRAMATIC PUBLISHING
TURNING POINT
321 COLEMAN, CURTIS
326 WOODSTOCK DIAL RIDE
327 SCHROEDER, NORMAN E
347 CARBAJAL, JOSAFAT
403 BEARDSLEY, R L
409 TRAPINO, PETER
415 FARRIS, BRUCE M
416 SZYMKOWIAK, MARY
419 MEYERS, GEORGE C
420 STREIT, MICHAEL R
430 NYSTROM, JOHN
436 DECHANT, STANLEY
GILLESPIE, THOMAS
441 WATERMANN, WILBUR C
501 PIERCES LITTLE STR
511 HALL, PETER I

511	WENCK, IAN
514	VERMETT, BARRY
520	BROKER, CRAIG
526	DHOM, DAVID C
532	CISNER, MICHAEL
539	SAUNDERS, HORACE
542	WOODSTOCK MTL PRODS
543	GRAHAM, GEORGE
549	JENNER, ELMER
554	KRISTAN, GLENN
560	ALLIED PRINTING CO
561	LISENBY, B
	YEGGE, LOUIS
562	PADERA, RICHARD
566	GOLBECK, C L
571	FREUND, STEVEN R
576	DREHER, MICHAEL A
588	GREEN, EUGENE R
604	B T M INDUSTRIES
	LITTLE LIFT INC
605	BRIGGS, GEORGE
621	DANIELSON, STANLEY
629	ALVORD, MARK S
641	ALVAREZ, ROSENDO
644	ERNST, ROBERT
	PHILIPP, EDWARD J
	SHALLENBARGER, CHETT
651	DONELIN, PAUL
655	YOUNG, RICHARD
656	AUSTIN, ALLEN
660	ANDERSON, KEITH S
669	FINNEGAN, WILLIAM A
670	DIGGINS, DEBORAH A
	MAGNUSON, RICHARD
705	HERRERA, P
708	EASTER SEAL SOCIETY
721	HAAGER, FRED
722	SWANSON, RAYMOND C
724	MAGGARD, ROBERT E
725	NOVY, ANTON G
727	STANGER, CHRISTI M
	WILLIAMS, VERNE A
728	TOMLINSON, MARK
729	ORTIZ, ADAN
730	OLSON, BRIAN L
735	UDEN, DAVID
747	WHITING, DAVID G
751	HAHN, WAYNE
752	BUSCH, CURT
	KAMIN, CANDY

WASHINGTON ST 1992 (Cont'd)

762 VIDALES, HENRY JR
763 LISTON, DONALD
765 CROHN, GERALD P
767 SIMCOE, M R
768 CONNELL, JACK
770 HUNT, THOMAS
780 THOMPSON, GLEN S
782 SMITH ROBT L CONSTR
SMITH, ROBERT L JR
800 USHER, RONALD D
801 ANDERSON, MICHAEL
GRAY, L J
KAUFMANN, K
LEARMAN, JASON W
MISHLER, JASON
ROWLAND, MAURA
SCHAEFER, LISA
809 SULLIVAN, TIMOTHY
811 LABAHN, RICHARD
813 COLANGELO, FRANK G
819 WOODRUFF, V M
822 LEARMAN, FRED
824 WEISS, FRED R
825 OHLRICH, DAVID
827 THUROW, JEFFERY
829 HAUGEN, MARK B SR
830 CAMPBELL, L E
831 DRABEK, LORI J
MALLEY, DONNA
833 RECKLEIN, DENNIS M
835 KRAUSEN, PAUL
839 SCHNULLE, JEFFREY A
851 CORDTS, WENDY J
852 RANK, STEVEN R
853 WIEBERG, ARNOLD
858 ABT, RONALD
859 FISCHER, WAYNE P
860 SCHNEIDERMAN, MELVIN
861 RICO, RAUL
901 AVATAR INC
3102 JONES, TODD E
4302 BECKER, TROY
5062 LEWIS, JEL D
7301 SPANGENBERG, BRUCE
8003 FINGER, MIKE
8011 MANSFIELD, L
MARTIN, JEFF
8531 DICKMAN, C
13704 CRISTY, EUGENE T
13825 STOERP, JERRY

Target Street	Cross Street	Source
-	✓	Cole Information

WASHINGTON ST 1992 (Cont'd)

13826 BENTZ, LEO A
13911 DICK, JOHN
13917 BABECKY, WALTER
13921 DRAFFKORN, PHILIP A
14101 KNAACK, HENRY
14213 MORTER, CLYDE W
14417 CONWAY, ROBERT J
14419 SIMES, CHARLES J
14510 SCHROEDER, RUSSELL R
14513 MEYER, ROBERT L
34712 TAPIA, ONORIO
71712 WAY, DARLENE M
80110 BRISCOE, ROBERT J
84912 TEDESCO, PAT J

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

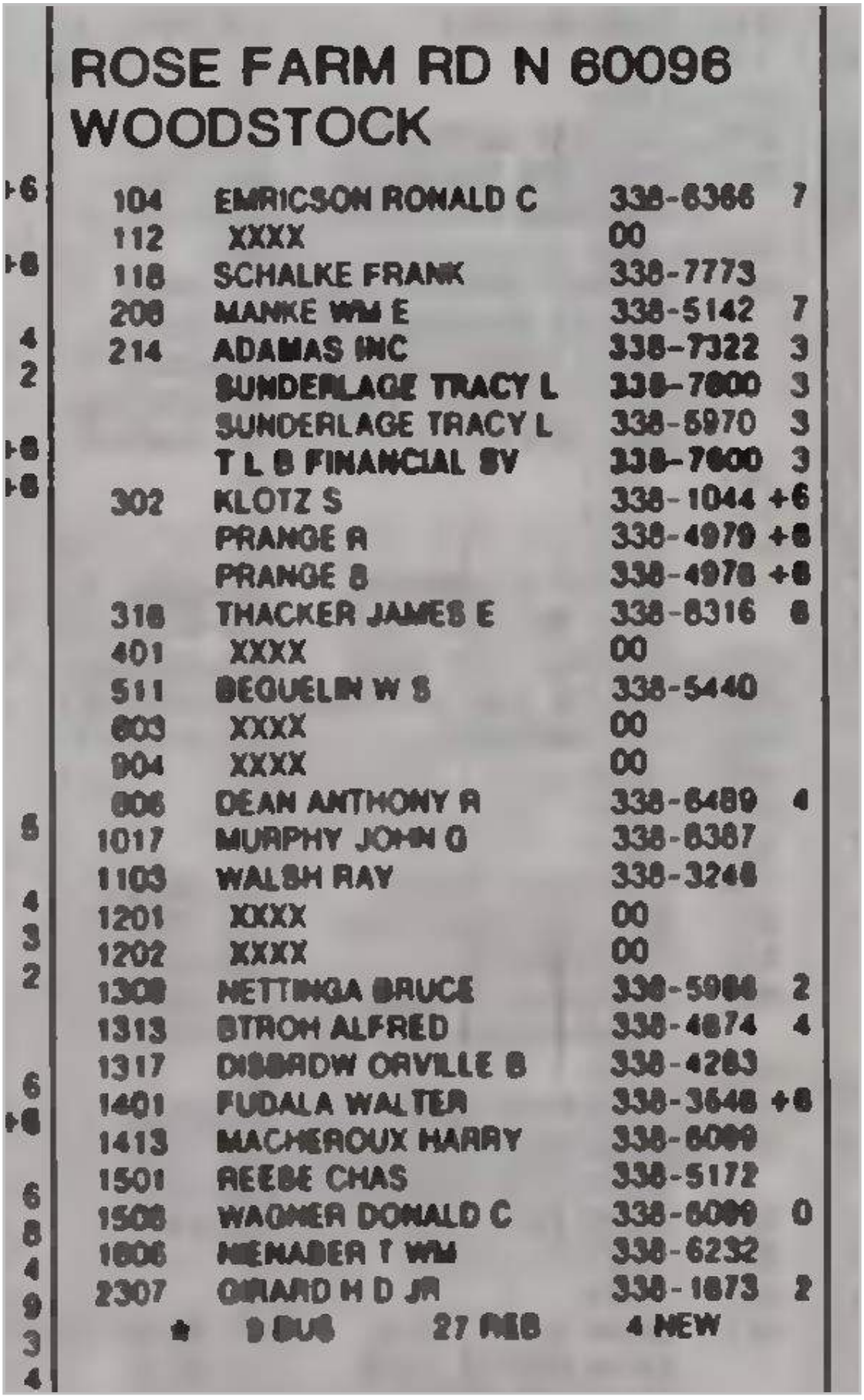
KISHWAUKEE VALLEY RD 1986

KISHWAUKEE VLY RD
60096 WOODSTOCK

1060	ROBINETT DAVID	338-6781	9
1080	KACENA A	338-8530	+6
1300	GRACE EVANGELCL LUTH	338-0654	5
1360	HANSON M L	337-0116	6
11275	YOUTH OPPORTUNITIES	228-0990	+6
13610	COLLINS JOHN T	338-8338	2
13611	STOCK THOS L	338-4411	
13619	XXXX	00	
13620	GRABBERT GEO	338-5615	
13711	GRAF AIR FREIGHT	228-3120	+6
	MCHENRY CO ED SERV	228-2440	+6
13714	XXXX	00	
13801	XXXX	00	
13816	RHODES BUD	338-0881	3
13901	XXXX	00	
13902	ZIBELL WM E	338-2874	
14004	XXXX	00	
14116	KELLY WARREN H	338-0610	
14212	SCHMEDING STEVEN T	338-8811	4
	SORENSEN DAVID W	338-0133	+6
14304	OLSON LEROY R	338-7585	6
14307	AUSTIN DWIGHT	338-4308	
14315	HEMMINGSEN DONALD	338-1584	
14411	TOBIAS HOUSE	228-7570	5
14414	STAHLECKER H A JR	338-0086	5
14513	ELLIS JOEL	338-9161	4
	JENSEN ALLAN	338-9161	4
14516	MARESCA JAN	337-0645	5
14518	WIG ERIC	338-8382	2
14604	DAVIDSON KEITH	338-8864	
	DAVIDSON WENDY	338-8864	5
14616	XXXX	00	
15108	KLINE WM J	338-0687	+6
16180	MORITZ DAVID	338-4329	3
	MORITZ FIRE EXTNGSHR	228-4077	6
15270	XXXX	00	
16214	SCHUSTER EDWARD A	338-2207	3
15312	BROWN JOAN	338-3783	
	BROWN WAYNE V	338-3783	
15314	XXXX	00	
15520	GEORGE DAVID	337-0048	6
16700	XXXX	00	
15917	DOUBLE D FARM	228-5642	3
16308	HAYDEN EDMUND JR	338-2114	
16313	THOME JOS J	338-7733	3
16401	XXXX	00	
16504	ERTMANN LAWRENCE	338-3410	7
16508	XXXX	00	
16710	BARNES P A	338-1272	
17505	ANDERSON G R	338-8078	1
17908	WINKELMAN HAROLD	338-1524	
18104	HORNE & HOUND WHLSL	668-8864	4
18108	MULLEN JOHN C	668-6741	6
18314	LUCZAREK GEO C	668-8864	
	6 BUS	48 RES	6 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

N ROSE FARM RD 1986

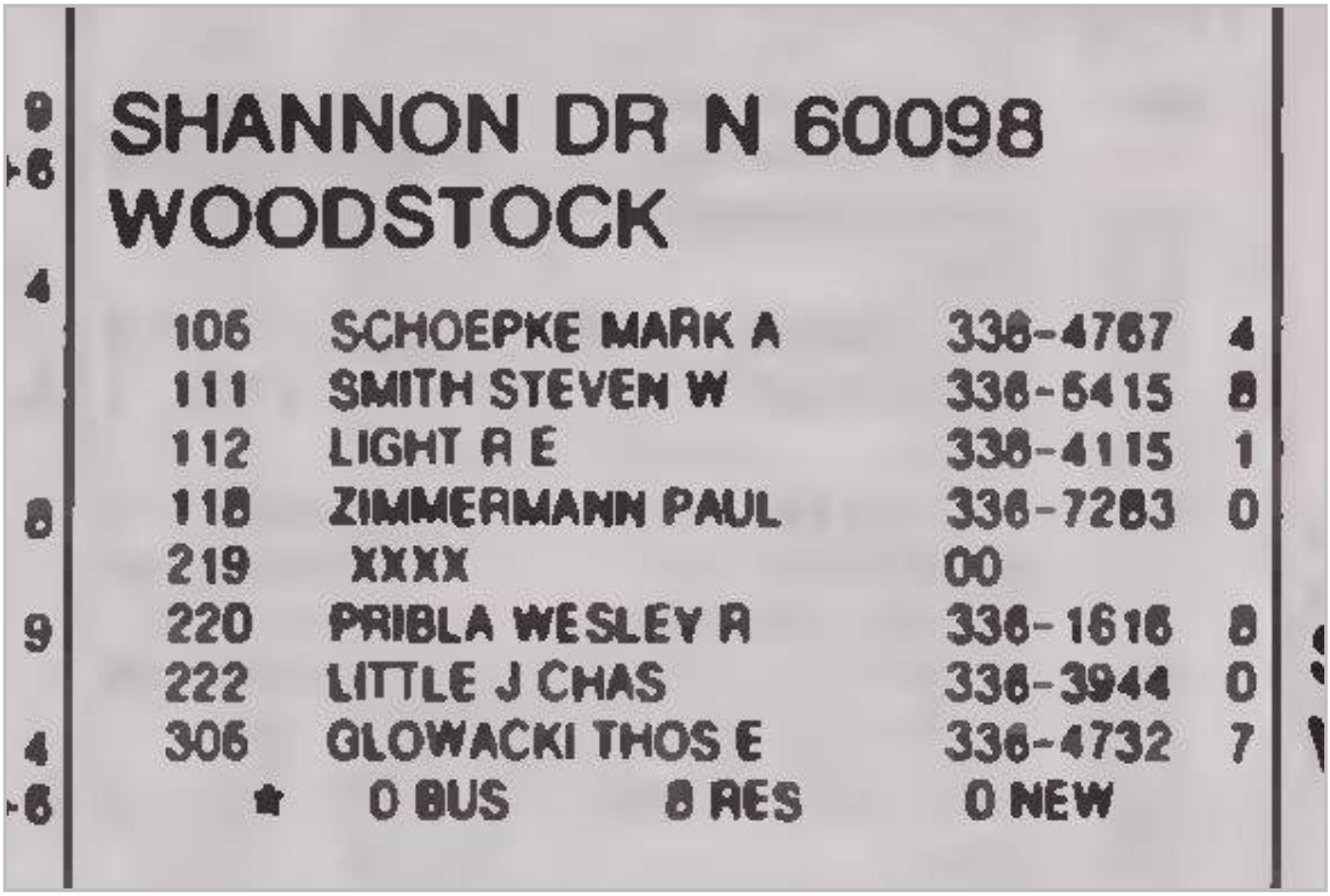


ROSE FARM RD N 60096
WOODSTOCK

+6	104	EMRICSON RONALD C	338-6366	7
	112	XXXX	00	
+8	118	SCHALKE FRANK	338-7773	
	208	MANKE WM E	338-5142	7
4	214	ADAMAS INC	338-7322	3
2		SUNDERLAGE TRACY L	338-7800	3
		SUNDERLAGE TRACY L	338-5970	3
+8		T L B FINANCIAL SV	338-7800	3
+8	302	KLOTZ S	338-1044	+6
		PRANGE R	338-4979	+8
		PRANGE B	338-4978	+8
	318	THACKER JAMES E	338-6316	8
	401	XXXX	00	
	511	BEQUELIN W S	338-5440	
	603	XXXX	00	
	904	XXXX	00	
	906	DEAN ANTHONY R	338-6489	4
5	1017	MURPHY JOHN G	338-6387	
	1103	WALSH RAY	338-3248	
4	1201	XXXX	00	
3	1202	XXXX	00	
2	1308	NETTINGA BRUCE	338-5984	2
	1313	STROM ALFRED	338-4874	4
	1317	DIBBROW ORVILLE B	338-4283	
6	1401	FUDALA WALTER	338-3648	+8
+8	1413	MACHEROUX HARRY	338-6089	
	1501	REEBE CHAS	338-5172	
6	1508	WAGNER DONALD C	338-6089	0
8	1606	NEMABER T WM	338-6232	
4	2307	GIRARD H D JR	338-1873	2
9				
3		9 BUS 27 RES	4 NEW	
4				

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

N SHANNON DR 1986



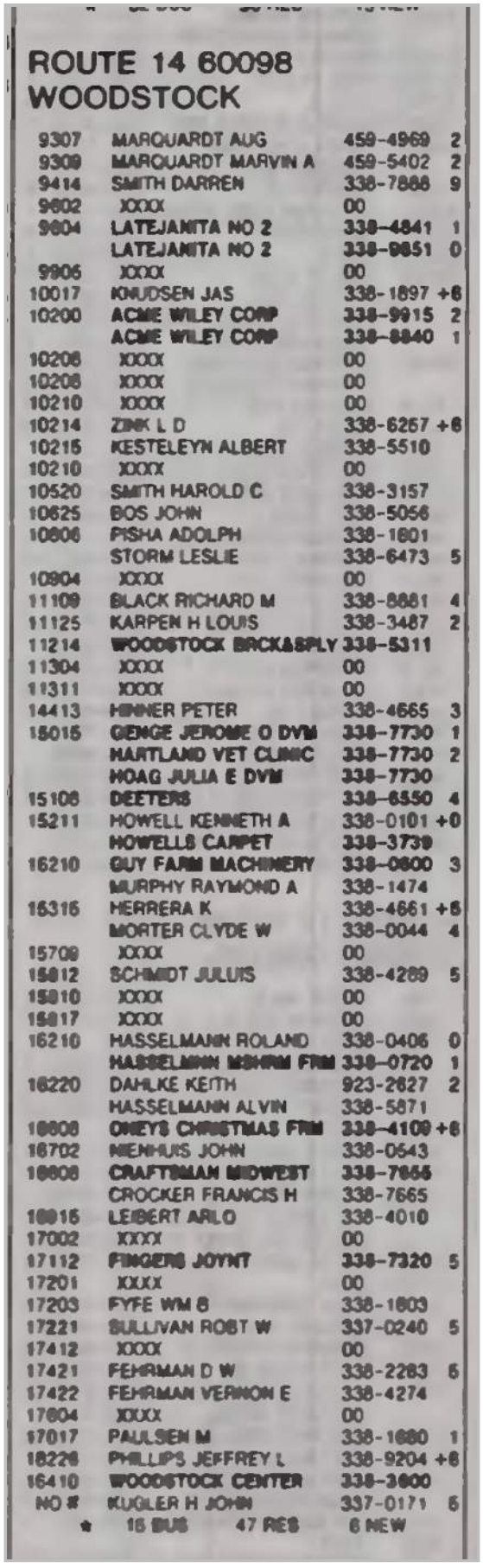
SHANNON DR N 60098
WOODSTOCK

	106	SCHOEPKE MARK A	338-4767	4
	111	SMITH STEVEN W	338-6415	8
	112	LIGHT R E	338-4115	1
	118	ZIMMERMANN PAUL	338-7283	0
	219	XXXX	00	
	220	PRIBLA WESLEY R	338-1616	8
	222	LITTLE J CHAS	338-3944	0
	306	GLOWACKI THOS E	338-4732	7

★ 0 BUS 8 RES 0 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

US HIGHWAY 14 1986



ROUTE 14 60098
WOODSTOCK

9307	MARQUARDT AUG	459-4969	2
9309	MARQUARDT MARVIN A	459-5402	2
9414	SMITH DARREN	338-7888	9
9602	XXXX	00	
9604	LATEJANITA NO 2	338-4841	1
	LATEJANITA NO 2	338-9851	0
9906	XXXX	00	
10017	KNUDSEN JAS	338-1897	+8
10200	ACME WILEY CORP	338-9915	2
	ACME WILEY CORP	338-8840	1
10206	XXXX	00	
10208	XXXX	00	
10210	XXXX	00	
10214	ZINK L D	338-6257	+8
10215	KESTELEYN ALBERT	338-5510	
10218	XXXX	00	
10520	SMITH HAROLD C	338-3157	
10625	BOS JOHN	338-5056	
10806	PISHA ADOLPH	338-1801	
	STORM LESLIE	338-6473	5
10904	XXXX	00	
11109	BLACK RICHARD M	338-8881	4
11125	KARPEN H LOUIS	338-3487	2
11214	WOODSTOCK BRCK&SPLY	338-5311	
11304	XXXX	00	
11311	XXXX	00	
14413	HINNER PETER	338-4665	3
15015	GENGE JEROME O DVM	338-7730	1
	HARTLAND VET CLINIC	338-7730	2
	HOAG JULIA E DVM	338-7730	
15106	DEETERS	338-6550	4
15211	HOWELL KENNETH A	338-0101	+0
	HOWELLS CARPET	338-3739	
16210	GUY FARM MACHINERY	338-0800	3
	MURPHY RAYMOND A	338-1474	
16316	HERRERA K	338-4661	+8
	MORTER CLYDE W	338-0044	4
15709	XXXX	00	
15812	SCHMIDT JULUS	338-4289	5
15910	XXXX	00	
15917	XXXX	00	
16210	HASSELMANN ROLAND	338-0406	0
	HASSELMANN MSHRM FRM	338-0720	1
16220	DAHLKE KEITH	923-2827	2
	HASSELMANN ALVIN	338-5871	
16606	ONEYS CHRISTMAS FRM	338-4109	+8
16702	NIENHUIS JOHN	338-0543	
16806	CRAFTSMAN MIDWEST	338-7665	
	CROCKER FRANCIS H	338-7665	
16915	LEIBERT ARLO	338-4010	
17002	XXXX	00	
17112	FINGERS JOYNT	338-7320	5
17201	XXXX	00	
17203	FYFE WM B	338-1603	
17221	SULLIVAN ROBT W	337-0240	5
17412	XXXX	00	
17421	FEHRMAN D W	338-2283	6
17422	FEHRMAN VERNON E	338-4274	
17604	XXXX	00	
17017	PAULSEN M	338-1680	1
18226	PHILLIPS JEFFREY L	338-9204	+8
16410	WOODSTOCK CENTER	338-3600	
NO #	KUGLER H JOHN	337-0171	6
*	16 BUS 47 RES	6 NEW	

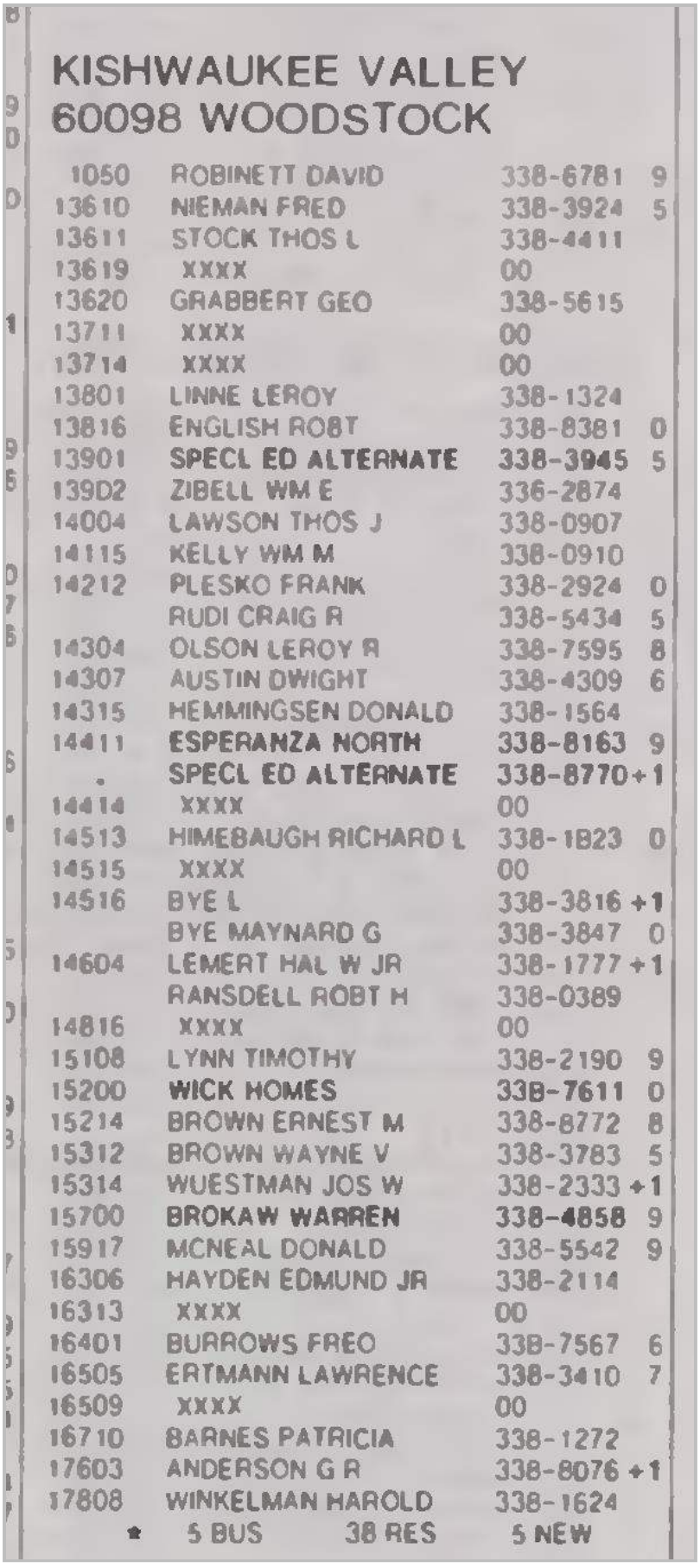
Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WASHINGTON ST 1986

WASHINGTON		60098 CONT	
13720	XXXX	00	
13723	RUSH MARK	337-0029	5
13813	MCANDREWS THOS J	338-3589	1
13825	XXXX	00	
13829	BENTZ LEO A	338-1567	
13811	DENNISON KENNETH	338-4813	+6
13912	XXXX	00	
13917	BABECKY WALTER	338-1260	
13921	DRAFFKORN PHILIP A	338-0424	5
14019	WALLIS MILFORD F	338-4984	9
14020	ROUTE 14 AUTO PARTS	338-2800	+6
14101	KNAACK HENRY	338-5576	
14212	G&H PRODUCTION MFG	338-1580	+6
14213	VESSEL HARRY	338-1674	
14417	WALGENBACH JOHN	338-4293	
14419	SIMES CHAS J	338-7972	7
14510	WALKINGTON G	338-0676	
14512	MONON TRAILER	336-2897	5
14513	MEYER ROBT L	338-9318	+6
14719	CONSLTD FREIGHTWAYS	338-9060	5
	MCLEAN TRUCKING CO	338-5770	5
14801	LUSK DONNIE LEE JR	338-6970	+6
	RUSHMORE INN	338-9729	
14810	XXXX	00	
★	44 BUS 174 RES	52 NEW	

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

KISHWAUKEE VALLEY RD 1981



KISHWAUKEE VALLEY
60098 WOODSTOCK

1050	ROBINETT DAVID	338-6781	9
13610	NIEMAN FRED	338-3924	5
13611	STOCK THOS L	338-4411	
13619	XXXX	00	
13620	GRABBERT GEO	338-5615	
13711	XXXX	00	
13714	XXXX	00	
13801	LINNE LEROY	338-1324	
13816	ENGLISH ROBT	338-8381	0
13901	SPECL ED ALTERNATE	338-3945	5
13902	ZIBELL WM E	336-2874	
14004	LAWSON THOS J	338-0907	
14115	KELLY WM M	338-0910	
14212	PLESKO FRANK	338-2924	0
	RUDI CRAIG R	338-5434	5
14304	OLSON LEROY R	338-7595	8
14307	AUSTIN DWIGHT	338-4309	6
14315	HEMMINGSEN DONALD	338-1564	
14411	ESPERANZA NORTH	338-8163	9
	SPECL ED ALTERNATE	338-8770	+1
14414	XXXX	00	
14513	HIMEBAUGH RICHARD L	338-1823	0
14515	XXXX	00	
14516	BYE L	338-3816	+1
	BYE MAYNARD G	338-3847	0
14604	LEMERT HAL W JR	338-1777	+1
	RANSDELL ROBT H	338-0389	
14816	XXXX	00	
15108	LYNN TIMOTHY	338-2190	9
15200	WICK HOMES	338-7611	0
15214	BROWN ERNEST M	338-8772	8
15312	BROWN WAYNE V	338-3783	5
15314	WUESTMAN JOS W	338-2333	+1
15700	BROKAW WARREN	338-4858	9
15917	MCNEAL DONALD	338-5542	9
16306	HAYDEN EDMUND JR	338-2114	
16313	XXXX	00	
16401	BURROWS FRED	338-7567	6
16505	ERTMANN LAWRENCE	338-3410	7
16509	XXXX	00	
16710	BARNES PATRICIA	338-1272	
17603	ANDERSON G R	338-8076	+1
17808	WINKELMAN HAROLD	338-1624	

* 5 BUS 38 RES 5 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

N ROSE FARM RD 1981

ROSE FARM RD N 60098
WOODSTOCK

104	EMRICSON RONALD	338-6366	7
112	DOWLING THOMAS J	338-3367	9
118	SCHALKE FRANK	338-7773	6
208	MANKE WM E	338-5142	7
214	SUNDERLAGE TRACY	338-6419	7
318	THACKER JAMES E	338-6315	8
401	XXXX	00	
511	BEGUELIN W S	338-5440	
803	XXXX	00	
904	GLENN M ANN	338-0296	+1
906	WOODSTK ROSES	338-0667	6
1017	MURPHY JOHN G	338-6367	4
1103	WALSH RAY	338-3246	5
1201	SACHNOFF LEE E	338-7848	0
1202	XXXX	00	
1309	HART VERNON R	338-2610	
1313	GAVERS ROBT L	338-5048	
1317	DISBROW ORVILLE S	338-4283	
1401	BURFEINDT WM	338-1713	
1413	MACHEROUX HARRY	338-5099	
1501	REESE CHAS	338-5172	
1505	WAGNER DONALD C	338-6096	0
1606	NIENABER T WM	338-5232	3
2013	XXXX	00	
2015	XXXX	00	
2307	GIRARD H D JR	338-1673	2

★ 2 BUS 24 RES 1 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

N SHANNON DR 1981

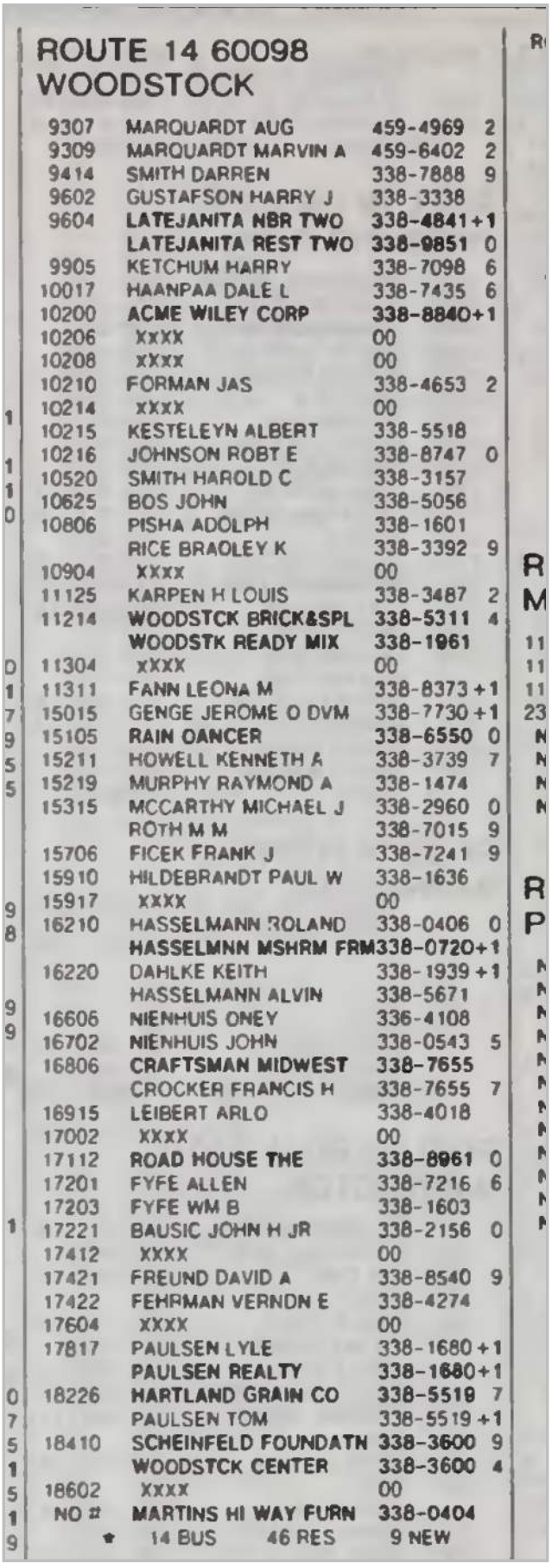
SHANNON DR 60098
WOODSTOCK

104	AMBER LOUIS	338-7613	7
105	MEYER J D	338-8414	0
106	WISSELL RICHARD A	338-2243	7
111	SMITH STEVEN W	338-5415	8
112	LIGHT R E	338-4115	+1
114	OCONNOR LAWRENCE	338-8647	0
	SHAMROCK FIBRES	338-5240	+1
118	ZIMMERMANN PAUL	338-7263	0
201	XXXX	00	
209	BERRY DENNIS C	338-0145	7
	DENSCO MARKETING	338-6573	+1
214	HARDING THOS	338-3516	6
219	XXXX	00	
220	PRIBLA WESLEY R	338-1616	8
222	LITTLE J CHAS	338-3944	0
245	XXXX	00	
305	GLOWACKI THOS E	338-4732	7
307	KAISER DAVID G	338-2359	9
408	BROWN HASKELL D JR	338-7294	8
411	DUREC STEPHEN	338-6937	9
414	CREIGHTON WM J	338-4262	5
417	KOESER DAVID C	338-0274	+1
420	KELLY JOS R	338-4574	5
425	BEER BERT J	338-7491	9
	BEER BERT J CHLD	338-7419	9
426	SARBAUGH RICHARD H	338-1249	6

2 BUS 24 RES 4 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

US HIGHWAY 14 1981



ROUTE 14 60098
WOODSTOCK

9307	MARQUARDT AUG	459-4969	2
9309	MARQUARDT MARVIN A	459-6402	2
9414	SMITH DARREN	338-7888	9
9602	GUSTAFSON HARRY J	338-3338	
9604	LATEJANITA NBR TWO	338-4841	+1
	LATEJANITA REST TWO	338-9851	0
9905	KETCHUM HARRY	338-7098	6
10017	HAANPAA DALE L	338-7435	6
10200	ACME WILEY CORP	338-8840	+1
10206	XXXX	00	
10208	XXXX	00	
10210	FORMAN JAS	338-4653	2
10214	XXXX	00	
10215	KESTELEYN ALBERT	338-5518	
10216	JOHNSON ROBT E	338-8747	0
10520	SMITH HAROLD C	338-3157	
10625	BOS JOHN	338-5056	
10806	PISHA ADOLPH	338-1601	
	RICE BRADLEY K	338-3392	9
10904	XXXX	00	
11125	KARPEN H LOUIS	338-3487	2
11214	WOODSTCK BRICK&SPL	338-5311	4
	WOODSTK READY MIX	338-1961	
11304	XXXX	00	
11311	FANN LEONA M	338-8373	+1
15015	GENGE JEROME O DVM	338-7730	+1
15105	RAIN CANCER	338-6550	0
15211	HOWELL KENNETH A	338-3739	7
15219	MURPHY RAYMOND A	338-1474	
15315	MCCARTHY MICHAEL J	338-2960	0
	ROTH M M	338-7015	9
15706	FICEK FRANK J	338-7241	9
15910	HILDEBRANDT PAUL W	338-1636	
15917	XXXX	00	
16210	HASSELMANN ROLAND	338-0406	0
	HASSELMNN MSHRM FRM	338-0720	+1
16220	DAHLKE KEITH	338-1939	+1
	HASSELMANN ALVIN	338-5671	
16606	NIENHUIS ONEY	336-4108	
16702	NIENHUIS JOHN	338-0543	5
16806	CRAFTSMAN MIDWEST	338-7655	
	CROCKER FRANCIS H	338-7655	7
16915	LEIBERT ARLO	338-4018	
17002	XXXX	00	
17112	ROAD HOUSE THE	338-8961	0
17201	FYFE ALLEN	338-7216	6
17203	FYFE WM B	338-1603	
17221	BAUSIC JOHN H JR	338-2156	0
17412	XXXX	00	
17421	FREUND DAVID A	338-8540	9
17422	FEHRMAN VERNON E	338-4274	
17604	XXXX	00	
17817	PAULSEN LYLE	338-1680	+1
	PAULSEN REALTY	338-1680	+1
18226	HARTLAND GRAIN CO	338-5519	7
	PAULSEN TOM	338-5519	+1
18410	SCHEINFELD FOUNDATN	338-3600	9
	WOODSTCK CENTER	338-3600	4
18602	XXXX	00	
NO #	MARTINS HI WAY FURN	338-0404	

* 14 BUS 46 RES 9 NEW

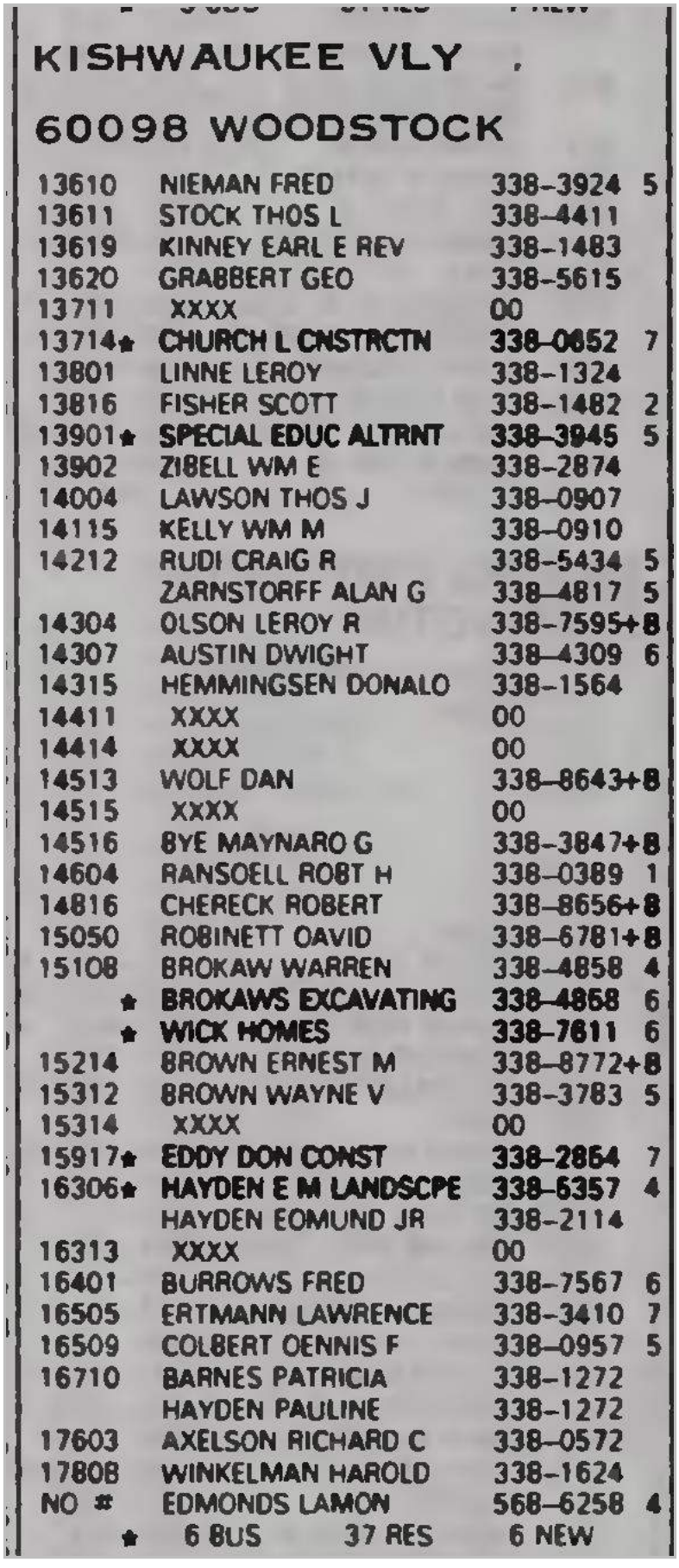
Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WASHINGTON ST 1981

5	13708	KROHNS KART KATERNG	338-0766	0
9	13712	ROGERS THOS	338-3073	0
	13717	NOBLE FREDK W	338-5855	
	13718	BOYKIN JEAN	338-1886	9
		LAMPLIGHTER MOTEL	338-3040	+1
7		SMITH LOREN E	338-5477	+1
5	13720	XXXX	00	
1	13723	XXXX	00	
	13813	MCANDREWS THOS J	338-3589	+1
	13825	PUCCINI JAS W	338-5001	5
9	13826	BENTZ LEO A	338-1557	
0	13911	JOHNSON EMILY	338-0384	+1
	13912	REYMANN MIKE	338-4113	0
9	13913	RED FOX ROAD HOUSE	338-7699	9
	13917	BABECKY WALTER	338-1260	
1	13921	BRANN LESTER W 3D	338-8178	0
	14019	WALLIS MILFORD F	338-4984	9
	14020	ROUTE 14 AUTO PARTS	338-0270	0
7	14101	KNAACK HENRY	338-5576	
5	14213	VESSEL HARRY	338-1674	
1	14417	WALGENBACH JOHN	338-4293	
4	14419	SIMES CHAS J	338-7972	7
	14510	LANGE MOTOR EXPRESS	338-3764	9
0		WALKINGTON G	338-0676	3
9	14512	CHGO MFG&DSTRBTNG	338-2879	9
		CRECO DIV	338-2879	
2		EVANS PRODUCTS CO	338-2879	0
5	14513	GARRETT FRANK	338-0564	
1	14801	RUSHMORE INN	338-9729	5
7	14810	XXXX	00	
7	★	36 BUS 169 RES	44 NEW	

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

KISHWAUKEE VALLEY RD 1978



KISHWAUKEE VLY

60098 WOODSTOCK

13610	NIEMAN FRED	338-3924	5
13611	STOCK THOS L	338-4411	
13619	KINNEY EARL E REV	338-1483	
13620	GRABBERT GEO	338-5615	
13711	XXXX	00	
13714★	CHURCH L CNSTRCTN	338-0652	7
13801	LINNE LEROY	338-1324	
13816	FISHER SCOTT	338-1482	2
13901★	SPECIAL EDUC ALTRNT	338-3945	5
13902	ZIBELL WM E	338-2874	
14004	LAWSON THOS J	338-0907	
14115	KELLY WM M	338-0910	
14212	RUDI CRAIG R	338-5434	5
	ZARNSTORFF ALAN G	338-4817	5
14304	OLSON LEROY R	338-7595+	8
14307	AUSTIN DWIGHT	338-4309	6
14315	HEMMINGSEN DONALD	338-1564	
14411	XXXX	00	
14414	XXXX	00	
14513	WOLF DAN	338-8643+	8
14515	XXXX	00	
14516	BYE MAYNARD G	338-3847+	8
14604	RANSOELL ROBT H	338-0389	1
14816	CHERECK ROBERT	338-8656+	8
15050	ROBINETT DAVID	338-6781+	8
15108	BROKAW WARREN	338-4858	4
★	BROKAWS EXCAVATING	338-4858	6
★	WICK HOMES	338-7611	6
15214	BROWN ERNEST M	338-8772+	8
15312	BROWN WAYNE V	338-3783	5
15314	XXXX	00	
15917★	EDDY DON CONST	338-2854	7
16306★	HAYDEN E M LANDSCPE	338-6357	4
	HAYDEN EDMUND JR	338-2114	
16313	XXXX	00	
16401	BURROWS FRED	338-7567	6
16505	ERTMANN LAWRENCE	338-3410	7
16509	COLBERT DENNIS F	338-0957	5
16710	BARNES PATRICIA	338-1272	
	HAYDEN PAULINE	338-1272	
17603	AXELSON RICHARD C	338-0572	
17808	WINKELMAN HAROLD	338-1624	
NO #	EDMONDS LAMON	568-6258	4
★	6 BUS 37 RES	6 NEW	

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

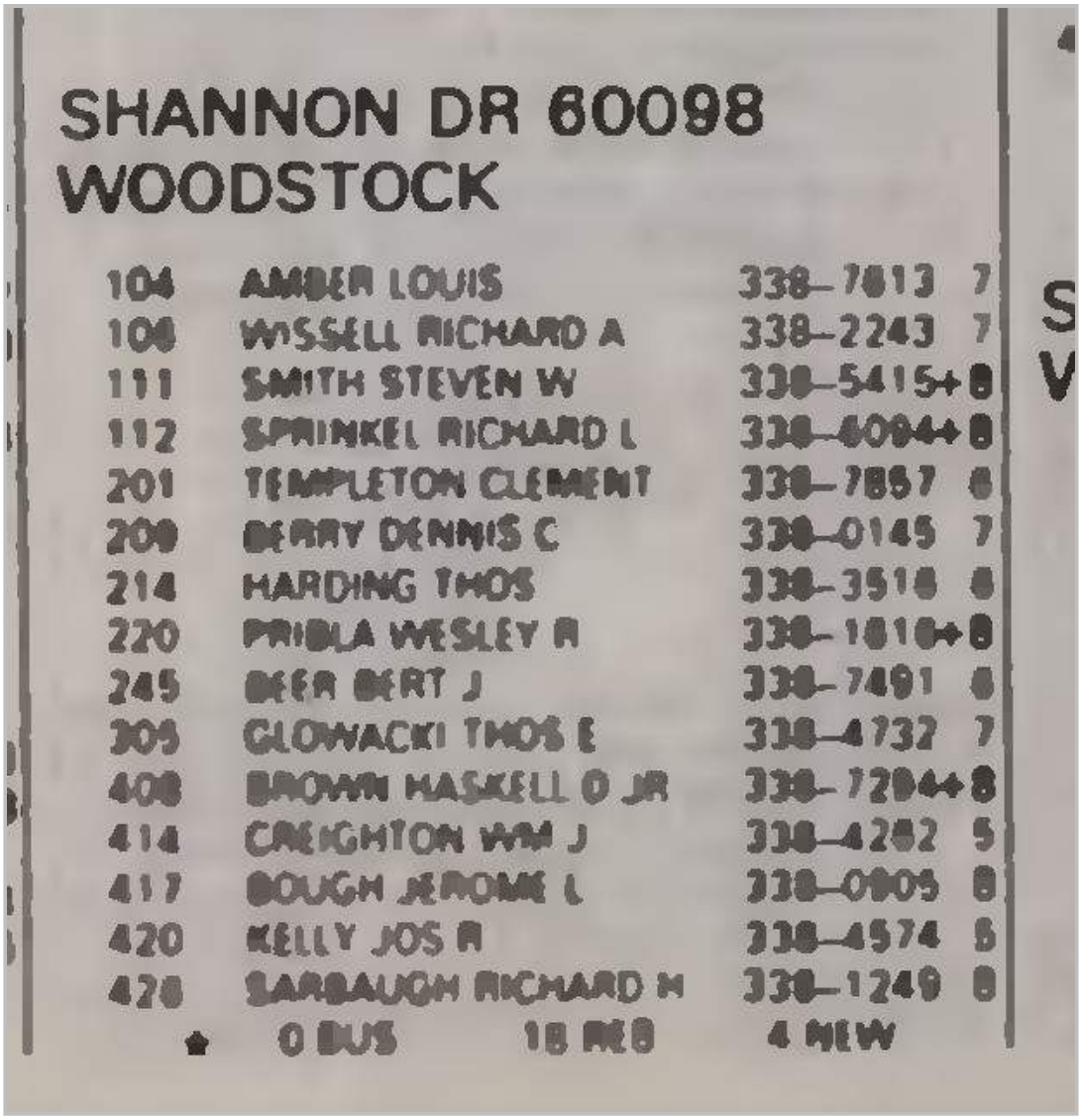
N ROSE FARM RD 1978

ROSE FARM RD N 60098
WOODSTOCK

104	EMRICSON RONALD C	338-6366	7
112	NUELLE THOS D	338-5126	7
118	SCHALKE FRANK	338-7773	6
208	MANKE WM E	338-5142	7
214	SUNDERLAGE TRACY	338-6419	7
318	THACKER JAMES E	338-6315	+8
401	XXXX	00	
511	BEGUELIN W S	338-5440	
803	CHAN WAYNE	338-8457	+8
904	SPANBAUER THEO F	338-0151	5
906	SPANBAUER RONALD F	338-6089	5
♦	WOODSTK ROSES	338-0667	6
1017	MURPHY JOHN G	338-6367	4
1103	WALSH RAY	338-3246	5
1202	XXXX	00	
1309♦	HART VERNON R	338-2810	
1313	GAVERS ROBT L	338-5048	
1317	DISBROW ORVILLE S	338-4283	
1401	BURFEINDT WM	338-1713	
1413	MACHEROUX HARRY	338-5099	
1501	REESE CHAS	338-5172	
1505	HILLEBRAND MICHAEL	338-3961	7
1606	NIENABER T WM	338-5232	3
	NIENABER T WM-CHILD	338-5330	3
2307	GIRARD H D JR	338-1673	2
♦	2 BUS 23 RES	2 NEW	

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

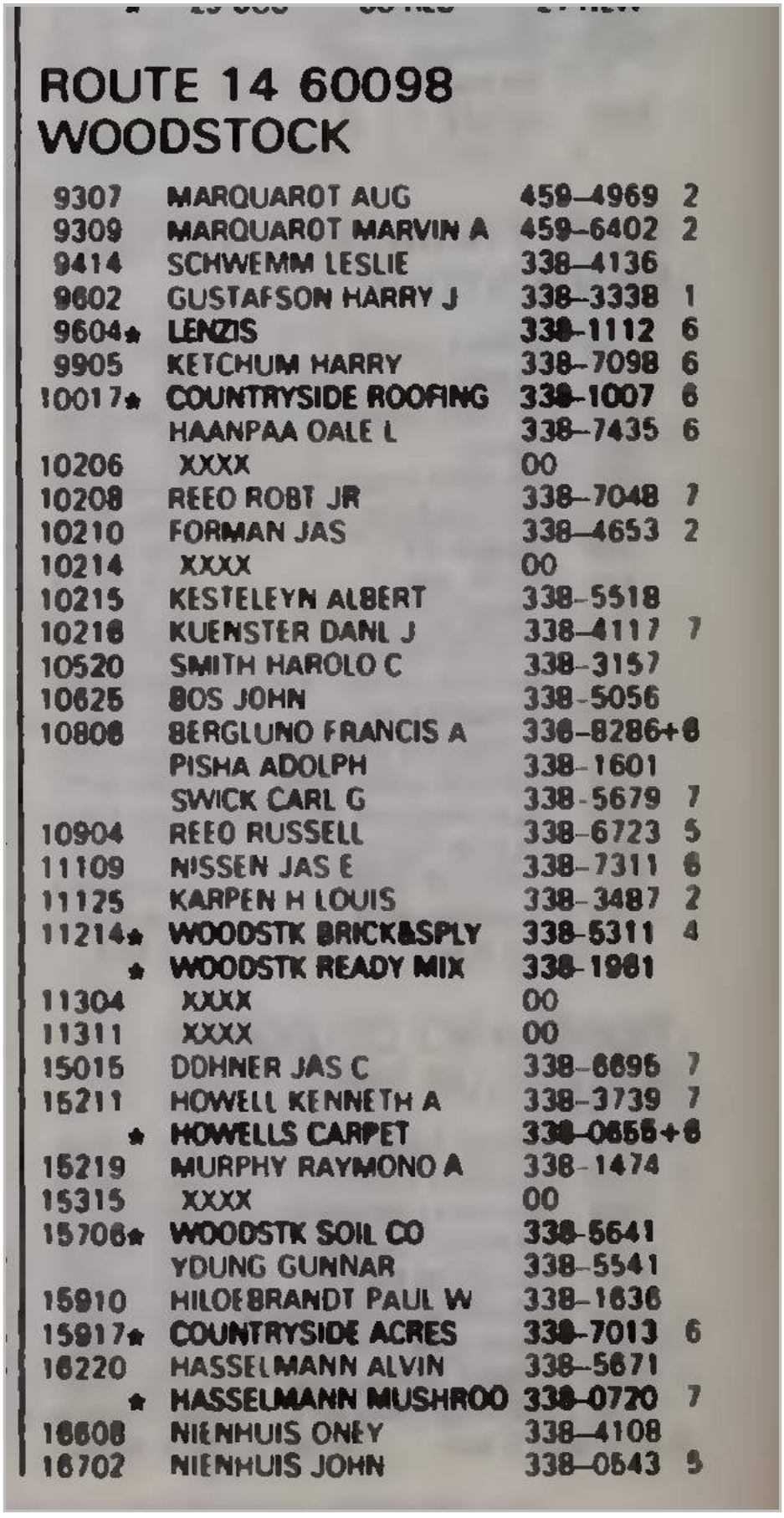
N SHANNON DR 1978



SHANNON DR 60098
WOODSTOCK

104	AMBER LOUIS	338-7813	7
106	WISSELL RICHARD A	338-2243	7
111	SMITH STEVEN W	338-5415	8
112	SPRINKEL RICHARD L	338-6094	8
201	TEMPLETON CLEMENT	338-7857	6
209	BERRY DENNIS C	338-0145	7
214	HARDING THOS	338-3518	6
220	PRIBLA WESLEY R	338-1810	8
245	BEER BERT J	338-7491	6
305	GLOWACKI THOS E	338-4732	7
408	BROWN HASKELL O JR	338-7204	8
414	CREIGHTON WM J	338-4282	5
417	BOUGH JEROME L	338-0905	8
420	KELLY JOS R	338-4574	5
428	BARBAUGH RICHARD M	338-1249	8

★ 0 BUS 18 RES 4 NEW

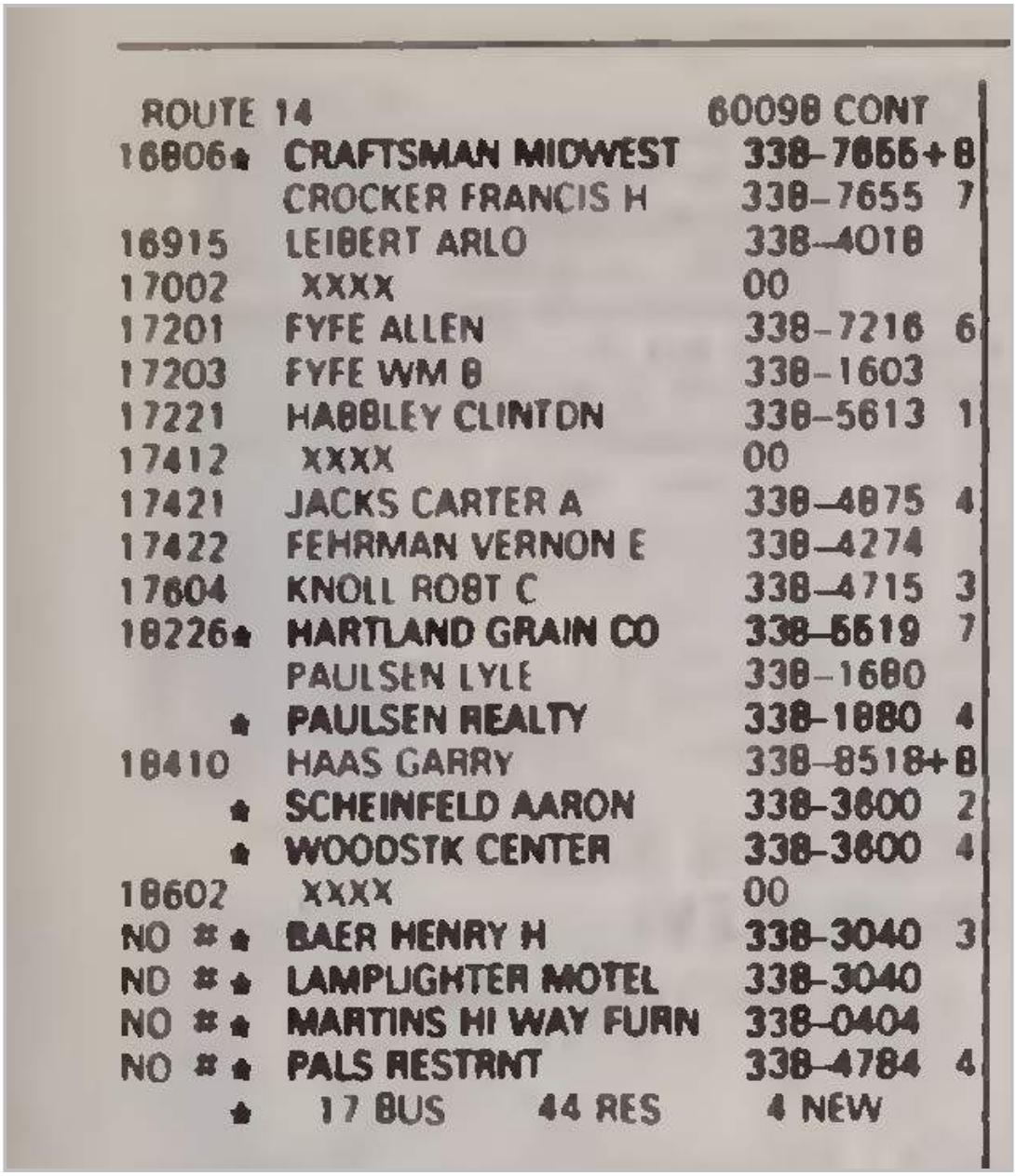


ROUTE 14 60098
WOODSTOCK

9307	MARQUAROT AUG	459-4969	2
9309	MARQUAROT MARVIN A	459-6402	2
9414	SCHWEMM LESLIE	338-4136	
9602	GUSTAFSON HARRY J	338-3338	1
9604★	LENZIS	338-1112	6
9905	KETCHUM HARRY	338-7098	6
10017★	COUNTRYSIDE ROOFING	338-1007	6
	HAANPAA OALE L	338-7435	6
10206	XXXX	00	
10208	REEO ROBT JR	338-7048	7
10210	FORMAN JAS	338-4653	2
10214	XXXX	00	
10215	KESTELEYN ALBERT	338-5518	
10216	KUENSTER DANL J	338-4117	7
10520	SMITH HAROLO C	338-3157	
10625	BOS JOHN	338-5056	
10806	BERGLUNO FRANCIS A	336-8286+8	
	PISHA ADOLPH	338-1601	
	SWICK CARL G	338-5679	7
10904	REEO RUSSELL	338-6723	5
11109	NISSEN JAS E	338-7311	6
11125	KARPEN H LOUIS	338-3487	2
11214★	WOODSTK BRICK&SPLY	338-5311	4
★	WOODSTK READY MIX	338-1981	
11304	XXXX	00	
11311	XXXX	00	
15015	DOHNER JAS C	338-6696	7
15211	HOWELL KENNETH A	338-3739	7
★	HOWELLS CARPET	338-0656+8	
15219	MURPHY RAYMONO A	338-1474	
15315	XXXX	00	
15706★	WOODSTK SOIL CO	338-5641	
	YDUNG GUNNAR	338-5541	
15910	HILOEBRANDT PAUL W	338-1636	
15917★	COUNTRYSIDE ACRES	338-7013	6
16220	HASSELMANN ALVIN	338-5671	
★	HASSELMANN MUSHROO	338-0720	7
16608	NIENHUIS ONEY	338-4108	
16702	NIENHUIS JOHN	338-0643	9

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

US HIGHWAY 14 1978



ROUTE 14		60098 CONT	
16806 ★	CRAFTSMAN MIDWEST	338-7655+B	
	CROCKER FRANCIS H	338-7655	7
16915	LEIBERT ARLO	338-4018	
17002	XXXX	00	
17201	FYFE ALLEN	338-7216	6
17203	FYFE WM B	338-1603	
17221	HABBLEY CLINTON	338-5613	1
17412	XXXX	00	
17421	JACKS CARTER A	338-4875	4
17422	FEHRMAN VERNON E	338-4274	
17604	KNOLL ROBT C	338-4715	3
18226 ★	HARTLAND GRAIN CO	338-5519	7
	PAULSEN LYLE	338-1680	
★	PAULSEN REALTY	338-1880	4
18410	HAAS GARRY	338-8518+B	
★	SCHEINFELD AARON	338-3600	2
★	WOODSTK CENTER	338-3600	4
18602	XXXX	00	
NO # ★	BAER HENRY H	338-3040	3
ND # ★	LAMPLIGHTER MOTEL	338-3040	
NO # ★	MARTINS HI WAY FURN	338-0404	
NO # ★	PALS RESTRNT	338-4784	4
★	17 BUS 44 RES	4 NEW	

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WASHINGTON ST 1978

949½	SORENSEN MICHAEL	338-7485+8	
13712	BASS LINDA	338-4227+8	
13717	NOBLE FREDK W	338-5655	
13718	MILLER M E	338-3744+8	
13720	XXXX	00	
13723	KIRKLAND C	338-8447+8	
13825	PUCCINI JAS W	338-5001	5
13826	BENTZ LEO A	338-1557	
13911	KLOCEK JAS V	338-6474	5
13912★	R G MOTORCYCLE SERV	338-2309	7
★	RED FOX ROAD HOUSE	338-7699	6
13917	BABECKY WALTER	338-1260	
13921	OLEARY RONALD J	338-3498+8	
14019	RITTER LARRY	338-7173+8	
14020★	ROUTE 14 AUTO PARTS	338-0270	
★	ROUTE 14 AUTO PARTS	338-2800	
14101	KNAACK HENRY	338-5576	
14213	VESSEL HARRY	338-1674	
14417	WALGENBACH JOHN	338-4293	
14419	SIMES CHAS J	338-7972	7
14510	LANGE ROBT L	338-3764	6
	WALKINGTON G	338-0676	3
14512★	CHGO MFG&DSTRBTNG	338-2879+8	
★	CRECO DIVISION	338-2879+8	
14513	GARRETT FRANK	338-0564	
14801	KNUTSON N M	338-6368	5
★	RUSHMORE INN	338-9729	5
14810	BINZ STEVE E	338-7134	7
NO ★	CHGO&NW RY WOODSTC	338-0153	7
NO ★	WOODSTK AIRPORT	338-4383	4
★	45 BUS 167 RES	48 NEW	

Appendix G

Woodstock Community Energy Initiative

0 US Hwy 14

Woodstock, IL 60098

Inquiry Number: 7904069.4

February 20, 2025

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

02/20/25

Site Name:

Woodstock Community Energy
0 US Hwy 14
Woodstock, IL 60098
EDR Inquiry # 7904069.4

Client Name:

SCI Engineering, Inc.
130 Point West Blvd
St. Charles, MO 63301
Contact: Bethany Walter

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by SCI Engineering, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 2025-0239.20

Project: Woodstock Community Energy

Coordinates:

Latitude:	42.331407 42° 19' 53" North
Longitude:	-88.484685 -88° 29' 5" West
UTM Zone:	Zone 16 North
UTM X Meters:	377680.68
UTM Y Meters:	4687640.39
Elevation:	898.08' above sea level

Maps Provided:

2021	1926
2018	
2015	
2012	
1992	
1978	
1963	
1944	

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT. Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2025 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2021 Source Sheets

Woodstock
2021
7.5-minute, 24000

Marengo North
2021
7.5-minute, 24000

2018 Source Sheets

Woodstock
2018
7.5-minute, 24000

Marengo North
2018
7.5-minute, 24000

2015 Source Sheets

Woodstock
2015
7.5-minute, 24000

Marengo North
2015
7.5-minute, 24000

2012 Source Sheets

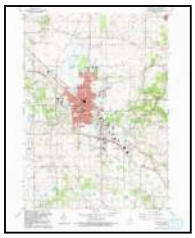
Woodstock
2012
7.5-minute, 24000

Marengo North
2012
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1992 Source Sheets

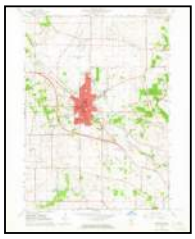


Woodstock
1992
7.5-minute, 24000
Aerial Photo Revised 1988

1978 Source Sheets

Woodstock
1978
7.5-minute, 24000
Aerial Photo Revised 1972

1963 Source Sheets



Woodstock
1963
7.5-minute, 24000
Aerial Photo Revised 1961

1944 Source Sheets

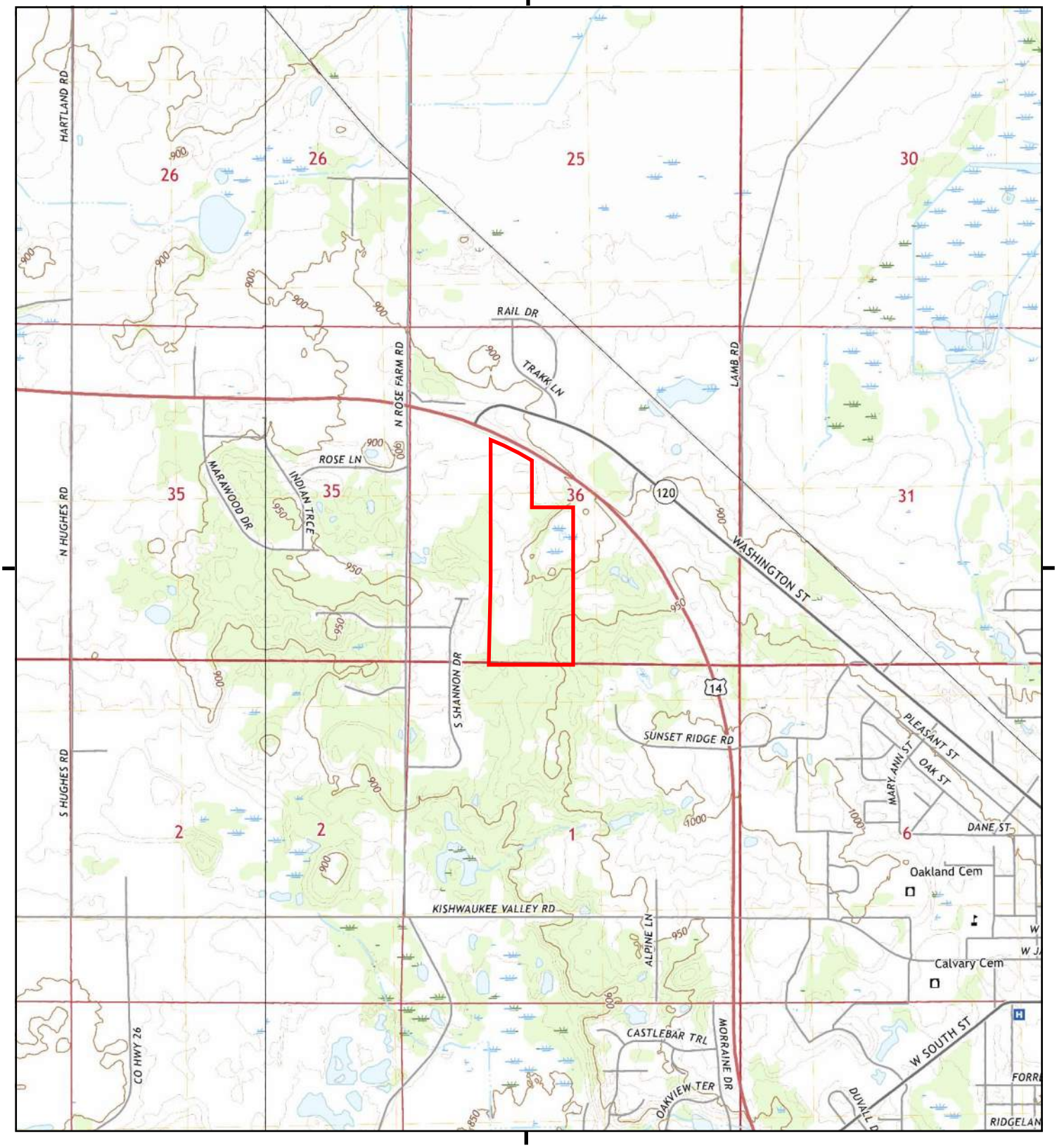
McHenry
1944
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1926 Source Sheets

McHenry
1926
15-minute, 62500



This report includes information from the following map sheet(s).

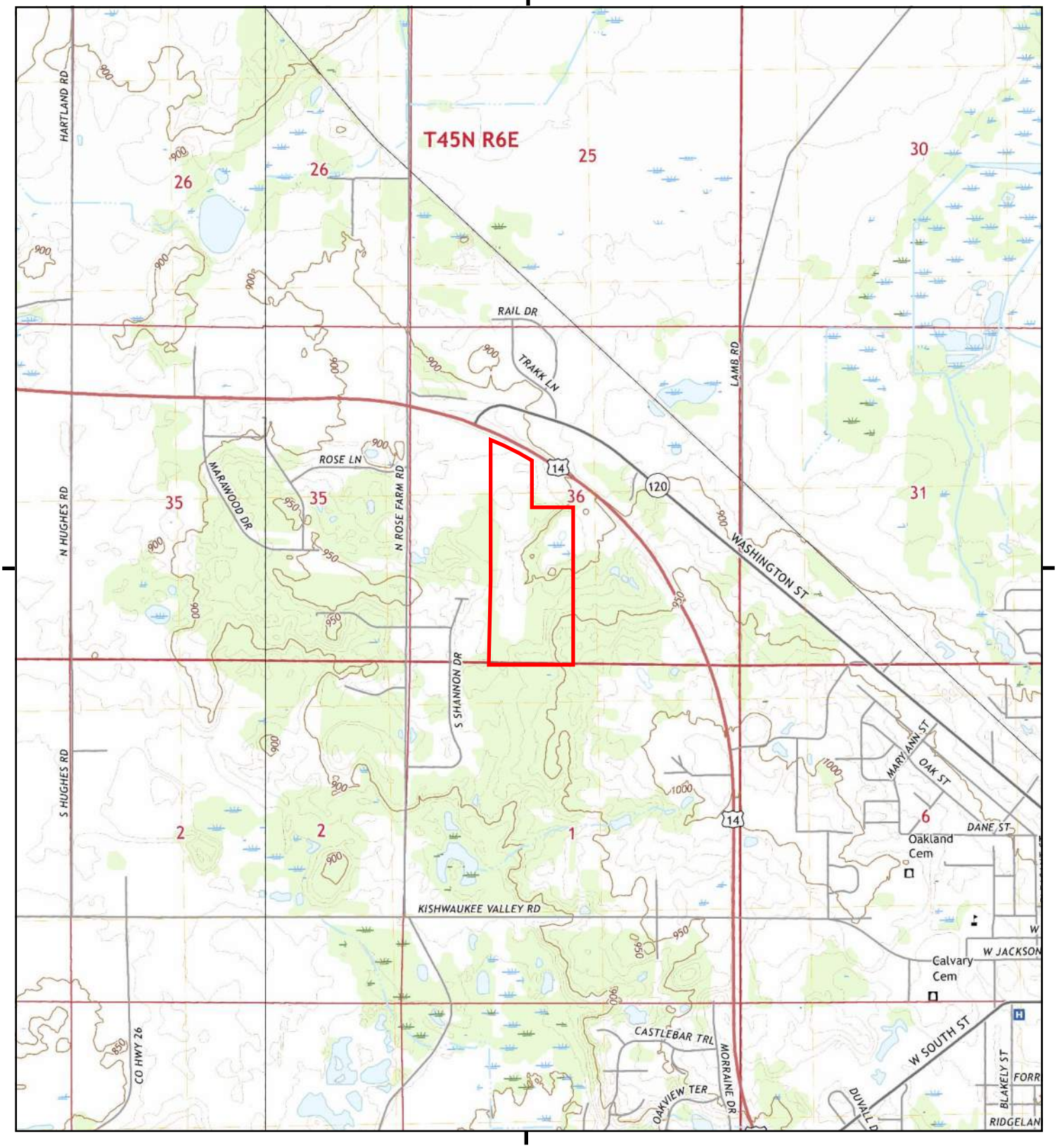
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Woodstock, 2021, 7.5-minute
W, Marengo North, 2021, 7.5-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

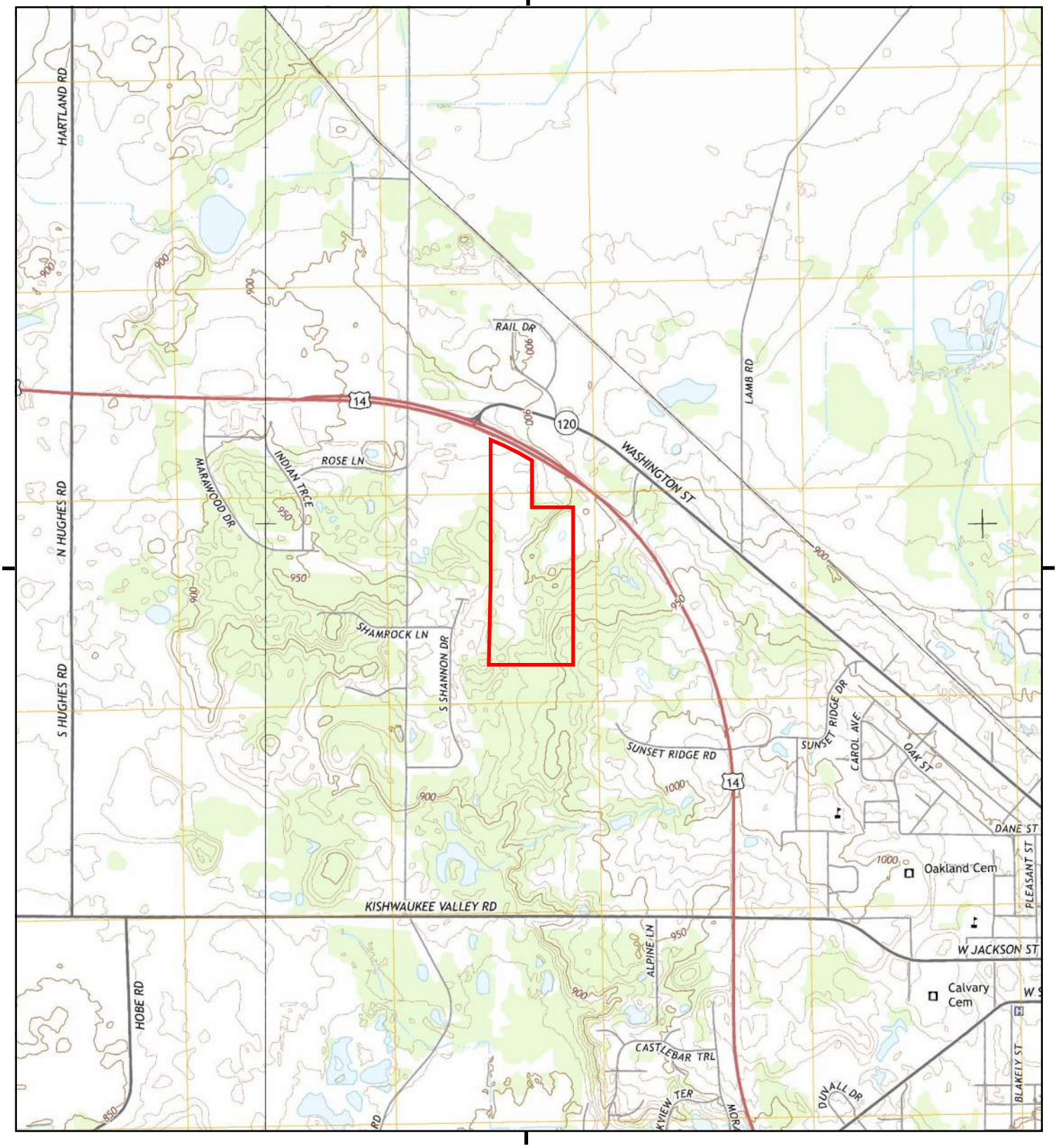
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Woodstock, 2018, 7.5-minute
W, Marengo North, 2018, 7.5-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

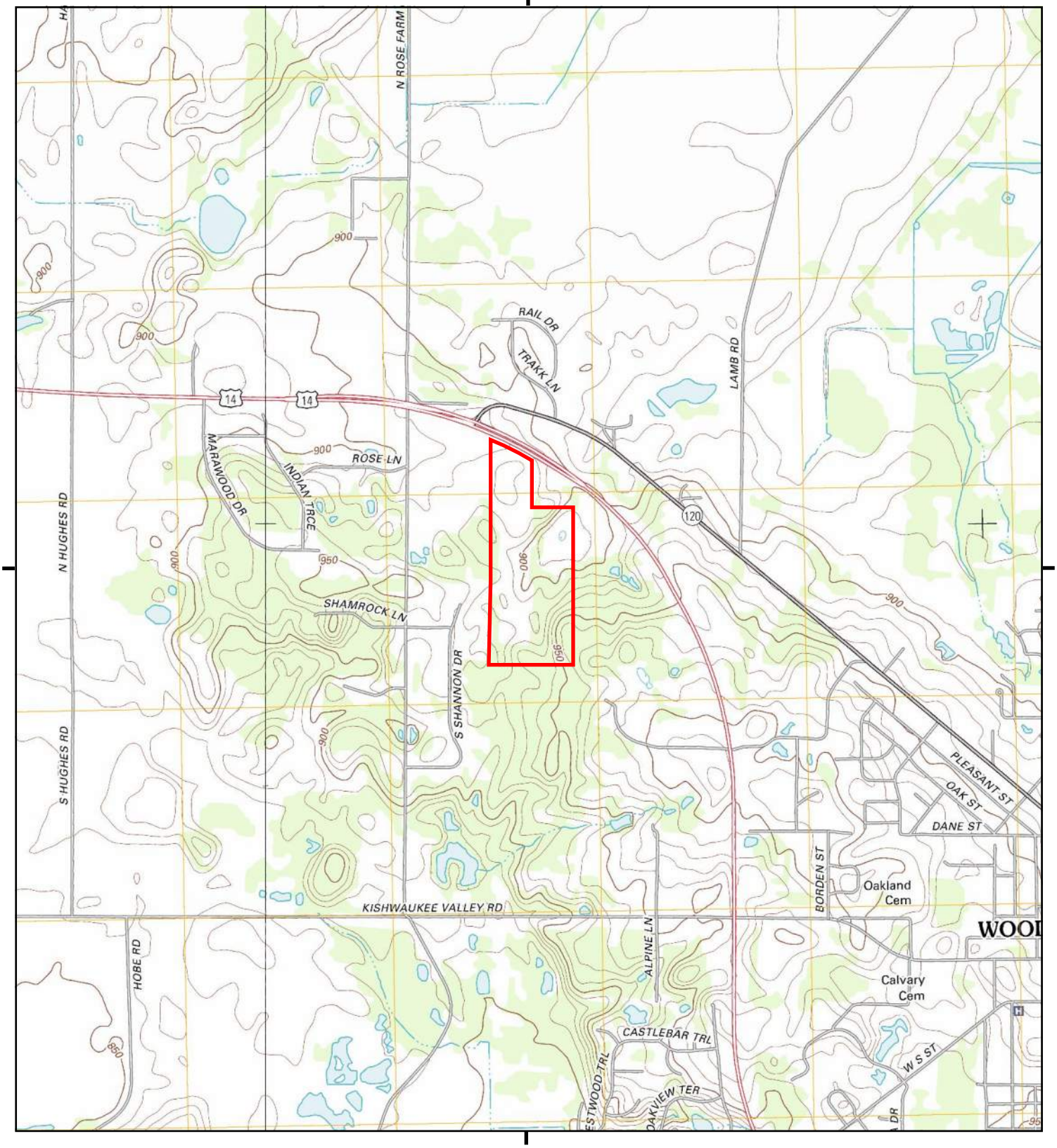
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Woodstock, 2015, 7.5-minute
W, Marengo North, 2015, 7.5-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

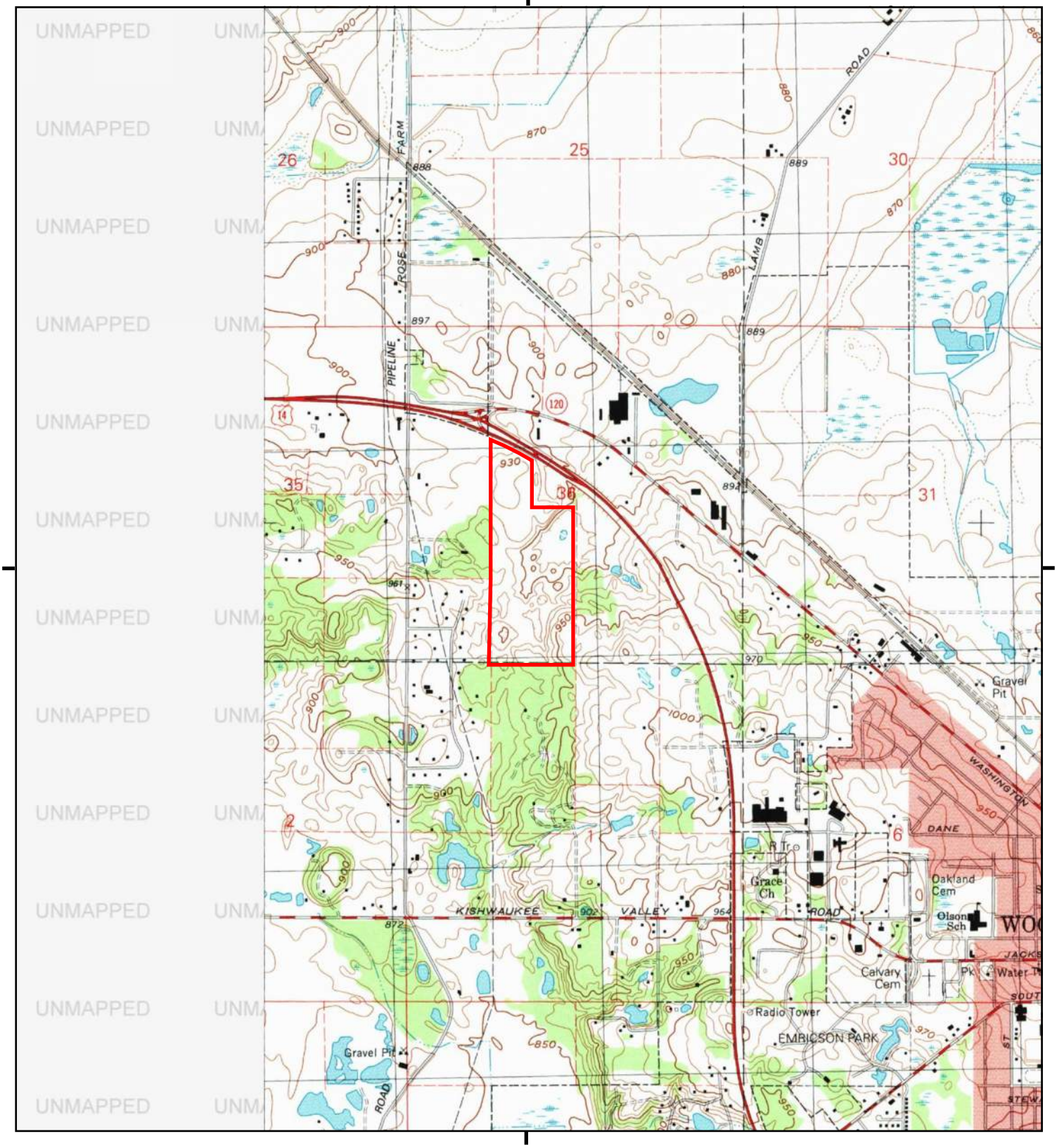
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Woodstock, 2012, 7.5-minute
W, Marengo North, 2012, 7.5-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

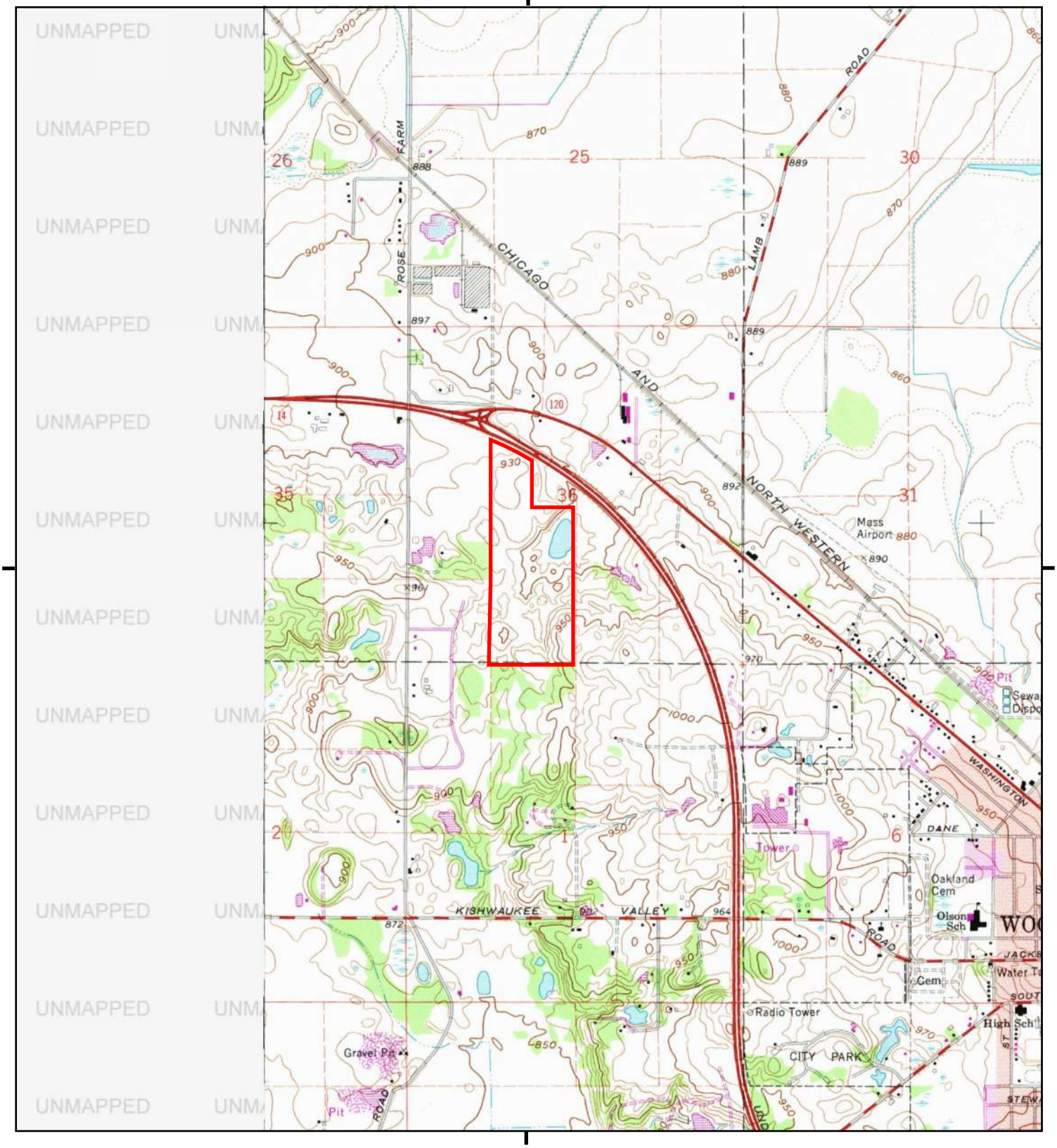
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Woodstock, 1992, 7.5-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

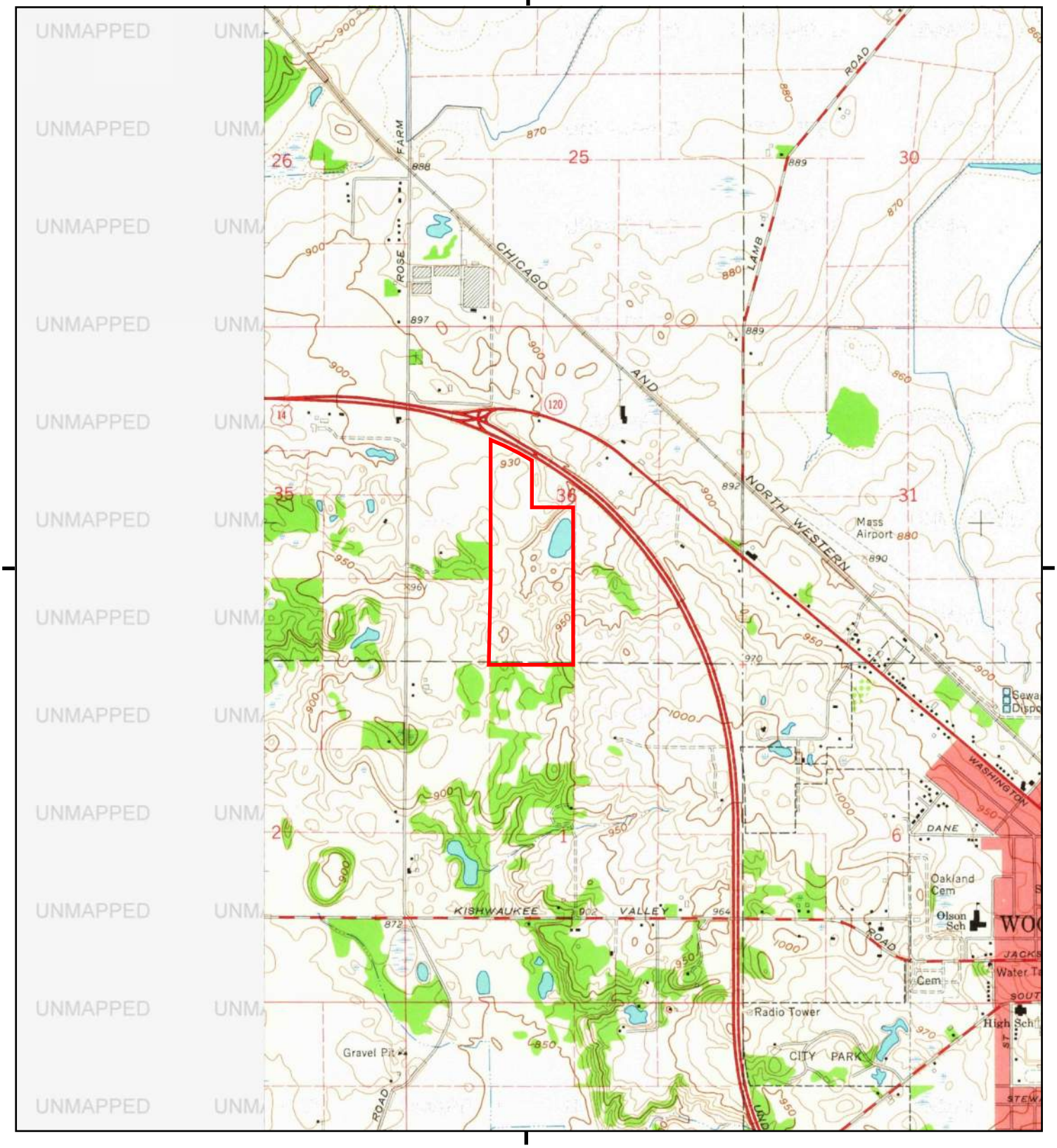
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Woodstock, 1978, 7.5-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

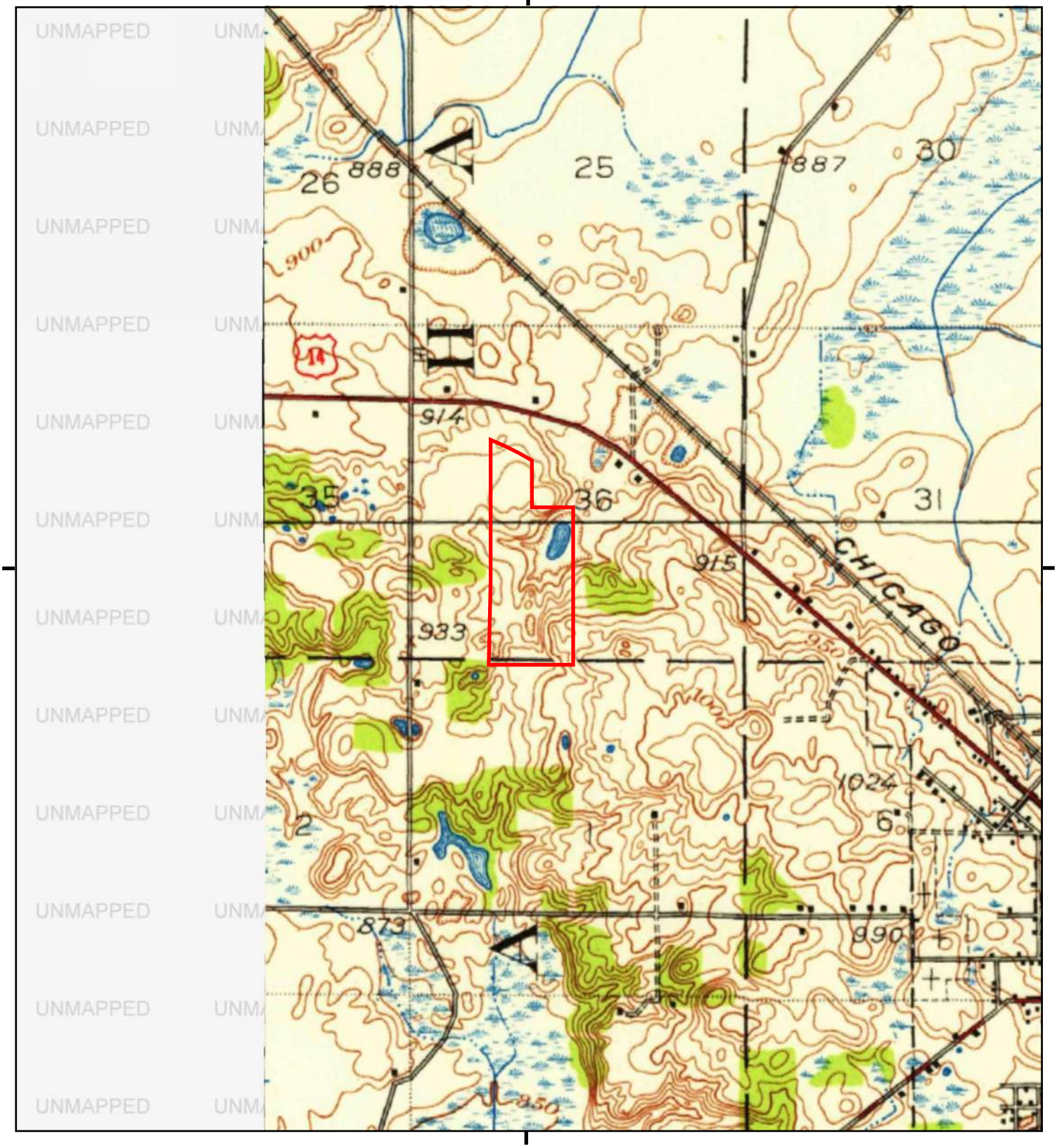
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Woodstock, 1963, 7.5-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

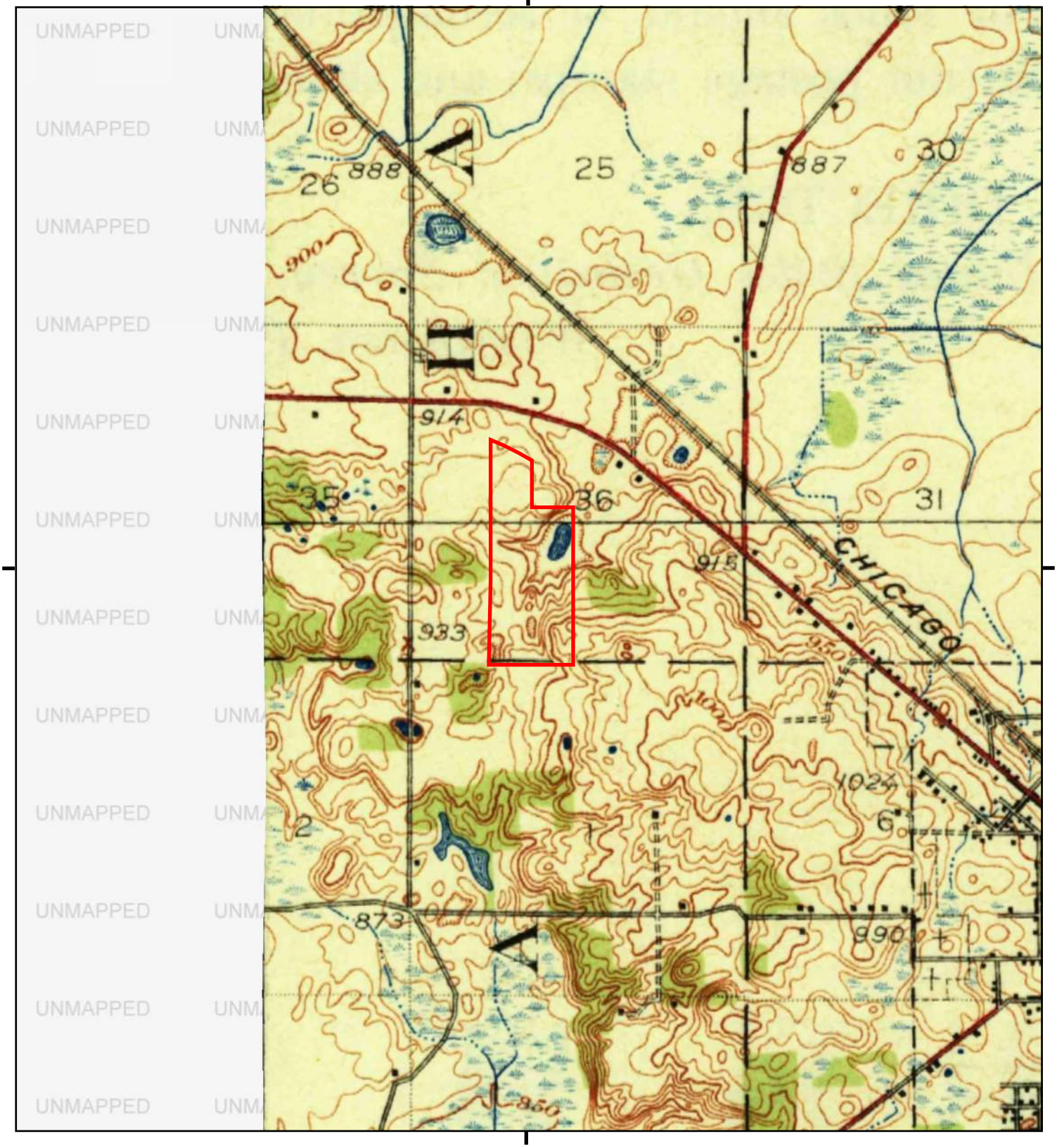
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, McHenry, 1944, 15-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, McHenry, 1926, 15-minute

SITE NAME: Woodstock Community Energy Initiative
ADDRESS: 0 US Hwy 14
Woodstock, IL 60098
CLIENT: SCI Engineering, Inc.

N

Appendix H

Woodstock Community Energy Initiative
0 US Hwy 14
Woodstock, IL 60098

Inquiry Number: 7904069.2s
February 20, 2025

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	7
Orphan Summary	28
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-22
Physical Setting Source Map Findings	A-24
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. **NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA) INFORMATION PROVIDED IN THIS REPORT.** Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2025 by Environmental Data Resources, LLC. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, LLC, or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

0 US HWY 14
WOODSTOCK, IL 60098

COORDINATES

Latitude (North):	42.3314070 - 42° 19' 53.06''
Longitude (West):	88.4846850 - 88° 29' 4.86''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	377677.3
UTM Y (Meters):	4687426.5
Elevation:	898 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	24264840 WOODSTOCK, IL
Version Date:	2021
West Map:	24264822 MARENGO NORTH, IL
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20190809
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
0 US HWY 14
WOODSTOCK, IL 60098

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	UNKNOWN	14719 WASHINGTON ST	UST FINDER	Lower	697, 0.132, NNE
A2	UNKNOWN	14719 WASHINGTON ST	IL UST	Lower	697, 0.132, NNE
B3	WHEELABRATOR TECHNOL		PFAS ECHO	Lower	927, 0.176, NNE
B4	EVANS PRODUCTS CO		PFAS ECHO	Lower	944, 0.179, NNE
C5		520 MAGNET WAY	MI MANIFEST	Lower	1037, 0.196, NE
C6	A&A MAGNETICS	520 MAGNET WAY	RCRA-VSQG	Lower	1037, 0.196, NE
7	EMTECH MACHINING	818 TRAKK LANE	RCRA NonGen / NLR, FINDS	Lower	1048, 0.198, North
B8	WHEELABRATOR TECHNOL	14512 WASHINGTON ST	RCRA-VSQG, FINDS	Lower	1070, 0.203, NNE
B9	EVANS PRODUCTS CO	14512 WASHINGTON ST	IL SRP, FINDS	Lower	1070, 0.203, NNE
B10	ARI TECHNOLOGIES	14512 WASHINGTON ST	MN MANIFEST	Lower	1070, 0.203, NNE
11	ARNTZEN CORPORATION	14600 WASHINGTON ST	RCRA-VSQG	Lower	1142, 0.216, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

IL SWF/LF ---- Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

Lists of state and tribal leaking storage tanks

IL LUST ---- Leaking Underground Storage Tank Sites
INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

IL ENG CONTROLS ---- Sites with Engineering Controls
IL INST CONTROL ---- Institutional Controls

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Hazardous waste / Contaminated Sites

IL CDL ---- Meth Drug Lab Site Listing
US CDL ---- National Clandestine Laboratory Register

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
IL SPILLS ---- State spills
IL SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
RADINFO ---- Radiation Information Database
INDIAN RESERV ---- Indian Reservations
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
PFAS NPL ---- Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES ---- Federal Sites PFAS Information

PFAS TSCA ---------- PFAS Manufacture and Imports Information
PFAS TRIS ---------- List of PFAS Added to the TRI
PFAS RCRA MANIFEST ---------- PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR ---------- PFAS Contamination Site Location Listing
PFAS WQP ---------- Ambient Environmental Sampling for PFAS
PFAS NPDES ---------- Clean Water Act Discharge Monitoring Information
PFAS PROJECT ---------- NORTHEASTERN UNIVERSITY PFAS PROJECT
PFAS ECHO FIRE TRAIN ---------- Facilities in Industries that May Be Handling PFAS Listing
PFAS PT 139 AIRPORT ---------- All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC ---------- Aqueous Foam Related Incidents Listing
UST FINDER RELEASE ---------- UST Finder Releases Database
IL PFAS ---------- PFAS Sampling Listing
IL DRYCLEANERS ---------- Illinois Licensed Drycleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 09/16/2024 has revealed that there are 3 RCRA-VSQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
A&A MAGNETICS EPA ID:: ILR000143289	520 MAGNET WAY	NE 1/8 - 1/4 (0.196 mi.)	C6	12
WHEELABRATOR TECHNOL EPA ID:: ILD122329998	***14512 WASHINGTON ST***	***NNE 1/8 - 1/4 (0.203 mi.)***	***B8***	***17***
ARNTZEN CORPORATION EPA ID:: ILR000064907	14600 WASHINGTON ST	NNE 1/8 - 1/4 (0.216 mi.)	11	25

Lists of state and tribal registered storage tanks

IL UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Illinois State Fire Marshal's STC Facility List.

A review of the IL UST list, as provided by EDR, and dated 10/15/2024 has revealed that there is 1 IL UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
UNKNOWN Tank Status: Removed Status: CLOSED Facility Id: 2025286	14719 WASHINGTON ST	NNE 1/8 - 1/4 (0.132 mi.)	A2	8

Lists of state and tribal voluntary cleanup sites

IL SRP: Illinois Environmental Protection Agency, Site Remediation Program Database

A review of the IL SRP list, as provided by EDR, and dated 09/23/2024 has revealed that there is 1 IL SRP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
EVANS PRODUCTS CO IL EPA Id: 1110955013	***14512 WASHINGTON ST***	***NNE 1/8 - 1/4 (0.203 mi.)***	***B9***	***21***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/16/2024 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
EMTECH MACHINING EPA ID:: ILR000040758	***818 TRAKK LANE***	***N 1/8 - 1/4 (0.198 mi.)***	***7***	***15***

EXECUTIVE SUMMARY

PFAS ECHO: Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

A review of the PFAS ECHO list, as provided by EDR, and dated 12/30/2024 has revealed that there are 2 PFAS ECHO sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WHEELABRATOR TECHNOL		NNE 1/8 - 1/4 (0.176 mi.)	B3	9
EVANS PRODUCTS CO		NNE 1/8 - 1/4 (0.179 mi.)	B4	10

UST FINDER: EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

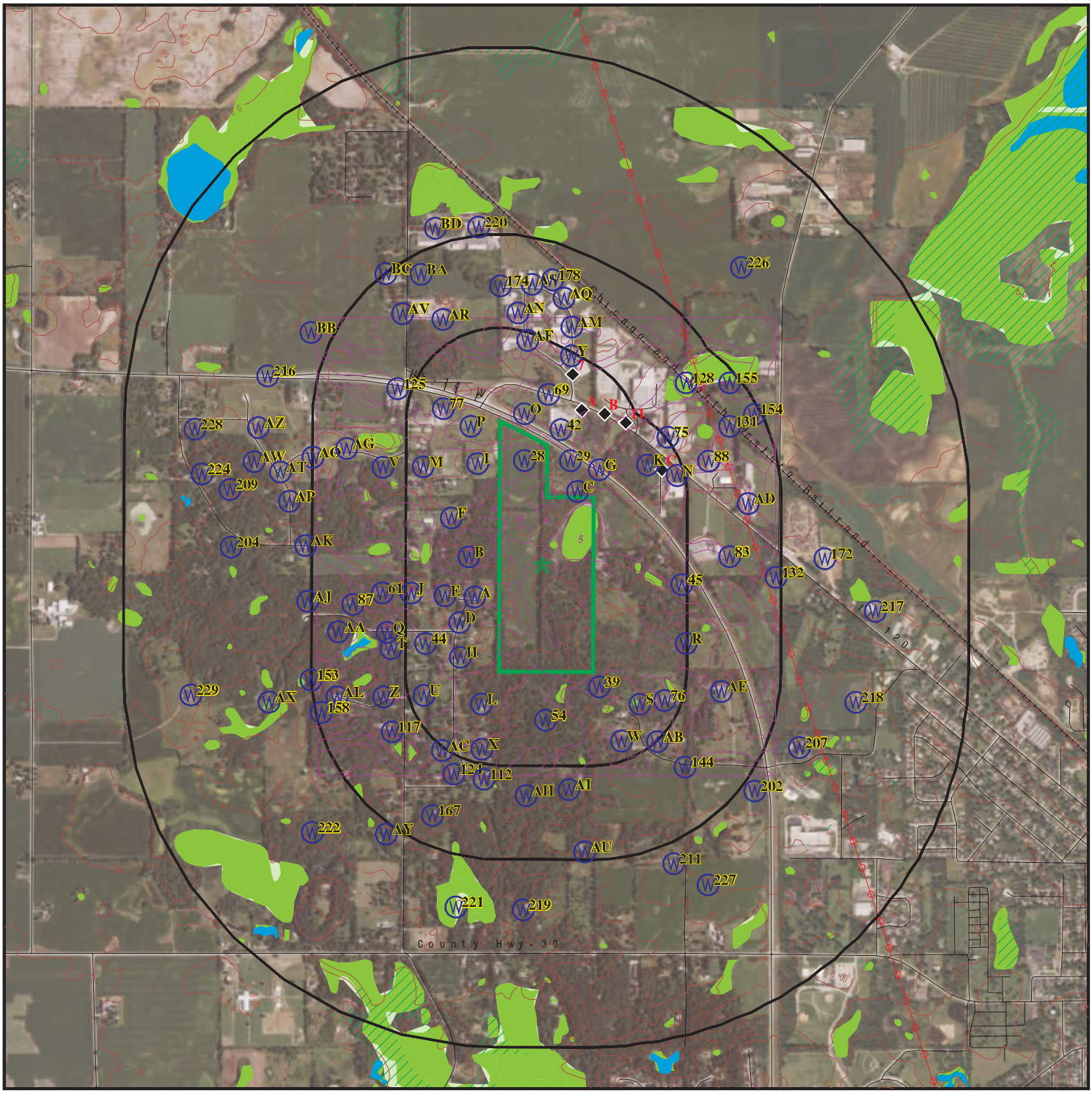
A review of the UST FINDER list, as provided by EDR, and dated 06/08/2023 has revealed that there is 1 UST FINDER site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
UNKNOWN	14719 WASHINGTON ST	NNE 1/8 - 1/4 (0.132 mi.)	A1	7

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 7904069.2S

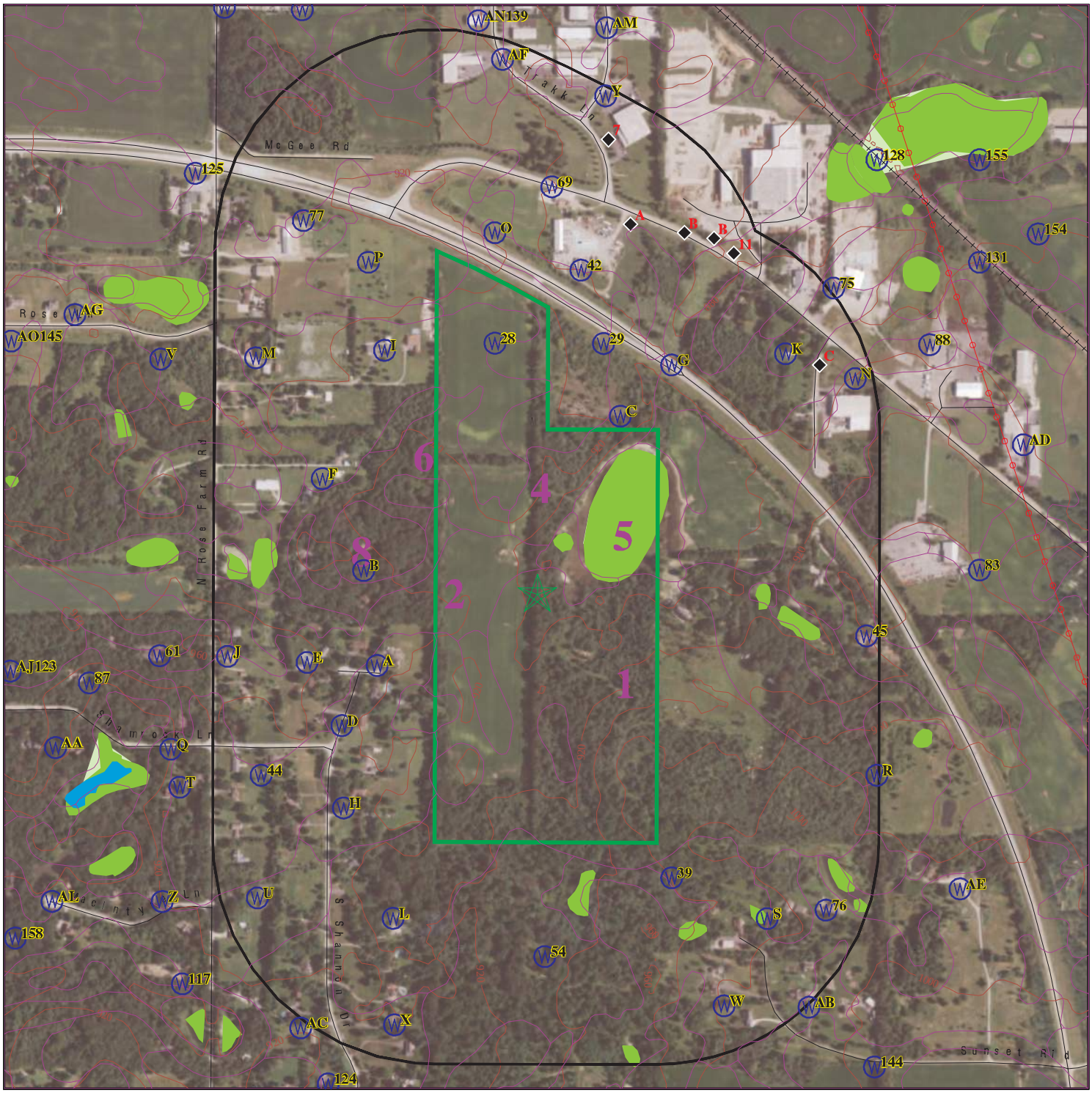


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Woodstock Community Energy Initiative	CLIENT:	SCI Engineering, Inc.
ADDRESS:	0 US Hwy 14 Woodstock IL 60098	CONTACT:	Bethany Walter
LAT/LONG:	42.331407 / 88.484685	INQUIRY #:	7904069.2s
		DATE:	February 20, 2025 12:31 pm

Copyright © 2025 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 7904069.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Sensitive Receptors

National Priority List Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Woodstock Community Energy Initiative	CLIENT:	SCI Engineering, Inc.
ADDRESS:	0 US Hwy 14 Woodstock IL 60098	CONTACT:	Bethany Walter
LAT/LONG:	42.331407 / 88.484685	INQUIRY #:	7904069.2s
		DATE:	February 20, 2025 12:36 pm

Copyright © 2025 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	3	NR	NR	NR	3
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
IL SWF/LF	0.500		0	0	0	NR	NR	0
Lists of state and tribal leaking storage tanks								
IL LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
IL UST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
IL ENG CONTROLS	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
IL INST CONTROL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
IL SRP	0.500		0	1	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
IL CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
IL SPILLS	0.001		0	NR	NR	NR	NR	0
IL SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	2	NR	NR	NR	2
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	0	NR	NR	0
UST FINDER	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
IL PFAS	0.250		0	0	NR	NR	NR	0
IL DRYCLEANERS	0.250		0	0	NR	NR	NR	0
- Totals --		0	0	9	0	0	0	9

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
NNE
1/8-1/4
0.132 mi.
697 ft.

UNKNOWN
14719 WASHINGTON ST
WOODSTOCK, IL 60098

Site 1 of 2 in cluster A

UST FINDER **1028314944**
N/A

Relative:
Lower

Actual:
892 ft.

UST FINDER:

Object ID:	143267
Facility ID:	IL2025286
Name:	UNKNOWN
Address:	14719 WASHINGTON ST
City,State,Zip:	WOODSTOCK, IL 60098
Address Match Type:	PointAddress
Open USTs:	0
Closed USTs:	2
TOS USTs:	0
Population 1500ft:	16
Private Wells 1500ft:	6
Within 100yr Floodplain:	No
Land Use:	Developed, Low Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	IL1110950_19012
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	071200060902
Facility Status:	Closed UST(s)
Date of Last Inspection:	Not reported
EPA Region:	5
Tribe:	Not reported
Coordinate Source:	Geocode
X Coord:	-88.48262857
Y Coord:	42.3376171400001
Latitude:	42.33761714
Longitude:	-88.48262857

UST FINDER:

Object ID:	453015
Facility ID:	IL2025286
Tank ID:	IL2025286_1
Tank Status:	Closed
Installation Date:	Not reported
Removal Date:	1990/04/13 15:59:59+00
Tank Capacity:	10000
Substances:	Diesel Fuel
Tank Wall Type:	Not reported

Object ID:	453016
Facility ID:	IL2025286
Tank ID:	IL2025286_2
Tank Status:	Closed
Installation Date:	Not reported
Removal Date:	1990/04/13 15:59:59+00
Tank Capacity:	500
Substances:	Gasoline
Tank Wall Type:	Not reported

A2 **UNKNOWN** **IL UST** **U001138938**
NNE **14719 WASHINGTON ST** **N/A**
1/8-1/4 **WOODSTOCK, IL 60098**
0.132 mi.
697 ft. **Site 2 of 2 in cluster A**

Relative: UST:
Lower

Actual: Name: UNKNOWN
892 ft. Address: 14719 WASHINGTON ST
City: WOODSTOCK
Zip: 60098
Facility ID: 2025286
Facility Status: CLOSED
Facility Type: **NONE**
Owner Id: U0008898
Owner Name: Lange Robert
Owner Address: 731 Pleasant St
Owner City,St,Zip: Woodstock, IL 60098

Tank Number: 1
Tank Status: **Removed**
Tank Capacity: 10000
Tank Substance: Diesel Fuel
Last Used Date: 12/1/1983
OSFM First Notify Date: 3/14/1990
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Fee Due: Not reported
Motor Fuel Permit Inspection Date: Not reported
Motor Fuel Permit Expiration Date: Not reported
MOTOR FUEL TYPE: Not reported
Pending Nov: N
IEMA: Not reported
Equipment Type: Not reported
Equipment: Not reported
Last Passing Date: Not reported
Test Expire Date: Not reported
Removed Date: 4/13/1990
Abandoned Date: Not reported

Tank Number: 2
Tank Status: **Removed**
Tank Capacity: 500
Tank Substance: Gasoline
Last Used Date: 12/1/1983
OSFM First Notify Date: 3/14/1990
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Fee Due: Not reported
Motor Fuel Permit Inspection Date: Not reported
Motor Fuel Permit Expiration Date: Not reported
MOTOR FUEL TYPE: Not reported

UNKNOWN (Continued) **U001138938**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/13/1990
Abandoned Date:	Not reported

B3 **WHEELABRATOR TECHNOLOGIES INC.** **PFAS ECHO** **1027439371**
NNE **N/A**
1/8-1/4 **WOODSTOCK, IL**
0.176 mi.
927 ft. **Site 1 of 5 in cluster B**

Relative:
Lower

Actual:
886 ft.

PFAS ECHO:

Name:	Wheelabrator Technologies Inc.
Address:	Not reported
City,State,Zip:	WOODSTOCK, IL
Latitude:	42.33728
Longitude:	-88.48144
Count:	1
County:	MCHENRY
Status:	Active
Region:	05
Industry:	Chemical Mfg

ECHO Facility Report:

Facility Percent Minority:	27.077
Facility Derived Tribes:	-
Facility Population:	710.61
EPA Programs:	CAA; RCRA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	17111
Facility Indian Country Flag:	N
Facility Collection Method:	ADDRESS MATCHING-HOUSE NUMBER
Facility Derived HUC:	07120006
Facility Derived WBD:	071200060902
Facility Derived CD113:	14
Facility Derived CB2010:	171118702003051
Facility Major Flag:	-
Facility Active Flag:	Y
Facility Inspection Count:	0
Facility Date Last Inspection:	6/24/2013
Facility Days Last Inspection:	4,198
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-
Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N

WHEELABRATOR TECHNOLOGIES INC. (Continued) **1027439371**

AIR Flag:	Y
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	Y
TRI Flag:	N
GHG Flag:	N
AIR IDS:	IL000111808AAC
CAA Permit Types:	Minor Emissions
CAA NAICS:	325131
CAA SICS:	2819
NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	ILD122329998
RCRA Permit Types:	VSQG
RCRA NAICS:	-
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	60098WHLBR14512
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	N

EJSCREEN Report:

B4 **EVANS PRODUCTS CO** **PFAS ECHO** **1027357840**
NNE **N/A**
1/8-1/4 **WOODSTOCK, IL**
0.179 mi.
944 ft. **Site 2 of 5 in cluster B**

Relative:
Lower

Actual:
885 ft.

PFAS ECHO:

Name:	Evans Products Co
Address:	Not reported
City,State,Zip:	WOODSTOCK, IL
Latitude:	42.33724
Longitude:	-88.48134
Count:	1
County:	MC HENRY
Status:	Inactive
Region:	05
Industry:	Metal Machinery Mfg

ECHO Facility Report:

Facility Percent Minority:	27.078
Facility Derived Tribes:	-
Facility Population:	710.3
EPA Programs:	CAA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	17111
Facility Indian Country Flag:	N

EVANS PRODUCTS CO (Continued) **1027357840**

Facility Collection Method:	ADDRESS MATCHING-HOUSE NUMBER
Facility Derived HUC:	07120006
Facility Derived WBD:	071200060902
Facility Derived CD113:	14
Facility Derived CB2010:	171118702003051
Facility Major Flag:	-
Facility Active Flag:	-
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-
Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	Y
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AIR IDS:	IL000111095ABB
CAA Permit Types:	Minor Emissions
CAA NAICS:	332999
CAA SICS:	3499
NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	-
RCRA Permit Types:	-
RCRA NAICS:	-
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	N

EJSCREEN Report:

C5
NE
1/8-1/4
0.196 mi.
1037 ft.

520 MAGNET WAY
WOODSTOCK, IL 60098

Site 1 of 2 in cluster C

MI MANIFEST **S130522982**
N/A

Relative:
Lower

Actual:
890 ft.

MI MANIFEST:

Generator Site ID Manifest:	ILR000143289
Name:	Not reported
Address:	520 MAGNET WAY
City,State,Zip:	WOODSTOCK, IL 60098
Manifest Number:	015929916JJK
Manifest Date:	02/23/2018
Transporter Site ID Manifest:	NJD054126164
Transporter Site Legal Name Site Table:	FREEHOLD CARTAGE INC
TSD Site ID Manifest:	MID980991566
TSD Site Legal Name Site Table:	EQ DETROIT INC
Container Number:	Not reported
Container Type:	Not reported
Total Quantity:	55
Unit Of Measure:	G
Waste Number:	D001
Waste Number 2:	F003
Waste Number 3:	F005
Waste Number 4:	Not reported
Waste Number 5:	Not reported
Waste Number 6:	Not reported

C6
NE
1/8-1/4
0.196 mi.
1037 ft.

A&A MAGNETICS
520 MAGNET WAY
WOODSTOCK, IL 60098

Site 2 of 2 in cluster C

RCRA-VSQG **1010317210**
ILR000143289

Relative:
Lower

Actual:
890 ft.

RCRA Listings:

Date Form Received by Agency:	20060913
Handler Name:	A&A Magnetics
Handler Address:	520 Magnet Way
Handler City,State,Zip:	WOODSTOCK, IL 60098
EPA ID:	ILR000143289
Contact Name:	MIKE ?
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	815-338-6054
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	05
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	DESPLAINES
Mailing Address:	520 MAGNET WAY
Mailing City,State,Zip:	WOODSTOCK, IL 60098
Owner Name:	A&A Magnetics
Owner Type:	Private

A&A MAGNETICS (Continued) **1010317210**

Operator Name:	A&A Magnetics
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20150414
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	F003
Waste Description:	The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still

A&A MAGNETICS (Continued) **1010317210**

Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Waste Code: F005
Waste Description: The Following Spent Nonhalogenated Solvents: Toluene, Methyl Ethyl Ketone, Carbon Disulfide, Isobutanol, Pyridine, Benzene, 2-Ethoxyethanol, And 2-Nitropropane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Nonhalogenated Solvents Or Those Solvents Listed In F001, F002, Or F004; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: A&A MAGNETICS	
Legal Status:	Private
Date Became Current:	20060913
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: A&A MAGNETICS	
Legal Status:	Private
Date Became Current:	20060913
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20060913
Handler Name: A&A MAGNETICS	
Federal Waste Generator Description:	Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

A&A MAGNETICS (Continued) **1010317210**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

7
North
1/8-1/4
0.198 mi.
1048 ft.

EMTECH MACHINING
818 TRAKK LANE
WOODSTOCK, IL 60098

RCRA NonGen / NLR **1001201864**
FINDS **ILR000040758**

Relative:
Lower

Actual:
896 ft.

RCRA Listings:

Date Form Received by Agency:	20191213
Handler Name:	Emtech Machining
Handler Address:	818 Trakk Lane
Handler City,State,Zip:	WOODSTOCK, IL 60098
EPA ID:	ILR000040758
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	05
Land Type:	Private
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	DESPLAINES
Mailing Address:	Not reported
Mailing City,State,Zip:	Not reported
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N

EMTECH MACHINING (Continued) **1001201864**

Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20191213
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D000
Waste Description:	Not Defined

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: EMRICSON LAVERN J	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2620 DUNHAM WOODS RD
Owner/Operator City,State,Zip:	HARVARD, IL 60033
Owner/Operator Telephone:	815-943-7557
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20191213
Handler Name: EMTECH MACHINING	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

EMTECH MACHINING (Continued) **1001201864**

Receive Date:	19970730
Handler Name:	EMTECH MACHINING
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110005957214

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.
The Agency Compliance and Enforcement Systems (ACES) application supports the compliance and enforcement activities that exist primarily within the Illinois Bureaus of Air, Water, and Land, the Division of Legal Counsel, and the Office of Chemical Safety. The intent of the system is to track compliance and enforcement processes and to share the information throughout the agency, the public and with other entities.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B8 **WHEELABRATOR TECHNOLOGIES INC.** **RCRA-VSQG** **1004692951**
NNE **14512 WASHINGTON ST** **FINDS** **ILD122329998**
1/8-1/4 **WOODSTOCK, IL 60098**
0.203 mi.
1070 ft. **Site 3 of 5 in cluster B**

Relative:
Lower

Actual:
881 ft.

RCRA Listings:

Date Form Received by Agency:	19990910
Handler Name:	Us Filter Wastewater Group Inc
Handler Address:	14512 Washington St
Handler City,State,Zip:	WOODSTOCK, IL 60098

WHEELABRATOR TECHNOLOGIES INC. (Continued) **1004692951**

EPA ID:	ILD122329998
Contact Name:	EDW GODAWSKI
Contact Address:	14512 WASHINGTON ST
Contact City,State,Zip:	WOODSTOCK, IL 60098
Contact Telephone:	412-772-0044
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	05
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	DESPLAINES
Mailing Address:	14512 WASHINGTON ST
Mailing City,State,Zip:	WOODSTOCK, IL 60098
Owner Name:	Us Filter Wastewater Group Inc
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20000915
Recognized Trader-Importer:	No

WHEELABRATOR TECHNOLOGIES INC. (Continued) **1004692951**

Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D000
Waste Description:	Not Defined
Waste Code:	D007
Waste Description:	Chromium

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	US FILTER WASTEWATER GROUP INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	181 THORN HILL RD
Owner/Operator City,State,Zip:	WARRENDALE, PA 15086
Owner/Operator Telephone:	412-772-0044
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19990910
Handler Name:	US FILTER WASTEWATER GROUP INC
Federal Waste Generator Description:	Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Has the Facility Received Notices of Violations:

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported

WHEELABRATOR TECHNOLOGIES INC. (Continued) **1004692951**

Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	20130624
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier:	SBO
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

FINDS:

Registry ID: 110009372525

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

ICIS-Air (AIR) AIR is the modernization of the Air Facility System (AFS) into the Integrated Compliance Information System (ICIS). AIR contains enforcement, compliance, and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.
The database that supports the Toxic Substances Control Act (TSCA) of

WHEELABRATOR TECHNOLOGIES INC. (Continued) **1004692951**

1976, which provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint.
The Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies.
The Toxic Release Inventory System (TRIS) is a publicly available EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities.
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.
The Agency Compliance and Enforcement Systems (ACES) application supports the compliance and enforcement activities that exist primarily within the Illinois Bureaus of Air, Water, and Land, the Division of Legal Counsel, and the Office of Chemical Safety. The intent of the system is to track compliance and enforcement processes and to share the information throughout the agency, the public and with other entities.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B9 **EVANS PRODUCTS CO** **IL SRP** **1004472962**
NNE **14512 WASHINGTON ST** **FINDS** **N/A**
1/8-1/4 **WOODSTOCK, IL 60098**
0.203 mi.
1070 ft. **Site 4 of 5 in cluster B**

Relative: **Lower**

Actual: **881 ft.**

SRP:

Name:	ARI TECHNOLOGIES, PWF
Address:	14512 WASHINGTON STREET
City,State,Zip:	WOODSTOCK, IL 60098
IL EPA Id:	1110955013
US EPA Id:	ILD122329998
Longitude:	-88.479515
Latitude:	42.338207
Contact Name:	L.C. Hardison
Contact Address:	600 North First Bank Drive
Contact City,St,Zip:	Palatine, IL 60067
Date Enrolled:	06/30/1990
Point Of Contact:	Not reported
Consultant Company:	Not reported
Consultant Address:	Not reported
Consultant City,St,Zip:	Not reported
Proj Mgr Assigned:	Tammy Smith
Sec. 4 Letter Date:	11/04/1992
Active:	No

EVANS PRODUCTS CO (Continued) **1004472962**

Remediation Applicant Co: ARI Technologies, Inc.

FINDS:
Registry ID: 110001293591

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies.
ICIS-Air (AIR) AIR is the modernization of the Air Facility System (AFS) into the Integrated Compliance Information System (ICIS). AIR contains enforcement, compliance, and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.
The Agency Compliance and Enforcement Systems (ACES) application supports the compliance and enforcement activities that exist primarily within the Illinois Bureaus of Air, Water, and Land, the Division of Legal Counsel, and the Office of Chemical Safety. The intent of the system is to track compliance and enforcement processes and to share the information throughout the agency, the public and with other entities.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B10 **ARI TECHNOLOGIES** **MN MANIFEST** **S119126158**
NNE **14512 WASHINGTON ST** **N/A**
1/8-1/4 **WOODSTOCK, IL 60098**
0.203 mi.
1070 ft. **Site 5 of 5 in cluster B**

Relative: **Lower**
Actual: **881 ft.**

MN MANIFEST:

Name:	ARI TECHNOLOGIES
Address:	14512 WASHINGTON ST
City,State,Zip:	WOODSTOCK, IL 60098-9304
Manifest ID:	12145
Generator ID:	ILD122329998
Generator AI ID:	42331
Transporter 1 ID:	MID985568021
Transporter 1 AI ID:	32634
Transporter 1 AI Name:	Chemical Analytics Inc
Transporter 1 Address:	29959 Beverly Rd
Transporter 1 City:	Romulus
Transporter 1 State:	MI
Transporter 1 ZIP:	48174-2031
Transporter 2 ID:	Not reported
Transporter 2 AI ID:	Not reported
Transporter 2 AI Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City:	Not reported
Transporter 2 State:	Not reported
Transporter 2 ZIP:	Not reported
TSD ID:	MND981190242
TSD AI ID:	36830
TSD AI Name:	Aptus Nei
TSD Address:	21750 Cedar Ave
TSD City:	Lakeville

ARI TECHNOLOGIES (Continued) **S119126158**

TSD State:	MN
TSD Zip:	55044
Gen Copy Recd Date:	9/20/1993 0:00:00
Fac Copy Recd Date:	1993-10-04 00:00:00
Gen Ship Date:	1993-09-15 00:00:00
Trans 1 Recd Date:	1993-09-15 00:00:00
Trans 2 Recd Date:	Not reported
Tsd Recd Date:	1993-09-22 00:00:00
Comments:	Not reported

Detail:

Manifest ID:	12145
Manifest Row:	1
Haz Material Name:	TITANIUM TETRACHLORIDE
Haz Class Number:	Not reported
UN NA Number:	UN1838
Packing Group Number:	Not reported
Container Qty:	1
Container Code:	DMPF
Waste Qty:	1
Waste Units Code:	FI
Waste Code List:	D002

Manifest ID:	12145
Manifest Row:	2
Haz Material Name:	SODIUM AZIDE
Haz Class Number:	Not reported
UN NA Number:	UN1687
Packing Group Number:	Not reported
Container Qty:	1
Container Code:	DMPF
Waste Qty:	1
Waste Units Code:	IB
Waste Code List:	P105

Manifest ID:	12145
Manifest Row:	3
Haz Material Name:	DI
Haz Class Number:	Not reported
UN NA Number:	UN2038
Packing Group Number:	Not reported
Container Qty:	1
Container Code:	DMPF
Waste Qty:	1
Waste Units Code:	IB
Waste Code List:	U105

Manifest ID:	12145
Manifest Row:	4
Haz Material Name:	SODIUM HYDROSULFIDE
Haz Class Number:	Not reported
UN NA Number:	UN2318
Packing Group Number:	Not reported
Container Qty:	1
Container Code:	DMPF
Waste Qty:	5
Waste Units Code:	IB
Waste Code List:	D001

ARI TECHNOLOGIES (Continued) **S119126158**

Name:	ARI TECHNOLOGIES
Address:	14512 WASHINGTON ST
City,State,Zip:	WOODSTOCK, IL 60098-9304
Manifest ID:	12146
Generator ID:	ILD122329998
Generator AI ID:	42331
Transporter 1 ID:	MID985568021
Transporter 1 AI ID:	32634
Transporter 1 AI Name:	Chemical Analytics Inc
Transporter 1 Address:	29959 Beverly Rd
Transporter 1 City:	Romulus
Transporter 1 State:	MI
Transporter 1 ZIP:	48174-2031
Transporter 2 ID:	Not reported
Transporter 2 AI ID:	Not reported
Transporter 2 AI Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City:	Not reported
Transporter 2 State:	Not reported
Transporter 2 ZIP:	Not reported
TSD ID:	MND981190242
TSD AI ID:	36830
TSD AI Name:	Aptus Nei
TSD Address:	21750 Cedar Ave
TSD City:	Lakeville
TSD State:	MN
TSD Zip:	55044
Gen Copy Recd Date:	11/23/1994 0:00:00
Fac Copy Recd Date:	1994-11-22 00:00:00
Gen Ship Date:	1994-11-03 00:00:00
Trans 1 Recd Date:	1994-11-03 00:00:00
Trans 2 Recd Date:	Not reported
Tsd Recd Date:	1994-11-16 00:00:00
Comments:	Not reported

Detail:

Manifest ID:	12146
Manifest Row:	1
Haz Material Name:	TITANIUM TETRACHLORIDE
Haz Class Number:	Not reported
UN NA Number:	UN1838
Packing Group Number:	Not reported
Container Qty:	1
Container Code:	DMPF
Waste Qty:	1
Waste Units Code:	FI
Waste Code List:	D002

Manifest ID:	12146
Manifest Row:	2
Haz Material Name:	AMMONIUM SULFIDE SOLUTION
Haz Class Number:	Not reported
UN NA Number:	UN2683
Packing Group Number:	Not reported
Container Qty:	1
Container Code:	DMPF
Waste Qty:	1
Waste Units Code:	FI

ARI TECHNOLOGIES (Continued) **S119126158**

Waste Code List:	D001
Manifest ID:	12146
Manifest Row:	3
Haz Material Name:	SODIUM SULFIDE, HYDRATED
Haz Class Number:	Not reported
UN NA Number:	UN1849
Packing Group Number:	Not reported
Container Qty:	1
Container Code:	DMPF
Waste Qty:	20
Waste Units Code:	IB
Waste Code List:	D002

---

11 **ARNTZEN CORPORATION** **RCRA-VSQG** **1004697106**
NNE **14600 WASHINGTON ST** **ILR000064907**
1/8-1/4 **WOODSTOCK, IL 60098**
0.216 mi.
1142 ft.

Relative: **Lower**

Actual: **880 ft.**

RCRA Listings:

Date Form Received by Agency:	19990607
Handler Name:	Arntzen Corporation
Handler Address:	14600 W Washington St
Handler City,State,Zip:	WOODSTOCK, IL 60098
EPA ID:	ILR000064907
Contact Name:	ROBERT ARNTZEN
Contact Address:	1025 SCHOOL ST
Contact City,State,Zip:	ROCKFORD, IL 61101
Contact Telephone:	815-963-9414
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	05
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	DESPLAINES
Mailing Address:	1025 SCHOOL ST
Mailing City,State,Zip:	ROCKFORD, IL 61101
Owner Name:	Arntzen Corporation
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No

ARNTZEN CORPORATION (Continued) **1004697106**

Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20000915
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	F003
Waste Description:	The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code:	F005
Waste Description:	The Following Spent Nonhalogenated Solvents: Toluene, Methyl Ethyl Ketone, Carbon Disulfide, Isobutanol, Pyridine, Benzene, 2-Ethoxyethanol, And 2-Nitropropane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Nonhalogenated Solvents Or Those Solvents Listed In F001, F002, Or F004; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

ARNTZEN CORPORATION (Continued) **1004697106**

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: ARNTZEN CORPORATION	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1025 SCHOOL ST
Owner/Operator City,State,Zip:	ROCKFORD, IL 61101
Owner/Operator Telephone:	815-964-9413
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19990607
Handler Name: ARNTZEN CORPORATION	
Federal Waste Generator Description:	Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/03/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 69

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/03/2025
Number of Days to Update: 79

Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

LF WMRC: Waste Management & Research Center Landfill Database

The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001
Date Data Arrived at EDR: 10/06/2006
Date Made Active in Reports: 11/06/2006
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 217-333-8940
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/03/2025
Number of Days to Update: 79

Source: Illinois Environmental Protection Agency
Telephone: 217-524-3300
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

UST: Underground Storage Tank Facility List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/03/2025
Number of Days to Update: 79
Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Sites with Engineering Controls

Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 09/23/2024
Date Data Arrived at EDR: 09/24/2024
Date Made Active in Reports: 12/09/2024
Number of Days to Update: 76

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 12/18/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

Inst Control: Institutional Controls

Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 09/23/2024
Date Data Arrived at EDR: 09/24/2024
Date Made Active in Reports: 12/09/2024
Number of Days to Update: 76

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 12/18/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

Lists of state and tribal voluntary cleanup sites

SRP: Site Remediation Program Database
The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 09/23/2024
Date Data Arrived at EDR: 09/24/2024
Date Made Active in Reports: 12/09/2024
Number of Days to Update: 76
Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 12/18/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Semi-Annually

Local Lists of Hazardous waste / Contaminated Sites

CDL: Meth Drug Lab Site Listing
A listing of clandestine/meth drug lab locations.

Date of Government Version: 09/26/2024
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/17/2024
Number of Days to Update: 75
Source: Department of Public Health
Telephone: 217-782-5750
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Quarterly

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/14/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 06/24/2024
Number of Days to Update: 7
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

SPILLS: State spills
A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 09/11/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 01/06/2025
Number of Days to Update: 81
Source: Illinois EPA
Telephone: 217-782-3637
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

IEMA SPILLS: Illinois Emergency Management Agency Spills
A listing of hazardous materials incidents reported to the Illinois Emergency Management Agency.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/09/2025
Number of Days to Update: 79
Source: Illinois Emergency Management Agency
Telephone: 217-524-0770
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/15/2013
Number of Days to Update: 71
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80
Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: N/A

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/11/2025
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 7

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 100

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/12/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 33

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/17/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 06/04/2024
Date Data Arrived at EDR: 11/22/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 88

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/11/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 90

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/13/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/19/2023
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 62

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 12/05/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29
Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data
The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 10/13/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

UST FINDER: UST Finder Database
EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106
Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database
US EPA’s UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA’s Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79
Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Semi-Annually

E MANIFEST: Hazardous Waste Electronic Manifest System
EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 94
Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

PFAS: PFAS Sampling Listing
The Illinois Environmental Protection Agency (Illinois EPA) has conducted statewide investigations into the prevalence and occurrence of Per- and Polyfluoroalkyl Substances (PFAS) contamination.

Date of Government Version: 12/15/2023
Date Data Arrived at EDR: 12/27/2023
Date Made Active in Reports: 12/29/2023
Number of Days to Update: 2

Source: Illinois Environmental Protection Agency
Telephone: 217-524-3038
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Varies

DRYCLEANERS: Illinois Licensed Drycleaners

Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 87

Source: Drycleaner Environmental Response Trust Fund of Illinois
Telephone: 800-765-4041
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

COUNTY RECORDS

COOK COUNTY:

CHICAGO COMPLAINTS: CDPH Environmental Complaints Listing

Environmental complaints received by the Department of Environment (DOE) from January 1993 to December 31, 2011 and by the Department of Public Health (CDPH) since January 1, 2012. On January 1, 2012, the DOE was disbanded and all its inspection, permitting, and enforcement authorities were transferred to the CDPH.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 09/10/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 70

Source: Chicago Department of Public Health
Telephone: 312-747-9884
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Varies

CHICAGO INSPECT: CDPH Environmental Inspections Listing

Inspections conducted by the Department of Environment (DOE) from April, 1997 to December 31, 2011 and by the Department of Public Health (CDPH) since January 1, 2012. On January 1, 2012, the Department of Environment was disbanded and all its inspection, permitting, and enforcement authorities were transferred to the CDPH.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 09/10/2024
Date Made Active in Reports: 11/25/2024
Number of Days to Update: 76

Source: Chicago Department of Public Health
Telephone: 312-747-9884
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/27/2025
Number of Days to Update: 83

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/06/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 11/27/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Homes & Centers Listing
Source: Department of Children & Family Services
Telephone: 312-814-4150

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Illinois State Geological Survey
Telephone: 217-333-4747

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WOODSTOCK COMMUNITY ENERGY INITIATIVE
0 US HWY 14
WOODSTOCK, IL 60098

TARGET PROPERTY COORDINATES

Latitude (North):	42.331407 - 42° 19' 53.07''
Longitude (West):	88.484685 - 88° 29' 4.87''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	377677.3
UTM Y (Meters):	4687426.5
Elevation:	898 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	24264840 WOODSTOCK, IL
Version Date:	2021
West Map:	24264822 MARENGO NORTH, IL
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

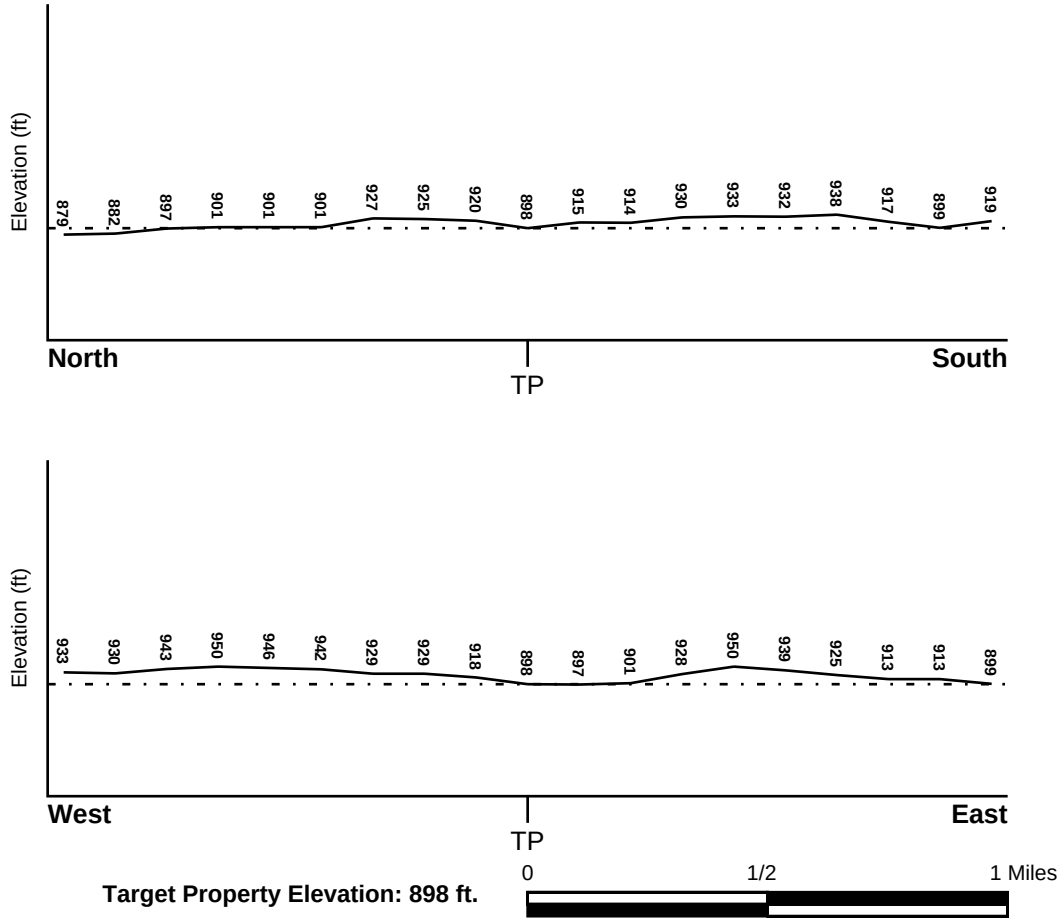
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
17111C0178J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
17111C0175J	FEMA FIRM Flood data
17111C0176J	FEMA FIRM Flood data
17111C0179J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WOODSTOCK	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

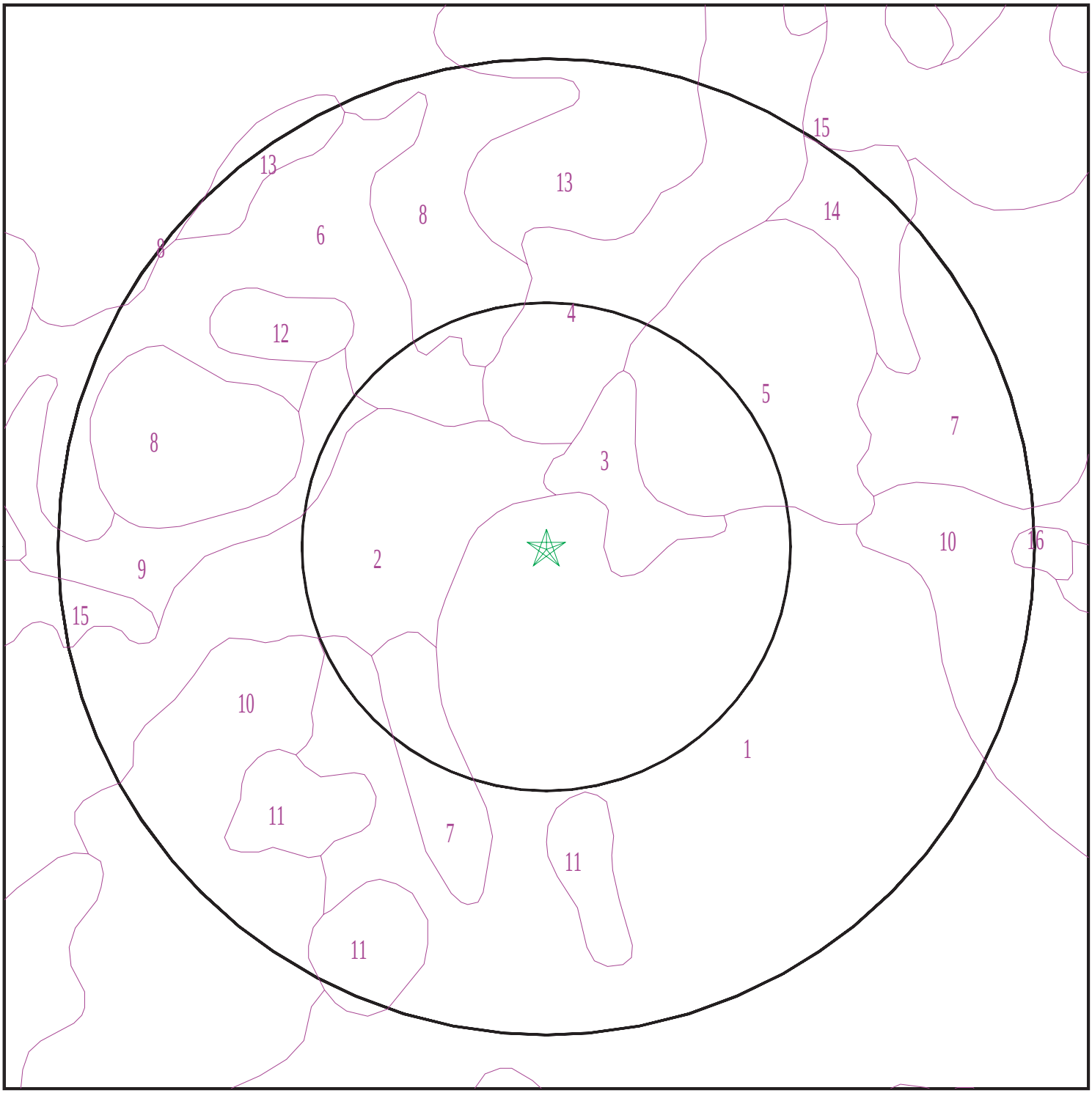
Era:	Paleozoic
System:	Silurian
Series:	Middle Silurian (Niagoaran)
Code:	S2 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7904069.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Woodstock Community Energy Initiative	CLIENT:	SCI Engineering, Inc.
ADDRESS:	0 US Hwy 14 Woodstock IL 60098	CONTACT:	Bethany Walter
LAT/LONG:	42.331407 / 88.484685	INQUIRY #:	7904069.2s
		DATE:	February 20, 2025 12:39 pm

Copyright © 2025 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kidder

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
2	11 inches	27 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
3	27 inches	59 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: Kidder

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
2	11 inches	27 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
3	27 inches	59 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: Thorp

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 7.8 Min: 5.6
2	11 inches	22 inches		Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 7.8 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	22 inches	38 inches		Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 7.8 Min: 5.6
4	38 inches	59 inches		Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 7.8 Min: 5.6

Soil Map ID: 4

Soil Component Name: Kidder

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
2	11 inches	27 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
3	27 inches	59 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4

Soil Map ID: 5

Soil Component Name: Selmass

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 7 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 42.34	Max: 8.4 Min: 6.6
2	22 inches	35 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 42.34	Max: 8.4 Min: 6.6
3	35 inches	50 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 42.34	Max: 8.4 Min: 6.6
4	50 inches	59 inches	loamy sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 42.34	Max: 8.4 Min: 6.6

Soil Map ID: 6

Soil Component Name: Kidami

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 84 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
2	9 inches	37 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
3	37 inches	44 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
4	44 inches	59 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

Soil Map ID: 7

Soil Component Name: McHenry

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
2	14 inches	22 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
3	22 inches	37 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
4	37 inches	59 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4

Soil Map ID: 8

Soil Component Name: Kidami

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 84 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
2	9 inches	37 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
3	37 inches	44 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
4	44 inches	59 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

Soil Map ID: 9

Soil Component Name: Kidami

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 84 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
2	9 inches	37 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
3	37 inches	44 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
4	44 inches	59 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

Soil Map ID: 10

Soil Component Name: Kidder

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
2	11 inches	27 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
3	27 inches	59 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4

Soil Map ID: 11

Soil Component Name: Pella

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	16 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
2	29 inches	53 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	53 inches	61 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
4	61 inches	79 inches	stratified loamy sand to silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
5	0 inches	16 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6

Soil Map ID: 12

Soil Component Name: Palms

Soil Surface Texture: muck

Hydrologic Group: Class A/D - Drained/undrained hydrology class of soils that can be drained and are classified.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	muck	Not reported	Not reported	Max: 14.11 Min: 1.41	Max: Min:
2	5 inches	31 inches		Not reported	Not reported	Max: 14.11 Min: 1.41	Max: Min:
3	31 inches	59 inches		Not reported	Not reported	Max: 14.11 Min: 1.41	Max: Min:

Soil Map ID: 13

Soil Component Name: Kidami

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 84 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
2	9 inches	37 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
3	37 inches	44 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
4	44 inches	59 inches		Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

Soil Map ID: 14

Soil Component Name: Kidder

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	clay loam	Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
2	7 inches	22 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4
3	22 inches	59 inches		Not reported	Not reported	Max: 42.34 Min: 14.11	Max: 8.4 Min: 7.4

Soil Map ID: 15

Soil Component Name: Virgil

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 46 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 42.34 Min: 4.23	Max: 8.4 Min: 5.6
2	7 inches	12 inches		Not reported	Not reported	Max: 42.34 Min: 4.23	Max: 8.4 Min: 5.6
3	12 inches	48 inches		Not reported	Not reported	Max: 42.34 Min: 4.23	Max: 8.4 Min: 5.6
4	48 inches	59 inches		Not reported	Not reported	Max: 42.34 Min: 4.23	Max: 8.4 Min: 5.6

Soil Map ID: 16

Soil Component Name: Water

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	ILSG40000216662	1/8 - 1/4 Mile WSW
B2	ILSG40000214808	1/8 - 1/4 Mile West
B3	ILSG40000210113	1/8 - 1/4 Mile WNW
A4	ILSG40000208332	1/8 - 1/4 Mile WSW
A5	ILSG40000208207	1/8 - 1/4 Mile WSW
C6	ILPW67668	1/8 - 1/4 Mile NNE
C7	ILPW67667	1/8 - 1/4 Mile NNE
C8	ILPW67657	1/8 - 1/4 Mile NNE
C9	ILPW67658	1/8 - 1/4 Mile NNE
C10	ILPW67664	1/8 - 1/4 Mile NNE
C11	ILPW67660	1/8 - 1/4 Mile NNE
C12	ILPW67659	1/8 - 1/4 Mile NNE
C13	ILPW67662	1/8 - 1/4 Mile NNE
C14	ILPW67663	1/8 - 1/4 Mile NNE
C15	ILPW67665	1/8 - 1/4 Mile NNE
C16	ILPW67666	1/8 - 1/4 Mile NNE
C17	ILPW67661	1/8 - 1/4 Mile NNE
D18	ILSG40000212999	1/8 - 1/4 Mile SW
E19	ILSG40000227321	1/4 - 1/2 Mile WSW
E20	ILSG40000212994	1/4 - 1/2 Mile WSW
D21	ILSG40000213002	1/4 - 1/2 Mile SW
F22	ILSG40000214806	1/4 - 1/2 Mile NW
D23	ILSG40000208610	1/4 - 1/2 Mile WSW
D24	ILSG40000207916	1/4 - 1/2 Mile WSW
D25	ILSG40000212998	1/4 - 1/2 Mile WSW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D26	ILSG40000213000	1/4 - 1/2 Mile WSW
F27	ILSG40000214805	1/4 - 1/2 Mile WNW
28	ILSG40000216663	1/4 - 1/2 Mile North
29	ILSG40000224387	1/4 - 1/2 Mile NNE
G30	ILPW67679	1/4 - 1/2 Mile NNE
G31	ILPW67680	1/4 - 1/2 Mile NNE
H32	ILSG40000208477	1/4 - 1/2 Mile SW
E33	ILSG40000208330	1/4 - 1/2 Mile WSW
I34	ILPW67681	1/4 - 1/2 Mile NW
I35	ILSG40000215880	1/4 - 1/2 Mile NNW
H36	ILSG40000208331	1/4 - 1/2 Mile SW
I37	ILSG40000217087	1/4 - 1/2 Mile NW
J38	ILSG40000212995	1/4 - 1/2 Mile WSW
39	ILPW67678	1/4 - 1/2 Mile SSE
H40	ILSG40000208745	1/4 - 1/2 Mile SW
J41	ILSG40000230226	1/4 - 1/2 Mile WSW
42	ILSG40000230491	1/4 - 1/2 Mile North
K43	ILPW67677	1/4 - 1/2 Mile NE
44	ILPW67685	1/4 - 1/2 Mile WSW
45	ILSG40000211896	1/4 - 1/2 Mile East
L46	ILSG40000208209	1/4 - 1/2 Mile SSW
M47	ILPW67686	1/4 - 1/2 Mile NW
M48	ILPW67687	1/4 - 1/2 Mile NW
N49	ILSG40000227049	1/4 - 1/2 Mile NE
K50	ILSG40000213001	1/4 - 1/2 Mile NE
O51	ILSG40000212997	1/4 - 1/2 Mile North
O52	ILSG40000215226	1/4 - 1/2 Mile North
M53	ILSG40000211593	1/4 - 1/2 Mile NW
54	ILEPANC70003077	1/4 - 1/2 Mile South
L55	ILSG40000208254	1/4 - 1/2 Mile SSW
L56	ILSG40000230692	1/4 - 1/2 Mile SSW
P57	ILPW67684	1/4 - 1/2 Mile NNW
P58	ILPW67683	1/4 - 1/2 Mile NNW
P59	ILPW67682	1/4 - 1/2 Mile NNW
Q60	ILSG40000212002	1/4 - 1/2 Mile WSW
61	ILSG40000225778	1/4 - 1/2 Mile West
R62	ILPW67674	1/4 - 1/2 Mile ESE
R63	ILPW67673	1/4 - 1/2 Mile ESE
M64	ILSG40000215227	1/4 - 1/2 Mile NW
S65	ILSG40000221053	1/4 - 1/2 Mile SSE
T66	ILSG40000215222	1/4 - 1/2 Mile WSW
U67	ILSG40000211477	1/4 - 1/2 Mile SW
U68	ILSG40000217492	1/4 - 1/2 Mile SW
69	ILEPANC70002237	1/4 - 1/2 Mile North
N70	ILPW67675	1/4 - 1/2 Mile NE
U71	ILPW63160	1/4 - 1/2 Mile SW
S72	ILPW63155	1/4 - 1/2 Mile SE
T73	ILSG40000215223	1/4 - 1/2 Mile WSW
Q74	ILPW67690	1/4 - 1/2 Mile WSW
75	ILSG40000217491	1/4 - 1/2 Mile NE
76	ILSG40000217055	1/4 - 1/2 Mile SE
77	ILSG40000230332	1/4 - 1/2 Mile NNW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
V78	ILPW67691	1/4 - 1/2 Mile WNW
V79	ILPW67693	1/4 - 1/2 Mile WNW
V80	ILPW67692	1/4 - 1/2 Mile WNW
W81	ILSG40000224689	1/4 - 1/2 Mile SSE
X82	ILSG40000207463	1/4 - 1/2 Mile SSW
83	ILPW67670	1/4 - 1/2 Mile East
V84	ILSG40000224386	1/2 - 1 Mile NW
U85	ILSG40000212154	1/2 - 1 Mile SW
X86	ILSG40000229312	1/2 - 1 Mile SSW
87	ILSG40000225744	1/2 - 1 Mile WSW
88	ILSG40000207990	1/2 - 1 Mile ENE
W89	ILSG40000229126	1/2 - 1 Mile SSE
Y90	ILSG40000219611	1/2 - 1 Mile North
Z91	ILPW67688	1/2 - 1 Mile SW
Z92	ILPW67689	1/2 - 1 Mile SW
X93	ILSG40000222066	1/2 - 1 Mile SSW
Z94	ILPW63163	1/2 - 1 Mile SW
Z95	ILPW63164	1/2 - 1 Mile SW
Z96	ILPW63162	1/2 - 1 Mile SW
AA97	ILSG40000221525	1/2 - 1 Mile WSW
AB98	ILSG40000217385	1/2 - 1 Mile SSE
Z99	ILSG40000216216	1/2 - 1 Mile SW
Z100	ILSG40000216489	1/2 - 1 Mile SW
AC101	ILPW63159	1/2 - 1 Mile SSW
AB102	ILPW63153	1/2 - 1 Mile SSE
AB103	ILPW63154	1/2 - 1 Mile SSE
AD104	ILSG40000212996	1/2 - 1 Mile ENE
AC105	ILSG40000212155	1/2 - 1 Mile SSW
AE106	ILSG40000216214	1/2 - 1 Mile SE
AB107	ILSG40000212153	1/2 - 1 Mile SE
Z108	ILSG40000218028	1/2 - 1 Mile SW
AD109	ILSG40000209948	1/2 - 1 Mile ENE
AE110	ILPW63837	1/2 - 1 Mile SE
AF111	ILSG40000227320	1/2 - 1 Mile North
112	ILSG40000229868	1/2 - 1 Mile SSW
AG113	ILSG40000230428	1/2 - 1 Mile WNW
AE114	ILPW67669	1/2 - 1 Mile ESE
Y115	ILSG40000228010	1/2 - 1 Mile North
AA116	ILSG40000217258	1/2 - 1 Mile WSW
117	ILSG40000230399	1/2 - 1 Mile SW
AH118	ILPW63157	1/2 - 1 Mile South
AF119	ILSG40000227457	1/2 - 1 Mile North
AH120	ILSG40000223747	1/2 - 1 Mile South
AI121	ILSG40000208414	1/2 - 1 Mile South
AI122	ILSG40000224349	1/2 - 1 Mile South
AJ123	ILSG40000222436	1/2 - 1 Mile West
124	ILSG40000212151	1/2 - 1 Mile SSW
125	ILEPANC70002236	1/2 - 1 Mile NW
AK126	ILPW67651	1/2 - 1 Mile West
AJ127	ILPW67650	1/2 - 1 Mile West
128	ILPW67676	1/2 - 1 Mile NE
AF129	ILSG40000221079	1/2 - 1 Mile North

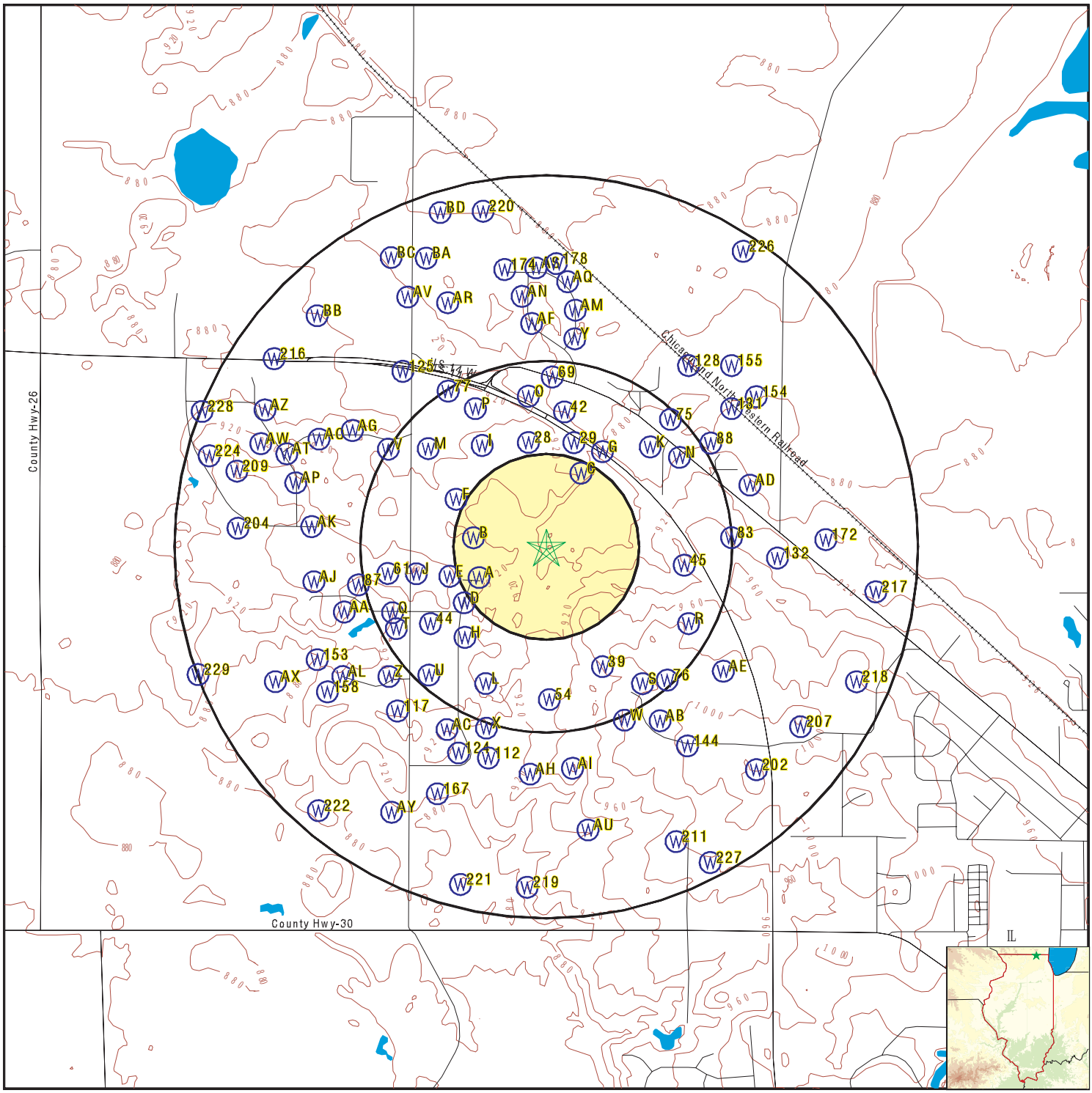
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AL130	ILSG40000216808	1/2 - 1 Mile WSW
131	ILPW67671	1/2 - 1 Mile NE
132	ILSG40000229614	1/2 - 1 Mile East
AG133	ILSG40000229240	1/2 - 1 Mile WNW
AM134	ILSG40000221801	1/2 - 1 Mile North
AH135	ILEPANC70003078	1/2 - 1 Mile South
AH136	ILEPANC70003079	1/2 - 1 Mile South
AK137	ILSG40000224935	1/2 - 1 Mile West
AM138	ILSG40000222491	1/2 - 1 Mile North
AN139	ILSG40000226149	1/2 - 1 Mile North
AK140	ILSG40000215225	1/2 - 1 Mile West
AJ141	ILSG40000230225	1/2 - 1 Mile WSW
AM142	ILSG40000221527	1/2 - 1 Mile North
AL143	ILSG40000219553	1/2 - 1 Mile SW
144	ILSG40000207359	1/2 - 1 Mile SE
AO145	ILSG40000227572	1/2 - 1 Mile WNW
AJ146	ILSG40000224309	1/2 - 1 Mile West
AO147	ILSG40000226801	1/2 - 1 Mile WNW
AP148	ILSG40000226736	1/2 - 1 Mile WNW
AN149	ILSG40000221528	1/2 - 1 Mile North
AN150	ILSG40000221747	1/2 - 1 Mile North
AL151	ILSG40000226389	1/2 - 1 Mile WSW
AP152	ILSG40000227516	1/2 - 1 Mile WNW
153	ILPW67649	1/2 - 1 Mile WSW
154	ILSG40000207191	1/2 - 1 Mile NE
155	ILPW67672	1/2 - 1 Mile NE
AQ156	ILSG40000221181	1/2 - 1 Mile North
AR157	ILPW67591	1/2 - 1 Mile NNW
158	ILSG40000215990	1/2 - 1 Mile WSW
AO159	ILSG40000227962	1/2 - 1 Mile WNW
AQ160	ILSG40000221526	1/2 - 1 Mile North
AN161	ILSG40000224764	1/2 - 1 Mile North
AR162	ILSG40000228306	1/2 - 1 Mile NNW
AS163	ILSG40000221522	1/2 - 1 Mile North
AT164	ILSG40000226890	1/2 - 1 Mile WNW
AU165	ILSG40000212033	1/2 - 1 Mile South
AU166	ILSG40000224348	1/2 - 1 Mile South
167	ILSG40000206209	1/2 - 1 Mile SSW
AP168	ILSG40000227754	1/2 - 1 Mile WNW
AQ169	ILSG40000226889	1/2 - 1 Mile North
AT170	ILSG40000227145	1/2 - 1 Mile WNW
AV171	ILPW67592	1/2 - 1 Mile NNW
172	ILSG40000220267	1/2 - 1 Mile East
AT173	ILSG40000227937	1/2 - 1 Mile WNW
174	ILSG40000228244	1/2 - 1 Mile North
AS175	ILSG40000229652	1/2 - 1 Mile North
AS176	ILSG40000226454	1/2 - 1 Mile North
AU177	ILEPANC70003080	1/2 - 1 Mile South
178	ILSG40000230223	1/2 - 1 Mile North
AS179	ILSG40000229651	1/2 - 1 Mile North
AU180	ILPW63137	1/2 - 1 Mile South
AU181	ILPW63138	1/2 - 1 Mile South

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AU182	ILPW63139	1/2 - 1 Mile South
AU183	ILPW63151	1/2 - 1 Mile South
AU184	ILPW63140	1/2 - 1 Mile South
AU185	ILPW63147	1/2 - 1 Mile South
AU186	ILPW63148	1/2 - 1 Mile South
AU187	ILPW63146	1/2 - 1 Mile South
AU188	ILPW63141	1/2 - 1 Mile South
AU189	ILPW63142	1/2 - 1 Mile South
AU190	ILPW63136	1/2 - 1 Mile South
AU191	ILPW63144	1/2 - 1 Mile South
AU192	ILPW63145	1/2 - 1 Mile South
AU193	ILPW63143	1/2 - 1 Mile South
AU194	ILPW63149	1/2 - 1 Mile South
AU195	ILPW63150	1/2 - 1 Mile South
AV196	ILSG40000206957	1/2 - 1 Mile NNW
AW197	ILSG40000227084	1/2 - 1 Mile WNW
AX198	ILPW63173	1/2 - 1 Mile WSW
AX199	ILPW63174	1/2 - 1 Mile WSW
AY200	ILPW63161	1/2 - 1 Mile SSW
AZ201	ILSG40000227319	1/2 - 1 Mile WNW
202	ILSG40000208898	1/2 - 1 Mile SE
AW203	ILSG40000227048	1/2 - 1 Mile WNW
204	ILSG40000210506	1/2 - 1 Mile West
BA205	ILSG40000216487	1/2 - 1 Mile NNW
AY206	ILSG40000211203	1/2 - 1 Mile SSW
207	ILSG40000214835	1/2 - 1 Mile SE
BA208	ILPW67593	1/2 - 1 Mile NNW
209	ILSG40000218787	1/2 - 1 Mile WNW
AZ210	ILSG40000227039	1/2 - 1 Mile WNW
211	ILEPANC70003083	1/2 - 1 Mile SSE
BB212	ILPW67653	1/2 - 1 Mile NW
BB213	ILPW67652	1/2 - 1 Mile NW
BC214	ILSG40000224852	1/2 - 1 Mile NNW
BC215	ILSG40000211533	1/2 - 1 Mile NNW
216	ILPW67654	1/2 - 1 Mile NW
217	ILSG40000219155	1/2 - 1 Mile East
218	ILSG40000226138	1/2 - 1 Mile ESE
219	ILSG40000225999	1/2 - 1 Mile South
220	ILSG40000226635	1/2 - 1 Mile North
221	ILSG40000219985	1/2 - 1 Mile SSW
222	ILPW63172	1/2 - 1 Mile SW
BD223	ILSG40000206626	1/2 - 1 Mile NNW
224	ILSG40000209947	1/2 - 1 Mile WNW
BD225	ILSG40000221782	1/2 - 1 Mile NNW
226	ILPW68095	1/2 - 1 Mile NNE
227	ILSG40000223748	1/2 - 1 Mile SSE
228	ILSG40000229370	1/2 - 1 Mile WNW
229	ILSG40000225183	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 7904069.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Woodstock Community Energy Initiative	CLIENT:	SCI Engineering, Inc.
ADDRESS:	0 US Hwy 14 Woodstock IL 60098	CONTACT:	Bethany Walter
LAT/LONG:	42.331407 / 88.484685	INQUIRY #:	7904069.2s
		DATE:	February 20, 2025 12:38 pm

Copyright © 2025 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WSW
1/8 - 1/4 Mile
Higher | **IL WELLS** | **ILSG40000216662**

WELLS SGS:

Database:	Water Well Records	API #:	121113207200
IL SWSP #:	221436	Status:	Water Well
Date Drilled:	19910304060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Craig
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	200	Lithologic Formation:	limestone
Top of Formation (ft):	195	Bottom of Formation (ft):	200
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113207200		

B2
West
1/8 - 1/4 Mile
Higher | **IL WELLS** | **ILSG40000214808**

WELLS SGS:

Database:	Water Well Records	API #:	121113020100
IL SWSP #:	425793	Status:	Water Well
Date Drilled:	19890627050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	260	Lithologic Formation:	limestone
Top of Formation (ft):	250	Bottom of Formation (ft):	260
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113020100		

B3
WNW
1/8 - 1/4 Mile
Higher | **IL WELLS** | **ILSG40000210113**

WELLS SGS:

Database:	Water Well Records	API #:	121112464100
IL SWSP #:	223952	Status:	Water Well
Date Drilled:	19860411050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	220	Lithologic Formation:	limestone
Top of Formation (ft):	191	Bottom of Formation (ft):	220
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112464100		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A4
WSW
1/8 - 1/4 Mile
Higher

IL WELLS **ILSG40000208332**

WELLS SGS:

Database:	Water Well Records	API #:	121112270900
IL SWSP #:	102376	Status:	Water Well
Date Drilled:	19760126060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Hoover Water Well Service
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	250	Lithologic Formation:	limestone
Top of Formation (ft):	245	Bottom of Formation (ft):	250
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112270900		

A5
WSW
1/8 - 1/4 Mile
Higher

IL WELLS **ILSG40000208207**

WELLS SGS:

Database:	Water Well Records	API #:	121112258300
IL SWSP #:	100071	Status:	Water Well
Date Drilled:	19760106060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Boetsch, William M.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	300	Lithologic Formation:	limestone
Top of Formation (ft):	265	Bottom of Formation (ft):	300
Pump Flow (gpm):	8		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112258300		

C6
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **ILPW67668**

Database:	Illinois Private Well Database and PICS		
Well ID:	67668	2nd ID:	Not Reported
Owner:	TIM REDDEN	Driller:	WM. HUEMANN
Date drilled:	08/15/1988	Permit:	4721
Depth:	148	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

C7
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **ILPW67667**

Database:	Illinois Private Well Database and PICS		
Well ID:	67667	2nd ID:	Not Reported
Owner:	ERICH SCHMETZKO	Driller:	CRAIG NICE
Date drilled:	05/10/1989	Permit:	011257

Depth:	170	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

C8
NNE **IL WELLS** **ILPW67657**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67657	2nd ID:	Not Reported
Owner:	BAUSKE BROS	Driller:	L VANHOOZEN
Date drilled:	00/00/1941	Permit:	|
Depth:	196	Record type:	OG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

C9
NNE **IL WELLS** **ILPW67658**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67658	2nd ID:	Not Reported
Owner:	D HUH LOT 17	Driller:	BOETSCH WATER SUPPLY
Date drilled:	02/03/1975	Permit:	|034671
Depth:	210	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

C10
NNE **IL WELLS** **ILPW67664**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67664	2nd ID:	Not Reported
Owner:	D KLINE LOT 6	Driller:	BOETSCH WATER SUPPLY
Date drilled:	09/27/1976	Permit:	|047561
Depth:	275	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

C11
NNE **IL WELLS** **ILPW67660**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67660	2nd ID:	Not Reported
Owner:	H BERAN LOT 11	Driller:	W BINZ
Date drilled:	10/00/1974	Permit:	|030236
Depth:	102	Record type:	RG
Well Use:	Domestic	Well Type:	~~

Aquifer type: ~~

C12
NNE **IL WELLS** **ILPW67659**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67659	2nd ID:	Not Reported
Owner:	WOODSTOCK ROSES	Driller:	Not Reported
Date drilled:	00/00/1970	Permit:	|
Depth:	25	Record type:	C
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

C13
NNE **IL WELLS** **ILPW67662**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67662	2nd ID:	Not Reported
Owner:	S SMITH LOT 3	Driller:	K & K WELL DRLG
Date drilled:	10/19/1976	Permit:	|047673
Depth:	360	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

C14
NNE **IL WELLS** **ILPW67663**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67663	2nd ID:	Not Reported
Owner:	ZIMMERMAN CCONST LOT 13	Driller:	W BOETSCH WATER SUPP
Date drilled:	07/01/1976	Permit:	|046148
Depth:	60	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

C15
NNE **IL WELLS** **ILPW67665**
1/8 - 1/4 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67665	2nd ID:	Not Reported
Owner:	G LAROCCO LOT 6	Driller:	DUPAGE PUMP
Date drilled:	12/21/1977	Permit:	|069198
Depth:	200	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C16
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **ILPW67666**

Database:	Illinois Private Well Database and PICS		
Well ID:	67666	2nd ID:	Not Reported
Owner:	P & F BDRS LOT 2	Driller:	NEELY
Date drilled:	10/00/1978	Permit:	|040915
Depth:	350	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

C17
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **ILPW67661**

Database:	Illinois Private Well Database and PICS		
Well ID:	67661	2nd ID:	Not Reported
Owner:	L AMBERT LOT 14	Driller:	A MATTSON
Date drilled:	12/29/1975	Permit:	|041959
Depth:	150	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

D18
SW
1/8 - 1/4 Mile
Higher

IL WELLS **ILSG40000212999**

WELLS SGS:

Database:	Water Well Records	API #:	121112838500
IL SWSP #:	102386	Status:	Water Well
Date Drilled:	19780327050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Matthesius, Fred H.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	198	Lithologic Formation:	broken lime
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838500		

E19
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000227321**

WELLS SGS:

Database:	Water Well Records	API #:	121114275800
IL SWSP #:	381029	Status:	Water Well
Date Drilled:	20051108060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported

Total Depth:	192	Lithologic Formation:	lime/gravel
Top of Formation (ft):	188	Bottom of Formation (ft):	192
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114275800		

E20
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000212994**

WELLS SGS:

Database:	Water Well Records	API #:	121112838000
IL SWSP #:	102383	Status:	Water Well
Date Drilled:	19750702050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, Wayne L.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	52	Lithologic Formation:	gravel
Top of Formation (ft):	50	Bottom of Formation (ft):	52
Pump Flow (gpm):	6		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838000		

D21
SW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000213002**

WELLS SGS:

Database:	Water Well Records	API #:	121112838800
IL SWSP #:	102378	Status:	Water Well
Date Drilled:	19790130060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, Wayne L.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	196	Lithologic Formation:	gravel
Top of Formation (ft):	181	Bottom of Formation (ft):	196
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838800		

F22
NW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000214806**

WELLS SGS:

Database:	Water Well Records	API #:	121113019900
IL SWSP #:	425795	Status:	Water Well
Date Drilled:	19891201060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	220	Lithologic Formation:	limestone
Top of Formation (ft):	202	Bottom of Formation (ft):	220
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113019900		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D23
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000208610**

WELLS SGS:

Database:	Water Well Records	API #:	121112298700
IL SWSP #:	102381	Status:	Water Well
Date Drilled:	19760927050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Boetsch, William M.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	275	Lithologic Formation:	limestone
Top of Formation (ft):	210	Bottom of Formation (ft):	265
Pump Flow (gpm):	8		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112298700		

D24
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000207916**

WELLS SGS:

Database:	Water Well Records	API #:	121112229000
IL SWSP #:	102371	Status:	Water Well
Date Drilled:	19741001050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, Wayne L.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	102	Lithologic Formation:	gravel
Top of Formation (ft):	99	Bottom of Formation (ft):	102
Pump Flow (gpm):	8		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112229000		

D25
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000212998**

WELLS SGS:

Database:	Water Well Records	API #:	121112838400
IL SWSP #:	102382	Status:	Water Well
Date Drilled:	19771221060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Wellendorf, Rodney
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	200	Lithologic Formation:	drift
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838400		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D26
WSW
1/4 - 1/2 Mile
Higher | **IL WELLS** | **ILSG40000213000**

WELLS SGS:

Database:	Water Well Records	API #:	121112838600
IL SWSP #:	102384	Status:	Water Well
Date Drilled:	19751030050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Neely, Harry C.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	247	Lithologic Formation:	limestone
Top of Formation (ft):	318	Bottom of Formation (ft):	350
Pump Flow (gpm):	6		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838600		

F27
WNW
1/4 - 1/2 Mile
Higher | **IL WELLS** | **ILSG40000214805**

WELLS SGS:

Database:	Water Well Records	API #:	121113019800
IL SWSP #:	425794	Status:	Water Well
Date Drilled:	19890316050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	260	Lithologic Formation:	limestone
Top of Formation (ft):	200	Bottom of Formation (ft):	260
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113019800		

28
North
1/4 - 1/2 Mile
Higher | **IL WELLS** | **ILSG40000216663**

WELLS SGS:

Database:	Water Well Records	API #:	121113207300
IL SWSP #:	102385	Status:	Water Well
Date Drilled:	19780630050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Neely, Harry C.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	137	Lithologic Formation:	gravel
Top of Formation (ft):	133	Bottom of Formation (ft):	137
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113207300		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

29
NNE
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000224387**

WELLS SGS:

Database:	Water Well Records	API #:	121113980800
IL SWSP #:	0	Status:	Water Well
Date Drilled:	Not Reported	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Not Reported
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	0	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113980800		

G30
NNE
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67679**

Database:	Illinois Private Well Database and PICS		
Well ID:	67679	2nd ID:	Not Reported
Owner:	J WALGENBACK	Driller:	W HUEMANN
Date drilled:	09/12/1978	Permit:	|077837
Depth:	103	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

G31
NNE
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67680**

Database:	Illinois Private Well Database and PICS		
Well ID:	67680	2nd ID:	Not Reported
Owner:	ZIMMERMAN CON LOT 9	Driller:	NICE
Date drilled:	03/04/1991	Permit:	F1040
Depth:	200	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

H32
SW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000208477**

WELLS SGS:

Database:	Water Well Records	API #:	121112285400
IL SWSP #:	102380	Status:	Water Well
Date Drilled:	19760701050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Boetsch, William M.
Elevation:	0	Elevation Reference:	Not Reported

Total Depth:	60	Lithologic Formation:	gravel
Top of Formation (ft):	2	Bottom of Formation (ft):	60
Pump Flow (gpm):	8		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112285400		

E33
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000208330**

WELLS SGS:

Database:	Water Well Records	API #:	121112270700
IL SWSP #:	102379	Status:	Water Well
Date Drilled:	19760312060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Pilgard, John P.
Elevation:	930	Elevation Reference:	Topographic map
Total Depth:	188	Lithologic Formation:	sand & gravel
Top of Formation (ft):	188	Bottom of Formation (ft):	0
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112270700		

I34
NW
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67681**

Database:	Illinois Private Well Database and PICS		
Well ID:	67681	2nd ID:	Not Reported
Owner:	C SINUS	Driller:	H NEELY
Date drilled:	06/00/1976	Permit:	|047200
Depth:	137	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

I35
NNW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000215880**

WELLS SGS:

Database:	Water Well Records	API #:	121113128300
IL SWSP #:	231087	Status:	Water Well
Date Drilled:	19910812050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	250	Lithologic Formation:	limestone
Top of Formation (ft):	190	Bottom of Formation (ft):	250
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113128300		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H36
SW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000208331**

WELLS SGS:

Database:	Water Well Records	API #:	121112270800
IL SWSP #:	102372	Status:	Water Well
Date Drilled:	19751229060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Mattson, Arthur R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	150	Lithologic Formation:	gravel
Top of Formation (ft):	145	Bottom of Formation (ft):	150
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112270800		

I37
NW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000217087**

WELLS SGS:

Database:	Water Well Records	API #:	121113249800
IL SWSP #:	244437	Status:	Water Well
Date Drilled:	19930415050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	320	Lithologic Formation:	limestone
Top of Formation (ft):	188	Bottom of Formation (ft):	320
Pump Flow (gpm):	18		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113249800		

J38
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000212995**

WELLS SGS:

Database:	Water Well Records	API #:	121112838100
IL SWSP #:	102388	Status:	Water Well
Date Drilled:	19790511050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	190	Lithologic Formation:	sand
Top of Formation (ft):	183	Bottom of Formation (ft):	190
Pump Flow (gpm):	3		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838100		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

39
SSE
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67678**

Database:	Illinois Private Well Database and PICS		
Well ID:	67678	2nd ID:	Not Reported
Owner:	R KOHLER	Driller:	H BOYSEN CO
Date drilled:	01/26/1976	Permit:	|042031
Depth:	250	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

H40
SW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000208745**

WELLS SGS:

Database:	Water Well Records	API #:	121112312400
IL SWSP #:	102373	Status:	Water Well
Date Drilled:	19761019050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	K & K Well Drilling, Inc
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	360	Lithologic Formation:	rock
Top of Formation (ft):	0	Bottom of Formation (ft):	360
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112312400		

J41
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000230226**

WELLS SGS:

Database:	Water Well Records	API #:	121114581800
IL SWSP #:	0	Status:	Water Well
Date Drilled:	20180928050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	205	Lithologic Formation:	sand/gravel
Top of Formation (ft):	201	Bottom of Formation (ft):	205
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114581800		

42
North
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000230491**

WELLS SGS:

Database:	Water Well Records	API #:	121114609200
IL SWSP #:	0	Status:	Water Well

Date Drilled:	20200729050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	50	Lithologic Formation:	gravel
Top of Formation (ft):	46	Bottom of Formation (ft):	50
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114609200		

K43
NE
1/4 - 1/2 Mile
Lower

IL WELLS **ILPW67677**

Database:	Illinois Private Well Database and PICS		
Well ID:	67677	2nd ID:	Not Reported
Owner:	DAVID DEAN/DEAN'S CONCRETE	Driller:	KELLER
Date drilled:	10/05/1993	Permit:	F-5605
Depth:	140	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

44
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67685**

Database:	Illinois Private Well Database and PICS		
Well ID:	67685	2nd ID:	Not Reported
Owner:	J C LITTLE LOT 11	Driller:	MCHENRY WELL & PUMP
Date drilled:	03/27/1978	Permit:	|070962
Depth:	198	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

45
East
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000211896**

WELLS SGS:

Database:	Water Well Records	API #:	121112725600
IL SWSP #:	224136	Status:	Water Well
Date Drilled:	19881005050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	148	Lithologic Formation:	gravel
Top of Formation (ft):	136	Bottom of Formation (ft):	148
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112725600		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L46
SSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000208209**

WELLS SGS:

Database:	Water Well Records	API #:	121112258500
IL SWSP #:	100077	Status:	Water Well
Date Drilled:	19751017050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Pilgard, John P.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	206	Lithologic Formation:	limestone
Top of Formation (ft):	204	Bottom of Formation (ft):	206
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112258500		

M47
NW
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67686**

Database:	Illinois Private Well Database and PICS		
Well ID:	67686	2nd ID:	Not Reported
Owner:	JIM MARCH LOT 4	Driller:	HUEMANN
Date drilled:	09/12/1991	Permit:	F1809
Depth:	250	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

M48
NW
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67687**

Database:	Illinois Private Well Database and PICS		
Well ID:	67687	2nd ID:	Not Reported
Owner:	JOHN/ELAINE WARNKE	Driller:	KELLER
Date drilled:	04/15/1993	Permit:	F-5452
Depth:	320	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

N49
NE
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000227049**

WELLS SGS:

Database:	Water Well Records	API #:	121114248500
IL SWSP #:	376063	Status:	Water Well
Date Drilled:	20050909050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported

Total Depth:	399	Lithologic Formation:	limestone
Top of Formation (ft):	381	Bottom of Formation (ft):	399
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114248500		

K50
NE **IL WELLS** **ILSG40000213001**
1/4 - 1/2 Mile
Lower

WELLS SGS:

Database:	Water Well Records	API #:	121112838700
IL SWSP #:	102387	Status:	Water Well
Date Drilled:	19780912050000	Farm Name:	1
Well Name:	1	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	103	Lithologic Formation:	gravel
Top of Formation (ft):	73	Bottom of Formation (ft):	103
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838700		

O51
North **IL WELLS** **ILSG40000212997**
1/4 - 1/2 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121112838300
IL SWSP #:	102377	Status:	Water Well
Date Drilled:	19801226060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Marvin R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	60	Lithologic Formation:	gravel
Top of Formation (ft):	55	Bottom of Formation (ft):	60
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838300		

O52
North **IL WELLS** **ILSG40000215226**
1/4 - 1/2 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121113062300
IL SWSP #:	224142	Status:	Water Well
Date Drilled:	19891002050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	238	Lithologic Formation:	limestone
Top of Formation (ft):	196	Bottom of Formation (ft):	238
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113062300		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M53
NW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000211593**

WELLS SGS:

Database:	Water Well Records	API #:	121112687300
IL SWSP #:	102389	Status:	Water Well
Date Drilled:	19880520050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Marvin R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	180	Lithologic Formation:	limestone
Top of Formation (ft):	178	Bottom of Formation (ft):	180
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112687300		

54
South
1/4 - 1/2 Mile
Higher

IL WELLS **ILEPANC70003077**

WELLS EPA:

Well ID:	11100666	Facility Name:	KIAWASSA PROGRAM CENTER (32599)
Facility #:	IL3032599	Well Status:	Inactive
Well Type:	NonPublic	Primary Use Name:	SUMMER CAMP
Population Count:	0	Update Time Stamp:	29-NOV-06
IEPA Facility #:	Not Reported	Water Supply Name:	Not Reported
Min Setback Zone (ft):	Not Reported	Well Depth:	Not Reported
Ambient Sampling Netwk Stat:	Not Reported	EPA Facility Status:	Not Reported
SDWIS Well ID:	Not Reported	SDWIS Facility #:	Not Reported
API #:	Not Reported		

L55
SSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000208254**

WELLS SGS:

Database:	Water Well Records	API #:	121112263000
IL SWSP #:	102368	Status:	Water Well
Date Drilled:	19750203060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Boetsch, William M.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	210	Lithologic Formation:	limestone
Top of Formation (ft):	210	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112263000		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L56
SSW **IL WELLS** **ILSG40000230692**
1/4 - 1/2 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121114629500
IL SWSP #:	0	Status:	Water Well
Date Drilled:	20201028050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	200	Lithologic Formation:	sand/gravel
Top of Formation (ft):	196	Bottom of Formation (ft):	200
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114629500		

P57
NNW **IL WELLS** **ILPW67684**
1/4 - 1/2 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67684	2nd ID:	Not Reported
Owner:	BOB JACKOWIAK	Driller:	WM. HUEMANN
Date drilled:	05/30/1989	Permit:	11761
Depth:	238	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

P58
NNW **IL WELLS** **ILPW67683**
1/4 - 1/2 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67683	2nd ID:	Not Reported
Owner:	BOB JACKOWIECK LOT 10	Driller:	HUEMANN
Date drilled:	10/02/1989	Permit:	11761
Depth:	238	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

P59
NNW **IL WELLS** **ILPW67682**
1/4 - 1/2 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67682	2nd ID:	Not Reported
Owner:	LANGE MOTOR EXP	Driller:	M NICE
Date drilled:	12/26/1980	Permit:	|097735
Depth:	60	Record type:	RG
Well Use:	Commerical	Well Type:	~~
Aquifer type:	~~		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Q60
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000212002**

WELLS SGS:

Database:	Water Well Records	API #:	121112737600
IL SWSP #:	0	Status:	Water Well
Date Drilled:	19890429050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	320	Lithologic Formation:	limestone
Top of Formation (ft):	300	Bottom of Formation (ft):	320
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112737600		

61
West
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000225778**

WELLS SGS:

Database:	Water Well Records	API #:	121114121000
IL SWSP #:	357252	Status:	Water Well
Date Drilled:	20030925050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	170	Lithologic Formation:	gravel
Top of Formation (ft):	167	Bottom of Formation (ft):	170
Pump Flow (gpm):	12		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114121000		

R62
ESE
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67674**

Database:	Illinois Private Well Database and PICS		
Well ID:	67674	2nd ID:	Not Reported
Owner:	TIM REDDEN	Driller:	HUEMANN
Date drilled:	10/05/1988	Permit:	4721
Depth:	148	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

R63
ESE
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67673**

Database:	Illinois Private Well Database and PICS		
Well ID:	67673	2nd ID:	Not Reported
Owner:	JAMES BAKER	Driller:	HUEMANN
Date drilled:	01/15/1990	Permit:	016251

Depth:	335	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

M64
NW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000215227**

WELLS SGS:

Database:	Water Well Records	API #:	121113062400
IL SWSP #:	224145	Status:	Water Well
Date Drilled:	19890929050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Craig
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	170	Lithologic Formation:	limestone
Top of Formation (ft):	169	Bottom of Formation (ft):	170
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113062400		

S65
SSE
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000221053**

WELLS SGS:

Database:	Water Well Records	API #:	121113646800
IL SWSP #:	310573	Status:	Water Well
Date Drilled:	19990405050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Craig
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	400	Lithologic Formation:	limestone
Top of Formation (ft):	251	Bottom of Formation (ft):	400
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113646800		

T66
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000215222**

WELLS SGS:

Database:	Water Well Records	API #:	121113061900
IL SWSP #:	223950	Status:	Water Well
Date Drilled:	19900115060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	335	Lithologic Formation:	limestone
Top of Formation (ft):	312	Bottom of Formation (ft):	335
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113061900		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

U67
SW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000211477**

WELLS SGS:

Database:	Water Well Records	API #:	121112672100
IL SWSP #:	425775	Status:	Water Well
Date Drilled:	19881010050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	178	Lithologic Formation:	gravel
Top of Formation (ft):	175	Bottom of Formation (ft):	178
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112672100		

U68
SW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000217492**

WELLS SGS:

Database:	Water Well Records	API #:	121113290300
IL SWSP #:	253602	Status:	Water Well
Date Drilled:	19940211060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Gaffke, George E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	140	Lithologic Formation:	sand
Top of Formation (ft):	134	Bottom of Formation (ft):	140
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113290300		

69
North
1/4 - 1/2 Mile
Higher

IL WELLS **ILEPANC70002237**

WELLS EPA:

Well ID:	11103108	Facility Name:	DIE NOS BAR AND GRILL
Facility #:	IL3109165	Well Status:	Active
Well Type:	NonCommunity	Primary Use Name:	RESTAURANT
Population Count:	50	Update Time Stamp:	22-SEP-06
IEPA Facility #:	Not Reported	Water Supply Name:	Not Reported
Min Setback Zone (ft):	Not Reported	Well Depth:	Not Reported
Ambient Sampling Netwk Stat:	Not Reported	EPA Facility Status:	Not Reported
SDWIS Well ID:	Not Reported	SDWIS Facility #:	Not Reported
API #:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N70
NE
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67675**

Database:	Illinois Private Well Database and PICS		
Well ID:	67675	2nd ID:	Not Reported
Owner:	R SCHLAU	Driller:	W BINZ
Date drilled:	10/00/1974	Permit:	|032258
Depth:	75	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

U71
SW
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW63160**

Database:	Illinois Private Well Database and PICS		
Well ID:	63160	2nd ID:	Not Reported
Owner:	W MANKE	Driller:	J PILGARD
Date drilled:	10/17/1975	Permit:	|039548
Depth:	206	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

S72
SE
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW63155**

Database:	Illinois Private Well Database and PICS		
Well ID:	63155	2nd ID:	Not Reported
Owner:	GEORGE WINTER	Driller:	HUEMANN
Date drilled:	03/12/1992	Permit:	F-4903
Depth:	207	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

T73
WSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000215223**

WELLS SGS:

Database:	Water Well Records	API #:	121113062000
IL SWSP #:	223941	Status:	Water Well
Date Drilled:	19891130060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Knierim, Phil
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	260	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		

URL: https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113062000

Q74
WSW **IL WELLS** **ILPW67690**
1/4 - 1/2 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67690	2nd ID:	Not Reported
Owner:	BRUCE MINNOTT	Driller:	HUEMANN
Date drilled:	04/11/1986	Permit:	119759
Depth:	220	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

75
NE **IL WELLS** **ILSG40000217491**
1/4 - 1/2 Mile
Lower

WELLS SGS:

Database:	Water Well Records	API #:	121113290200
IL SWSP #:	253883	Status:	Water Well
Date Drilled:	19931005050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	140	Lithologic Formation:	limestone
Top of Formation (ft):	0	Bottom of Formation (ft):	140
Pump Flow (gpm):	30		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113290200		

76
SE **IL WELLS** **ILSG40000217055**
1/4 - 1/2 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121113246600
IL SWSP #:	244626	Status:	Water Well
Date Drilled:	19930312060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	207	Lithologic Formation:	gravel
Top of Formation (ft):	199	Bottom of Formation (ft):	207
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113246600		

77
NNW **IL WELLS** **ILSG40000230332**
1/4 - 1/2 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121114593100

IL SWSP #:	0	Status:	Water Well
Date Drilled:	20190510050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	75	Lithologic Formation:	gravel
Top of Formation (ft):	71	Bottom of Formation (ft):	75
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114593100		

V78
WNW **IL WELLS** **ILPW67691**
1/4 - 1/2 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67691	2nd ID:	Not Reported
Owner:	W ADAMS	Driller:	J PILGARD
Date drilled:	03/12/1976	Permit:	|042008
Depth:	188	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

V79
WNW **IL WELLS** **ILPW67693**
1/4 - 1/2 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67693	2nd ID:	Not Reported
Owner:	ERICH SCHMETZKO	Driller:	NICE
Date drilled:	09/29/1989	Permit:	011257
Depth:	170	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

V80
WNW **IL WELLS** **ILPW67692**
1/4 - 1/2 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	67692	2nd ID:	26873
Owner:	S MCMACKIN	Driller:	M NICE
Date drilled:	05/20/1988	Permit:	|001628
Depth:	180	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

W81
SSE **IL WELLS** **ILSG40000224689**
1/4 - 1/2 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121114011600
IL SWSP #:	343656	Status:	Water Well
Date Drilled:	20020524050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	205	Lithologic Formation:	gravel
Top of Formation (ft):	194	Bottom of Formation (ft):	197
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114011600		

X82
SSW
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG40000207463**

WELLS SGS:

Database:	Water Well Records	API #:	121110183300
IL SWSP #:	100079	Status:	Water Well
Date Drilled:	19720914050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	McKinney, Melvin
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	205	Lithologic Formation:	sand gravel
Top of Formation (ft):	205	Bottom of Formation (ft):	205
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121110183300		

83
East
1/4 - 1/2 Mile
Higher

IL WELLS **ILPW67670**

Database:	Illinois Private Well Database and PICS		
Well ID:	67670	2nd ID:	Not Reported
Owner:	J GUANCI	Driller:	MCHENRY WELL & PUMP
Date drilled:	10/08/1979	Permit:	|088557
Depth:	221	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

V84
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000224386**

WELLS SGS:

Database:	Water Well Records	API #:	121113980700
IL SWSP #:	0	Status:	Water Well
Date Drilled:	Not Reported	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Not Reported
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	0	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113980700		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

U85
SW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000212154**

WELLS SGS:

Database:	Water Well Records	API #:	121112753800
IL SWSP #:	100083	Status:	Water Well
Date Drilled:	19770615050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, Steve
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	144	Lithologic Formation:	gravel
Top of Formation (ft):	138	Bottom of Formation (ft):	144
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112753800		

X86
SSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000229312**

WELLS SGS:

Database:	Water Well Records	API #:	121114490100
IL SWSP #:	244961	Status:	Water Well
Date Drilled:	19930811050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	162	Lithologic Formation:	gravel
Top of Formation (ft):	159	Bottom of Formation (ft):	162
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114490100		

87
WSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000225744**

WELLS SGS:

Database:	Water Well Records	API #:	121114117600
IL SWSP #:	355855	Status:	Water Well
Date Drilled:	20030225060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	280	Lithologic Formation:	limestone
Top of Formation (ft):	220	Bottom of Formation (ft):	280
Pump Flow (gpm):	6		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114117600		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

88
ENE
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000207990**

WELLS SGS:

Database:	Water Well Records	API #:	121112236600
IL SWSP #:	102375	Status:	Water Well
Date Drilled:	19741001050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, Wayne L.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	75	Lithologic Formation:	gravel
Top of Formation (ft):	65	Bottom of Formation (ft):	75
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112236600		

W89
SSE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000229126**

WELLS SGS:

Database:	Water Well Records	API #:	121114471500
IL SWSP #:	459338	Status:	Water Well
Date Drilled:	20120203060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	192	Lithologic Formation:	gravel
Top of Formation (ft):	188	Bottom of Formation (ft):	192
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114471500		

Y90
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000219611**

WELLS SGS:

Database:	Water Well Records	API #:	121113501900
IL SWSP #:	0	Status:	Water Well
Date Drilled:	19970226060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	103	Lithologic Formation:	gravel
Top of Formation (ft):	88	Bottom of Formation (ft):	103
Pump Flow (gpm):	30		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113501900		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Z91
SW
1/2 - 1 Mile
Higher

IL WELLS **ILPW67688**

Database:	Illinois Private Well Database and PICS		
Well ID:	67688	2nd ID:	Not Reported
Owner:	P ZIMMERMAN LOT 12	Driller:	W BINZ
Date drilled:	01/00/1979	Permit:	|076974
Depth:	196	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

Z92
SW
1/2 - 1 Mile
Higher

IL WELLS **ILPW67689**

Database:	Illinois Private Well Database and PICS		
Well ID:	67689	2nd ID:	Not Reported
Owner:	W BROKAW LOT 2	Driller:	W HUEMANN
Date drilled:	05/11/1979	Permit:	|083491
Depth:	190	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

X93
SSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000222066**

WELLS SGS:

Database:	Water Well Records	API #:	121113748100
IL SWSP #:	322474	Status:	Water Well
Date Drilled:	20000308060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	138	Lithologic Formation:	fine gravel
Top of Formation (ft):	130	Bottom of Formation (ft):	138
Pump Flow (gpm):	18		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113748100		

Z94
SW
1/2 - 1 Mile
Higher

IL WELLS **ILPW63163**

Database:	Illinois Private Well Database and PICS		
Well ID:	63163	2nd ID:	Not Reported
Owner:	DON VOTH	Driller:	BINZ
Date drilled:	08/11/1993	Permit:	F-6098
Depth:	162	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Z95
SW
1/2 - 1 Mile
Higher

IL WELLS **ILPW63164**

Database:	Illinois Private Well Database and PICS		
Well ID:	63164	2nd ID:	Not Reported
Owner:	JERRY SZMUC	Driller:	GAFFKE
Date drilled:	02/11/1994	Permit:	F-6103
Depth:	140	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

Z96
SW
1/2 - 1 Mile
Higher

IL WELLS **ILPW63162**

Database:	Illinois Private Well Database and PICS		
Well ID:	63162	2nd ID:	Not Reported
Owner:	J SHARIL	Driller:	S BINZ
Date drilled:	06/15/1977	Permit:	|057744
Depth:	144	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AA97
WSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000221525**

WELLS SGS:

Database:	Water Well Records	API #:	121113694000
IL SWSP #:	318671	Status:	Water Well
Date Drilled:	19980411050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	196	Lithologic Formation:	limestone
Top of Formation (ft):	193	Bottom of Formation (ft):	196
Pump Flow (gpm):	12		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113694000		

AB98
SSE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000217385**

WELLS SGS:

Database:	Water Well Records	API #:	121113279600
IL SWSP #:	247032	Status:	Water Well
Date Drilled:	19931111060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported

Total Depth:	213	Lithologic Formation:	gravel
Top of Formation (ft):	201	Bottom of Formation (ft):	213
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113279600		

Z99
SW **IL WELLS** **ILSG40000216216**
1/2 - 1 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121113162200
IL SWSP #:	252038	Status:	Water Well
Date Drilled:	19920528050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	110	Lithologic Formation:	gravel
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113162200		

Z100
SW **IL WELLS** **ILSG40000216489**
1/2 - 1 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121113189900
IL SWSP #:	243967	Status:	Water Well
Date Drilled:	19920713050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	280	Lithologic Formation:	limestone
Top of Formation (ft):	193	Bottom of Formation (ft):	280
Pump Flow (gpm):	5		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113189900		

AC101
SSW **IL WELLS** **ILPW63159**
1/2 - 1 Mile
Higher

Database:	Illinois Private Well Database and PICS		
Well ID:	63159	2nd ID:	Not Reported
Owner:	H ABT	Driller:	M MCKINNEY
Date drilled:	09/14/1972	Permit:	|015196
Depth:	205	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AB102
SSE
1/2 - 1 Mile
Higher

IL WELLS **ILPW63153**

Database:	Illinois Private Well Database and PICS		
Well ID:	63153	2nd ID:	Not Reported
Owner:	D KEMKE	Driller:	M NICE
Date drilled:	01/07/1985	Permit:	|113985
Depth:	280	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AB103
SSE
1/2 - 1 Mile
Higher

IL WELLS **ILPW63154**

Database:	Illinois Private Well Database and PICS		
Well ID:	63154	2nd ID:	Not Reported
Owner:	MIKE MANKE	Driller:	HUEMANN
Date drilled:	11/11/1993	Permit:	F6848
Depth:	213	Record type:	RG
Well Use:	Domestic	Well Type:	Drilled
Aquifer type:	Unconsolidated		

AD104
ENE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000212996**

WELLS SGS:

Database:	Water Well Records	API #:	121112838200
IL SWSP #:	102374	Status:	Water Well
Date Drilled:	19791008050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Matthesius, Fred H.
Elevation:	905	Elevation Reference:	Ground level
Total Depth:	221	Lithologic Formation:	lime rock
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	30		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112838200		

AC105
SSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000212155**

WELLS SGS:

Database:	Water Well Records	API #:	121112753900
IL SWSP #:	100080	Status:	Water Well
Date Drilled:	19770929050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Boetsch, William M.
Elevation:	0	Elevation Reference:	Not Reported

Total Depth:	192	Lithologic Formation:	limestone
Top of Formation (ft):	191	Bottom of Formation (ft):	192
Pump Flow (gpm):	8		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112753900		

AE106
SE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000216214**

WELLS SGS:

Database:	Water Well Records	API #:	121113162000
IL SWSP #:	243866	Status:	Water Well
Date Drilled:	19920914050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	184	Lithologic Formation:	gravel
Top of Formation (ft):	173	Bottom of Formation (ft):	184
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113162000		

AB107
SE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000212153**

WELLS SGS:

Database:	Water Well Records	API #:	121112753700
IL SWSP #:	100073	Status:	Water Well
Date Drilled:	19850107060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Marvin R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	280	Lithologic Formation:	limestone
Top of Formation (ft):	255	Bottom of Formation (ft):	280
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112753700		

Z108
SW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000218028**

WELLS SGS:

Database:	Water Well Records	API #:	121113343600
IL SWSP #:	264962	Status:	Water Well
Date Drilled:	19940726050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	320	Lithologic Formation:	limestone
Top of Formation (ft):	180	Bottom of Formation (ft):	320
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113343600		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AD109
ENE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000209948**

WELLS SGS:

Database:	Water Well Records	API #:	121112441500
IL SWSP #:	223949	Status:	Water Well
Date Drilled:	19860619050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	48	Lithologic Formation:	gravel
Top of Formation (ft):	31	Bottom of Formation (ft):	48
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112441500		

AE110
SE
1/2 - 1 Mile
Higher

IL WELLS **ILPW63837**

Database:	Illinois Private Well Database and PICS		
Well ID:	63837	2nd ID:	Not Reported
Owner:	ROBERT BALMES	Driller:	HUEMANN
Date drilled:	07/01/1989	Permit:	009308
Depth:	64	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

AF111
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227320**

WELLS SGS:

Database:	Water Well Records	API #:	121114275700
IL SWSP #:	381014	Status:	Water Well
Date Drilled:	20060529050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	64	Lithologic Formation:	gravel
Top of Formation (ft):	47	Bottom of Formation (ft):	64
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114275700		

112
SSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000229868**

WELLS SGS:

Database:	Water Well Records	API #:	121114545800
IL SWSP #:	0	Status:	Water Well

Date Drilled:	20150826050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	238	Lithologic Formation:	green shale
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114545800		

AG113
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000230428**

WELLS SGS:

Database:	Water Well Records	API #:	121114602700
IL SWSP #:	0	Status:	Water Well
Date Drilled:	20191121060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	155	Lithologic Formation:	gravel
Top of Formation (ft):	151	Bottom of Formation (ft):	155
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114602700		

AE114
ESE
1/2 - 1 Mile
Higher

IL WELLS **ILPW67669**

Database:	Illinois Private Well Database and PICS		
Well ID:	67669	2nd ID:	26795
Owner:	N GRAMMAS	Driller:	D BINZ
Date drilled:	04/13/1988	Permit:	|001118
Depth:	60	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

Y115
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000228010**

WELLS SGS:

Database:	Water Well Records	API #:	121114359700
IL SWSP #:	438311	Status:	Water Well
Date Drilled:	20071020050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	62	Lithologic Formation:	multicolor gravel
Top of Formation (ft):	58	Bottom of Formation (ft):	62
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114359700		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AA116
WSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000217258**

WELLS SGS:

Database:	Water Well Records	API #:	121113266900
IL SWSP #:	261182	Status:	Water Well
Date Drilled:	19930801050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	160	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113266900		

117
SW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000230399**

WELLS SGS:

Database:	Water Well Records	API #:	121114599600
IL SWSP #:	0	Status:	Water Well
Date Drilled:	20200204060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	169	Lithologic Formation:	sand/gravel
Top of Formation (ft):	165	Bottom of Formation (ft):	169
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114599600		

AH118
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63157**

Database:	Illinois Private Well Database and PICS		
Well ID:	63157	2nd ID:	Not Reported
Owner:	KIAWASSA GIRL SCOUT CAMP	Driller:	MCHENRY WELL & PUMP
Date drilled:	05/25/1976	Permit:	|047497
Depth:	225	Record type:	RG
Well Use:	Commerical	Well Type:	~~
Aquifer type:	~~		

AF119
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227457**

WELLS SGS:

Database:	Water Well Records	API #:	121114289400
IL SWSP #:	383721	Status:	Water Well

Date Drilled:	20060706050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	920	Elevation Reference:	Not Reported
Total Depth:	60	Lithologic Formation:	sand/gravel
Top of Formation (ft):	50	Bottom of Formation (ft):	54
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114289400		

AH120
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000223747**

WELLS SGS:

Database:	Water Well Records	API #:	121113916700
IL SWSP #:	0	Status:	Water Well
Date Drilled:	Not Reported	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Not Reported
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	0	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113916700		

AI121
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000208414**

WELLS SGS:

Database:	Water Well Records	API #:	121112279100
IL SWSP #:	100075	Status:	Water Well
Date Drilled:	19760525050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Matthesius, Fred H.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	225	Lithologic Formation:	lime rock
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112279100		

AI122
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000224349**

WELLS SGS:

Database:	Water Well Records	API #:	121113976900
IL SWSP #:	0	Status:	Water Well
Date Drilled:	Not Reported	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Not Reported
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	0	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113976900		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AJ123
West
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000222436**

WELLS SGS:

Database:	Water Well Records	API #:	121113785100
IL SWSP #:	327482	Status:	Water Well
Date Drilled:	20000919050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	315	Lithologic Formation:	limestone
Top of Formation (ft):	222	Bottom of Formation (ft):	315
Pump Flow (gpm):	5		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113785100		

124
SSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000212151**

WELLS SGS:

Database:	Water Well Records	API #:	121112753500
IL SWSP #:	100082	Status:	Water Well
Date Drilled:	19770901050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Boetsch, William M.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	295	Lithologic Formation:	limestone
Top of Formation (ft):	255	Bottom of Formation (ft):	295
Pump Flow (gpm):	8		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112753500		

125
NW
1/2 - 1 Mile
Higher

IL WELLS **ILEPANC70002236**

WELLS EPA:

Well ID:	11101615	Facility Name:	DEETERS
Facility #:	IL3063694	Well Status:	Not Reported
Well Type:	NonPublic	Primary Use Name:	Not Reported
Population Count:	0	Update Time Stamp:	Not Reported
IEPA Facility #:	Not Reported	Water Supply Name:	Not Reported
Min Setback Zone (ft):	Not Reported	Well Depth:	Not Reported
Ambient Sampling Netwk Stat:	Not Reported	EPA Facility Status:	Not Reported
SDWIS Well ID:	Not Reported	SDWIS Facility #:	Not Reported
API #:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AK126
West
1/2 - 1 Mile
Higher

IL WELLS **ILPW67651**

Database:	Illinois Private Well Database and PICS		
Well ID:	67651	2nd ID:	Not Reported
Owner:	MIKE SULLIVAN LOT 14	Driller:	HUEMANN
Date drilled:	11/28/1989	Permit:	016172
Depth:	320	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

AJ127
West
1/2 - 1 Mile
Higher

IL WELLS **ILPW67650**

Database:	Illinois Private Well Database and PICS		
Well ID:	67650	2nd ID:	Not Reported
Owner:	LEO & NANCY JEAN/ALAN SCHUTZ	Driller:	BINZ
Date drilled:	08/01/1993	Permit:	F-6300
Depth:	160	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

128
NE
1/2 - 1 Mile
Lower

IL WELLS **ILPW67676**

Database:	Illinois Private Well Database and PICS		
Well ID:	67676	2nd ID:	Not Reported
Owner:	BROCK CONST LOT 7	Driller:	W BINZ
Date drilled:	07/02/1975	Permit:	|038380
Depth:	52	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AF129
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000221079**

WELLS SGS:

Database:	Water Well Records	API #:	121113649400
IL SWSP #:	310590	Status:	Water Well
Date Drilled:	19980916050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	63	Lithologic Formation:	gravel
Top of Formation (ft):	40	Bottom of Formation (ft):	63
Pump Flow (gpm):	12		

URL: https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113649400

AL130
WSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000216808**

WELLS SGS:

Database:	Water Well Records	API #:	121113221800
IL SWSP #:	243943	Status:	Water Well
Date Drilled:	19920819050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	180	Lithologic Formation:	gravel
Top of Formation (ft):	170	Bottom of Formation (ft):	180
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113221800		

131
NE
1/2 - 1 Mile
Lower

IL WELLS **ILPW67671**

Database:	Illinois Private Well Database and PICS		
Well ID:	67671	2nd ID:	Not Reported
Owner:	J ROSERS	Driller:	W BINZ
Date drilled:	08/00/1972	Permit:	|015170
Depth:	96	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

132
East
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000229614**

WELLS SGS:

Database:	Water Well Records	API #:	121114520400
IL SWSP #:	476149	Status:	Water Well
Date Drilled:	20130819050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	139	Lithologic Formation:	sand/gravel
Top of Formation (ft):	135	Bottom of Formation (ft):	139
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114520400		

AG133
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000229240**

WELLS SGS:

Database:	Water Well Records	API #:	121114482900

IL SWSP #:	463411	Status:	Water Well
Date Drilled:	20120525050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	120	Lithologic Formation:	sand/gravel
Top of Formation (ft):	116	Bottom of Formation (ft):	120
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114482900		

AM134
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000221801**

WELLS SGS:

Database:	Water Well Records	API #:	121113721700
IL SWSP #:	320268	Status:	Water Well
Date Drilled:	19991020050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Efflandt, Robert
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	105	Lithologic Formation:	gravel
Top of Formation (ft):	95	Bottom of Formation (ft):	105
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113721700		

AH135
South
1/2 - 1 Mile
Higher

IL WELLS **ILEPANC70003078**

WELLS EPA:

Well ID:	11100542	Facility Name:	KIAWASSA PROGRAM CENTER
Facility #:	IL3023580	Well Status:	Inactive
Well Type:	NonPublic	Primary Use Name:	SUMMER CAMP
Population Count:	0	Update Time Stamp:	31-AUG-06
IEPA Facility #:	Not Reported	Water Supply Name:	Not Reported
Min Setback Zone (ft):	Not Reported	Well Depth:	Not Reported
Ambient Sampling Netwk Stat:	Not Reported	EPA Facility Status:	Not Reported
SDWIS Well ID:	Not Reported	SDWIS Facility #:	Not Reported
API #:	Not Reported		

AH136
South
1/2 - 1 Mile
Higher

IL WELLS **ILEPANC70003079**

WELLS EPA:

Well ID:	11100534	Facility Name:	KIAWASSA PROGRAM CENTER (22079)
Facility #:	IL3022079	Well Status:	Inactive
Well Type:	NonPublic	Primary Use Name:	SUMMER CAMP
Population Count:	0	Update Time Stamp:	29-NOV-06
IEPA Facility #:	Not Reported	Water Supply Name:	Not Reported
Min Setback Zone (ft):	Not Reported	Well Depth:	Not Reported
Ambient Sampling Netwk Stat:	Not Reported	EPA Facility Status:	Not Reported
SDWIS Well ID:	Not Reported	SDWIS Facility #:	Not Reported
API #:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AK137
West
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000224935**

WELLS SGS:

Database:	Water Well Records	API #:	121114036400
IL SWSP #:	345684	Status:	Water Well
Date Drilled:	20021002050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Howe, Robert E. Jr.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	170	Lithologic Formation:	gravel
Top of Formation (ft):	163	Bottom of Formation (ft):	170
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114036400		

AM138
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000222491**

WELLS SGS:

Database:	Water Well Records	API #:	121113790600
IL SWSP #:	327507	Status:	Water Well
Date Drilled:	20000906050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	61	Lithologic Formation:	sand & gravel
Top of Formation (ft):	57	Bottom of Formation (ft):	61
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113790600		

AN139
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000226149**

WELLS SGS:

Database:	Water Well Records	API #:	121114158100
IL SWSP #:	362534	Status:	Water Well
Date Drilled:	20040719050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	54	Lithologic Formation:	gravel
Top of Formation (ft):	30	Bottom of Formation (ft):	54
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114158100		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AK140
West
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000215225**

WELLS SGS:

Database:	Water Well Records	API #:	121113062200
IL SWSP #:	223944	Status:	Water Well
Date Drilled:	19891128060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	320	Lithologic Formation:	shale
Top of Formation (ft):	272	Bottom of Formation (ft):	320
Pump Flow (gpm):	142		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113062200		

AJ141
WSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000230225**

WELLS SGS:

Database:	Water Well Records	API #:	121114581700
IL SWSP #:	0	Status:	Water Well
Date Drilled:	20110809050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	425	Lithologic Formation:	limestone
Top of Formation (ft):	198	Bottom of Formation (ft):	425
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114581700		

AM142
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000221527**

WELLS SGS:

Database:	Water Well Records	API #:	121113694200
IL SWSP #:	313151	Status:	Water Well
Date Drilled:	19991104050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Craig
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	60	Lithologic Formation:	gravel
Top of Formation (ft):	40	Bottom of Formation (ft):	60
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113694200		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AL143
SW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000219553**

WELLS SGS:

Database:	Water Well Records	API #:	121113496100
IL SWSP #:	292913	Status:	Water Well
Date Drilled:	19961227060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Craig
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	175	Lithologic Formation:	gravel
Top of Formation (ft):	155	Bottom of Formation (ft):	175
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113496100		

144
SE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000207359**

WELLS SGS:

Database:	Water Well Records	API #:	121110172900
IL SWSP #:	233591	Status:	Water Well
Date Drilled:	19710603050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Boetsch, William M.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	242	Lithologic Formation:	sand & gravel
Top of Formation (ft):	242	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121110172900		

AO145
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227572**

WELLS SGS:

Database:	Water Well Records	API #:	121114300900
IL SWSP #:	422477	Status:	Water Well
Date Drilled:	20061024050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	240	Lithologic Formation:	limestone
Top of Formation (ft):	182	Bottom of Formation (ft):	240
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114300900		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AJ146
West
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000224309**

WELLS SGS:

Database:	Water Well Records	API #:	121113972900
IL SWSP #:	339043	Status:	Water Well
Date Drilled:	20011102050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	240	Lithologic Formation:	limestone
Top of Formation (ft):	216	Bottom of Formation (ft):	240
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113972900		

AO147
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000226801**

WELLS SGS:

Database:	Water Well Records	API #:	121114223600
IL SWSP #:	373924	Status:	Water Well
Date Drilled:	20050527050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	194	Lithologic Formation:	gravel
Top of Formation (ft):	188	Bottom of Formation (ft):	194
Pump Flow (gpm):	2		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114223600		

AP148
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000226736**

WELLS SGS:

Database:	Water Well Records	API #:	121114217100
IL SWSP #:	372740	Status:	Water Well
Date Drilled:	20050623050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Jablonski, John A.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	525	Lithologic Formation:	limestone
Top of Formation (ft):	415	Bottom of Formation (ft):	525
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114217100		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AN149
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000221528**

WELLS SGS:

Database:	Water Well Records	API #:	121113694300
IL SWSP #:	313155	Status:	Water Well
Date Drilled:	19991006050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	60	Lithologic Formation:	gravel
Top of Formation (ft):	40	Bottom of Formation (ft):	60
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113694300		

AN150
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000221747**

WELLS SGS:

Database:	Water Well Records	API #:	121113716300
IL SWSP #:	320587	Status:	Water Well
Date Drilled:	20000103060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	88	Lithologic Formation:	sand - gravel
Top of Formation (ft):	69	Bottom of Formation (ft):	74
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113716300		

AL151
WSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000226389**

WELLS SGS:

Database:	Water Well Records	API #:	121114182200
IL SWSP #:	366236	Status:	Water Well
Date Drilled:	20040430050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	190	Lithologic Formation:	sand/gravel
Top of Formation (ft):	186	Bottom of Formation (ft):	190
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114182200		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AP152
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227516**

WELLS SGS:

Database:	Water Well Records	API #:	121114295300
IL SWSP #:	421019	Status:	Water Well
Date Drilled:	20060823050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	485	Lithologic Formation:	limestone
Top of Formation (ft):	213	Bottom of Formation (ft):	485
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114295300		

153
WSW
1/2 - 1 Mile
Lower

IL WELLS **ILPW67649**

Database:	Illinois Private Well Database and PICS		
Well ID:	67649	2nd ID:	Not Reported
Owner:	CRAFTSMAN MIDWEST LOT 3	Driller:	KNIERIM
Date drilled:	11/30/1989	Permit:	014540
Depth:	260	Record type:	RG
Well Use:	Industrial/Commercial	Well Type:	--
Aquifer type:	Unconsolidated		

154
NE
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000207191**

WELLS SGS:

Database:	Water Well Records	API #:	121110156100
IL SWSP #:	102370	Status:	Water Well
Date Drilled:	19720801050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, Wayne L.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	96	Lithologic Formation:	gravel
Top of Formation (ft):	92	Bottom of Formation (ft):	96
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121110156100		

155
NE
1/2 - 1 Mile
Lower

IL WELLS **ILPW67672**

Database:	Illinois Private Well Database and PICS		
Well ID:	67672	2nd ID:	Not Reported
Owner:	WM. TONYAN & SON	Driller:	HUEMANN
Date drilled:	06/19/1986	Permit:	117446

Depth:	48	Record type:	RG
Well Use:	Industrial/Commercial	Well Type:	--
Aquifer type:	Unconsolidated		

AQ156
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000221181**

WELLS SGS:

Database:	Water Well Records	API #:	121113659600
IL SWSP #:	312169	Status:	Water Well
Date Drilled:	19990707050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	57	Lithologic Formation:	gravel & sand
Top of Formation (ft):	27	Bottom of Formation (ft):	57
Pump Flow (gpm):	25		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113659600		

AR157
NNW
1/2 - 1 Mile
Lower

IL WELLS **ILPW67591**

Database:	Illinois Private Well Database and PICS		
Well ID:	67591	2nd ID:	Not Reported
Owner:	BAUSKE & HINNER GREENHOUSE	Driller:	Not Reported
Date drilled:	00/00/1960	Permit:	|
Depth:	190	Record type:	OC
Well Use:	Commerical	Well Type:	~~
Aquifer type:	~~		

158
WSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000215990**

WELLS SGS:

Database:	Water Well Records	API #:	121113139300
IL SWSP #:	242157	Status:	Water Well
Date Drilled:	19911206060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Marvin R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	195	Lithologic Formation:	gravel
Top of Formation (ft):	165	Bottom of Formation (ft):	195
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113139300		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AO159
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227962**

WELLS SGS:

Database:	Water Well Records	API #:	121114354800
IL SWSP #:	434456	Status:	Water Well
Date Drilled:	20070531050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	87	Lithologic Formation:	gravel
Top of Formation (ft):	84	Bottom of Formation (ft):	87
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114354800		

AQ160
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000221526**

WELLS SGS:

Database:	Water Well Records	API #:	121113694100
IL SWSP #:	313152	Status:	Water Well
Date Drilled:	19991103050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	58	Lithologic Formation:	gravel
Top of Formation (ft):	40	Bottom of Formation (ft):	58
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113694100		

AN161
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000224764**

WELLS SGS:

Database:	Water Well Records	API #:	121114019100
IL SWSP #:	344145	Status:	Water Well
Date Drilled:	20020714050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Gaffke, George E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	71	Lithologic Formation:	sand & gravel small
Top of Formation (ft):	64	Bottom of Formation (ft):	71
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114019100		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AR162
NNW
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000228306**

WELLS SGS:

Database:	Water Well Records	API #:	121114389300
IL SWSP #:	448178	Status:	Water Well
Date Drilled:	20080710050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	50	Lithologic Formation:	gravel
Top of Formation (ft):	25	Bottom of Formation (ft):	50
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114389300		

AS163
North
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000221522**

WELLS SGS:

Database:	Water Well Records	API #:	121113693700
IL SWSP #:	313153	Status:	Water Well
Date Drilled:	19991005050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	60	Lithologic Formation:	gravel
Top of Formation (ft):	40	Bottom of Formation (ft):	60
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113693700		

AT164
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000226890**

WELLS SGS:

Database:	Water Well Records	API #:	121114232600
IL SWSP #:	374410	Status:	Water Well
Date Drilled:	20050805050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	122	Lithologic Formation:	gravel
Top of Formation (ft):	118	Bottom of Formation (ft):	122
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114232600		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AU165
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000212033**

WELLS SGS:

Database:	Water Well Records	API #:	121112741100
IL SWSP #:	361038	Status:	Water Well
Date Drilled:	19890330050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Howe, Robert E. Jr.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	193	Lithologic Formation:	gravel
Top of Formation (ft):	187	Bottom of Formation (ft):	193
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112741100		

AU166
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000224348**

WELLS SGS:

Database:	Water Well Records	API #:	121113976800
IL SWSP #:	0	Status:	Water Well
Date Drilled:	Not Reported	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Not Reported
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	0	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113976800		

167
SSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000206209**

WELLS SGS:

Database:	Water Well Records	API #:	121110057800
IL SWSP #:	100078	Status:	Water Well
Date Drilled:	19700616050000	Farm Name:	1
Well Name:	1	Driller:	Bottlemy, August
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	205	Lithologic Formation:	lime rock
Top of Formation (ft):	192	Bottom of Formation (ft):	205
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121110057800		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AP168
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227754**

WELLS SGS:

Database:	Water Well Records	API #:	121114334000
IL SWSP #:	426619	Status:	Water Well
Date Drilled:	20070328050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	947	Elevation Reference:	Not Reported
Total Depth:	277	Lithologic Formation:	limestone
Top of Formation (ft):	222	Bottom of Formation (ft):	277
Pump Flow (gpm):	18		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114334000		

AQ169
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000226889**

WELLS SGS:

Database:	Water Well Records	API #:	121114232500
IL SWSP #:	374465	Status:	Water Well
Date Drilled:	20050914050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	69	Lithologic Formation:	gravel
Top of Formation (ft):	15	Bottom of Formation (ft):	69
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114232500		

AT170
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227145**

WELLS SGS:

Database:	Water Well Records	API #:	121114258200
IL SWSP #:	378594	Status:	Water Well
Date Drilled:	20060211060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	281	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114258200		

Map ID Direction Distance Elevation		Database	EDR ID Number
AV171 **NNW** **1/2 - 1 Mile** **Higher**		**IL WELLS**	**ILPW67592**

Database:	Illinois Private Well Database and PICS		
Well ID:	67592	2nd ID:	Not Reported
Owner:	WALT GEORGI	Driller:	NICE
Date drilled:	04/02/1992	Permit:	F-3225
Depth:	100	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

---

172 **East** **1/2 - 1 Mile** **Higher**		**IL WELLS**	**ILSG40000220267**

WELLS SGS:

Database:	Water Well Records	API #:	121113567500
IL SWSP #:	304845	Status:	Water Well
Date Drilled:	19980810050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	123	Lithologic Formation:	gravel & sand
Top of Formation (ft):	108	Bottom of Formation (ft):	123
Pump Flow (gpm):	30		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113567500		

AT173 **WNW** **1/2 - 1 Mile** **Higher**		**IL WELLS**	**ILSG40000227937**

WELLS SGS:

Database:	Water Well Records	API #:	121114352300
IL SWSP #:	434167	Status:	Water Well
Date Drilled:	20070823050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	255	Lithologic Formation:	limestone
Top of Formation (ft):	195	Bottom of Formation (ft):	254
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114352300		

---

174 **North** **1/2 - 1 Mile** **Lower**		**IL WELLS**	**ILSG40000228244**

WELLS SGS:

Database:	Water Well Records	API #:	121114383100
IL SWSP #:	445476	Status:	Water Well

Date Drilled:	20070423050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	56	Lithologic Formation:	sand & gravel
Top of Formation (ft):	52	Bottom of Formation (ft):	56
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114383100		

AS175
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000229652**

WELLS SGS:

Database:	Water Well Records	API #:	121114524200
IL SWSP #:	482013	Status:	Water Well
Date Drilled:	20070424050000	Farm Name:	1
Well Name:	1	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	58	Lithologic Formation:	sand/gravel
Top of Formation (ft):	54	Bottom of Formation (ft):	58
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114524200		

AS176
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000226454**

WELLS SGS:

Database:	Water Well Records	API #:	121114188700
IL SWSP #:	366926	Status:	Water Well
Date Drilled:	20040805050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	70	Lithologic Formation:	sand/gravel
Top of Formation (ft):	56	Bottom of Formation (ft):	60
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114188700		

AU177
South
1/2 - 1 Mile
Higher

IL WELLS **ILEPANC70003080**

WELLS EPA:

Well ID:	11100344	Facility Name:	KIAWASSA PROGRAM CENTER (18168)
Facility #:	IL3018168	Well Status:	Inactive
Well Type:	NonPublic	Primary Use Name:	SUMMER CAMP
Population Count:	0	Update Time Stamp:	29-NOV-06
IEPA Facility #:	Not Reported	Water Supply Name:	Not Reported
Min Setback Zone (ft):	Not Reported	Well Depth:	Not Reported
Ambient Sampling Netwk Stat:	Not Reported	EPA Facility Status:	Not Reported
SDWIS Well ID:	Not Reported	SDWIS Facility #:	Not Reported
API #:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

178
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000230223**

WELLS SGS:

Database:	Water Well Records	API #:	121114581500
IL SWSP #:	493618	Status:	Water Well
Date Drilled:	20170719050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	888	Elevation Reference:	Ground level
Total Depth:	62	Lithologic Formation:	gravel
Top of Formation (ft):	58	Bottom of Formation (ft):	62
Pump Flow (gpm):	12		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114581500		

AS179
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000229651**

WELLS SGS:

Database:	Water Well Records	API #:	121114524100
IL SWSP #:	482012	Status:	Water Well
Date Drilled:	20070424050000	Farm Name:	2
Well Name:	2	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	60	Lithologic Formation:	sand/gravel
Top of Formation (ft):	56	Bottom of Formation (ft):	60
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114524100		

AU180
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63137**

Database:	Illinois Private Well Database and PICS		
Well ID:	63137	2nd ID:	Not Reported
Owner:	W OBRIEN	Driller:	Not Reported
Date drilled:	00/00/1934	Permit:	|
Depth:	150	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AU181
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63138**

Database:	Illinois Private Well Database and PICS		
Well ID:	63138	2nd ID:	Not Reported
Owner:	AMER NAT BANK	Driller:	Not Reported
Date drilled:	00/00/1934	Permit:	|

Depth:	Not Reported	Record type:	RG
Well Use:	Commerical	Well Type:	~~
Aquifer type:	~~		

AU182
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63139**

Database:	Illinois Private Well Database and PICS		
Well ID:	63139	2nd ID:	Not Reported
Owner:	WOODSTOCK FUR FARM	Driller:	VANHOOZEN
Date drilled:	00/00/1927	Permit:	|
Depth:	84	Record type:	RG
Well Use:	Commerical	Well Type:	~~
Aquifer type:	~~		

AU183
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63151**

Database:	Illinois Private Well Database and PICS		
Well ID:	63151	2nd ID:	Not Reported
Owner:	CHARLES STRADA	Driller:	HUEMANN
Date drilled:	09/14/1992	Permit:	F-4513
Depth:	184	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

AU184
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63140**

Database:	Illinois Private Well Database and PICS		
Well ID:	63140	2nd ID:	Not Reported
Owner:	WOODSTOCK FUR FARM	Driller:	VAN HOOZEN
Date drilled:	00/00/1927	Permit:	|
Depth:	84	Record type:	RG
Well Use:	Commerical	Well Type:	~~
Aquifer type:	~~		

AU185
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63147**

Database:	Illinois Private Well Database and PICS		
Well ID:	63147	2nd ID:	Not Reported
Owner:	JOHN KUGLER	Driller:	BOETSCH
Date drilled:	02/06/1976	Permit:	44555
Depth:	120	Record type:	RG
Well Use:	Domestic	Well Type:	--

Aquifer type: Unconsolidated

AU186
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63148**

Database:	Illinois Private Well Database and PICS		
Well ID:	63148	2nd ID:	Not Reported
Owner:	FRANK BARTLETT	Driller:	BOETSCH
Date drilled:	06/03/1971	Permit:	NF-09484
Depth:	242	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

AU187
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63146**

Database:	Illinois Private Well Database and PICS		
Well ID:	63146	2nd ID:	Not Reported
Owner:	W HARRIS LOT 17	Driller:	BOETSCH WATER SUPPLY
Date drilled:	09/01/1977	Permit:	|058666
Depth:	295	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AU188
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63141**

Database:	Illinois Private Well Database and PICS		
Well ID:	63141	2nd ID:	Not Reported
Owner:	H W ROHM	Driller:	WAYMAN AND WAYMAN
Date drilled:	09/00/1933	Permit:	|
Depth:	125	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AU189
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63142**

Database:	Illinois Private Well Database and PICS		
Well ID:	63142	2nd ID:	Not Reported
Owner:	EMERSON	Driller:	Not Reported
Date drilled:	00/00/1934	Permit:	|
Depth:	45	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AU190
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63136**

Database:	Illinois Private Well Database and PICS		
Well ID:	63136	2nd ID:	Not Reported
Owner:	J MERGNER	Driller:	Not Reported
Date drilled:	00/00/1934	Permit:	|
Depth:	25	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AU191
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63144**

Database:	Illinois Private Well Database and PICS		
Well ID:	63144	2nd ID:	Not Reported
Owner:	DR N ABANDO LOT 8	Driller:	BOETSCH WATER SUPPLY
Date drilled:	01/06/1976	Permit:	|041962
Depth:	300	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AU192
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63145**

Database:	Illinois Private Well Database and PICS		
Well ID:	63145	2nd ID:	Not Reported
Owner:	ZIMMERMAN CONST LOT 16	Driller:	BOETSCH WATER SUPPLY
Date drilled:	09/29/1977	Permit:	|062217
Depth:	191	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AU193
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63143**

Database:	Illinois Private Well Database and PICS		
Well ID:	63143	2nd ID:	Not Reported
Owner:	W KELLEY	Driller:	Not Reported
Date drilled:	00/00/1928	Permit:	|
Depth:	120	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AU194
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63149**

Database:	Illinois Private Well Database and PICS		
Well ID:	63149	2nd ID:	Not Reported
Owner:	JOSEPH WINTERS	Driller:	BINZ
Date drilled:	07/00/1956	Permit:	Not Reported
Depth:	60	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

AU195
South
1/2 - 1 Mile
Higher

IL WELLS **ILPW63150**

Database:	Illinois Private Well Database and PICS		
Well ID:	63150	2nd ID:	Not Reported
Owner:	Not Reported	Driller:	S. SPECHT
Date drilled:	00/00/0000	Permit:	Not Reported
Depth:	9	Record type:	OG
Well Use:	Test Well	Well Type:	--
Aquifer type:	Unconsolidated		

AV196
NNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000206957**

WELLS SGS:

Database:	Water Well Records	API #:	121110132700
IL SWSP #:	102366	Status:	Water Well
Date Drilled:	19720119060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Matthesius, Fred H.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	135	Lithologic Formation:	gravel
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121110132700		

AW197
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227084**

WELLS SGS:

Database:	Water Well Records	API #:	121114252000
IL SWSP #:	376986	Status:	Water Well
Date Drilled:	20051117060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported

Total Depth:	100	Lithologic Formation:	gravel
Top of Formation (ft):	96	Bottom of Formation (ft):	100
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114252000		

AX198
WSW **IL WELLS** **ILPW63173**
1/2 - 1 Mile
Lower

Database:	Illinois Private Well Database and PICS		
Well ID:	63173	2nd ID:	Not Reported
Owner:	THOMAS & SHARON WELBEZK	Driller:	NICE
Date drilled:	12/06/1991	Permit:	F 2433
Depth:	195	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

AX199
WSW **IL WELLS** **ILPW63174**
1/2 - 1 Mile
Lower

Database:	Illinois Private Well Database and PICS		
Well ID:	63174	2nd ID:	Not Reported
Owner:	THOMAS/SHARON WELBEZK/LESCHER	Driller:	MARVIN NICE
Date drilled:	12/06/1991	Permit:	F2433
Depth:	195	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

AY200
SSW **IL WELLS** **ILPW63161**
1/2 - 1 Mile
Lower

Database:	Illinois Private Well Database and PICS		
Well ID:	63161	2nd ID:	Not Reported
Owner:	E J ROTH	Driller:	A BOTTLEMY
Date drilled:	06/16/1970	Permit:	|008179
Depth:	205	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

AZ201
WNW **IL WELLS** **ILSG40000227319**
1/2 - 1 Mile
Higher

WELLS SGS:

Database:	Water Well Records	API #:	121114275600
IL SWSP #:	381025	Status:	Water Well
Date Drilled:	20050909050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry

Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	323	Lithologic Formation:	limestone
Top of Formation (ft):	170	Bottom of Formation (ft):	323
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114275600		

202
SE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000208898**

WELLS SGS:

Database:	Water Well Records	API #:	121112328000
IL SWSP #:	233600	Status:	Engineering Test
Date Drilled:	Not Reported	Farm Name:	S-20
Well Name:	S-20	Driller:	IL State Geological Survey
Elevation:	862	Elevation Reference:	Topographic map
Total Depth:	9	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112328000		

AW203
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000227048**

WELLS SGS:

Database:	Water Well Records	API #:	121114248400
IL SWSP #:	375283	Status:	Water Well
Date Drilled:	20051026050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	251	Lithologic Formation:	limestone
Top of Formation (ft):	200	Bottom of Formation (ft):	251
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114248400		

204
West
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000210506**

WELLS SGS:

Database:	Water Well Records	API #:	121112519800
IL SWSP #:	102367	Status:	Water Well
Date Drilled:	19861030050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Pilgard, John P.
Elevation:	925	Elevation Reference:	Ground level
Total Depth:	318	Lithologic Formation:	limestone
Top of Formation (ft):	254	Bottom of Formation (ft):	318
Pump Flow (gpm):	25		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112519800		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

BA205
NNW
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000216487**

WELLS SGS:

Database:	Water Well Records	API #:	121113189700
IL SWSP #:	244604	Status:	Water Well
Date Drilled:	19920402050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Marvin R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	100	Lithologic Formation:	gravel
Top of Formation (ft):	9	Bottom of Formation (ft):	95
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113189700		

AY206
SSW
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000211203**

WELLS SGS:

Database:	Water Well Records	API #:	121112631500
IL SWSP #:	100085	Status:	Water Well
Date Drilled:	19871002050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Marvin R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	63	Lithologic Formation:	gravel
Top of Formation (ft):	51	Bottom of Formation (ft):	63
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112631500		

207
SE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000214835**

WELLS SGS:

Database:	Water Well Records	API #:	121113022800
IL SWSP #:	213847	Status:	Water Well
Date Drilled:	19890701050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	64	Lithologic Formation:	gravel
Top of Formation (ft):	59	Bottom of Formation (ft):	64
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113022800		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

BA208
NNW
1/2 - 1 Mile
Lower

IL WELLS **ILPW67593**

Database:	Illinois Private Well Database and PICS		
Well ID:	67593	2nd ID:	Not Reported
Owner:	OTTO BAUSKO ROSES	Driller:	Not Reported
Date drilled:	00/00/1968	Permit:	|
Depth:	196	Record type:	CO
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

209
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000218787**

WELLS SGS:

Database:	Water Well Records	API #:	121113419500
IL SWSP #:	278757	Status:	Water Well
Date Drilled:	19950906050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, William F.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	175	Lithologic Formation:	gravel
Top of Formation (ft):	168	Bottom of Formation (ft):	175
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113419500		

AZ210
WNW
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000227039**

WELLS SGS:

Database:	Water Well Records	API #:	121114247500
IL SWSP #:	376102	Status:	Water Well
Date Drilled:	20051116060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Mark E.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	280	Lithologic Formation:	limestone
Top of Formation (ft):	180	Bottom of Formation (ft):	275
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114247500		

211
SSE
1/2 - 1 Mile
Higher

IL WELLS **ILEPANC70003083**

WELLS EPA:

Well ID:	11103371	Facility Name:	WILL OAKS CAMPGROUND
Facility #:	IL3110585	Well Status:	Active

Well Type:	NonCommunity	Primary Use Name:	SUMMER CAMP
Population Count:	100	Update Time Stamp:	22-SEP-06
IEPA Facility #:	Not Reported	Water Supply Name:	Not Reported
Min Setback Zone (ft):	Not Reported	Well Depth:	Not Reported
Ambient Sampling Netwk Stat:	Not Reported	EPA Facility Status:	Not Reported
SDWIS Well ID:	Not Reported	SDWIS Facility #:	Not Reported
API #:	Not Reported		

BB212
NW
1/2 - 1 Mile
Higher

IL WELLS **ILPW67653**

Database:	Illinois Private Well Database and PICS		
Well ID:	67653	2nd ID:	Not Reported
Owner:	LARRY MOEHLING	Driller:	BINZ
Date drilled:	02/13/1992	Permit:	FIO-3577
Depth:	280	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Bedrock		

BB213
NW
1/2 - 1 Mile
Higher

IL WELLS **ILPW67652**

Database:	Illinois Private Well Database and PICS		
Well ID:	67652	2nd ID:	Not Reported
Owner:	R MURPHY	Driller:	MCHENRY WELL & PUMP
Date drilled:	01/19/1972	Permit:	|013372
Depth:	135	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

BC214
NNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000224852**

WELLS SGS:

Database:	Water Well Records	API #:	121114027900
IL SWSP #:	340597	Status:	Water Well
Date Drilled:	19970402050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	67	Lithologic Formation:	sand/gravel
Top of Formation (ft):	63	Bottom of Formation (ft):	67
Pump Flow (gpm):	12		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114027900		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

BC215
NNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000211533**

WELLS SGS:

Database:	Water Well Records	API #:	121112679500
IL SWSP #:	223914	Status:	Water Well
Date Drilled:	19880413050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	60	Lithologic Formation:	gravel
Top of Formation (ft):	57	Bottom of Formation (ft):	60
Pump Flow (gpm):	14		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112679500		

216
NW
1/2 - 1 Mile
Lower

IL WELLS **ILPW67654**

Database:	Illinois Private Well Database and PICS		
Well ID:	67654	2nd ID:	Not Reported
Owner:	DON JANKOVICH	Driller:	NICE
Date drilled:	08/19/1992	Permit:	F-4038
Depth:	180	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

217
East
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000219155**

WELLS SGS:

Database:	Water Well Records	API #:	121113456500
IL SWSP #:	288646	Status:	Water Well
Date Drilled:	19960501050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	187	Lithologic Formation:	gravel
Top of Formation (ft):	177	Bottom of Formation (ft):	177
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113456500		

218
ESE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000226138**

WELLS SGS:

Database:	Water Well Records	API #:	121114157000
IL SWSP #:	362541	Status:	Water Well

Date Drilled:	20040402050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Binz, David Joseph
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	335	Lithologic Formation:	limestone
Top of Formation (ft):	270	Bottom of Formation (ft):	335
Pump Flow (gpm):	9		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114157000		

219
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000225999**

WELLS SGS:

Database:	Water Well Records	API #:	121114143100
IL SWSP #:	361346	Status:	Water Well
Date Drilled:	20031203060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	166	Lithologic Formation:	sand/gravel
Top of Formation (ft):	162	Bottom of Formation (ft):	166
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114143100		

220
North
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000226635**

WELLS SGS:

Database:	Water Well Records	API #:	121114206800
IL SWSP #:	371465	Status:	Water Well
Date Drilled:	20050413050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	85	Lithologic Formation:	sand/gravel
Top of Formation (ft):	66	Bottom of Formation (ft):	70
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114206800		

221
SSW
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000219985**

WELLS SGS:

Database:	Water Well Records	API #:	121113539400
IL SWSP #:	295288	Status:	Water Well
Date Drilled:	19970401050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	97	Lithologic Formation:	gravel
Top of Formation (ft):	93	Bottom of Formation (ft):	97
Pump Flow (gpm):	25		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113539400		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

222
SW
1/2 - 1 Mile
Lower

IL WELLS **ILPW63172**

Database:	Illinois Private Well Database and PICS		
Well ID:	63172	2nd ID:	26315
Owner:	N ZIEMER	Driller:	M NICE
Date drilled:	10/02/1987	Permit:	|135309
Depth:	63	Record type:	RG
Well Use:	Domestic	Well Type:	~~
Aquifer type:	~~		

BD223
NNW
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000206626**

WELLS SGS:

Database:	Water Well Records	API #:	121110099600
IL SWSP #:	402647	Status:	Water Well
Date Drilled:	19410101060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Van Hoozen, Lucy H.
Elevation:	880	Elevation Reference:	Ground level
Total Depth:	196	Lithologic Formation:	lime rock
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121110099600		

224
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000209947**

WELLS SGS:

Database:	Water Well Records	API #:	121112441400
IL SWSP #:	102625	Status:	Water Well
Date Drilled:	19850807050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Nice, Marvin R.
Elevation:	920	Elevation Reference:	Ground level
Total Depth:	230	Lithologic Formation:	limestone
Top of Formation (ft):	197	Bottom of Formation (ft):	230
Pump Flow (gpm):	10		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121112441400		

BD225
NNW
1/2 - 1 Mile
Lower

IL WELLS **ILSG40000221782**

WELLS SGS:

Database:	Water Well Records	API #:	121113719800
IL SWSP #:	320513	Status:	Water Well

Date Drilled:	19991109060000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Keller, Larry
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	87	Lithologic Formation:	sand gravel
Top of Formation (ft):	57	Bottom of Formation (ft):	65
Pump Flow (gpm):	20		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113719800		

226
NNE
1/2 - 1 Mile
Lower

IL WELLS **ILPW68095**

Database:	Illinois Private Well Database and PICS		
Well ID:	68095	2nd ID:	Not Reported
Owner:	JEFF PETERSON	Driller:	BINZ
Date drilled:	10/07/1993	Permit:	F-6196
Depth:	75	Record type:	RG
Well Use:	Domestic	Well Type:	--
Aquifer type:	Unconsolidated		

227
SSE
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000223748**

WELLS SGS:

Database:	Water Well Records	API #:	121113916800
IL SWSP #:	0	Status:	Water Well
Date Drilled:	Not Reported	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Not Reported
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	0	Lithologic Formation:	Not Reported
Top of Formation (ft):	0	Bottom of Formation (ft):	0
Pump Flow (gpm):	0		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121113916800		

228
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG40000229370**

WELLS SGS:

Database:	Water Well Records	API #:	121114495900
IL SWSP #:	251595	Status:	Water Well
Date Drilled:	19900823050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Mattson, Arthur R.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	166	Lithologic Formation:	rock
Top of Formation (ft):	150	Bottom of Formation (ft):	166
Pump Flow (gpm):	15		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114495900		

Map ID Direction Distance Elevation		Database	EDR ID Number
229 WSW 1/2 - 1 Mile Higher		**IL WELLS**	**ILSG40000225183**

WELLS SGS:

Database:	Water Well Records	API #:	121114061300
IL SWSP #:	347005	Status:	Water Well
Date Drilled:	20020807050000	Farm Name:	Not Reported
Well Name:	Not Reported	Driller:	Huemann, Joseph J.
Elevation:	0	Elevation Reference:	Not Reported
Total Depth:	90	Lithologic Formation:	gravel
Top of Formation (ft):	85	Bottom of Formation (ft):	90
Pump Flow (gpm):	28		
URL:	https://isgs-oas.isgs.illinois.edu/reports/rwservlet?watersummary&121114061300		

AREA RADON INFORMATION

State Database: IL Radon

Radon Test Results

Zipcode	Result
60098	1
60098	2.3
60098	6.7
60098	1.5
60098	24
60098	2.4
60098	1.8
60098	2.5
60098	4.6
60098	0.7
60098	2.8
60098	1.7
60098	1.4
60098	16.7
60098	1.9
60098	2.4
60098	1.7
60098	1.3
60098	7
60098	2.5
60098	1.8
60098	2.1
60098	9.9
60098	2.4
60098	4.6
60098	3.3
60098	3.1
60098	1.3
60098	14.8
60098	1.6
60098	1.6
60098	1.1
60098	7.1
60098	5.8
60098	4.6
60098	1
60098	2.4
60098	1.1
60098	2.1
60098	2.2
60098	2.1
60098	2.7
60098	1.8
60098	2.5
60098	1.8
60098	5.7
60098	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

	5.5
60098	3.5
60098	5.5
60098	30.5
60098	1.3
60098	1.5
60098	5.9
60098	4.5
60098	8
60098	2.9
60098	1.9
60098	5.3
60098	2.7
60098	5.9
60098	1.6
60098	2.4
60098	5.3
60098	1.2
60098	3.4
60098	0.8
60098	8.7
60098	1.6
60098	2.5
60098	1.9
60098	4.8
60098	1.9
60098	4.6
60098	2.4
60098	1.3
60098	2.6

Federal EPA Radon Zone for MCHENRY County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 60098

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.667 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Illinois State Geological Survey
Telephone: 217-333-4747

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Oil and Gas Wells Listing
Source: Illinois State Geological Survey
Telephone: 217-333-5109
Oil and gas wells location points from the Illinois State Geological Survey database.

Water Well Records
Source: Illinois Geological Survey
Telephone: 217-333-4747

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)
Source: Illinois State Water Survey
Telephone: 217-333-9043

Water Well Location Information
Source: Illinois Environmental Protection Agency
Telephone: 217-782-0810

RADON

State Database: IL Radon
Source: Department of Nuclear Safety
Telephone: 217-785-9958
County Radon Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

Appendix I

SCI ENGINEERING, INC.

Travis S. Clayton
Project Scientist

Education
B.A., English, University of Illinois – Urbana-Champaign, IL, 2010

Registrations & Certifications
Asbestos Inspector:
Missouri, Illinois, Texas

Lead Inspector:
Missouri, Illinois

NIOSH 582 Equivalent Course

Air Sampling Professional:
Missouri, Illinois

OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)

OSHA 8-Hour HAZWOPER Supervisor

OSHA 10 Hour Construction Safety and Health Certification

IDOT Certifications:
QA/QC PCC-Level 1

Travis S. Clayton
Project Scientist
(618) 206-3049
tclayton@sciengineering.com

Travis joined SCI Engineering, Inc. (SCI) in August 2013 to support various environmental consulting activities including Phase One and Phase Two Environmental Site Assessments (ESAs), asbestos and lead building inspections, air monitoring, abatement oversight, mold reconnaissance, and technical report preparation. His previous experience includes GPS mapping, construction observation and documentation, and construction materials testing.

Project Experience

Residential

Bellevue Ave., Ethel Ave., and Hoover Ave. Properties
[Richmond Heights, MO]
Performed an inspection for Asbestos-Containing Building Materials in preparation for Demolition/Renovation activities.

Hazelwood Residential Asbestos Inspections [Hazelwood, MO]
Performed asbestos building inspections on a multitude of condemned properties to satisfy the requirements of the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAPS) for demolition and renovation prior to demolition.

Ceylon Luxury Apartments (25 N. Central Avenue) [Clayton, MO]
The Ceylon Luxury Apartments project involved the abatement of mold amplification at the site due to unusually wet weather which occurred during construction. The structure was a wood-framed, multi-story apartment building located in Clayton, Missouri. SCI was requested to develop an abatement protocol for the remediation of the mold amplification, assist with securing bids for the abatement and to provide oversight and verification throughout the abatement process.

Commercial/Retail

Wal-Mart Neighborhood Market #7072 [Cape Girardeau, MO]
SCI Engineering completed multiple environmental services on a seven-acre site for a Wal-Mart Neighborhood Market Store in Cape Girardeau, Missouri. SCI performed a Phase One Environmental Site Assessment. The purpose of this assessment was to explore for evidence of the presence of recognized environmental conditions (RECs) and evaluate additional factors that could pose as a business environmental risk (BER). Multiple RECs and BERs were identified in connection to the site. A limited Phase Two was then completed to evaluate the presence of widespread impact to the soil and/or groundwater on the subject site because of the RECs found in the Phase One Assessment. Results of the limited Phase Two revealed the need for the client to enroll in the Missouri Department of Natural Resources Brownfield/ Voluntary Cleanup Program (B/VCP) to pursue a No Further Action (NFA) letter. SCI submitted, on behalf of Wal-Mart Stores, Inc, an application for the B/VCP and the property was accepted for the program. Because of activities associated with the B/ VCP, two underground storage tanks (USTs) were encountered. SCI installed monitoring wells and sampled the well for four consecution quarters to illustrate plum stability. Additionally, Stego Wrap 15-mil Class A Vapor Barrier was installed. Based on all activities that were performed on site, SCI requested and was granted a Certificate of Completion.

QuikTrip Corporation [Various Missouri Locations]
Performed inspection of Best Management Practices (BMPs) for managing storm water for various stores throughout the St. Louis Metropolitan area.

QuikTrip Store #623 [St. Charles, MO]
Assisted in tank closure procedures by performing soil sampling activities as outlined in the Missouri Risk-Based Corrective Action Process for Petroleum Storage Tanks guidance.

Jamestown Mall-Macy's [St. Louis County, MO]
Performed full asbestos inspection of a large multi-story retail space prior to the proposed demolition of the onsite structure to satisfy the requirements of the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAPS) for demolition and renovation.

Fulton Theatre-613 Court Street [Fulton, MO]
Performed a limited asbestos building inspection prior to proposed renovation of an historic building. Additionally, conducted mold reconnaissance of the structure and collected indoor air samples of the facility to evaluate the potential impact of histoplasmosis and other mold impacts related to water intrusion and the past presence of bats.

2051 Lynch Avenue [East St. Louis, IL]
SCI provided environmental services for an 8.74-acre commercial property in East St. Louis, Illinois. The Phase One Environmental Site Assessment included historical and public records research, interviews, and a site reconnaissance to identify recognized environmental conditions (RECs), historical RECs (HRECs), and controlled RECs (CRECs). Key findings included an aboveground storage tank (AST) for a backup generator, solid waste, suspect urban fill materials, and evidence of past and current chemical storage. While the AST and municipal waste disposal were not considered RECs, the presence of urban fill materials, dumped debris, and chemical storage posed potential environmental risks. SCI recommended further investigation and proper management of these materials to mitigate potential impacts on future site development.

Urban Redevelopment

North Sarah Phase III [St. Louis, MO]
Performed multiple asbestos inspections in connection with an urban redevelopment project. The properties surveyed consisted of residential structures as well as commercial properties.

Poindexter Phase III [Columbus, OH]
Observed and documented soil boring efforts and collected soil, groundwater, and soil gas samples in support of Phase Two ESA preparation. Provided oversight of monitoring well and soil gas well installation. Observed and documented test pit excavation and collected soil samples in an effort to delineate impacted soil hot spots.

East Meadows Phase II [San Antonio, TX]
SCI performed a Phase One ESA, Post Demo Sampling, Soil Management Plan, Delineation Sampling, Oversight and Completion Report for the East Meadows Phase II project. The project area consisted of 36 parcels which currently host approximately 30 single-family homes and a single-story commercial/retail building (former church).

Herndon Homes [Atlanta, GA]
SCI performed a Phase One Environmental Site Assessment for the Herndon Homes project which was compliant with Housing and Urban Development (HUD) and Georgia Department of Community Affairs (DCA) environmental review guidelines prior to the redevelopment of the approximate 13-acre site in Atlanta, Georgia. A Phase Two Environmental Site Assessment was performed which identified the present of impacted soil. SCI developed a remedial scope of work which was

utilized to obtain bids for the remedial work.

Healthcare

Fulton State Hospital [Fulton, MO]
Performed long-term project oversight and conducted third-party air monitoring during abatement operations to remove asbestos and universal wastes prior to demolition of a large state-run mental health facility. Conducted additional environmental services as required, including additional asbestos and heavy metal based paint inspections and sampling

National Geospatial-Intelligence Agency [St. Louis, MO]
Assisted in the completion of Phase Two ESA. Coordinated with drillers and performed oversight of soil sampling activities and piezometer installation. Conducted soil and groundwater sampling for laboratory analysis and assisted in data review.

Industrial and Manufacturing

Powell Avenue and Annalee Sewer Separation [Brentwood, MO]
Implemented SCI's Environmental Work and Safety Plan developed for the Metropolitan St. Louis Sewer District (MSD). Performed excavation observation, field screening, and documentation of potentially impacted soils and waters. Coordinated with drillers and performed oversight of soil sampling activities and piezometer installation to facilitate waste characterization.

Proposed Steelcote Development [St. Louis City, MO]
SCI has performed several environmental investigations at the Steelcote Manufacturing facility, which was formerly utilized for the production of various paints, lacquers, and coatings. A Phase One ESA was also prepared for the south-adjacent property, which historically hosted the Columbia Oil Co. Both parcels comprise the proposed re-development. Past site operations included the use and storage of various petroleum products and hazardous materials. Above and underground storage tanks (ASTs/USTs) were formerly present on the site. Environmental investigations include Phase One ESAs, a HUD Phase One ESA, a Phase Two ESA, Asbestos Survey, Lead-Based Paint Survey, and BVCP Liaison activities.

Distribution Facility-Rolla [Rolla, MO]
Conducted Phase One ESA walkover of subject site, performed historical document review, and drafted Phase One ESA report under the guidance of an Environmental Professional.

Oil, Gas, and Energy

Brayton Point Power Plant [Somerset, MA]
SCI initially performed a preliminary asbestos review of the Brayton Point Power Station in Somerset, Massachusetts. This review was performed as part of a project to prepare asbestos abatement budgets and cost projections for 14 coal fired power plants across the United States. SCI was subsequently contracted to perform a comprehensive asbestos survey of the structures located on the site prior to its decommissioning and demolition. The property consisted of the main power plant and 74 outbuildings. The purpose of this survey was to identify asbestos-containing materials (ACMs) in accessible areas on the site. SCI's asbestos survey was used as the basis for preparing abatement specifications and securing abatement bids. SCI was also contracted by the abatement contractor to provide assistance during the initial phases of the abatement project.

Dynegy Wood River Power Station [Alton, IL]
Assisted SCI colleagues with asbestos containing material (ACM) assessment at a multi-unit coal-fired electrical generation station after the station was taken offline. Created drawings of suspect asbestos containing material (SACM) locations and quantities in the field, documented SACMs, and assisted in preparation of the report.

4126 West Florissant [St. Louis, MO]
Surveyed, developed, and sampled monitoring wells in support of site characterization activities at a known petroleum release site.

Transportation

600-1017 West Sargent Street [Litchfield, IL]
Assisted in the completion of Preliminary Site Investigation for a linear roadway project according to Illinois Department of Transportation (IDOT) guidelines. Coordinated with drillers and performed oversight of soil sampling activities. Conducted soil sampling for laboratory analysis, performed data review, and drafted final report.

Interstate 70 Improvements – Fifth Street to First Capitol Drive [St. Charles, MO]
SCI prepared Categorical Exclusion (CE) documentation for a transportation corridor improvement project in St. Charles, Missouri. This NEPA report was prepared because the project was seeking federal funding through MoDOT. The project included roadway improvements to the Fifth Street and First Capitol Drive interchanges at Interstate 70 (I-70), as well as improvements to the outer roads between the Fifth Street interchange and the First Capitol Drive interchange. These improvements included a Diverging Diamond Interchange (DDI) at Fifth Street, a new one-way north outer road between Fifth Street and Fairgrounds Road, the conversion of Veterans Memorial Parkway (VMP) to one-way from Fairgrounds Road to Fifth Street, eastbound and westbound I-70 access to and from Fairgrounds Road, the reconstruction of Fairgrounds bridge, a braided ramp bridge between Fairgrounds Road and Fifth Street, and the addition of fourth eastbound and westbound I-70 lanes at Route 94. The affected environment and environmental impacts related to displacements, farmland, wetland/water quality, floodplain impacts and analysis, air quality, noise analysis, cultural resources, 4(f)/6(f) involvement, threatened and endangered species, and hazardous waste were identified and discussed in the CE documentation. The results of our field exploration, research, and analysis were compiled in the report. As part of this study, SCI completed Phase One Environmental Site Assessment, a wetland delineation, a noise analysis and extensive agency consultation.

Government-Federal

Fort Sam Houston Air Force Base and Lackland Air Force Base [San Antonio, TX]
SCI prepared Asbestos, Lead-Based Paint and Universal Waste/Hazardous Material Surveys for the Lackland Air Force Base and Fort Sam Houston Air Force Base in San Antonio, Texas. Renovations are planned for the buildings due to structural failures within the buildings. These surveys were conducted to determine whether asbestos-containing materials or lead-based paint coatings would be impacted by the repairs; and to identify items that may require specialized removal and disposal prior to renovation activities.

Red River Army Depot [Texarkana, TX]
SCI Engineering, Inc. (SCI) performed asbestos consulting services for the Red River Army Depot in Texarkana, Texas. The project included evaluating the presence of asbestos containing materials (ACM) within 217 structures. Our services include the following: Complete asbestos surveys on approximately 50 percent the 217 structures; Review asbestos survey reports and data collected by others for the remaining 50 percent of the structures. Field verify and collect supplementary data, as necessary, to complete the survey reports; Label ACM identified during survey activities; Prepare abatement estimates for the asbestos containing materials identified during survey activities; and provide a written report for each of the structures which summarizes the findings of the survey activities, including but not limited to, photographs of each material sampled, maps depicting the location of each suspect material and a detailed description of each material sampled. SCI's work was performed in accordance with National Emission Standards for Hazardous Air Pollutants and the requirements of the A-E task order.

SCI ENGINEERING, INC.

Travis S. Clayton
Project Scientist
(618) 206-3049
tclayton@sciengineering.com

Government-Municipal

St. Clair County ACM Surveys [East St. Louis, IL]
Performed asbestos surveys on numerous residential structures scheduled for demolition in and around East St. Louis. Surveys were performed as part of an on-going initiative undertaken by St. Clair County to demolish derelict structures and clean up properties from their delinquent tax rolls and were used to obtain asbestos abatement bids as part of demolition bid packages.

Missouri Air National Guard Cooper Drive [Jefferson City, MO]
Performed asbestos building inspection prior to building renovation. Provided oversight during abatement activities and conducted final clearance inspection and air sampling upon completion of abatement.

Missouri State Highway Patrol [Jefferson City, MO]
Performed asbestos building inspection prior to building renovation. Performed project oversight and third-party air monitoring during abatement activities in the toxicology laboratory.

Missouri State Capitol and Capitol Annex [Jefferson City, MO]
Performed asbestos building inspection prior to building renovation. Provided oversight, third-party air monitoring, and final clearance inspection during abatement activities performed on the Capitol HVAC system.

Missouri National Guard Headquarters [Jefferson City, MO]
Performed air sampling in conjunction with mold reconnaissance activities in a large military installation.

Missouri School for the Deaf [Fulton, MO]
Performed limited asbestos inspections of several buildings on a large educational campus. Worked with roofing professional to obtain roof core samples of potentially asbestos containing materials from several large institutional structures.

Ladue Fire Station [Ladue, MO]
Assisted in the completion of Phase Two ESA. Coordinated with drillers and performed oversight of soil sampling activities and piezometer installation. Conducted soil and groundwater sampling for laboratory analysis. Performed third-party air monitoring and clearance air sampling prior to renovation of the onsite structure.

Missouri Supreme Court [Jefferson City, MO]
Coordinated with State and Contractor representatives to conduct indoor air monitoring and project oversight for an emergency abatement project required to abate thermal system insulation from steam lines after hours at the Missouri Supreme Court Building. Collected samples and facilitated rapid turnaround analysis to ensure timely reoccupancy of the affected spaces.

Howerton State Office Building [Jefferson City, MO]
Performed indoor air quality sampling to evaluate potential impacts to human health caused by mold or other environmental factors. Worked with facility personnel to access, sample, and document conditions of office and mechanical spaces including air handler units and distribution ducts.

Education

Bayless School District [St. Louis, MO]
Performed third-party air monitoring during asbestos abatement activities including the removal of asbestos-containing floor tile and mastic, thermal system insulation, and window caulk and glaze in the Bayless School District. Conducted final

SCI ENGINEERING, INC.

Benjamin K. Butterfield, CHMM
Senior Scientist

Education
M.S., Environmental Science, Taylor University, 2011

B.S., Environmental Science, Taylor University, 2010

Registrations & Certifications
Asbestos Inspector-Missouri

OSHA 10-Hour Safety and Health

OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)

OSHA 8-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) Supervisor

Certified Remote Airman

Missouri Well Drillers and/or Pump Installers

Benjamin K. Butterfield, CHMM
Senior Scientist
(636) 757-1044
bbutterfield@sciengineering.com

Ben joined SCI Engineering, Inc. (SCI) in June 2011 to conduct Phase One Environmental Site Assessments (Phase One ESA), Phase Two Environmental Site Assessments (Phase Two ESA), asbestos inspections, Underground Storage Tank (UST) closure activities, and wastewater sampling. As a Certified Hazardous Materials Manager (CHMM), Ben brings extensive expertise in managing hazardous materials and ensuring environmental compliance. His responsibilities include developing and implementing safety protocols, conducting risk assessments, and overseeing the proper handling, storage, and disposal of hazardous substances. With a strong focus on regulatory compliance, Ben works to ensure adherence to federal, state, and local environmental regulations, minimizing risks to personnel and the environment. His knowledge spans various industries, including construction, manufacturing, and waste management, where he has successfully managed complex projects involving hazardous materials.

Project Experience

Education

De La Salle Middle School [St. Louis, MO]
SCI Engineering, Inc. (SCI) provided environmental consulting services for the construction of the De La Salle Middle School in St. Louis, Missouri. SCI performed a Phase One ESA, a limited Phase Two ESA, Water Sampling from water fountains and sinks, and a Lead Based Paint survey on the site.

Althoff Catholic [Belleville, IL]
Performed a Transaction Screen Process (TSP0) of a 26 1/2 acre tract of the Althoff school property. SCI performed site reconnaissance, above and underground storage tank survey as well as a polychlorinated biphenyl survey. Results of the survey concluded that no further investigation was warranted for the site.

LaGrange School [Lagrange, MO]
Performed a phase one environmental site assessment on the LaGrange School property. Phase one activities consisted of historical and public records research, historical review, interviews and a reconnaissance survey. Based on the activities, SCI identified no evidence of REC's in connection with the site.

Residential

Magnolia Homes/Cedar Terrace [Galveston, TX]
Conducted monitoring well installation and sampling as well as oversight activities associated with urban redevelopment on Galveston Island.

Commercial/Retail

Menards Richmond Heights [Richmond Heights, MO]
Conducted a Phase One ESA on a site which included various commercial properties, a highway department facility, and numerous residences. Also completed asbestos inspections of the structures. Made recommendations for Phase Two investigations relating to various environmental concerns noted on the site.

QuikTrip 06-0651 [St. Louis, MO]

SCI ENGINEERING, INC.

Benjamin K. Butterfield, CHMM
Senior Scientist
(636) 757-1044
bbutterfield@sciengineering.com

SCI performed a Phase One and Phase Two ESA, Asbestos and Universal Waste/Hazardous Materials Surveys at the proposed location of the QuikTrip No. 06-0651 in St. Louis, Missouri. The site was approximately 3.25 acres and was operating as Holy Trinity Lutheran Church. Following the asbestos survey, SCI performed asbestos abatement activities, including all permitting, and air monitoring and oversight activities. A close out report documenting the proper abatement was submitted at project completion.

Urban Redevelopment

Poindexter Place Redevelopment Project (Phase 2A, 2B, 3)

[Columbus, OH]
SCI performed environmental services during the redevelopment of approximately seven blocks in Columbus, Ohio. These projects included HUD compliant Phase and Phase Two ESAs as well as delineation sampling to identify the area of impact. SCI developed project specifications and drawings for site preparation. SCI performed project oversight for the implementation of the remedial activities.

Crossroads Apartments [Kansas City, MO]
Conducted installation and sampling of several monitoring wells, geo-probe borings, and soil vapor wells on the site and surrounding right of ways for the purposes of delineation and further characterization of a volatile organic compound (VOC) plume associated with the past use of the site as a commercial drycleaner. Using the data collected from site investigations, developed recommendations for additional work as well as a groundwater gradient map.

City Foundry [St. Louis, MO]
SCI provided environmental consulting services for the redevelopment of the Century Electric/Federal Mogul foundry site along Forest Park Avenue in St. Louis, Missouri. When completed, this urban renewal project will provide a mixed-use property that offers a significant economic benefit to St. Louis' central corridor. The project will include the renovation of the existing foundry structure in a multi-use commercial structure, hosting a combination of food vendors, offices, and entertainment tenants. SCI performed Phase One and Phase Two Environmental Site Assessments, asbestos and heavy metal-based paint surveys, asbestos abatement third-party air monitoring and oversight, remediation and demolition oversight, and project management services. Additionally, the subject site was enrolled in the Missouri Department of Natural Resources (MDNR) Brownfields Voluntary Cleanup Program (BVCP). SCI acted as liaison and technical consultant on the project. The project was awarded brownfields tax credits from the Missouri Department of Economic Development. As such, SCI's oversight and project management activities were conducted in such a way that site operations met the requirements of the MDNR BVCP-approved Remedial Action Plan (RAP) for the site, allowing for maximum tax-credit reimbursement.

Healthcare

Ascension Medical Facilities [Illinois]
Provided Phase One Environmental Site Assessments (Phase One ESAs) for 31 medical facilities in Illinois and Indiana. Phase One Environmental Site Assessment Practice were used to conduct the Phase One ESAs. The reports were requested due to the acquisition of the properties as part of any overall company merger. RECs were identified at many of the facilities which included multiple current and historic USTs, an identified mercury spill, and historic uses of the site and surrounding areas by drycleaners and gasoline stations. Following the completion of the Phase One ESAs, Limited Phase Two Environmental Site Assessments (Phase Two ESAs) were conducted at five of the facilities.

Industrial and Manufacturing

Steelcote Development [St. Louis, MO]
SCI has performed several environmental investigations at the Steelcote Manufacturing facility, which was formerly utilized for the production of various paints, lacquers, and coatings. A Phase One ESA was also prepared for the south-adjacent property, which historically hosted the Columbia Oil Co. Both parcels comprise the proposed re-development. Past site operations included the use and storage of various petroleum products and hazardous materials. Above and underground

storage tanks (ASTs/USTs) were formerly present on the site. Environmental investigations include Phase One ESAs, a HUD Phase One ESA, a Phase Two ESA, Asbestos Survey, Lead-Based Paint Survey, and BVCP Liaison activities.

Morganford Properties [St. Louis, MO]
Conducted Phase One and Phase Two Environmental site assessments on a former manufacturing facility, as well as an asbestos survey of portions of the site set for demolition. Assisted in project planning and development of the demolition and redevelopment scope of work. Conducted oversight of impacted soil removal activities.

West Pine – C.B. 3920 [St. Louis, MO]
Conducted a Phase One ESA and subsequent Phase Two on former industrial warehouse/ manufacturing facility. Phase Two consisted of borings on interior portions of the on-site structure, as well as soil and groundwater sampling. Enrolled the site in the Missouri Department of Natural Resources (MDNR) Brownfields Voluntary Cleanup Program (BVCP) and managed the site from beginning to issuance of the certificate of completion.

Transportation

South 17th Street Right-of-Way [Belleville, IL]
Performed a lead-impacted soil remediation project for the City of Belleville in St. Clair County, Illinois. This project consisted of RCRA Corrective Action activities performed in conjunction with a roadway construction Project. Completed the following activities as part of this project: - Initial site investigation that identified RCRA hazardous levels of lead impact within the ballast material of a former rail-bed - Delineation assessment of the impacted materials including a waste assessment which identified the type of waste located in each area of the project (hazardous vs. non-special) - Prepared a soil management and remedial construction strategies for the project. - Coordinated with the IEPA to allow reuse of non-special waste materials under the IEPA's Area of Contamination Policy - Conducted on-site soil treatment with lead stabilization compounds to ensure that no RCRA hazardous material would be reused on the subject site - Prepared Health & Safety plans and conducted H&S monitoring during construction activities This project has involved extensive communication and cooperation with the IEPA, local municipalities, contractors, highway authorities and roadway design engineers.

Government-Federal

National Geospatial Intelligence Agency Site [St. Louis, MO]
As project manager, conducted a Phase One and a Phase Two Environmental Site Assessment on a large site in North St. Louis City. Phase One activities consisted of review of historical documentation, interviews with owners/occupants, regulatory database review, and a site visit. Phase Two activities included the advancement of sixty-seven geo-probe borings and 13,300 linear feet of trenching. A ground-penetrating radar survey was also conducted to screen for potential underground storage tanks. The findings of these assessment activities were utilized to develop the remediation strategy for the project.

EXHIBIT T: PHASE I ENVIRONMENTAL SITE ASSESSMENT

Horst, Ethan

From:	Horst, Ethan
Sent:	Thursday, July 17, 2025 1:57 PM
To:	mhedges@wfrd.org; kevans@wfrd.org
Cc:	Click, Andrew; cw@ecasolar.com; ha@ecasolar.com; bd@ecasolar.com
Subject:	Woodstock Community Energy Initiative, LLC Fire Department Coordination
Attachments:	Woodstock Community Energy Initiative LLC Zoning Site Plan.pdf

Good afternoon,

I am reaching out on behalf of the Woodstock Community Energy Initiative, LLC solar project. We are currently working through the zoning process for McHenry County, and this project appears to fall within your jurisdiction. As a part of our due diligence, we would like to confirm whether your department has any specific requirements that our project must comply with, particularly as they pertain to system layout, access, emergency shutoff, or any other considerations.

To help provide context on the scope and location of the project, we've included a PDF of the zoning site plan. Please feel free to review it and let us know if you have any questions or feedback.

Thank you in advance for your time and assistance.

Ethan Horst, EI
Kimley-Horn | 10 Lea Avenue, Suite 400, Nashville, TN 37210
Direct: 615.806.6040
Connect with us: Twitter | LinkedIn | Facebook | Instagram | Kimley-Horn.com

Celebrating 18 years as one of FORTUNE's 100 Best Companies to Work For

Horst, Ethan

From:	Matt Hedges <mhedges@wfrd.org>
Sent:	Tuesday, July 22, 2025 1:37 PM
To:	Horst, Ethan; Kalene Evans
Cc:	Click, Andrew; cw@ecasolar.com; ha@ecasolar.com; bd@ecasolar.com
Subject:	Re: EXTERNAL - Woodstock Community Energy Initiative, LLC Fire Department Coordination
Attachments:	Solar Review.docx; WFRD Aerial Turn Radius.pdf

Some people who received this message don't often get email from mhedges@wfrd.org. Learn why this is important

Good afternoon,

Thank you for reaching out! I've attached the plan review letter that I'd be using to verify compliance with our fire code as well as the turn radii for our largest apparatus for the turn radius verification.

Take care,
Matt

Matt Hedges | Deputy Chief
Woodstock Fire/Rescue District

From: Horst, Ethan <Ethan.Horst@kimley-horn.com>
Sent: Thursday, July 17, 2025 1:56:32 PM
To: Matt Hedges; Kalene Evans
Cc: Click, Andrew; cw@ecasolar.com; ha@ecasolar.com; bd@ecasolar.com
Subject: EXTERNAL - Woodstock Community Energy Initiative, LLC Fire Department Coordination

Good afternoon,

I am reaching out on behalf of the Woodstock Community Energy Initiative, LLC solar project. We are currently working through the zoning process for McHenry County, and this project appears to fall within your jurisdiction. As a part of our due diligence, we would like to confirm whether your department has any specific requirements that our project must comply with, particularly as they pertain to system layout, access, emergency shutoff, or any other considerations.

To help provide context on the scope and location of the project, we've included a PDF of the zoning site plan. Please feel free to review it and let us know if you have any questions or feedback.

Thank you in advance for your time and assistance.

Ethan Horst, EI

Kimley-Horn | 10 Lea Avenue, Suite 400, Nashville, TN 37210
Direct: 615.806.6040
Connect with us: Twitter | LinkedIn | Facebook | Instagram | Kimley-Horn.com

Celebrating 18 years as one of FORTUNE's 100 Best Companies to Work For

Woodstock Fire/Rescue District
435 E. Judd St.
Woodstock, IL 60098
(815) 338-2621

Date

Title
Firm
Address
City, State Zip
VIA Email ---

Salutation,

I am in receipt of your plans for *** to be located in ***, Illinois on PIN ***; **physical location**. The plans indicate a *** MW Ground-mounted Solar Generating Facility. The plans were reviewed for compliance with the 2021 International Building and Fire Codes w/ amendments as adopted by the Woodstock Fire/ Rescue District. I have the following comments:

1. An approved emergency response plan shall be submitted to the district. *2021 IFC 401.2*
2. Premise identification shall be visible from the roadway. *2021 IFC 505.1*
3. Access road width needs to be 20' in width. *2021 IFC 503.2.1*
4. Verify both access road and turnaround meet the design criteria of the fire code and apparatus turn radii as provided. *2021 IFC Appendix D*
5. Entry gate is minimum 20' in width. *2021 IFC D103.5*
6. Verify gate locking mechanism and gate operation (manual vs. electrical). **Note: a lockbox for physical keys is available for purchase directly from WFRD. If you will be utilizing an emergency access key to activate a mechanical gate, contact WFRD for Knox information. ** *2021 IFC 503.6, 506.1.1, D103.5*
7. Vegetation control plan provides for 10 feet of clear, brush-free area around perimeter. *2021 IFC 1205.5.1*
8. Battery energy storage system construction documents provided. *2021 IFC 1207.1.3*

Electronic plans for resubmittal are acceptable. Should you have any questions or concerns, please feel free to contact me at prevention@wfrd.org.

Sincerely,

Matt Hedges | Deputy Chief
Director of Fire Prevention
Woodstock Fire Rescue District

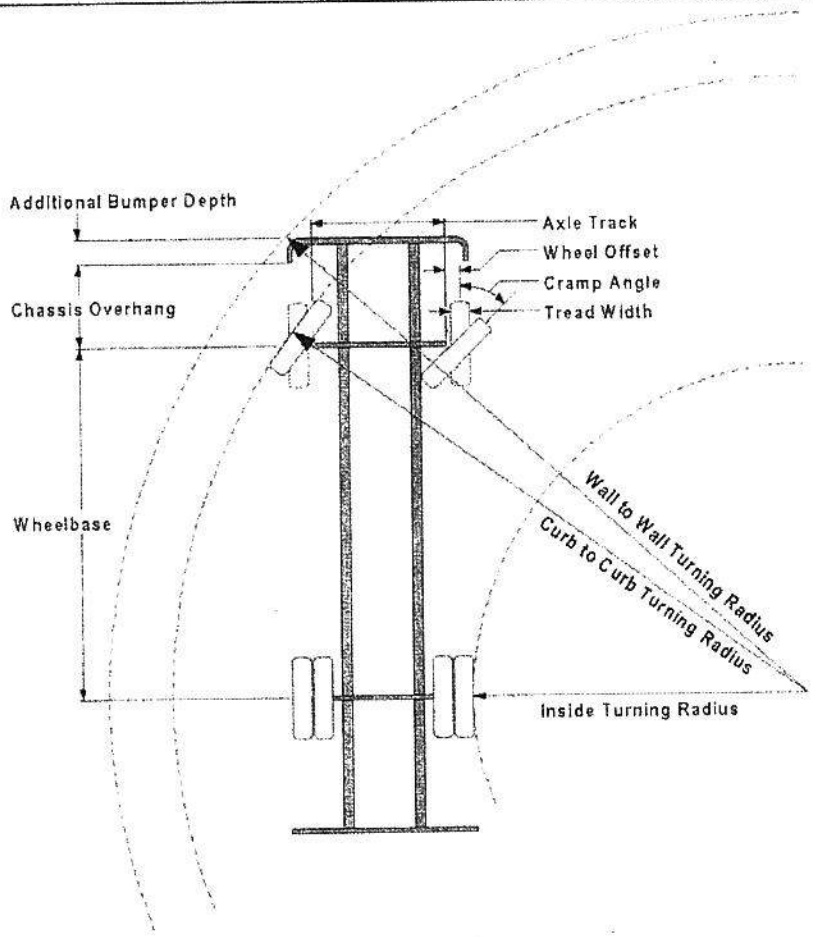
Cc: Planning and Zoning

Turning Performance Analysis

8/1/2013

Bid Number: NWMC - Woodstock F.P.D., Woodstock, IL.
Department: 1634

Chassis: Arrow-XT Chassis, Aerials/Tankers, Tandem, 48K
Body: Aerial, HD Ladder 105', Alum Body



Parameters:

Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	16.60 in.
Chassis Overhang:	68.99 in.
Additional Bumper Depth:	22.00 in.
Front Overhang:	90.99 in.
Wheelbase:	245.50 in.

Calculated Turning Radii:

Inside Turn:	19 ft. 5 in.
Curb to Curb:	35 ft. 3 in.
Wall to Wall:	39 ft. 11 in.

Comments:

Woodstock, IL. 105' PAL job 22251

Components	PRIDE #	Description
Wheels, Front	0019611	Wheels, Frt, Alum, Alcoa, 22.50" x 12.25" (425/ & 385/)
Axle, Front, Custom	0018453	Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, DLX/Enf/Qtm/AXT
Bumpers	0070138	Bumper, 26" Extd-Painted/Reinforced-All Chassis "Chicago design"
Tires, Front	0078244	Tires, Michelin, 425/65R22.50 20 ply XZY 3 tread
Aerial Devices	0120994	Aerial, 105' HDL, 750# Tip Load w/Waterway

Notes:

Actual Inside Cramp Angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for a 9.00 inch curb.

Turning Performance Analysis

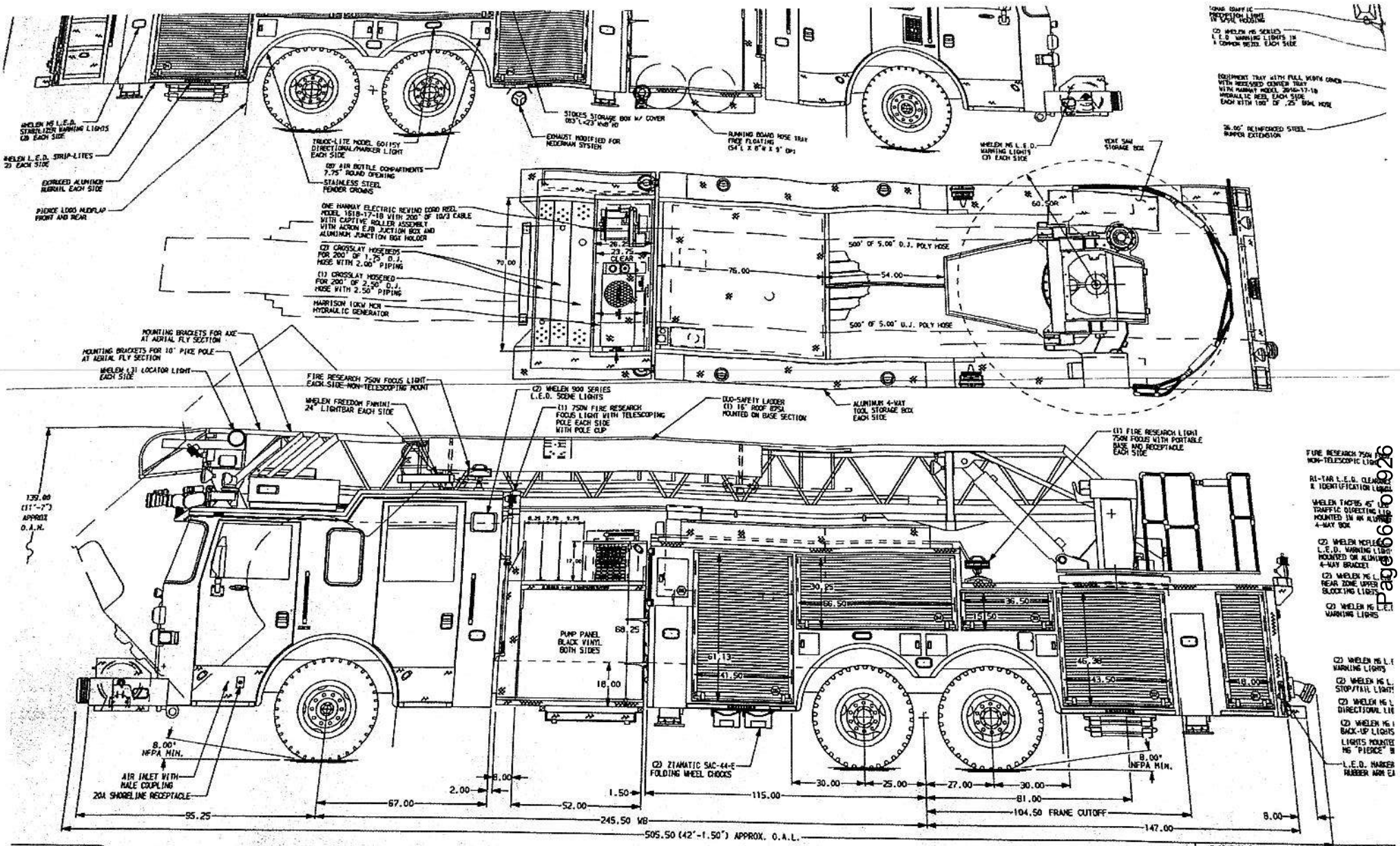
8/1/2013

Bid Number: NWMC - Woodstock F.P.D., Woodstock, IL.
Department: 1634

Chassis: Arrow-XT Chassis, Aerials/Tankers, Tandem, 48K
Body: Aerial, HD Ladder 105', Alum Body

Definitions:

Inside Cramp Angle	Maximum turning angle of the front inside tire.
Axle Track	King-pin to king-pin distance of the front axle.
Wheel Offset	Offset from the center-line of the wheel to the king-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance from the center-line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Depth	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicle's front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle inside of which the vehicle's tires can turn. This measurement assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle inside of which the entire vehicle can turn. This measurement takes into account any front overhang due to the chassis, bumper extensions and/or aerial devices.



CUSTOMER APPROVAL

APPROVED BY:

Page 66 of 226

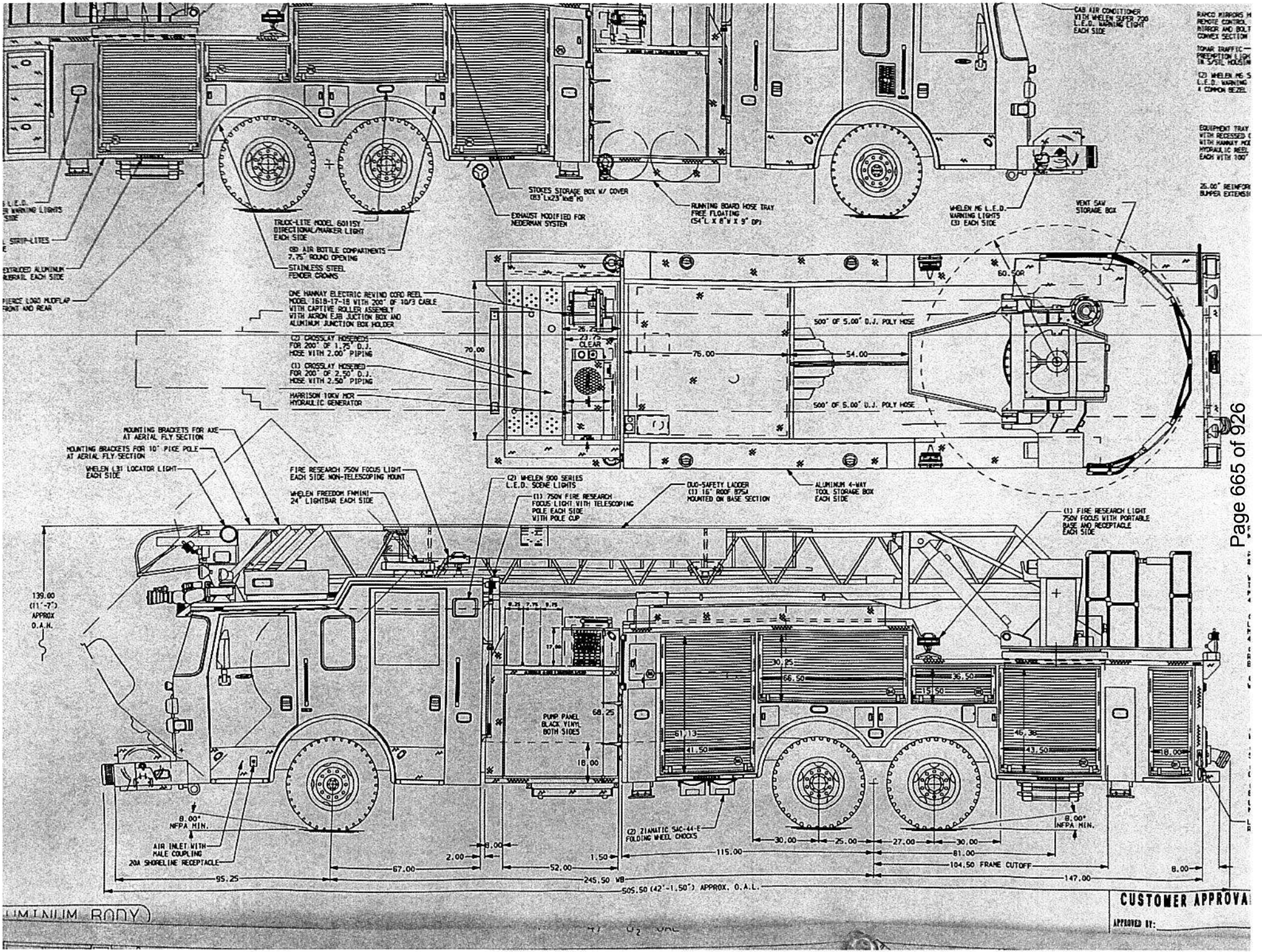

CAB AIR CONDITIONER WITH WHELEN SUPER 200 L.E.D. WARNING LIGHT EACH SIDE
STOKES STORAGE BOX W/ COVER (83"Lx23"Wx8"H)
EXHAUST MODIFIED FOR NEDERMAN SYSTEM
RUNNING BOARD HOSE TRAY FREE FLOATING (54"L X 8"W X 9" DP)
WHELEN M6 L.E.D. WARNING LIGHTS (3) EACH SIDE
VENT SAW STORAGE BOX
TRUCK-LITE MODEL 60115Y DIRECTIONAL/MARKER LIGHT EACH SIDE
(8) AIR BOTTLE COMPARTMENTS 7.75" ROUND OPENING
STAINLESS STEEL FENDER GRAINS
ONE HANNAY ELECTRIC REWIND CORD REEL MODEL 1618-17-18 WITH 200' OF 10/3 CABLE WITH CAPTIVE ROLLER ASSEMBLY WITH AKRON E38 JUNCTION BOX AND ALUMINUM JUNCTION BOX HOLDER
(2) CROSSLAY HOSEBEDS FOR 200' OF 1.75" D.J. HOSE WITH 2.00" PIPING
(1) CROSSLAY HOSEBED FOR 200' OF 2.50" D.J. HOSE WITH 2.50" PIPING
HARRISON 10KW MCR HYDRAULIC GENERATOR
500' OF 5.00" D.J. POLY HOSE
500' OF 5.00" D.J. POLY HOSE
MOUNTING BRACKETS FOR AXE AT AERIAL FLY SECTION
MOUNTING BRACKETS FOR 10' PIKE POLE AT AERIAL FLY SECTION
WHELEN L31 LOCATOR LIGHT EACH SIDE
FIRE RESEARCH 750W FOCUS LIGHT EACH SIDE NON-TELESCOPING MOUNT
WHELEN FREEDOM FM[N] 24" LIGHTBAR EACH SIDE
(2) WHELEN 900 SERIES L.E.D. SCENE LIGHTS
(1) 750W FIRE RESEARCH FOCUS LIGHT WITH TELESCOPING POLE EACH SIDE WITH POLE CUP
DUO-SAFETY LADDER (1) 16" ROOF 875A MOUNTED ON BASE SECTION
ALUMINUM 4-WAY TOOL STORAGE BOX EACH SIDE
(1) FIRE RESEARCH LIGHT 750W FOCUS WITH PORTABLE BASE AND RECEPTACLE EACH SIDE
139.00 (11'-7") APPROX O.A.H.
PUMP PANEL BLACK VINYL BOTH SIDES
8.00" NFPA MIN.
AIR INLET WITH MALE COUPLING
20A SHORELINE RECEPTACLE
(2) ZIAMATIC SAC-44-E FOLDING WHEEL CHOCKS
8.00" NFPA MIN.
95.25
67.00
2.00
8.00
52.00
1.50
245.50 WB
115.00
30.00
25.00
27.00
30.00
81.00
104.50 FRAME CUTOFF
8.00
147.00
505.50 (42'-1.50") APPROX. O.A.L.
CUSTOMER APPROVAL
APPROVED BY:

EXHIBIT V: PROPERTY VALUATION STUDIES

CohnReznick

www.cohnreznick.com

REAL ESTATE ADJACENT PROPERTY VALUE IMPACT REPORT:

Academic and Peer Authored Property Value Impact Studies, Research and Analysis of Existing Solar Facilities, and Market Participant and Assessor Interviews

Prepared For:

Colin Walker
Project Development Manager
ECA Solar
203 Crescent Street #106
Waltham, MA 02453

Submitted By:

CohnReznick LLP
Valuation Advisory Services
1 S. Wacker Drive, Suite 3550
Chicago, Illinois 60606
(312) 508-5900

Andrew R. Lines, MAI, CRE
Erin C. Bowen, MAI

July 12, 2024

LETTER OF TRANSMITTAL

July 12, 2024

Colin Walker
Project Development Manager
ECA Solar
203 Crescent Street #106
Waltham, MA 02453

SUBJECT: Property Value Impact Report
An Analysis of Existing Solar Farms

To Whom it May Concern:

CohnReznick is pleased to submit the accompanying property values impact report for proposed solar energy uses in Illinois. Per the client's request, CohnReznick researched property transactions adjacent to existing solar farms, researched and analyzed articles and other published studies, and interviewed real estate professionals and Township/County Assessors active in the market where solar farms are located, to gain an understanding of actual market transactions in the presence of solar energy uses.

The purpose of this consulting assignment is to determine whether proximity to a renewable energy use (solar farm) has an impact adjacent property values. The intended use of our opinions and conclusions is to assist the client in addressing local concerns and to provide information that local bodies are required to consider in their evaluation of solar project use applications. We have not been asked to value any specific property, and we have not done so.

The client and intended user for the assignment is ECA Solar. Additional intended users of our findings include Monee Community Energy Initiative LLC and the client's legal and site development professionals. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

This consulting assignment is intended to conform to the Uniform Standards of Professional Appraisal Practice (USPAP), the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, as well as applicable state appraisal regulations.

Based on the analysis in the accompanying report, and subject to the definitions, assumptions, and limiting conditions expressed in the report, our findings are:

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

FINDINGS

I. Academic Studies *(pages 19-23):* CohnReznick reviewed and analyzed published academic studies that specifically analyzed the impact of solar facilities on nearby property values. These studies include multiple regression analyses of hundreds and thousands of sales transactions, and opinion surveys, for both residential homes and farmland properties in rural communities, the majority of the data used in various studies indicates that there is no consistent and measurable impact to surrounding property values. We note that some of these studies do show a very small impact to certain homes, in certain locations, at certain distances, but these conclusions are not necessarily indicative of future projects in other locations.

Peer Authored Studies: CohnReznick also reviewed studies prepared by other real estate valuation experts that specifically analyzed the impact of solar facilities on nearby property values. These studies found little to no measurable or consistent difference in value between the Test Area Sales and the Control Area Sales attributed to the proximity to existing solar farms and noted that solar energy uses are generally considered a compatible use.

II. CohnReznick Studies *(pages 24-101)*: Further, CohnReznick has performed studies in 21 states, of both residential and agricultural properties, in which we have determined that the existing solar facilities have not caused any consistent and measurable negative impact on property values.

For this Project, we have included 10 of these studies which are most similar to the subject in terms of general location and size, summarized as follows:

CohnReznick - Existing Solar Farms Studied

Solar Farm #	Solar Farm	County	State	Power Output (MW AC)	Site Area (Acres)
1	2662 Freeport Solar CSG	Stephenson	IL	2.00	18
2	Grand Ridge Solar	LaSalle	IL	20.00	158
3	Spring Mill Solar	Lawrence	IN	1.10	9
4	Jefferson County Solar	Jefferson	CO	1.20	13.63
5	DTE Lapeer	LaPeer	MI	48.28	±365
6	Dominion Indy Solar III	Marion	IN	8.60	129
7	Sunfish Farm	Wake	NC	5.00	50
8	Portage Solar	Porter	IN	2.00	56
9	IMPA Frankton Solar	Madison	IN	1.40	13
10	Valparaiso Solar	Porter	IN	1.00	28

It is noted that proximity to the solar farms has not deterred sales of nearby agricultural land and residential single-family homes, nor has it deterred the development of new single-family homes on adjacent land.

This report also includes four “Before and After” analyses, in which sales that occurred prior to the announcement and construction of the solar farm project were compared with sales that occurred

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client’s legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

after completion of the solar farm project, for both adjoining and non-adjoining properties. No measurable impact on property values was demonstrated.

III. Market Participant Commentary *(pages 102-104)*: Our conclusions also consider interviews with over 75 County and Township Assessors, who have at least one solar farm in their jurisdiction, and in which they have determined that solar farms have not negatively affected adjacent property values.

With regards to the Project, we specifically interviewed in Illinois:

- In Otter Creek Township, in LaSalle County, Illinois, we spoke with Viki Crouch, the Township Assessor, who she said that *there has been no impact on property values due to their proximity to the **Grand Ridge Solar Farm***.
- We spoke with Ken Crowley, Rockford Township Assessor in Winnebago County, Illinois, who stated that he has seen *no impact on property values in his township as an effect of proximity to the **Rockford Solar Farm***.
- We spoke with James Weisiger, the Champaign Township Assessor in Champaign County, where the **University of Illinois Solar Farm** is located, and he noted *there appears to have been no impact on property values as a result of proximity to the solar farm*.
- Cindi Lotz of Fayette County, Illinois did indicate that the **Dressor Plains Solar** project *has not had any impact whatsoever on adjacent property values.*

To give us additional insight as to how the market evaluates farmland and single-family homes with views of solar farms, we interviewed numerous real estate brokers and other market participants who were party to actual sales of property adjacent to solar; these professionals also confirmed that solar farms did not diminish property values or marketability in the areas they conducted their business.

IV. Solar Farm Factors on Harmony of Use *(pages 105-113)*: In the course of our research and studies, we have recorded information regarding the compatibility of these existing solar facilities and their adjoining uses, including the continuing development of land adjoining these facilities.

CONCLUSION

Considering all of the preceding, the data reviewed does not indicate a negative impact on adjacent property based on proximity to a solar farm.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Very truly yours,

CohnReznick LLP

Andrew R. Lines, MAI, CRE
Principal
Certified General Real Estate Appraiser
Illinois License No. 553.001841
Expires 9/30/2025
Pennsylvania License No. GA004632
Expires 6/30/2025
Indiana License No. CG41500037
Expires 6/30/2026

Erin C. Bowen, MAI
Director
Certified General Real Estate Appraiser
Arizona License No. 32052
Expires 12/31/2024
Oregon License No. C001551
Expires 6/30/2026
California License No. 3004919
Expires 11/13/2025

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

TABLE OF CONTENTS

LETTER OF TRANSMITTAL 2

FINDINGS 3
CONCLUSION 4

SCOPE OF WORK 7

CLIENT AND INTENDED USERS 7
INTENDED USE 7
PURPOSE 7
DEFINITION OF VALUE 7
EFFECTIVE DATE & DATE OF REPORT 8
PRIOR SERVICES 8
INSPECTION 8

OVERVIEW OF SOLAR DEVELOPMENT IN THE UNITED STATES 9

NATIONAL COMMUNITY SOLAR ENERGY PRODUCTION 11
ENERGY PRODUCTION IN ILLINOIS 13

APPRAISAL THEORY – ADAJCENT PROPERTY'S IMPACT ON VALUE 15

METHODOLOGY 16
SCOPE OF WORK 17

TECHNIQUE 1: REVIEW OF PUBLISHED STUDIES 19

ACADEMIC REPORTS 19
VALUATION EXPERT REPORTS 22
REAL ESTATE ASSESSOR SOLAR IMPACT REPORTS 22
CONCLUSION 23

TECHNIQUE 2: PAIRED SALE ANALYSIS SOLAR FARM 24

SOLAR FARM 1: 2662 FREEPORT SOLAR CSG, STEPHENSON COUNTY, IL 24
SOLAR FARM 2: GRAND RIDGE SOLAR FARM, LASALLE COUNTY, ILLINOIS 30
SOLAR FARM 3: STOCKTON DG CSG SOLAR FARM, JO DAVIESS COUNTY, IL 35
SOLAR FARM 4: SPRING MILL SOLAR, LAWRENCE COUNTY, IN 41
SOLAR FARM 5: JEFFERSON COUNTY COMMUNITY SOLAR GARDEN, JEFFERSON COUNTY, CO 51
SOLAR FARM 6: DOMINION INDY SOLAR III, MARION COUNTY, INDIANA 63
SOLAR FARM 7: O'BRIEN SOLAR FIELDS, DANE COUNTY, WI 75
SOLAR FARM 8: PORTAGE SOLAR FARM, PORTAGE, PORTER COUNTY, INDIANA 85
SOLAR FARM 9: IMPA FRANKTON SOLAR FARM, FRANKTON, INDIANA 91
SOLAR FARM 10: VALPARAISO SOLAR, VALPARAISO, PORTER COUNTY, INDIANA 97

TECHNIQUE 3: MARKET COMMENTARY 102

SOLAR FARM FACTORS ON HARMONY OF USE 105

SUMMARY OF ADJOINING USES 113

SUMMARY AND FINAL CONCLUSIONS 114

CERTIFICATION 117

ASSUMPTIONS AND LIMITING CONDITIONS 119

ADDENDUM A: APPRAISER QUALIFICATIONS 123

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SCOPE OF WORK

CLIENT AND INTENDED USERS

The client and intended user of this report is ECA Solar; other intended users may include Monee Community Energy Initiative LLC and the client's legal and site development professionals.

INTENDED USE

The intended use of our opinions and conclusions is to assist the client in addressing local concerns and to provide information that local bodies are required to consider in their evaluation of solar project use applications. We have not been asked to value any specific property, and we have not done so. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

PURPOSE

The purpose of this consulting assignment is to determine whether proximity to the proposed solar facility will result in an impact on adjacent property values.

DEFINITION OF VALUE

This report utilizes Market Value as the appropriate premise of value. Market value is defined as:

"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised, and acting in what they consider their own best interests;
3. A reasonable time is allowed for exposure in the open market.
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."[1]

[1] Code of Federal Regulations, Title 12, Chapter I, Part 34.42[h]

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

EFFECTIVE DATE & DATE OF REPORT

July 12, 2024 (Paired sale analyses contained within each study are periodically updated.

PRIOR SERVICES

USPAP requires appraisers to disclose to the client any services they have provided in connection with the subject property in the prior three years, including valuation, consulting, property management, brokerage, or any other services.

This report is a compilation of the existing solar farms which we have studied over the past year and is not evaluating a specific subject site. In this instance, there is no “subject property” to disclose.

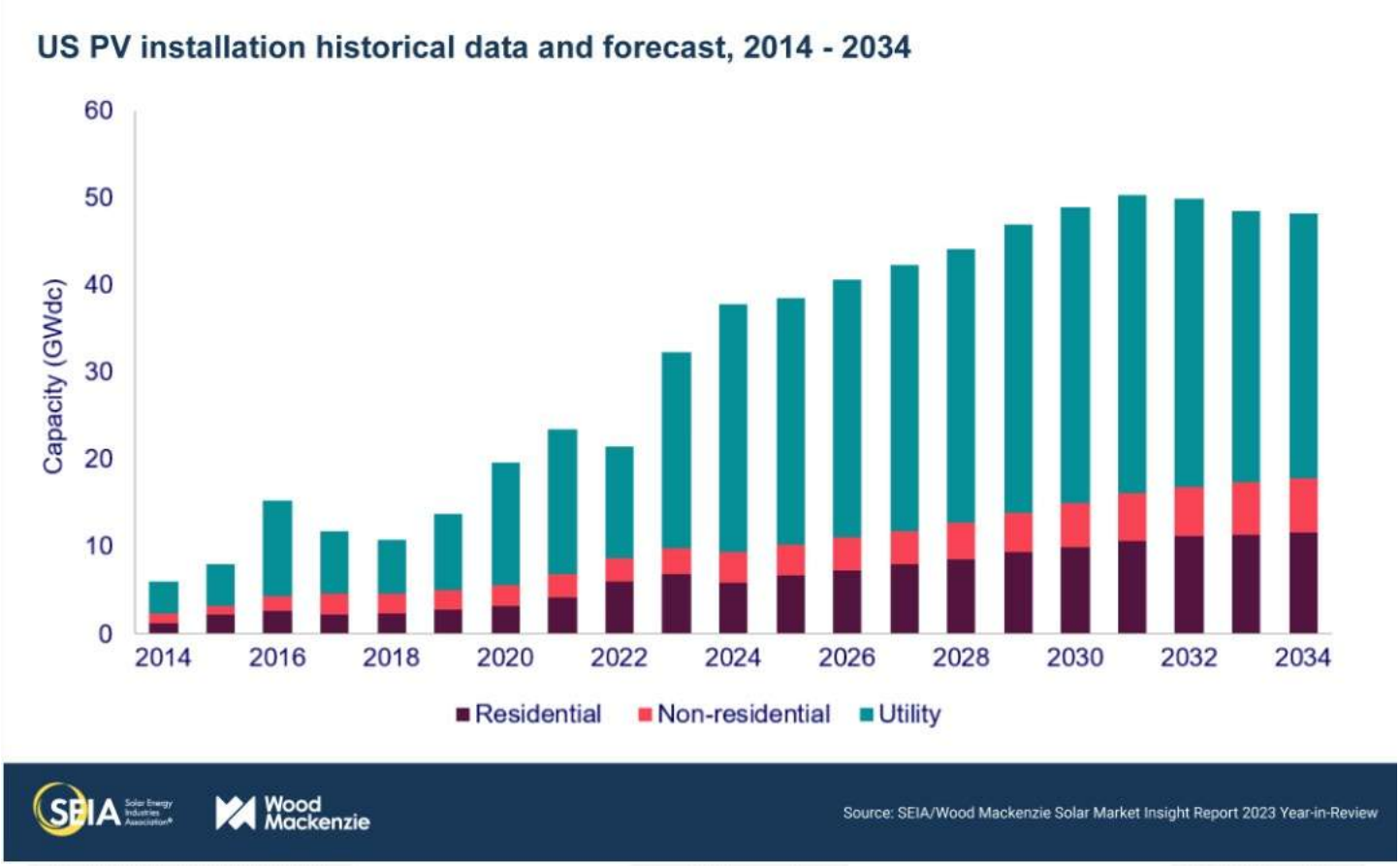
INSPECTION

Andrew R. Lines, MAI, CRE, and Erin C. Bowen, MAI have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client’s legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

OVERVIEW OF SOLAR DEVELOPMENT IN THE UNITED STATES

Solar development increased almost exponentially over the past ten years in the United States as technology and the economic incentives (Solar Investment Tax Credits or ITC) made the installation of solar farms economically reasonable. The cost to install solar panels has dropped nationally by 70 percent since 2010, which has been one cause that led to the increase in installations. A majority of these solar farm installations are attributed to larger-scale solar farm developments for utility purposes. The chart below portrays the historical increase on an annual basis of solar installations in the US as a whole, courtesy of research by Solar Energy Industries Association (SEIA) and Wood Mackenzie, and projects solar photovoltaic (PV) deployment for the next five years through 2028, with the largest percentage of installations attributed to utility-scale projects.



The U.S. installed 32.4 gigawatts (GWdc) of solar PV capacity in 2023, exceeding 30 GWdc of capacity for the first time. Solar has accounted for 53% of all new electricity-generating capacity added in the U.S. in 2023. Residential solar had another record year with 6.8 GWdc installed, a 13% increase from 2022. Utility-scale solar installations reached 22.5 GWdc, a 77% increase from 2022. Supply chain constraints are still present, but many delayed projects came online in 2023 as module shipments make their way to project sites.

On April 22, 2024 the U.S. Environmental Protection Agency ("EPA") announced $7 billion in grant awards through a grant competition, *Solar for All*, to deliver residential solar projects to over 900,000 households nationwide. The grant competition is funded through the Inflation Reduction Act and will provide funds to states,

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

territories, Tribal governments, municipalities, and non-profits across the country to develop long-lasting solar programs. The program is expected to generate over $350 million in annual savings on electric bills for households.

In response to the Inflation Reduction Act (IRA), there has been a considerable increase in newly announced module manufacturing facilities in the US. As of the end of Q1 2023, Wood Mackenzie is tracking 52 GW of new facilities scheduled to come online by 2026, at least 16 GW of which are under construction.

Over the course of our five-year outlook, the US solar industry is expected to nearly triple in size. Between 2023 and 2028, the industry will grow at an average annual rate of 14 percent, but growth is much stronger in the near-term before falling to lower-single digit growth in starting in 2026. Solar will be the leading technology of the clean energy transition, thanks to the long-term policy certainty provided by the IRA.

Wood Mackenzie expects the industry to remain supply-constrained through at least the second half of this year. Equipment importers are still contending with detainments as they seek to provide the documentation needed for compliance with the Uyghur Forced Labor Prevention Act (UFLPA).

Once supply chain relief arrives, the true impacts of the Inflation Reduction Act will manifest in rapid development. Beginning in 2024, annual installations of solar will consistently reach 30-40 GWdc.

On December 2nd, 2022, the Department of Commerce issued a preliminary affirmative ruling in the anticircumvention case initiated earlier this year. While the ruling was not issued in time to allow for incorporation into our forecasts, new tariffs present a downside risk to our outlook.

As of August 12, 2022, the Inflation Reduction Act was passed in the Senate and The House of Representatives, which includes long-term solar incentives and investment in domestic solar manufacturing. Included in the bill, a 10-year extension and expansion of the Investment Tax Credit (ITC) and Production Tax Credit (PTC) will provide tax credits for solar manufacturing and direct payment options for tax credits. While the uncertainty of the anti-circumvention investigation remains present, the passage of the Inflation Reduction Act gives the solar industry long-term market certainty.

Recent articles show that over the past decade, the solar industry has experienced unprecedented growth. Among the factors contributing to its growth were government incentives, significant capacity additions from existing and new entrants and continual innovation. Solar farms offer a wide array of economic and environmental benefits to surrounding properties. Unlike other energy sources, solar energy does not produce emissions that may cause negative health effects or environmental damage. Solar farms produce a lower electromagnetic field exposure than most household appliances, such as TV and refrigerators, and studies have confirmed there are no health issues related to solar farms.[2] One of the bigger factors contributing to growth is the retirements of the existing fossil fleet driven by age and economics. and the more recent increase in demand for electricity driven by data centers, AI, and EVs and economic growth.

[2] "Electromagnetic Field and Public Health." Media Centre (2013): 1-4. World Health Organization.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Solar farm construction in rural areas has also dramatically increased the tax value of the land on which they are built, which has provided a financial boost to some counties. CohnReznick has studied real estate tax increases due to the installation of solar, which can range up to 10-12 times the rate for farmland. A majority of tax revenue is funneled back into the local area, and as much as 50 percent of increased tax revenue can typically be allocated to the local school district. By converting farmland to a passive solar use for the duration of the system's life, the solar energy use does not burden school systems, utilities, traffic, nor infrastructure as it is a passive use that does not increase population as say a residential subdivision would.

Beyond creating jobs, solar farms are also benefiting the overall long-term agricultural health of the community. The unused land, and also all the land beneath the solar panels, will be left to rejuvenate naturally. In the long run this is a better use of land since the soil is allowed to recuperate instead of being ploughed and fertilized year after year. A solar farm can offer some financial security for the property owner over 20 to 25 years. Once solar panel racking systems are removed, the land can revert to its original use.[3]

NATIONAL COMMUNITY SOLAR ENERGY PRODUCTION

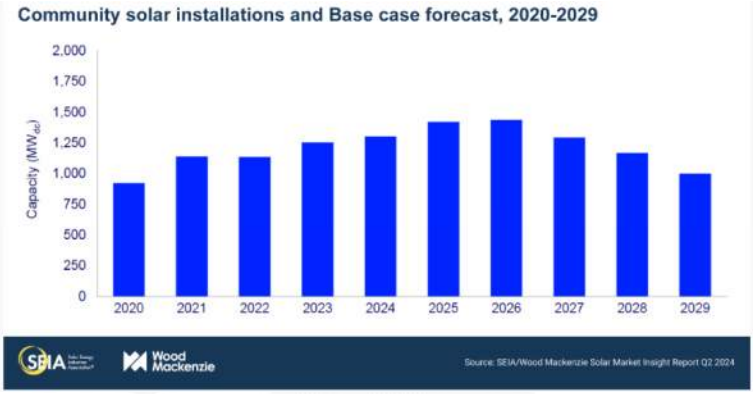
As of May 2024, the U.S. produces over 1.294 million megawatts (MW) of power each year, according to the U.S. Energy Information Administration (EIA) in ±26,230 unique power generation facilities. Of that power produced, approximately 7.8 percent is generated from solar facilities, or 101,241.5 MW AC, at 6,568 solar facilities across the country, reflecting an average facility size of 15.40 MW AC. For community scale solar production, the number of facilities that generate 5 MW or less of power accounts for 64.0 percent of all solar facilities, nationwide, although only 7.8 percent of solar power generated in the country comes from community scale facilities, overall, totaling 7,897.6 MW. The community solar industry had a slow start to 2024 with 279 MW installed through Q1, an increase of one percent from Q1 2023 and a decrease of 32.0 percent from the previous quarter, according to SEIA data.

Community solar refers to local solar facilities shared by multiple community subscribers who receive credit on their electricity bills for their share of the power produced. There are 41 states, plus D.C., with at least one community solar project on-line, the next five years will see the U.S. community solar market is expected to remain positive with 5 percent average annual growth from 2024 to 2026 before contracting by 11 percent annually on average through 2029.

[3] NC State Extension. (May 2016). Landowner Solar Leasing: Contract Terms Explained. Retrieved from: https://content.ces.ncsu.edu/landowner-solar-leasing-contract-terms-explained

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Community solar installations increased 1 percent year-over-year as of first quarter 2024, and installations are down from the fourth quarter 2023. Due to uncertainty around the anti-circumvention investigation, supply chain issues, and long timelines for new community solar policies, community solar installations growth is expected to only slightly increase through 2024. The growth of community solar installations from 2020 to 2029 is presented in the following chart.



While early growth for community solar installations was led primarily by three key markets - New York, Minnesota, and Massachusetts - a growing list of states with community solar programs have helped diversify the market, creating large pipelines set to come to fruition over the next several years.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

ENERGY PRODUCTION IN ILLINOIS

As of the end of Q1 2024, Illinois has 2,948 MW of solar installed, ranking 14th in the US for the capacity of solar installed according to the Solar Energy Industries Association (SEIA). There have been significantly more utility investments in clean energy with continued growth on the horizon, with 7,948 MW of solar proposed to be installed over the next five years.

On January 27, 2023, Illinois Governor JB Pritzker signed a new law, Public Act 102-1123, which refines county governments' ability to regulate new commercial wind and solar energy facilities. Specifically, PA 102-1123 prohibits counties from banning or establishing moratoriums on wind and solar development. The law also establishes siting and zoning standards, which county ordinances may not be more stringent than, and standardizes procedures for counties' review and approval of wind and solar siting or special use permits.

Illinois is a growing solar market that has benefited from a strong renewable portfolio standard that requires Illinois generates 25% of their energy from renewable sources by 2025. The amount of solar capacity installed in Illinois is expected to grow by more than 269% over the next five years with a total of 7,948 MW planned over that time period. The largest new solar facility in Illinois will be a 1,200 MW AC utility scale installation projected to become operational in December 2027 in Lee County, that is being developed by Steward Creek Solar.

Illinois has several utility scale solar facilities in operation, one of which, the Grand Ridge Solar Farm that we have studied and included in our report. The remaining utility scale solar facilities include:

- The 9 MW Exelon Solar Chicago, completed in December 2009
- The 10 MW Northern Cardinal Solar Project, completed in February 2021
- The 9.9 MW AES Belleville Solar Project, completed in September 2021
- The 200 MW Prairie Wolf Solar, completed in November 2021
- The 149 MW Big River Solar, completed in August 2022
- The 99 MW Prairie State Solar Project, completed in July 2021
- The 99 MW Dressor Plains Solar projects, completed in September 2021

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

- The 70 MW Mulligan Solar Project, completed in July 2022
- The 20 MW DePue Holdings Solar Project, completed in February 2023
- The 100 MW High Point Solar, completed in November 2023
- The 30 MW Prairie Creek Solar, completed in November 2023
- The 165.3 MW River Ferry Solar 1 Project, completed in December 2023.

We spoke to the Supervisor of Assessments for each project to ask whether there have been any transactions or impacts on property values since the completion of the facility. Most Assessment Officers indicated that the project was so new that there was no data in which to study. Cindi Lotz of Fayette County, Illinois did indicate that the Dressor Plains Solar project "has not had any impact whatsoever" on adjacent property values. We have reviewed the areas surrounding each of these newly constructed facilities; as of the reporting date, there are not yet eligible transactions for us to develop an impact study on these projects for inclusion in our analysis.

Illinois has seen considerable growth in solar production since the first project became operational in 2009. Of the 148 existing solar projects in Illinois, 11 were completed between 2009 and 2019. A further 46 solar projects were completed in 2020 alone, followed by 64 in 2021, 13 in 2022, 13 in 2023 and one through May 2024. The solar projects completed in the last five years account for 94% of the total solar projects in the state and 62% since 2021. Nevertheless, we were able to study two existing solar projects in Illinois that had transactions after the completion of the solar project.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

APPRAISAL THEORY – ADAJCENT PROPERTY'S IMPACT ON VALUE

According to Randall Bell, PhD, MAI, author of text *Real Estate Damages,* published by the Appraisal Institute in 2016, understanding the market's perceptions on all factors that may have an influence on a property's desirability (and therefore its value) is essential in determining if a diminution or enhancement of value has occurred.[4] According to Dr. Bell:

> *"There is often a predisposition to believe that detrimental conditions automatically have a negative impact on property values. However, it is important to keep in mind that if a property's value is to be affected by a negative condition, whether internal or external to the property, that condition must be given enough weight in the decision-making process of buyers and sellers to have a material effect on pricing relative to all the other positive and negative attributes that influence the value of that particular property."*[5]

Market data and empirical research through the application of the three traditional approaches to value should be utilized to estimate the market value to determine if there is a material effect on pricing due, to the influence of a particular characteristic of or on a property.

A credible impact analysis is one that is logical, innate, testable and repeatable, prepared in conformity with approved valuation techniques. In order to produce credible assignment results, more than one valuation technique should be utilized for support for the primary method, or a check of reasonableness, such as utilization of more than one approach to value, conducting a literature review, or having discussions (testimony) with market participants.[6] CohnReznick implemented the scientific method[7] to determine if a detrimental condition of proximity to a solar farm exists, further described in the next section.

---

[4] Bell, Randall, PhD, MAI. *Real Estate Damages. Third ed.* Chicago, IL: Appraisal Institute, 2016. (Pages 1-2)
[5] Ibid, Page 314
[6] Ibid, Pages 7-8
[7] The scientific method is a process that involves observation, development of a theory, establishment of a hypothesis, and testing. The valuation process applies principles of the scientific method as a model, based upon economic principles (primarily substitution) as the hypothesis. The steps for the scientific method are outlined as follows:

1. Identify the problem.
2. Collect relevant data.
3. Propose a hypothesis.
4. Test the hypothesis.
5. Assess the validity of the hypothesis.

Bell, Randall, PhD, MAI. *Real Estate Damages. Third ed.* Chicago, IL: Appraisal Institute, 2016. (Pages 314-316)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

METHODOLOGY

The purpose of this report is to determine whether proximity to the solar facility resulted in any measurable and consistent impact on adjacent property values. To test this hypothesis, CohnReznick identified three relevant techniques to test if a detrimental condition exists.

(1) A review of published studies;
(2) Paired sale analysis of properties adjacent to existing solar generating facilities, which may include repeat sale analyses or "Before and After" analyses; and,
(3) Interviews with real estate professionals and local real estate assessors.

The paired sales analysis is an effective method of determining if there is a detrimental impact on surrounding properties.

> *"One of the most useful applications of the sales comparison approach is paired sale analysis. This type of analysis may compare the subject property or similarly impacted properties called* ***Test Areas*** *(at Points B, C, D, E, or F) with unimpaired properties called* ***Control Areas*** *(Point A). A comparison may also be made between the unimpaired value of the subject property before and after the discovery of a detrimental condition. If a legitimate detrimental condition exists, there will likely be a* ***measurable and consistent difference*** *between the two sets of market data; if not, there will likely be no significant difference between the two sets of data. This process involves the study of a group of sales with a detrimental condition, which are then compared to a group of otherwise similar sales without the detrimental condition."*[8]

As an approved method, paired sales analysis can be utilized to extract the effect of a single characteristic on value. By definition, paired data analysis is "a quantitative technique used to identify and measure adjustments to the sale prices or rents of comparable properties; to apply this technique, sales or rental data on nearly identical properties is analyzed to isolate a single characteristic's effect on value or rent."[9] The text further describes that this method is theoretically sound when an abundance of market data, or sale transactions, is available for analysis.

Where data is available, CohnReznick has also prepared "Before and After" analyses or a Repeat Sale Analysis,[10] to determine if a detrimental impact has occurred.

---

[8] Bell, Randall, PhD, MAI. *Real Estate Damages. Third ed.* Chicago, IL: Appraisal Institute, 2016. (Page 33)
[9] *The Appraisal of Real Estate 14th Edition.* Chicago, IL: Appraisal Institute, 2013.
[10] Another type of paired sales analysis involves studying the sale and subsequent resale of the same property. This method is used to determine the influence of time on market values or to determine the impact of a detrimental condition by comparing values before and after the discovery of the condition.
Bell, Randall, PhD, MAI. *Real Estate Damages. Third ed.* Chicago, IL: Appraisal Institute, 2016. (Page 35)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SCOPE OF WORK

The scope of work utilized to test the hypothesis stated on the prior page is as follows:

1. Review published studies, assess credibility, and validity of conclusions;
2. Prepare paired sale analyses for existing solar farms as follows:
    2.1. Identify existing solar farms comparable to the proposed project to analyze;
    2.2. Define Test Area Sales and Control Areas Sales;
    2.3. Collect market data (sale transactions) for both Test Area and Control Area Sales;
    2.4. Analyze and confirm sales, including omission of sales that are not reflective of market value;
    2.5. Prepare comparative analysis of Test Area and Control Area sales, adjusting for market conditions;
    2.6. Interpret calculations; and
3. Conduct interviews with real estate professionals and local real estate assessors who have evaluated real property adjacent to existing solar farms.

It should be noted that our impact report data and methodology have been previously reviewed by our peer in the field – Kirkland Appraisals, LLC – as well as by the Solar Energy Industries Association (SEIA).

The following bullet points summarize important elements to consider in our scope of work:

- Test Area Sales consists of sales that are adjacent to an existing solar facility. Ownership and sales history for each adjoining property to an existing solar farm through the effective date of this report is maintained within our workfile. Adjoining properties with no sales data or that sold prior to the announcement of the solar farm were excluded from further analysis.

- Control Area Sales are generally located in the same market area, although varies based on the general location of the existing solar farm under analysis. In rural areas, sales are identified first within the township, and expands radially outward through the county until a reliable set of data points is obtained.

- Control Area Sales are generally between 12 and 18 months before or after the date of the Test Area Sale(s), and are comparable in physical characteristics such as age, condition, style, and size.

- Sales of properties that sold in a non-arm's length transaction (such as a transaction between related parties, bank-owned transaction, or between adjacent owners) were excluded from analysis as these are not considered to be reflective of market value, as defined earlier in this report. The sales that remained after exclusions were considered for a paired sale analysis.

- The methodology employed in this report for paired sale analysis does not rely on multiple subjective adjustments that are typical in many appraisals and single-paired sales analyses. Rather, the

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

methodology remains objective, and the only adjustment required is for market conditions;[11] the analysis relies upon market conditions trends tracked by credible agencies such as the Federal Housing Finance Agency ("FHFA"), who maintains a House Price Index ("HPI")[12] for macro and micro regions in the United States. A market conditions adjustment is a variable that affects all properties similarly and can be adjusted for in an objective manner.

- To make direct comparisons, the sale price of the Control Area Sales was adjusted for market conditions to a common date. In this analysis, the common date is the date of the Test Area Sale(s). After adjustment, any measurable difference between the sale prices would be indicative of a possible price impact by the solar facility.

- If there is more than one Test Area Sale to evaluate, the sales are grouped if they exhibit similar transactional and physical characteristics; otherwise, they are evaluated separately with their own respective Control Area Sale groups.

[11] Adjusting for market conditions is necessary as described in The Appraisal of Real Estate 14th Edition as follows: "Comparable sales that occurred under market conditions different from those applicable to the subject on the effective date of appraisal require adjustment for any differences that affect their values. An adjustment for market conditions is made if general property values have increased or decreased since the transaction dates."

[12] The FHFA HPI is a weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or re-financings on the same properties. This information is obtained by reviewing repeat mortgage transactions on single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac since January 1975. The FHFA HPI serves as a timely, accurate indicator of house price trends at various geographic levels. Because of the breadth of the sample, it provides more information than is available in other house price indexes.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

TECHNIQUE 1: REVIEW OF PUBLISHED STUDIES

The following is a discussion of various studies that consider the impact of solar farms on surrounding property values. The studies range from quantitative analysis to survey-based formal research to less-formal analyses.

ACADEMIC REPORTS

There have been three academic reports that attempt to quantify the effect on property values due to proximity to solar.

i. The first report is a study completed by **The University of Texas at Austin**, published in May 2018.[13] The portion of the study focusing on property impact was an Opinion Survey of Assessors with no sales data or evidence included in the survey. The opinion survey was sent to 400 accessors nationwide and received only 37 responses. Of those 37 assessors, only 18 had assessed a home near a utility-scale solar installation, the remainder had not. Of the 18 assessors with experience in valuing homes near solar farms, 17 had not found any impact on home values near solar. Those are the actual facts in the study. A small number of those assessor respondents hypothetically surmised an impact, but none had evidence to support such statements.

   The paper admits that there is no actual sales data analyzed, and further denotes its own areas of weakness, including "This study did not differentiate between ground-mounted and rooftop installations." The author states on the last line of page 22: ***"Finally, to shift from perceived to actual property value impacts**, **future research can conduct analyses on home sales data to collect empirical evidence of actual property value impacts."***

   The paper concludes with a suggestion that a statistic hedonic regression model may better identify impacts. It should be noted that the type of statistical analysis that the author states is required to determine "*actual property value impacts*' was completed two years later by the following Academic Studies.

ii. The second report is a study prepared by a team at the **University of Rhode Island**, published in September 2020, "*Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island*."[14] The study utilized a hedonic pricing model, or multiple regression analysis, to quantify the effect of proximity on property values due to solar by studying existing solar installations in Massachusetts and Rhode Island. The study evaluated 208 solar facilities, 71,373 housing sales occurring within one-mile of the solar facilities (Test Group), and 343,921 sales between one-to-three miles (Control Group). Because it is a hedonic regression model, it allowed them to isolate specific

[13] Al-Hamoodah, Leila, et al. An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations. Policy Research Project (PRP), LBJ School of Public Affairs, The University of Texas at Austin, May 2018, emp.lbl.gov/sites/default/files/property-value_impacts_near_utility-scale_solar_installations.pdf.

[14] Gaur, V. and C. Lang. (2020). Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island. Submitted to University of Rhode Island Cooperative Extension on September 29, 2020. Accessed at https://web.uri.edu/coopext/valuing-sitingoptions-for-commercial-scale-solar-energy-in-rhode-island/.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

variables that could impact value, including isolating rural and non-rural locations. The study defines "**Rural**," as an area having a "population density of 850 people per square mile or fewer."

The study provides data which found no negative impact to residential homes near solar arrays in rural areas: "these results suggest that [the Test Area] in rural areas ***is effectively zero*** (a statistically insignificant 0.1%), and that the negative externalities of solar arrays are only occurring in non-rural areas."[15] Further, the study tested to determine if the size of the installation impacted values, and found no evidence of differential property values impacts by the solar installation's size.

Thus, not only are there no impacts to homes in similar areas as the proposed Project, but any differences in the size of a solar farm are similarly not demonstrating an impact.

iii. The third report is a published study prepared by Dr. Nino Abashidze, School of Economics, Georgia Institute of Technology, dated October 20, 2020, entitled "*Utility Scale Solar Farms and Agricultural Land Values*." Abashidze examined 451 solar farms in North Carolina. "Across many samples and specifications, we find ***no direct negative or positive spillover effect of a solar farm construction on nearby agricultural land values.*** Although there are no direct effects of solar farms on nearby agricultural land values, we do find evidence that suggests construction of a solar farm may create a small, positive, option-value for land owners that is capitalized into land prices. Specifically, after construction of a nearby solar farm, we find that agricultural land that is also located near transmission infrastructure may increase modestly in value."

iv. On March 1, 2023, an article was prepared by the Energy Analysis and Environmental Impacts Division, **Lawrence Berkeley National Lab**, Berkeley, CA ("BNL"), which measured 1.8 million residential transactions around solar facilities greater than 1 MW in the states of CA, CT, MA, MN, NC and NJ. We are still reviewing this article although it does note that for the overwhelmingly majority of the transactions (in the states of CA, CT and MA), no impact was measured near large-scale photo-voltaic facilities or LSPV's. The authors of the study similarly released a webinar discussing the study, as well as key limitations of the study, as follows:

- The dataset is centered on relatively small projects in relatively urban areas... Our results should not be applied to larger projects, e.g., those >18 MW, and, of course projects built far from homes.
- [The] study did not consider site design, setbacks or landscaping features...
- Across the full dataset (all 6 states) only larger projects (greater than 12 acres) are correlated with a loss in house prices within 0.5 miles (compared to 2-4 miles away); BUT this analysis only applies to relatively small projects (90% are less than 35 acres/8 MW), so "large" is relative to the median of 12 acres.
- Only 6 states are included; therefore, the results would not necessarily apply outside the sample area.

[15] The U of RI study's conclusion that there may be an impact to non-rural communities is surmised is that "land is abundant in rural areas, so the development of some land into solar does little to impact scarcity, whereas in non-rural areas it makes a noticeable impact.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Given these limitations, we do not believe the study is overwhelmingly conclusive, and, if any, only presents limited data showing a rather small impact in certain areas. The states showing no impact reflect 68.6% of all the transactions studied.

Our review of the study revealed key questions that we believe limit the applicability of the study as a whole:

1. The study does not show the data for the largest of the solar facilities mapped and whether those reveal transactions that are consistent with the study's results (i.e., solar facilities greater than 18 MW in all six states). We would hypothesize that the largest of the facilities would show the greatest amount of impact; this is not expressed (and so likely not true). Further, our own studies of the largest facilities in Minnesota (the 100 MW North Star Solar Farm) rebut the study's results.
2. There was no effort by the authors to interpret whether other adjacent property next to solar facilities might also impact local residential values. This could include large commercial buildings, office towers, industrial developments or highways. This might have swayed the results.
3. Data results are somewhat contrary to common reason – for example, their conclusions indicate a negative impact in rural areas, insignificant impact in urban areas, but overwhelmingly positive results for "urban cluster" areas. This diverges from the theory that density and impact correlate.
4. Data results using similar methodology in the URI study reveal contrary results: while the URI study found no impact in rural communities, the BNL study indicates some very small degree of impact, and while the BNL study showed no impact in suburban areas, the URI did show a rather small impact. The results, therefore, are mixed and do not indicate consistent and measurable evidence.
5. Whether the results of -1.5% is applicable in terms of its relative degree. This is a rather small percentage and most appraisers and valuation professionals would find it difficult to profess this is of a magnitude that would be recognized in the market.

The BNL study does represent the largest study to date on the topic of solar farms and property values. We find that the majority of the data indicates no impact. The authors themselves suggest additional focus as follows: "more research is needed to understand the heterogeneity that we observe with respect to larger, agricultural and rural LSPVs [in the MN, NJ and NC contexts]. Here, surveys, qualitative research, mixed-methods, and case study-based approaches may indicate how neighbors of LSPVS engage differently with their nearby solar installations based on its size, land use, or the urbanicity of their home." CohnReznick agrees with the BNL suggestion – and covers specifically this request in our own studies within Minnesota and North Carolina, as well as several other solar farms of various sizes in various locations.

v. In April 2024 **Lawrence Berkeley National Lab**, published a report titled Perceptions of Large-Scale Solar Project Neighbors: Results From a National Survey.[16] Authored by Joseph Rand, Ben Hoen, Karl Hoesch, Sarah Mills, Robi Nilson, Doug Bassette and Jack White, the report is a summation of a nearly

[16] Rand Joseph, et al. Perceptions of Large-Scale Solar Project Neighbors: Results From a National Survey, Energy Markets & Policy, Berkeley Lab, April 2024, Perceptions of Large-Scale Solar Project Neighbors: Results From a National Survey | Energy Markets & Policy (lbl.gov).

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

1,000 resident survey. An opinion survey was sent to residents living within three miles of large-scale solar (LSS), and 984 responses were collected. The survey revealed that "***among LSS neighbors, 'positive' attitudes outnumber 'negative' by nearly a 3 to 1 margin.*** Looking across the full set of respondents that were aware of their local LSS project, 43% reported a 'positive' or 'very positive' attitude toward it, 42% were 'neutral', and 15% reported a 'negative' or 'very negative' attitude. 42% report that they would support additional LSS in their community, compared to 18% that would oppose it." Additionally, the report noted that "Roughly 1/3 of residents living within 3 miles of LSS projects did not know their local project existed. Those living closest to projects and respondents around the largest projects in our sample (>100 MW) tended to be more familiar with them, but even some respondents living within ½ mile were unaware."

VALUATION EXPERT REPORTS

We have similarly considered property value impact studies prepared by other experts, which have also noted that the installation of utility-scale solar on a property has no measurable or consistent impact on adjoining property value. According to a report titled "Mapleton Solar Impact Study" from Kirkland Appraisals, LLC, conducted in Murfreesboro, North Carolina in September 2017, which studied 13 existing solar farms in the state, found that the solar farms had no impact on adjacent vacant residential, agricultural land, or residential homes. The paired sales data analysis in the report primarily consisted of low density residential and agricultural land uses and included one case where the solar farm adjoined to two dense subdivisions of homes.

Donald Fisher, ARA, who has served six years as Chair of the American Society of Farm Managers and Rural Appraisers, and has prepared several market studies examining the impact of solar on residential values was quoted in a press release dated February 15, 2021 stating, "Most of the locations were in either suburban or rural areas, and all of these studies found either a neutral impact or, ironically, a positive impact, where values on properties after the installation of solar farms went up higher than time trends."

REAL ESTATE ASSESSOR SOLAR IMPACT REPORTS

The Chisago County (Minnesota) Assessor's Office conducted their own study on property prices adjacent to and in the close vicinity of the North Star solar farm in Chisago County, Minnesota. At the November 2017 Chisago County Board meeting, John Keefe, the Chisago County Assessor, presented data from his study. He concluded that the North Star solar farm had, "no adverse impact" on property values. His study encompassed 15 parcels that sold and were adjacent or in the close vicinity to the solar farm between January 2016 and October 2017; the control group used for comparison comprised of over 700 sales within the county. Almost all of the [Test Area] properties sold were at a price above the assessed value. He further stated that, "It seems conclusive that valuation has not suffered."[17]

Furthermore, Grant County, Kentucky Property Value Administrator, Elliott Anderson, stated that Duke Energy built a solar farm near Crittenden, adjacent to existing homes on Claiborne Drive in December 2017. At the time of the interview, there have been nine arm's length homes sales on that street since the solar farm commenced

[17] Chisago County Press: County Board Real Estate Update Shows No "Solar Effects" (11/03/2017)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

operations. Each of those nine homes sold higher than its assessed value, and one over 32 percent higher. At the time, Anderson noted that several more lots were for sale by the developer and four more homes were currently under construction. Anderson said that *the solar farm had no impact either on adjoining home values or on marketability or desirability of those homes adjacent to the solar farm.*

CONCLUSION

These published studies and other valuation expert opinions, conclude that there is no impact to property adjacent to established solar farms. These conclusions have been confirmed by academic studies utilizing large sales databases and regression analysis investigating this uses' potential impact on property values. Further, the conclusion has been confirmed by county assessors who have also investigated this adjacent land use' potential impact on property values.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

TECHNIQUE 2: PAIRED SALE ANALYSIS SOLAR FARM

SOLAR FARM 1: 2662 FREEPORT SOLAR CSG, STEPHENSON COUNTY, IL

Coordinates: Latitude 42.33941447101255, Longitude -89.6394781667045

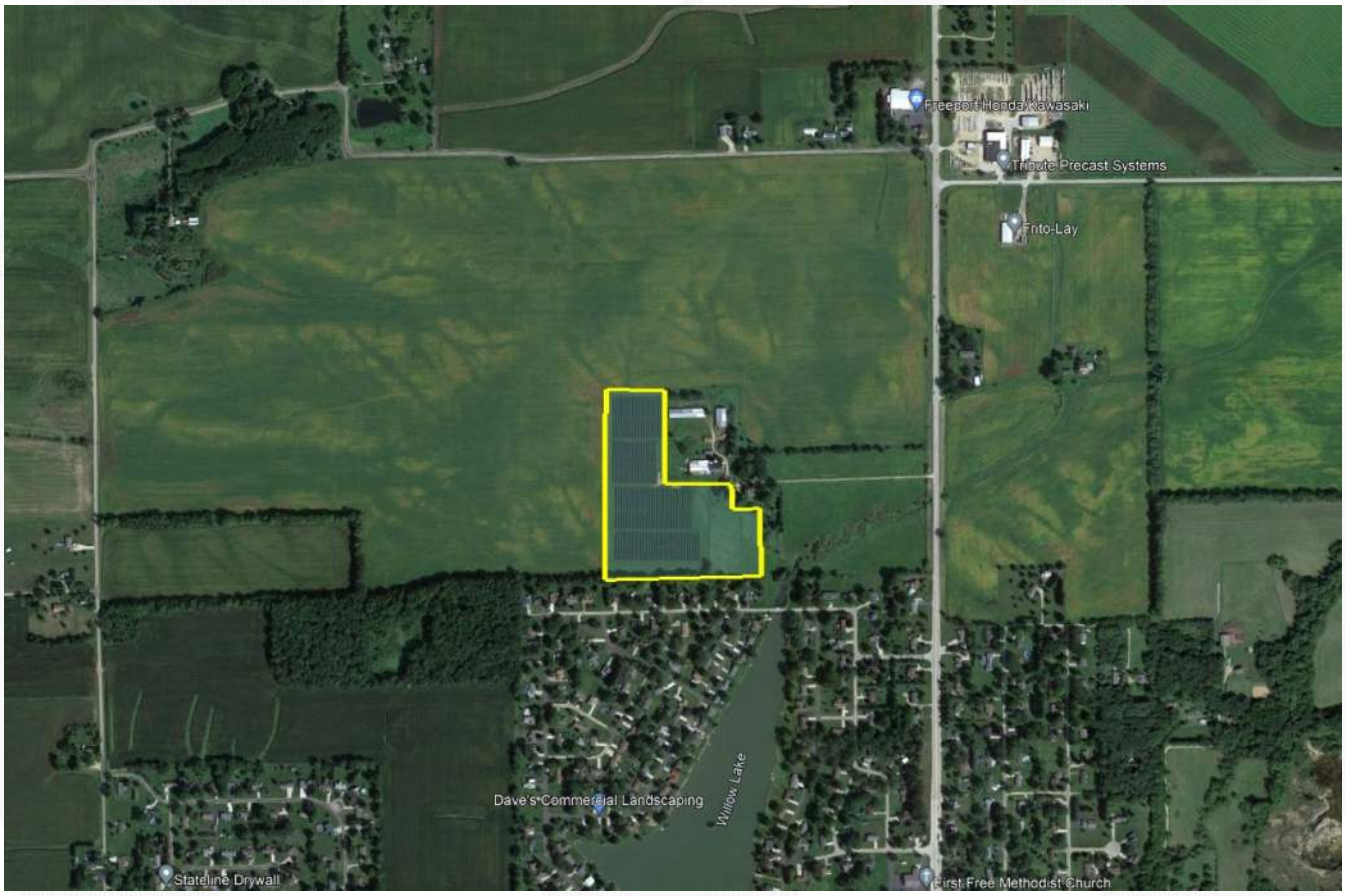
PIN: 08-00-13-800-001

Total Land Size: 17.84 acres

Date Project Announced: N/A

Date Project Completed: December 2020

Output: 2.0 MW AC



Approximate 2662 Freeport Solar CSG boundaries outlined in yellow, aerial imagery provided by Google Earth

2662 Freeport Solar CSG is located in Stephenson County, Illinois and is accessible via Illinois Route 26 N. The solar farm was developed by Borrego Solar Systems, Inc. and RECON Corporation and the improvements are owned by 2662 Freeport Solar I LLC. The solar farm went into operation in December 2020 with a total of 140,438

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

square feet of solar panels. The 17.84-acre solar farm was located on a larger 45-acre parcel that was replatted in January 2021. The underlying land of the solar farm sold in May 2022 for $200,000, with a 20-year ground lease for the solar panels. The remaining portion of the parcel – 27.16 acres – includes a single-family home, farm buildings, and farmland and has an easement for access to the solar site.

The Surrounding Area: The 2662 Freeport Solar CSG installation is located in Stephenson County, directly north of the City of Freeport. Stephenson County is located on the northern border of the state of Illinois, along the border with Wisconsin. The solar site is approximately 3 miles north of downtown Freeport and 100 miles northwest of the City of Chicago.

The 2662 Freeport Solar CSG project is one of 134 solar farms in Illinois and one of nine solar farms located within Stephenson County. The 2662 Freeport Solar CSG project is a similar size to all of the existing solar farms in Illinois with the exception of seven that are significantly larger and have output ranging from 10 to 200 MW. All of the solar farms in Stephenson County have capacity of 2.0 MW, similar to 2662 Freeport Solar CSG.

The Immediate Area: The solar farm is located in between W. Winneshiek Road to the north, Jay Street to the south, Blumenthal Road to the west, and Route 26 N to the east. The solar site is surrounded by farmland to the north and west, farmland and farmhouse buildings to the east, and single-family homes in a community surrounding Willow Lake to the south. The parcel lines of the single-family homes to the south are lined with mature trees. The single-family home located adjacent to the east of the solar site is surrounded by mature trees while the farm buildings have direct views of the solar site.

Real Estate Tax Info: In 2021 (payable 2022), the assessed value of the improvements was $145,333 and the owner paid $16,038 in real estate taxes. The 2021 assessed value of the underlying land was $2,404 and the participating the landowner paid $265 in real estate taxes. Prior assessment and tax information was unavailable given the split of the parcels, and the previous assessment and taxes included the larger 45-acre site and structures.

Adjoining Parcels: The following map displays the parcel in the solar farm site (outlined in red). Properties adjoining the solar parcels are numbered for subsequent analysis.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

2662 Freeport Solar CSG - Adjoining Properties

The surrounding area is primarily populated with agricultural uses to the north, east, and west, and a single-family home residential community to the south. Some of the agricultural parcels contain homesteads on the site and others are fully unimproved.

Adjoining Properties 4, 6, 8, and 9 have no sales data. Therefore, Adjoining Properties 4, 6, 8, and 9 are excluded from further analysis.

Recall, the solar farm under analysis began operations in December 2020. Adjoining Properties 1, 3, 5, 7, and 12 were sold in 2003, 2019, 2002, 2012, and 2008, respectively. These sales did not occur within a reasonable time period prior to /completion. Therefore, Adjoining Properties 1, 3, 5, 7, and 12 were excluded from further analysis.

Adjoining Property 11 sold in December 2021 and is comprised of 27 acres. Adjoining Property 11 consists of the remaining portion of the solar farm's parcel that was subdivided in 2020. Adjoining Property 11 includes a farmhouse, farm buildings, farmland, and an easement for access to the solar farm. We searched Stephenson County for sales of similar properties to Sale 3 with large areas of farmland and farm buildings and only found two comparables sales more than 15 acres. We excluded Adjoining Property 11 as a Test Area Sale given the easement and limited comparable Control Area Sales.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Therefore, we have only considered Adjoining Properties 2 and 10 for paired sales analysis (identified as Test Area Sales 1 and 2 going forward).

PAIRED SALES ANALYSIS

We considered only one type of paired sales anaylsis, which was comparing sales of properties not proximate to the solar farm (Control Area Sales) to the sales of adjoining properties after the completion of the solar farm project (Test Area Sales). Test Area Sales 1 and 2 are located in the single-family residential subdivision ajdacent to the south of the solar farm and have been utilized as a group of test sales.

We identified Control Area Sale data through the RealQuest database which aggregates real estate sales from public record. We verified these sales through county records and conversations with brokers and sellers. We excluded sales that were not arm's length, such as REO sales or bank-owned properties, or those between related parties.

It is important to note the these Control Area Sales are not adjoining to any solar farm, nor do they have a view of one from the property. Therefore, the announcement nor the completion of the solar farm use could not have impacted the sales price of these properties. Additionally, these Control Area Sales are all located within a one mile radius of the 2662 Freeport Solar CSG project.

Test Area Sale 1 sold in November 2020 for $140,000 after being on the market for 40 days. The property is a single-story 1,750 square foot home with a 2-car attached garage, located on a 0.5-acre lot. The improvements on this property are located approximately 230 feet to the nearest solar panel while the property line is approximately 100 feet to the nearest solar panel. Test Area Sale 2 sold in January 2021 for $150,000 after being on the market for 51 days. The property is a one- to two-story 2,009 square foot home with a 2-car attached garage and 2.5-stall detached garage, located on a 0.5-acre lot. The improvements on this property are located approximately 330 feet to the nearest solar panel while the property line is approximately 280 feet to the nearest solar panel.

The table on the following page outlines the characteristics of the Test Area Sales.

Test Area Sale 1

Test Area Sale 2

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

2662 Freeport Solar 1 CSG Test Area Sales										
Sale #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price/ SF	Sale Date
1	1424 Jay St. Freeport, IL 61032	$140,000	3	2.0 (1 full, 2 half)	1979	1,750	1-story SFH with 2-car attached garage	0.5	$80.00	Nov-20
2	1226 Jay St. Freeport, IL 61032	$150,000	3	2.5	1977	2,009	1-2 story SFH with 2-car attached garage and detached 2.5 stall garage	0.5	$74.66	Jan-21

We analyzed 14 Control Area Sales of single-family homes with similar construction and use that were not located in close proximity to the solar farm, that sold within 12 months from the median sale date of the Test Area Sales. The Control Area Sales are single-family homes with three to four bedrooms and 2 to 2.5 baths, consist of between 1,200 square feet and 2,300 square feet of gross living area, and built between 1957 and 1993. The Control Area Sales have a partial unfinished basement or finished basement, and are located on lots between 0.3 and 0.6 acres in size.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the 2662 Freeport Solar CSG project is presented below.

CohnReznick Paired Sales Anaysis 2662 Freeport Solar 1 CSG		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sales (2)	Yes: Adjoining solar farm	$77.33
Control Area Sales (14)	No: Not adjoining solar farm	$76.08
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**1.65%**

The marketing time (from list date to closing date) for Control Area Sales ranged from 16 to 87 days on market with a median of 61 days. The marketing time for to Test Area Sales ranged from 40 to 51 days, which is within the range of the Control Area Sales and below the median, ***and we note no substantial marketing time differential.***

The small differential between the Test Area Sale and the Control Area Sales is within the range of normal market variance, and therefore it does not appear that the 2662 Freeport Solar CSG installation impacted the sale price of the Test Area Sales.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

We contacted the selling broker of Test Area Sale 2, Julie Wenzel of RE/MAX Town Lake & Country, who indicated that proximity to the solar farm did not impact the sale of the property.

Additionally, we spoke with Cami Grossenbacher, Stephenson County Deputy Assessor, who stated that there has been *no impact on property values due to their proximity to the **2662 Freeport Solar CSG** project.*

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 2: GRAND RIDGE SOLAR FARM, LASALLE COUNTY, ILLINOIS

Coordinates: Latitude 41.143421, Longitude -88.758340

PINs: 34-22-100-000, 34-22-101-000

Total Land Size: 158 acres

Date Project Announced: December 31, 2010

Date Project Completed: July 2012

Output: 20 MW AC

This solar farm is located in the southeast quadrant of the intersection of E. 21st and N. 15th Roads, near Streator, in LaSalle County, Illinois. The solar farm was developed by Invenergy and is part of a renewable energy center known as Grand Ridge. The Energy Center includes the 20 MW AC solar facility, a 210 MW wind farm, and a 36 MW advanced-energy storage facility, all in one local vicinity. The solar site is located adjacent to the south and west of Invenergy's wind farm.

The solar facility consists of 20 individual 1-MW solar inverters and over 155,000 photovoltaic solar panels manufactured by General Electric.

The Surrounding Area: The Grand Ridge Solar Farm is situated just outside of the City of Streator, in Otter Creek Township, in LaSalle County, Illinois. The solar farm is located in a primarily rural part of Illinois, with the nearest interstate, Interstate-55, located approximately 14 miles southeast of the site.

The Immediate Area: Within a one-mile radius of the solar farm, surrounding uses mainly consist of agricultural land, with some single-family homes to the west. All of the adjacent land parcels to the solar farm are used for agricultural and/or residential purposes.

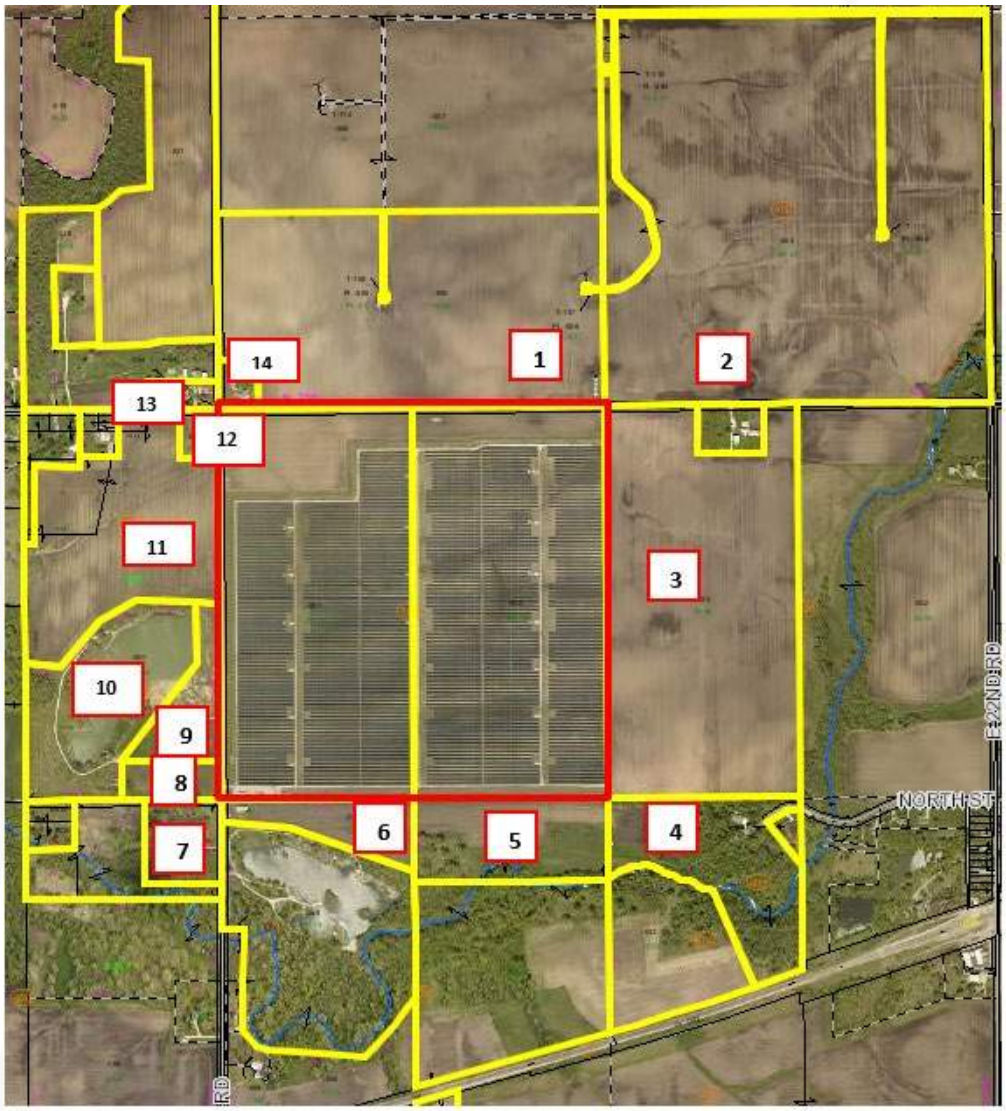
The solar site is surrounded by row crops to the north adjoining N. 15th Road. Row crops also adjoin the solar arrays to the east. Scrub shrubbery exists on the western border of the solar site, along E. 21st Road. On the west side of E. 21st Road is the 28-acre private Sandy Ford Sportsmans Club that includes a 12-acre fishing lake. The private Lazy Acres Fishing Club adjoins the solar site to the south and is surrounded by mature trees.

Real Estate Tax Information: Prior to development of the solar farm, in 2011, the owner of this 158-acre site paid real estate taxes of $3,000 annually. In the year following the solar farm development, 2012, real estate taxes increased to approximately $240,000, a 7,791 percent increase in tax revenue for the site.

PIN	Acres	2011 Taxes Paid	2012 Taxes Paid	Tax Increase	2011 Assessed Value	2012 Assessed Value	Value Increase
LaSalle County, IL							
34-22-100-000	78.99	$ 1,580	$ 120,064	7501%	$ 23,830	$ 1,812,357	7505%
34-22-101-000	78.80	$ 1,457	$ 119,539	8106%	$ 21,975	$ 1,804,433	8111%
TOTAL	**157.79**	**$ 3,036**	**$ 239,602**	**7791%**	**$ 45,805**	**$ 3,616,790**	**7796%**

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The map below displays the parcels in the solar farm site (outlined in red). Properties adjoining the solar parcels are numbered for subsequent analysis.



Grand Ridge Solar - Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The surrounding area is primarily populated with agricultural uses. Some of these agricultural parcels contain homesteads on the site and others are fully unimproved.

Adjoining Properties 1, 3, 5, 6, 7, 13, and 14 have no sales data, therefore, those properties djoining Properties have been excluded from further analysis.

Recall, the solar farm was announced on December 31, 2010 and began operations in July 2012. Adjoining Properties 8 and 9 were sold in 1997 and 1996, respectively. These sales did not occur within a reasonable time period prior to announcement/completion. Therefore, Adjoining Properties 8 and 9 were excluded from further analysis.

Adjoining Property 4 sold in March 2011 while construction was ongoing. However, we have not considered this property for a paired sales analysis because the impact of being proximate to the solar farm could not be differentiated from the impact of the construction. Therefore, Adjoining Property 4 was excluded from further analysis.

Adjoining Property 2 transferred in September of 2018 with no consideration amount on a Trustee's deed from Gemini Farms LLC to the Bedeker Family Gift Trust. John and Susan Bedeker are owners of the Adjoining Property 1. This is not considered an arm's length transaction, therefore, Adjoining Property 2 was excluded from further analysis.

Adjoining Properties 11 and 12 were initially one parcel of 37.07 acres. Adjoining Property 12 sold in October 2016, which is a reasonable time period after completion of the solar farm. When Adjoining Property 12 was sold, the parcel was split into the two-acre homesite now known as Adjoining Propeprty 12, and the 35.07 acre farm, that was retained by the seller. Therefore, we have excluded Adjoining Property 11 and only considered Adjoining Property 12 (Test Area Sale) for paired sales analysis.

PAIRED SALES ANALYSIS

We have considered only one type of paired sales analysis, we have compared sales of similar properties not proximate to the solar farm (Control Area Sales) to the sales of the adjoining property (Test Area Sale), after the completion of the solar farm project.

Adjoining Property 12 (Test Area Sale) was considered for a paired sales analysis, and we analyzed this property as a single-family home use, a 2,328 square foot home located on a 2.0- acre parcel that sold in October 2016. This parcel is approximately 366 feet from the closest solar panel, and the improvements are approximately 479 feet from the closest solar panel. The table on the following page outlines the other important characteristics of Adjoining Property 12.

Grand Ridge Solar Farm Test Area Sale - Adjoining Property 12										
Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price/SF	Sale Date
Adjoining Property 12	2098 N 15th Rd, Streator, IL	$186,000	3	4.0	1997	2,328	Single Family Home and Garage and Farm Acreage	2.0	$79.90	Oct-16

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

We have found five Control Area Sales using data from the Northern Illinois Multiple Listing Service (MLS) and verified these sales through county records, conversations with brokers, and the County Assessor's office. We excluded sales that were not arm's length, such as REO sales or those between related parties. We have excluded any home sites under one acre and included only sales with a similar quantity of bedrooms, bathrooms, and living area. The Control Area Sales are comparable in most physical characteristics and bracket Adjoining Property 12 reasonably.

Grand Ridge Solar: Test Area Sale Map

It is important to note that the Control Area Sales are not adjoining to any solar farm, nor do they have a view of one from the property. Therefore, neither the announcement nor the completion of the solar farm use could have impacted the sales price of these properties. It is informative to note that the average marketing time (from list date to closing date) for Control Area Sales of 171 days is consistent with the marketing time for the Test Area Sale which was on the market for 169 days. This is an indication that the marketability of the Test Area Sale was not negatively influenced by proximity to the solar farm.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

We analyzed the five Control Area Sales and adjusted for market conditions using a regression analysis to identity the appropriate monthly market conditions adjustment. The results of the paired sales analysis for the Grand Ridge Solar Farm are presented below.

CohnReznick Paired Sales Anaysis Grand Ridge Solar Farm Adjoining Property 12		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sale (1)	Yes: Adjoining solar farm	$79.90
Control Area Sales (5)	No: Not adjoining solar farm	$74.35
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**7.46%**

The unit sale price of the Test Area Sale was somewhat higher than the median adjusted unit sale price of the Control Area Sales.

We contacted the selling broker of the Test Area Sale home, Tina Sergenti with Coldwell Banker, who said that the proximity of the solar farm had no impact on the marketing time or selling price of the home. The Test Area Sale sold with 169 days on market (5 – 6 months) compared to the Control Area Sales, which sold between 10 471 days on market (0 and 16 months).

Noting no negative price differential, it does not appear that the Grand Ridge Solar Farm impacted the sales price of the Test Area Sale, Adjoining Property 12. This was confirmed by the real estate agent who marketed and sold this home.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 3: STOCKTON DG CSG SOLAR FARM, JO DAVIESS COUNTY, IL

Coordinates: Latitude 42.348183, Longitude -90.01124

PINs: 17-002-111-10, 17-002-111-20

Total Land Size: Approximately 23 Acres

Date Project Construction Began: August 2020

Date Project Completed: December 2020

Output: 1.9 MW AC

Approximate Stockton DG CSG Solar boundaries outlined in yellow, aerial imagery provided by Google Earth dated May 2023

The Stockton Distributed Generation Community Solar Garden ("Stockton DG CSG" or "Stockton Solar") use is located in Jo Daviess County, Illinois. The solar farm is located in between Front Avenue to the north, Eugene Street to the south, S. Golf Road to the west and Ward Street to the east.

The current owner of the solar farm is IGS Stockton DG, LLC, who leases the land from Brewster Cheese Company operates a production facility on the same parcel as the Stockton Solar project, while IGS Energy

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

developed the solar facility. The solar farm went into operation in December 2020 and provides energy for customers of Commonwealth Edison Co (Comed).

The Surrounding Area: The Stockton Solar installation is located in eastern Jo Daviess County, Illinois, in the southwest portion of the Village of Stockton, and approximately 50 miles northwest of the City of Rockford, in the northern portion of Ohio. The solar site is approximately 35 miles southeast of the City of Dubuque, Iowa, and 50 miles northwest of the City of Rockford. The solar site is approximately 20 miles east of the Iowa state border and 10 miles south of the Wisconsin state border.

The Stockton Solar project is one of the 147 solar farms in Illinois and is one of two solar farms located within Jo Daviess County, Illinois. The Stockton Solar project is the largest solar farm in Jo Daviess County with the Apple Canyon Lake Solar farm, which produces an output of 1.2 MW, is the second largest solar farm in Jo Daviess County.

The Immediate Area: The solar farm spans over 22 acres in Jo Daviess County and is immediately surrounded by primarily agricultural land with residential homestead properties interspersed throughout the surrounding Project area. The solar farm is situated on a parcel owned by Brewster Cheese Company, who operates a cheese production facility on the site.

To the northeast lies more densely concentrated residential properties in the Village of Stockton, within one-mile from the Project site.

Real Estate Tax Info: Prior to the development of the solar farm two "child" parcels were created, from the "parent" parcel owned by Brewster Cheese Company, to assess the Stockton Solar project. The parcels on which the Stockton Solar project is located were not created until the solar farm was constructed and no taxes were paid for the 2020 tax year. In 2021, after the completion of the solar farm, the assessed value of the participating parcels increased to $296,800 and real estate taxes increased to $26,874.

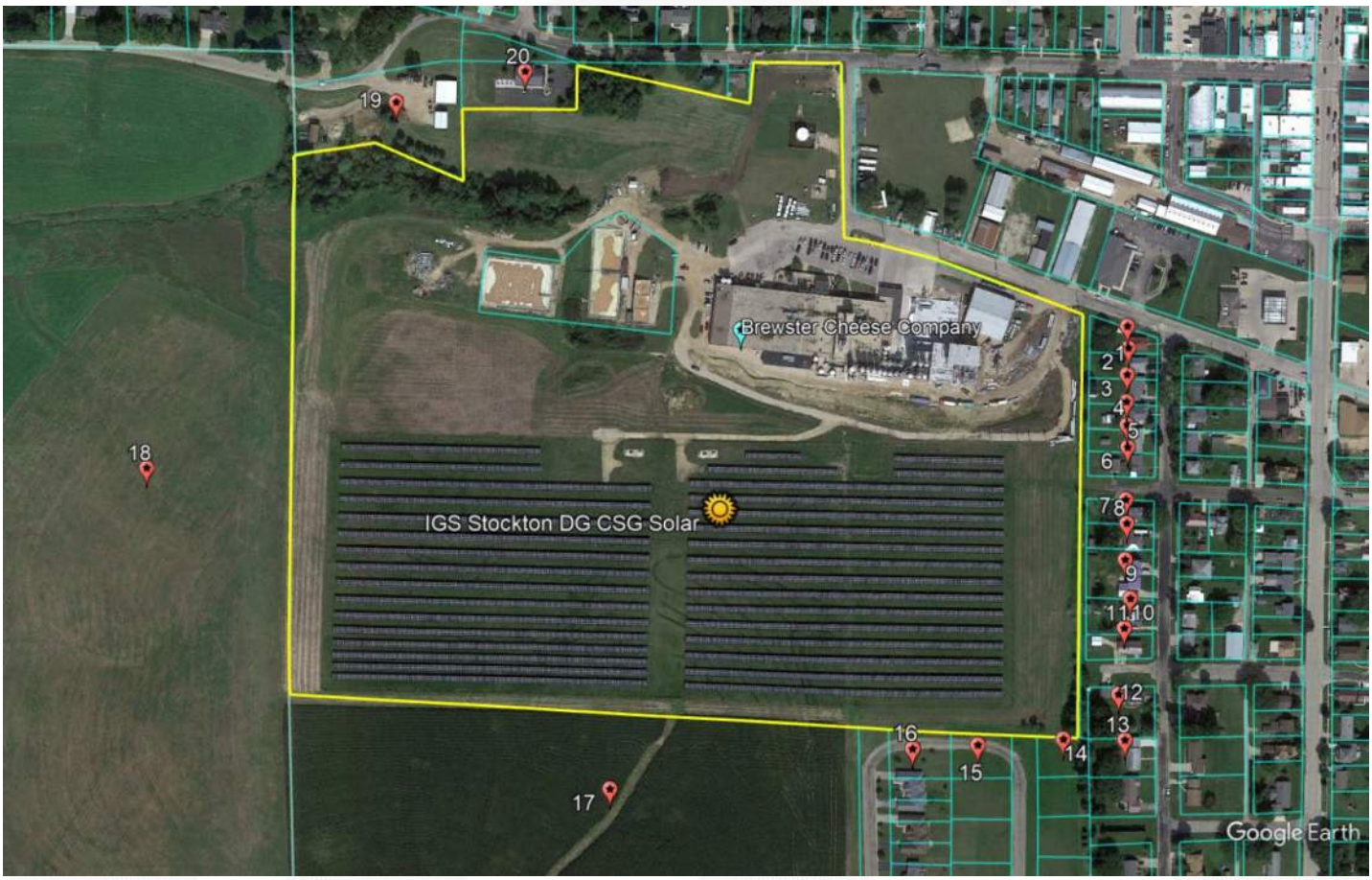
Pin	Acres
Jo Daviess County, IL	
17-002-111-10	11.3
17-002-111-20	11.3
Total	22.7

2020 Taxes Paid	2021 Taxes Paid	Tax Increase
$0	$13,437	-
$0	$13,437	-
$0	$26,874	-

2020 Assessed Value	2021 Assessed Value	Value Increase
$0	$148,400	-
$0	$148,400	-
$0	$296,800	-

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The following maps display the parcels developed with the solar farm (outlined in yellow). Properties immediately adjoining the solar parcels (outlined in blue) are numbered for subsequent analysis. It is noted that the aerial imagery provided by Google Earth is dated May 2023.



Stockton DG CSG Solar – Adjoining Properties

PAIRED SALES ANALYSIS

In reviewing Adjoining Properties to study in a Paired Sales Analysis, one property and sale was considered but eliminated from further consideration as discussed below.

Adjoining Property 9 was sold on June 1, 2023 for $110,000 or $45.83 per square foot of living area, after being on the market. Adjoining Property 9 consisted of a 2-Story SFH with a 3-car attached garage built in 1954 on a 0.44-acre lot. We have not included the sale of Adjoining Property 9 as the transaction was non-arm's length.

Group 1 – Improved Single-Family Residential Properties

Adjoining Property 6 to the Stockton DG CSG Solar Project was considered for a paired sales anaylsis, and we have anaylzed this property as a single-family home use in Group 1. The property is a single-story 960 sqaure foot home with a two car detached garage and a storage shed, located on a 0.22-acre lot that sold in July 2021.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

This property line is approximately 200 feet from the closest solar panel, and the improvements are approximately 250 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 6.

SUMMARY OF TEST AREA SALE Group 1 - Stockton DG CSG Solar										
Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
1	228 S. Ward Street, Stockton	$48,500	2	1.0	1923	960	1-Story SFH with 2-Car Detached Garage and Storage Shed	0.22	$50.52	Jul-21

Test Area Sale 1, aerial imagery provided by Google Earth, dated September 2022

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Test Area Sale 1, Red Arrow indicating location of Stockton DG CSG Solar Farm

We analyzed ten Control Area Sales of single-family homes with similar construction and use that were located within the Village of Stockton, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 1. The Control Area Sales for Group 1 are single-family homes located on lots in between 0.09 and 0.26-acres in size with one to three bedrooms and one to two baths, consisting of between 736 square feet and 1,416 square feet of gross living area, and built between 1910 and 1940.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Stockton DG CSG Solar Project – Group 1 is presented below.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick Paired Sale Analysis IGS Stockton DG CSG		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price PSF**
Test Area Sale (1)	Adjoining solar farm	$50.52
Control Area Sales (10)	No: Not adjoining solar farm	$52.20
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**-3.33%**

Noting no negative marketing time differential, Test Area Sale 1 sold in 74 days, while the Control Area Sales sold between 48 and 683 days, with a median time on market of 116 days.

The small differential between the Test Area Sale and Control Area Sales is within the range of normal market variace, and therefore it does not appear that the Stockton DG CSG installation impacted the sale price of the Test Area Sale.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 4: SPRING MILL SOLAR, LAWRENCE COUNTY, IN

Coordinates: Latitude 38.709545, Longitude -89.46968

PINs: 47-14-12-800-078.019-004

Population Density, Lawrence County (2023): 100 people per square mile

Total Land Size: 8.56-acres

Date Project Announced: N/A

Date Project Completed: September 2017

Output: 1.1 MW AC

Approximate Spring Mill Solar boundaries outlined in yellow, aerial imagery provided by Google Earth dated October 2019

The Spring Mill Solar project is located in Lawrence County, Indiana and is in between Parks Implement Road to the north, Indiana State Road 37 to the east and is bisected by Clover Lane.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The current owner of the solar farm is Hoosier Energy Rural Electric Cooperative, Inc., an electric cooperative with ten solar installations, including Spring Mill Solar, within the States of Indiana and Illinois. Hoosier Energy REC, Inc. only serves its' members as a cooperative and is not for-profit, like a majority of major electrical utilities. The solar farm went into operation in September 2017 and is comprised of nearly 4,000 panels.

The Surrounding Area: The Spring Mill Solar installation is located in southern Lawrence County, Indiana, approximately 10 miles south of the City of Bedford, in the south-central portion of Indiana. Lawrence County benefits from close proximity to the Naval Support Activity Crane, the third largest naval base in the world located in adjacent Martin County, making defense a prospective industry for growth while the Limestone Mining Industry is the foundation of commerce in Lawrence County. The solar site is approximately 50 miles northwest of the City of Louisville, 70 miles southwest of the City of Indianapolis, and 110 miles southwest of the City of Cincinnati.

The Spring Mill Solar project is one of the 92 solar farms in Indiana and is the sole solar farm located within Lawrence County, Indiana. The Spring Mill Solar project is one of the smaller solar farms in Indiana, with the largest solar farms in the state being the 265 MW Dunn's Bridge Solar farm in Jasper County, the Riverstart Solar Park in Randolph County and the Indiana Crossroads Solar Park in White County, which both produce an output of 200 MW.

The Immediate Area: The solar farm is bisected by Clover Lane and is located along Indiana-37 to the east. The solar farm is immediately surrounded by primarily vacant agricultural land with residential homestead properties interspersed to the east and west. Approximately one and a half miles to the north lies more densely concentrated residential and commercial properties in the City of Mitchell.

Real Estate Tax Info: In Lawrence County, Indiana, real property is assessed on annual basis as of January 1 each year. The Notice of Assessment is typically sent out to property owners in April of each year and Property tax bills are then due the following May 10th and November 13th for the preceding tax year. In the State of Indiana, land utilized for solar projects have an additional increase to the assessed land value or, "Solar Base Rate", which is set by the State and ranged from $5,000 to $13,000 per acre in 2022.

Prior to the development of the solar farm, the underlying land was part of a larger parent parcel (47-14-12-800-033.000-004*) that is 55.67-acres in size and was split to create a new parcel on which the Spring Mill Solar facility was constructed (47-14-12-800-078.019-004).

In 2017, prior to the property being assessed as a solar farm, the assessed value of the land was $79,500 and ownership paid $2,251 in real estate taxes. In 2018, the assessed value increased 131.57 percent to $184,100 and the real estate tax increased to $3,459, an increase in tax revenue of 53.71 percent.

Pin	Acres
47-14-12-800-078.019-004	8.56
47-14-12-800-033.000-004*	55.67*
Total	8.56

2017 Taxes Paid	2018 Taxes Paid	Tax Increase
-	$3,459	53.71%
$2,251	-	-
$2,251	$3,459	53.71%

2017 Assessed Value	2018 Assessed Value	Value Increase
-	$184,100	131.57%
$79,500	-	-
$79,500	$184,100	131.57%

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The following maps display the parcels developed with the solar farm (outlined in yellow). Properties immediately adjoining the solar parcels (outlined in red) are numbered for subsequent analysis. It is noted that the most recent and available aerial imagery provided by Google Earth is dated October 2019.

Spring Mill Solar – Adjoining Properties

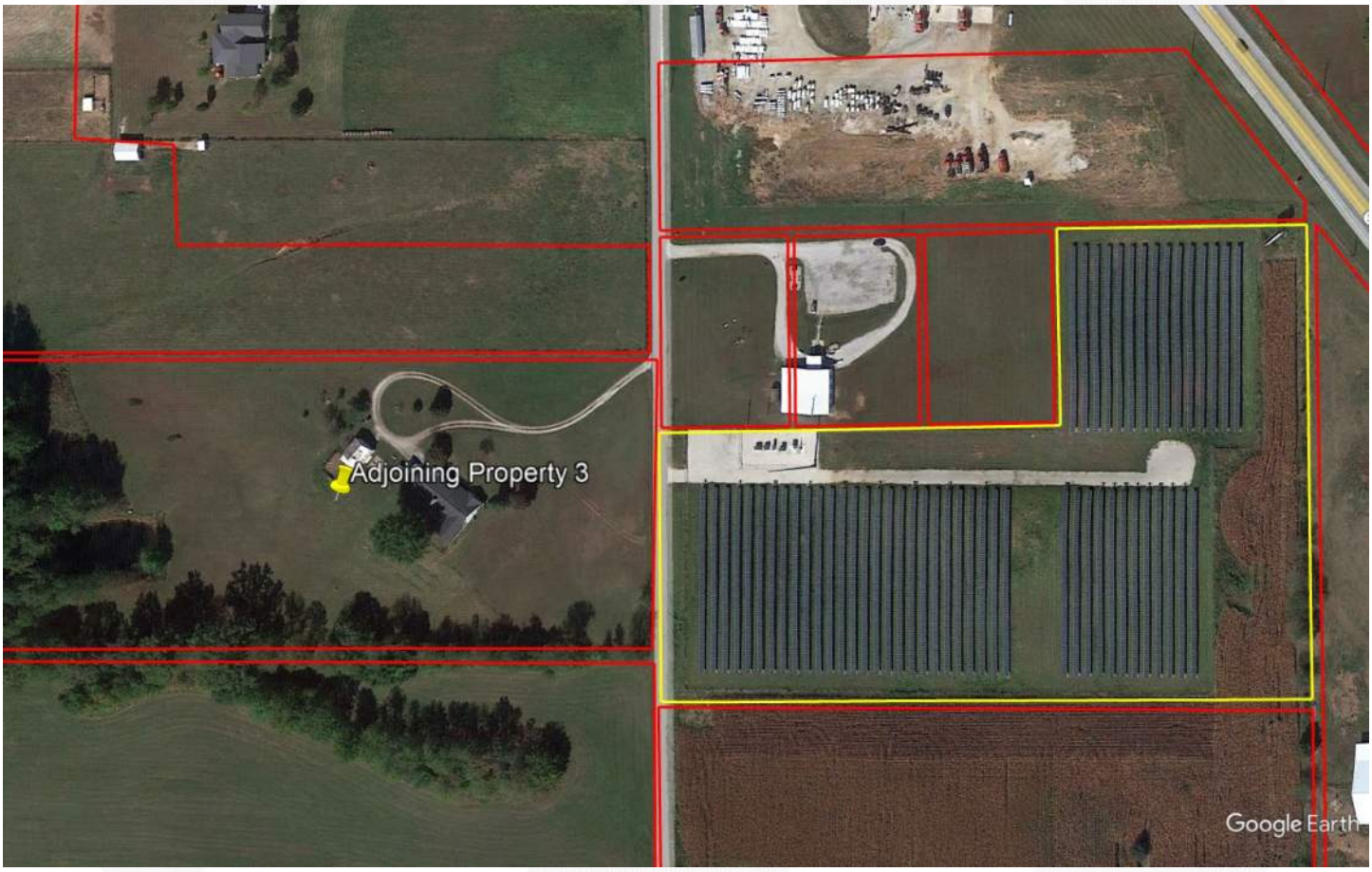
Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

PAIRED SALES ANALYSIS

Group 1 – Improved Single-Family Residential Properties

Adjoining Property 3 to the Spring Mill Solar Project was considered for a paired sales anaylsis, and we have anaylzed this property as a single-family home use in Group 1. The property is a one-story, 2,710 sqaure foot home with an attached garage and a pole barn (in need of roof replacement at the time of sale), located on a 17.50-acre lot that sold in June 2021. This property line is approximately 55 feet from the closest solar panel, and the improvements are approximately 275 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 3.

SUMMARY OF TEST AREA SALE Group 1 - Spring Mill Solar										
Adj .Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
3	1933 Clover Lane, Mitchell	$265,000	3	2.5	1972	2,710	1-Story SFH with Attached Garage and Pole Barn (in need of roof replacement)	17.50	$97.79	Jun-21



Spring Mill Solar Farm – Test Area Sale Map, Group 1

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

We analyzed seven Control Area Sales of single-family homes with similar construction and use that were located within Lawrence, Orange, Washington, Martin and Jackson Counties, that were not located in close proximity to Spring Mill Solar, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 1. The Control Area Sales for Group 1 are single-family homes located on lots between 5.5- and 17.25-acres in size with three to four bedrooms and two to three baths, consisting of between 2,305 square feet and 3,016 square feet of gross living area, and built between 1968 and 1981. The Control Area Sales also have two-car garage parking and a majority of the Control Area Sales have farm structures such as pole barns, workshops or utility sheds.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Spring Mill Solar Farm – Group 1 is presented below.

CohnReznick Paired Sale Analysis Spring Mill Solar Group 1		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sale (1)	Adjoining solar farm	$97.79
Control Area Sales (7)	No: Not adjoining solar farm	$100.84
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**-3.03%**

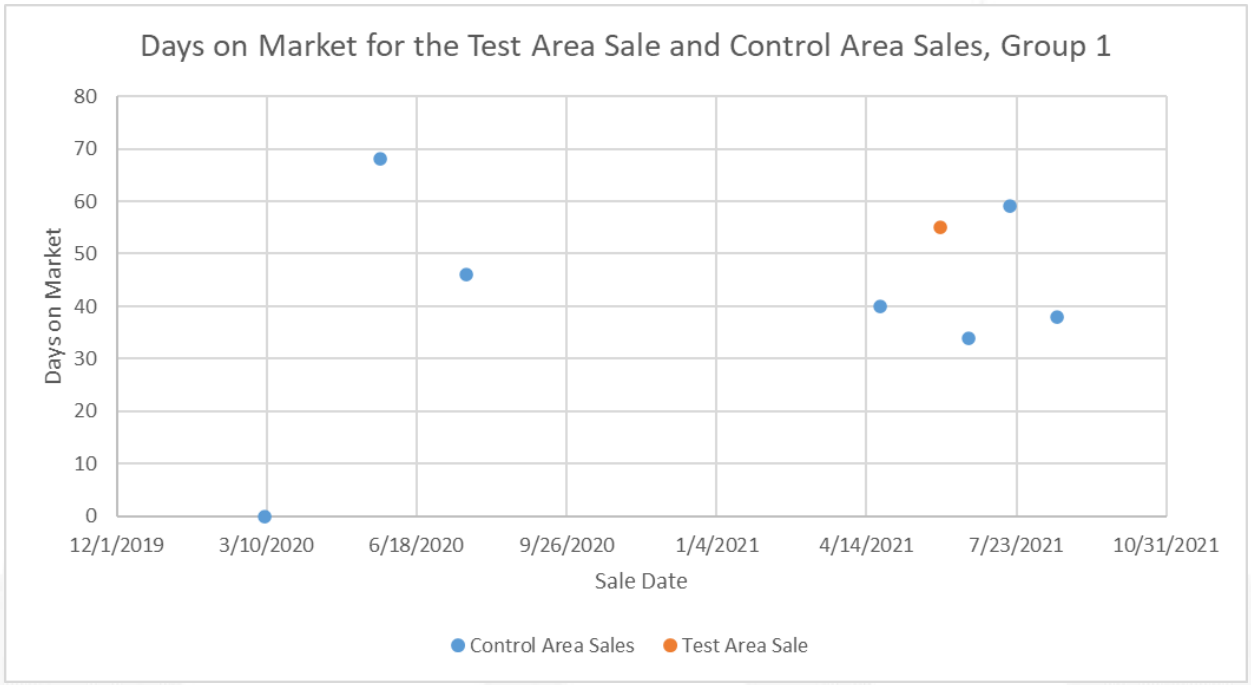
We spoke with Christina Root, listing agent for 1933 Clover Lane, who stated that the buyers were very familiar with the area and ***were not concerned about the adjacent Spring Mill Solar Farm***. Additionally, Ms. Root indicated that the Spring Mill Solar Farm had ***no impact on the final sale price*** as the property sold for its' listed price after just over one month on the market.

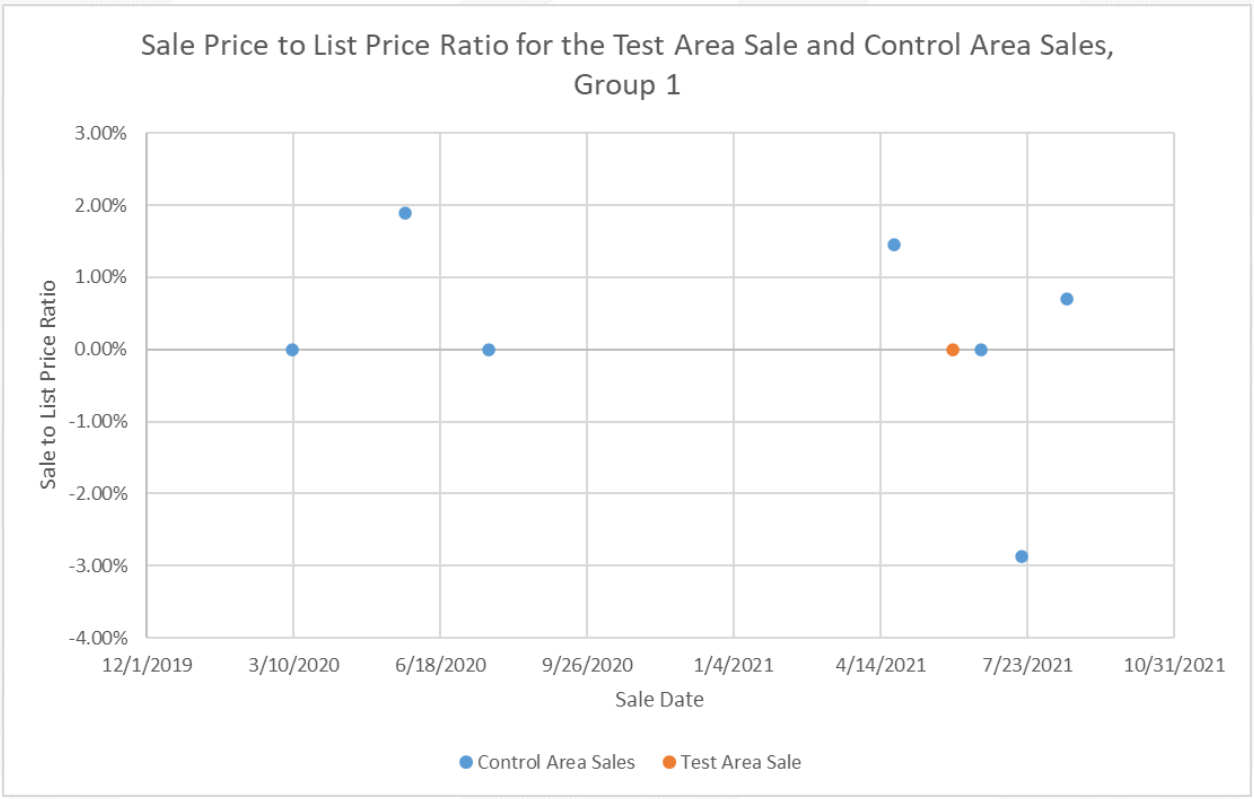
We note that the Test Area Sale in Group 1 included a pole barn with a roof needing replacement at the time of sale and none of the control sales indicated having deferred maintenance when sold.

Noting no negative marketing time differential, Test Area Sale 1 sold in 55 days, while the Control Area Sales sold between 34 and 68 days, with a median time on market of 43 days. Additionally, the Control Area Sales sold between 2.87 percent below to 1.89 percent above their listing price while Test Area Sale 1 sold at its' listing price, which is within the range of the Control Area Sales.

The small differential between the Test Area Sale and the Control Area Sales is within the range of normal market variance, and therefore it does not appear that the Spring Mill Solar Farm impacted the sale price of the Test Area Sale. We note that the control data had a higher median year built, representing more recently constructed residences, which likely explains the relative difference in adjusted median price per square foot.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.





Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Group 2 – Improved Single-Family Residential Properties

Adjoining Property 10 to the Spring Mill Solar project was considered for a paired sales analysis, and we have analyzed this property as single-family home use in Group 2. The property is a one-story 2,706 square foot home with an attached garage and pole barn, located on a 1.43-acre lot and sold in August 2023. The improvements on this property are located approximately 575 feet to the nearest solar panel while the property line is approximately 450 feet to the nearest solar panel. The following table outlines the other important characteristics of Adjoining Property 10.

SUMMARY OF TEST AREA SALE Group 2 - Spring Mill Solar										
Adj. Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
25	42 Gun Club Road, Mitchell	$299,000	3	2.5	1974	2,706	1-Story SFH with Attached Garage and Pole Barn	1.43	$110.50	Aug-23

We analyzed 15 Control Area Sales of single-family homes with similar construction and that were not located in close proximity to the solar farm, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 2. The Control Area Sales for Group 2 are single-family homes located on lots inbetween 0.5 and 2.72-acres in size with three to four bedrooms and two to three baths, consisting of between 2,200 square feet and 3,140 square feet of gross living area, and built between 1964 and 1983. The Control Area Sales also have two-car garage parking and a majority of the Control Area Sales have farm structures such as pole barns, workshops or utility sheds.

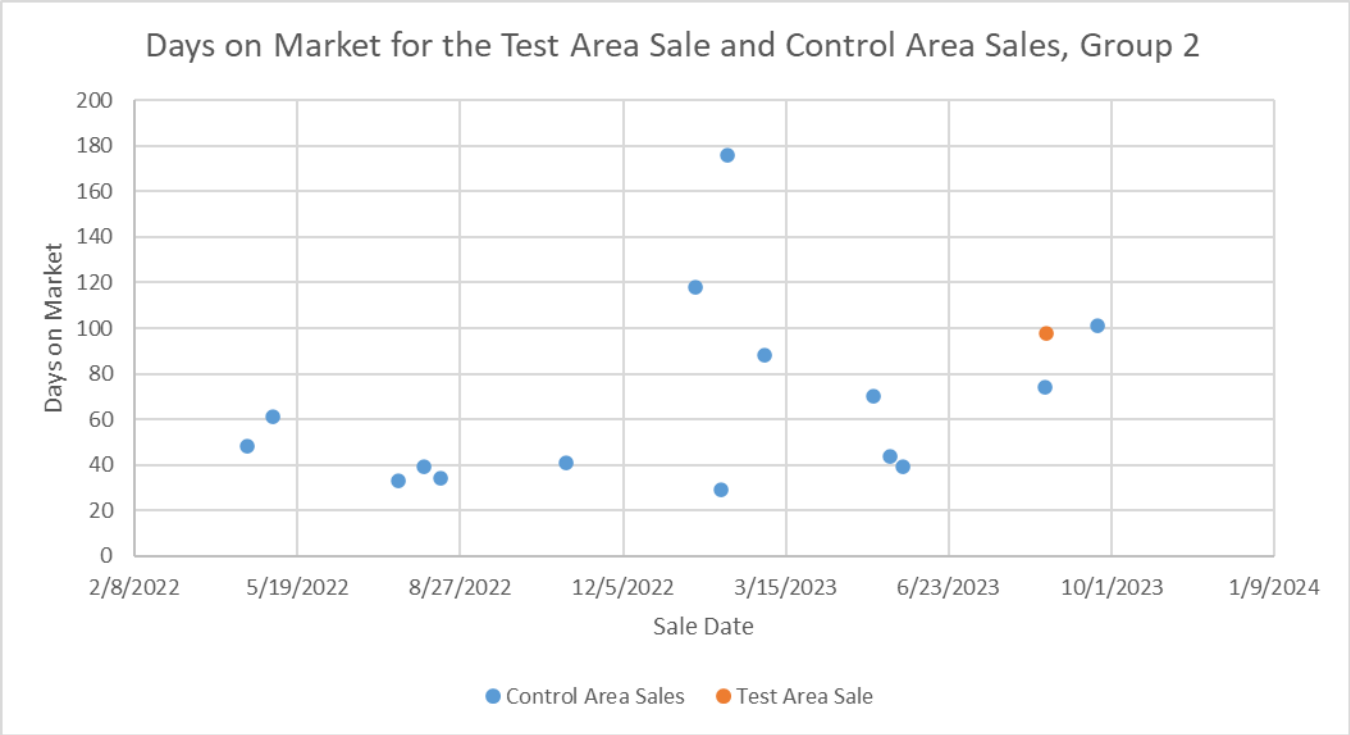
The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Spring Mill Solar Farm – Group 2 is presented below.

CohnReznick Paired Sale Analysis Spring Mill Solar Group 2		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sale (1)	Adjoining solar farm	$110.50
Control Area Sales (15)	No: Not adjoining solar farm	$102.03
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**8.30%**

Noting no negative price differential, it does not appear that the Spring Mill Solar Farm use impacted the sale of the Test Area Sale, Adjoining Property 10.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Noting no negative marketing time differential, Test Area Sale 2 sold in 98 days, while the Control Area Sales sold between 29 and 176 days. Additionally, the Control Area Sales sold for between 8.94 percent below to 4.05 percent above their listing price while Test Area Sale 2 sold for 5.08 percent less than its' listing price, which is within the range of the Control Area Sales.



Before & After Analysis – Assembly Solar Farm

We note the Test Area Sale in Group 2 of the Spring Mill Solar Farm Study (Adjoining Property 10) as well as seven Control Area Sales have sold at least twice over the past five years. To determine if any of the rates of appreciation for these identified home sales were affected by the proximity to the Spring Mill Solar Farm, we prepared a Repeat-Sales Analysis on the identified adjoining property. First, we calculated the total appreciation between each sale of the same property, the number of months that elapsed between each sale, and determined the monthly appreciation rate. Then, we compared extracted appreciation rates reflected in the Federal Housing Finance Agency (FHFA) Home Price Index for Indiana's 474 Three Digit Zip Code, where Adjoining Property 10 is located, over the same period. The index for the zip code is measured on a quarterly basis and is presented in the following table.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

474 Three Digit Zip Code - Housing Pricce Index Change (Quarter over Quarter) Not Seasonally Adjusted			
Three-Digit ZIP Code	Year	Quarter	Index (NSA)
474	2017	1	187.17
474	2017	2	188.57
474	2017	3	194.19
474	2017	4	191.52
474	2018	1	198.3
474	2018	2	202.76
474	2018	3	203.27
474	2018	4	204.61
474	2019	1	207.15
474	2019	2	213.58
474	2019	3	216.22
474	2019	4	221.52
474	2020	1	223.34
474	2020	2	225.46
474	2020	3	227.72
474	2020	4	233.87
474	2021	1	239.4
474	2021	2	255.49
474	2021	3	264.07
474	2021	4	271.71
474	2022	1	281.21
474	2022	2	302.74
474	2022	3	305.83
474	2022	4	305.51
474	2023	1	299.43
474	2023	2	315.26

We have presented the full repeat sales analysis on the following page.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Repeat Sales Analysis - Test Area Sales											474 Three Digit Zip Code - FHFA Housing Price Index Change	
Property ID	Address	Land Area (Acres)	Total Finished Living Area (SF)	Most Recent Sale Date	Most Recent Sale Price	Prior Sale Date	Prior Sale Price	Total Appreciation	Months Elapsed Between Sales	Monthly Appreciation Rate	Months Elapsed Between Sales	Monthly Appreciation Rate
10	42 Gun Club Road	1.43	2,706	8/22/2023	$299,000	10/30/2018	$190,000	57.37%	58	0.79%	58	0.75%

Repeat Sales Analysis - Control Area Sales											474 Three Digit Zip Code - FHFA Housing Price Index Change	
Property ID	Address	Land Area (Acres)	Total Finished Living Area (SF)	Most Recent Sale Date	Most Recent Sale Price	Prior Sale Date	Prior Sale Price	Total Appreciation	Months Elapsed Between Sales	Monthly Appreciation Rate	Months Elapsed Between Sales	Monthly Appreciation Rate
1-5	2458 Rabbitsville Road	14.96	2,526	5/25/2020	$275,000	6/6/2018	$185,000	48.65%	24	1.69%	24	0.45%
1-7	4338 Williams Road	7.72	2,914	8/19/2021	$302,000	8/9/2018	$229,900	31.36%	36	0.75%	36	0.72%
2-2	361 Johnson Lane	1.00	2,666	5/18/2023	$217,500	6/10/2022	$209,900	3.62%	11	0.32%	11	0.36%
2-5	309 3rd Street	1.21	2,664	3/2/2023	$252,000	1/28/2019	$177,900	41.65%	49	0.71%	49	0.75%
2-10	1803 Linwood Drive	0.59	2,200	8/15/2022	$304,900	7/11/2019	$180,000	69.39%	37	1.43%	37	0.94%
2-11	6877 State Road 54W	1.62	2,600	10/31/2022	$332,500	6/22/2020	$172,000	93.31%	28	2.36%	28	1.08%
2-13	508 Knoll Drive	1.01	2,778	5/8/2023	$450,000	10/29/2020	$350,000	28.57%	30	0.83%	30	0.99%
	Median - Control Area Sales	*1.21*	*2,664*							*0.83%*		*0.75%*

Conclusion

When compared to the FHFA home price index for the 474-zip code, the median extraction rate for the resale of Adjoining Property 10, that sold twice in the previous five years, exhibited a higher rate of appreciation than the Home Price Index for the 474-zip code. Additionally, the monthly appreciation rate of the Adjoining Property 10 was in line with the median monthly appreciation rate of the Control Area Sales, as depicted by the far-right column in the tables above. As such, we have concluded that there does not appear to be a consistent detrimental impact on properties adjacent to the Spring Mill Solar Farm.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 5: JEFFERSON COUNTY COMMUNITY SOLAR GARDEN, JEFFERSON COUNTY, CO

Coordinates: Latitude 39.859564, Longitude -105.1497

PIN: 29-194-01-037

Total Land Size: 13.63 acres

Date Project Announced: November 2013

Date Project Completed: May 2016

Output: 1.2 MW AC

The Jefferson County Community Solar Garden is adjacent to the Whisper Creek residential subdivision, just outside the City of Arvada, and was developed by SunShare Management. This solar farm has the capacity for 1.2 Megawatts (AC) of power, which is enough to power 300 homes. After two months of operation, the solar farm was 100 percent subscribed and its three largest customers are the cities of Arvada and Northglenn, as well as the Green Mountain Water and Sanitation District.

The Surrounding Area: The Whisper Creek subdivision is located between the Welton Reservoir to the west and Standley Lake to the east. To the northwest of the subdivision lies the Colorado Hills Open Space and the Rocky Flats national Wildlife Refuge. The subdivision is primarily in the City of Arvada city limits, but the municipal

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

boundary splits the street the Test Area Sales are located on, West 89th Loop, some are in Arvada and some are in unincorporated Jefferson County. Arvada is a northwestern suburb of the City of Denver and is accessible via Interstate-25 and Interstate-70 and Interstate-76.

The Immediate Area: The immediate area has uses that consist of vacant land to the north and east, a horse and alpaca farm to the south, known as Evening Star Farms, and single-family homes and a municipal police station and vacant land to the west.

Real Estate Tax Information: In 2017, real estate taxes totaled $79.10 for the entire parcel for the year, which is slightly less than taxes billed in 2016 and 2015.

The map below displays the solar farm parcel (outlined in yellow) and the Adjoining Properties (outlined in red) are numbered for subsequent analysis.

Jefferson County Community Solar Garden - Adjoining Properties
Aerial Imagery provided by Google Earth, dated May 2023
(Green Arrow – Direction of Photos on Following Page)

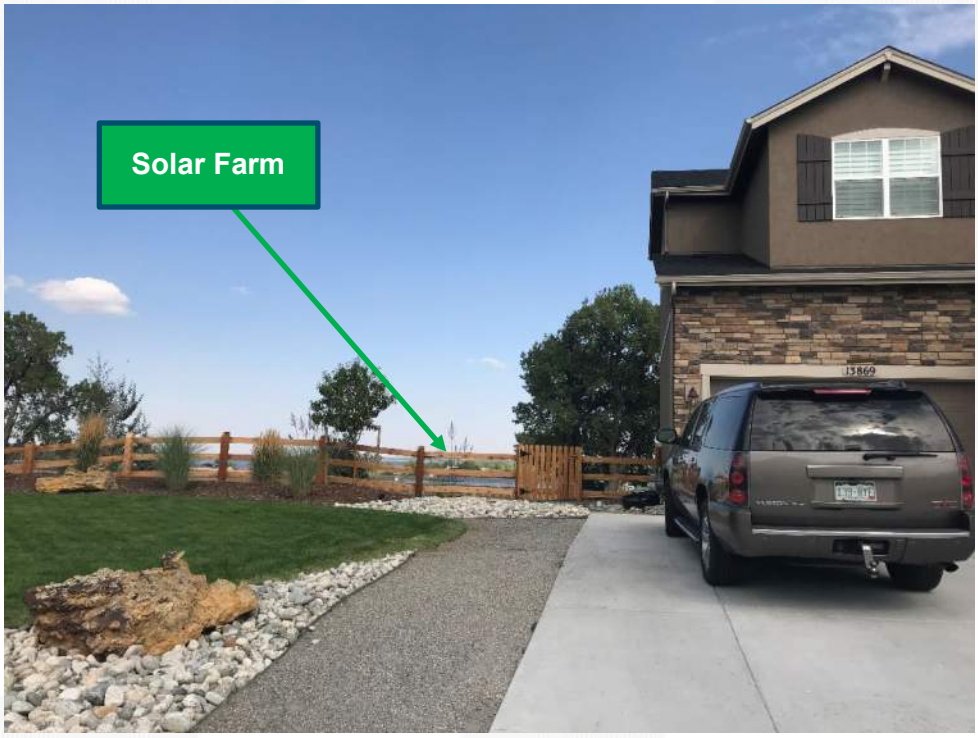
PAIRED SALES ANALYSIS

In reviewing Adjoining Properties to study in a Paired Sales Analysis, one property and sale was considered but eliminated from further consideration as discussed below.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

One adjoining residential property, Adjoining Property 11, was sold on June 7, 2022 for $900,000 or $446.21 per square foot of living area. Adjoining Property 11 is comprised of a single-story single family home with an unfinished basement and three-car attached garage, built in 2015 on a 0.21-acre lot. We have not included the sale of Adjoining Property 11 after speaking with the selling broker, Thomas Barron of A+ Realty Group, ***who noted this was a non-arm's length transaction and the buyer and seller involved had traded properties to avoid the hard costs involved financing the purchase of either property. Mr. Barron also stated that the property was initially openly marketed and potential buyers were not concerned about the adjacent solar farm.***

We identified six Adjoining Properties that qualified for a paired sales analysis, Adjoining Properties 1, 5, 9 (sold twice), 10, 13 and 17.



View from 89th Loop towards Solar Farm at rear of home

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

View from the rear of a Test Area Sale, towards Solar Farm

Group 1 – Improved Single-Family Residential Properties

Adjoining Properties 1, 5 and 9 to the Jefferson County Community Solar project were considered for a paired sales analysis, and we have analyzed these properties as a single-family home use in Group 1. The properties are two-story single-family homes with two- and three-car attached garages and basement areas, ranging from 3,201 square feet to 3,461 square feet of living area and are located on lots under one-acre in size within the Whisper Creek subdivision. The improvements on these properties are located between approximately 725 feet and 950 feet to the nearest solar panel while the property lines are between approximately between 685 feet and 860 feet to the nearest solar panel. The following table outlines the other important characteristics of Adjoining Properties 1, 5 and 9.

SUMMARY OF TEST AREA SALES
Group 1 - Jefferson County Community Solar Garden

Adj. Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
1	8958 Devinney Ct	$980,000	5	4.5	2011	3,201	2-Story SFH with Finished Basement and 3-Car Attached Garage	0.53	$306.15	Aug-20
5	8918 Devinney Court	$895,000	4	3.5	2014	3,202	2-Story SFH with Unfinished Basement and 3-Car Attached Garage	0.39	$279.51	Nov-20
9	13929 W. 89th Loop	$1,100,000	4	3.5	2016	3,461	2-Story SFH with Unfinished Basement and 2-Car Attached Garage	0.24	$317.83	Aug-21

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Jefferson County Community Solar Farm – Test Area Sale Map, Group 1

We analyzed twelve Control Area Sales of single-family homes with similar construction and use that were located within the Whisper Creek Subdivision and not adjacent to the solar farm, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 1. The Control Area Sales for Group 1 are two-story single-family homes located on lots less than 1.0-acre in size with four to five bedrooms and three and a half to four and a half baths, consisting of between 2,700 square feet and 3,900 square feet of gross living area, and built between 2009 and 2016. The Control Area Sales also have additional improvements such as attached garage parking and basement areas. It is noted that while we searched for all home sales within these parameters, of the twelve Control Area Sales included in Group 1 only three have lot size above 0.30-acres whereas, the three Test Area Sales had lots sizes of 0.53-acres, 0.39-acres and 0.24-acres. Additionally, other potential Control Area Sales within the Whisper Creek subdivision with more comparable lot sizes to the Test Area Sales consisted of significant differences in bed and bath count or square feet of gross living area and have not been included in Group 1.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Jefferson County Community Solar Project – Group 1 is presented on the following page.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick Paired Sale Analysis Group 1 - Jefferson County Community Solar Garden		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sales (3)	Adjoining solar farm	$306.15
Control Area Sales (12)	No: Not adjoining solar farm	$270.00
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**13.39%**

Noting no negative marketing time differential, Adjoining Properties 1, 5 and 9 sold after between 33 days and 106 days on the market, with a median time on market of 62 days, while the Control Area Sales sold between 12 and 271 days, with a median time on market of 58 days.

Noting no negative price differential, with Adjoining Properties 1, 5 and 9 having a higher unit sale price than the Control Area Sales, it does not appear that the Jefferson County Community Solar Farm had any negative impact on the sale of the Test Area Sale.

We note that the Control Area Sales consisted of slightly smaller lot sizes, with a median lot size of 0.25-acres compared to a median lot size of 0.39-acres for the Test Area Sales, which likely explains the relative difference in adjusted median price per square foot.

Group 2 – Improved Single-Family Residential Properties

Adjoining Property 17 to the Jefferson County Community Solar project was considered for a paired sales analysis, and we have analyzed this property as a single-family home use on agricultural zoned land in Group 2. The property consists of two single-story dwellings totaling 4,675 square feet with attached garage parking and various outbuildings utilized for horse ranching, located on a 9.79-acre lot and sold in August 2023. The improvements on this property are located approximately 80 feet to the nearest solar panel while the property line is approximately 30 feet to the nearest solar panel. The following table outlines the other important characteristics of Adjoining Property 17.

SUMMARY OF TEST AREA SALE Group 2 - Jefferson County Community Solar Garden										
Property #	**Address**	**Sale Price**	**Beds**	**Baths**	**Year Built**	**Home Size (SF)**	**Improvements**	**Site Size (AC)**	**Sale Price / SF**	**Sale Date**
17	8895 Alkire Street	$1,650,000	4	2.5	1978 & 1987	4,675	Two Single-Story SFH's with Attached Garages and No Basements; Horse Arena, Loafing Shed, Paddocks and Tack Room	9.79	$352.94	Aug-23

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Jefferson County Community Solar Farm – Test Area Sale Map, Group 2

We analyzed four Control Area Sales of single-family homes with similar construction and use that were located within Jefferson County or in close proximity to the solar farm, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 2. The Control Area Sales for Group 2 are single-family homes located on agricultural zoned land, located on lots in between 5.00 and 11.00-acres in size, with three to four bedrooms and two to four baths, consisting of between 4,000 square feet and 4,700 square feet of gross living area, and built between 1972 and 1987. The Control Area Sales also have additional improvements such as garage parking, pole barns, workshops or outbuildings utilized for horse ranching .

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Jefferson County Community Solar Project – Group 2 is presented on the following page.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick Paired Sale Analysis Group 2 - Jefferson County Community Solar Garden		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sale (1)	Adjoining solar farm	$352.94
Control Area Sales (4)	No: Not adjoining solar farm	$356.89
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**-1.11%**

The marketing time (from list date to closing date) for Control Area Sales ranged from 75 to 736 days on market with a median of 90 days on market, and the marketing time for Adjoining Property 17 was 307 days, which is within the range of the Control Area Sales, ***and we note no substantial marketing time differential.***

Noting minimal negative price differential, it does not appear that the Jefferson County Community Solar Farm use impacted the sale of the Test Area Sale, Adjoining Property 17.

This was confirmed by the buying agent, Eugene Mitchell of Signature Real Estate Corp., who stated, ***"My client was not deterred from buying the property due to the adjacent solar farm. I have not seen an indication that the solar farm has any negative impact nor have I heard from other local brokers that it is a concern among potential buyers."*** Additionally, we discussed the marketing of Adjoining Property 17 with the listing agent, Asa Kortman of Keller Williams Realty, who stated, "The original list price of $2,300,000 was too aggressive but insisted upon by my client. After six months we decreased the list price to $1,600,000 in April of 2023 and the property attracted four competing offers, ultimately selling after 121 days and above the new listing price." The Test Area Sale is located on agricultural zoned land which restricts the potential uses on the land and limits higher density commercial or residential development. The selling party of the Test Area Sale set the original list price based on similarly sized properties with non-agricultural zoned land ultimately leading to a large decrease in list price after not attracting offers at $2,300,000.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Group 3 – Improved Single-Family Residential Properties

Adjoining properties 9, 10 & 13 are two-story, single-family residential homes with four bedrooms and three and a half bathrooms, between 3,000 and 4,000 square feet of gross living area, on less than 0.30 acre of land, and each sold in 2016 as new construction homes.

Group 3 - Jefferson County Community Solar Garden Test Area Sales									
Adj. Property #	Address	Median Sale Price	Median Site Size (AC)	Median Beds	Median Baths	Median Year Built	Median Square Feet	Median Sale Date	Median Price PSF
9, 10, 13	13929 W 89TH LOOP, 13919 W 89TH LOOP, 13889 W 89TH LOOP	$635,500	0.23	4	3.5	2016	3,848	Jun-16	$165.15

The Test Area Sales are located between 595 feet and 720 feet from the house to the solar panels. We analyzed six Control Area Sales of single-family homes that are included in this analysis that sold within a reasonable time frame from the median sale date of the Test Area Sales and are similar to the Test Area Sales in physical characteristics. The Control Area Sales are removed from the solar panels and not adjoining, in other areas of the Whisper Creek subdivision.

Jefferson County Community Solar Farm – Test Area Sale Map, Group 3

All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The results of our analyses for the Jefferson County Community Solar Garden are presented below.

CohnReznick Paired Sale Analysis Group 3 - Jefferson County Community Solar Garden		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sales (3)	Adjoining solar farm	$165.15
Control Area Sales (6)	No: Not Adjoining solar farm	$164.36
Difference between Unit Price of Test Area Sales and Adjusted Median Unit Price of Control Area Sales		**0.48%**

Noting no negative price differential, it does not appear that the Jefferson County Community Solar Garden had any negative impact on adjacent property values.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Before & After Analysis – Jefferson County Community Solar Farm

We note a Test Area Sale in Groups 1 and 3 of the Jefferson County Community Solar Farm (Adjoining Property 9) has sold at least twice over approximately the past five years. To determine if any of the rates of appreciation for these identified home sales were affected by the proximity to the Jefferson County Community Solar Farm, we prepared a Repeat-Sales Analysis on the identified adjoining property. First, we calculated the total appreciation between each sale of the same property, the number of months that elapsed between each sale, and determined the monthly appreciation rate. Then, we compared extracted appreciation rates reflected in the Federal Housing Finance Agency (FHFA) Home Price Index for Colorado's 800 Three Digit Zip Code, where Adjoining Property 9 is located, over the same period. The index for the zip code is measured on a quarterly basis and is presented below.

800 Three Digit Zip Code - Housing Pricce Index Change (Quarter over Quarter) Not Seasonally Adjusted			
Three-Digit ZIP Code	Year	Quarter	Index (NSA)
800	2016	1	246.20
800	2016	2	257.04
800	2016	3	264.47
800	2016	4	269.06
800	2017	1	274.73
800	2017	2	285.57
800	2017	3	290.87
800	2017	4	294.57
800	2018	1	302.96
800	2018	2	311.49
800	2018	3	314.90
800	2018	4	315.14
800	2019	1	319.79
800	2019	2	324.21
800	2019	3	326.15
800	2019	4	328.49
800	2020	1	330.57
800	2020	2	335.39
800	2020	3	342.51
800	2020	4	348.90
800	2021	1	359.07
800	2021	2	384.17
800	2021	3	409.73
800	2021	4	420.22
800	2022	1	438.10
800	2022	2	474.74
800	2022	3	466.26
800	2022	4	449.45
800	2023	1	457.65
800	2023	2	466.78
800	2023	3	469.38

We have presented the full repeat sales analysis on the following page.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Repeat Sales Analysis											800 Three Digit Zip Code - FHFA Housing Price Index			
Property ID	Address	Land Area (Acres)	Total Finished Living Area (SF)	Most Recent Sale Date	Most Recent Sale Price	Prior Sale Date	Prior Sale Price	Total Appreciation	Months Elapsed Between Sales	Monthly Appreciation Rate	Index Level During Quarter of Most Recent Sale	Prior Sale Quarter Index Level	Total Appreciation	Monthly Appreciation Rate
9	13929 W. 89th Loop	0.53	3,461	8/10/2021	$1,100,000	6/17/2016	$636,332	72.87%	62	0.89%	409.73	257.04	59.40%	0.76%

Conclusion

When compared to the FHFA home price index for the 800-zip code, the extraction rate for the resale of Adjoining Property 9, that sold twice times in the previous five years, exhibited a higher rate of appreciation than the Home Price Index for the 800-zip code. As such, we have concluded that there does not appear to be a consistent detrimental impact on properties adjacent to the Jefferson County Community Solar Farm.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick

SOLAR FARM 6: DOMINION INDY SOLAR III, MARION COUNTY, INDIANA

Coordinates: Latitude 39°39'14.16"N, Longitude 86°15'35.06"W

PIN: 49-13-13-113-001.000-200

Total Land Size: 129 acres

Date Project Announced: August 2012

Date Project Completed: December 2013

Output: 8.6 MW AC (11.9 MW DC)

The Dominion Indy III solar farm was developed by Dominion Renewable Energy and became operable in December 2013. This solar farm has ground-mounted solar panels and has the capacity for 8.6 Megawatts (MW) AC of power. The panels are mounted in a fixed tilt fashion with 12 inverters.

The Surrounding Area: The Dominion Indy III solar farm is located in Decatur Township, in the southwest portion of Marion County, Indiana. The solar farm is approximately 10 miles southeast of the Indianapolis International Airport and approximately eight and a half miles from the center of Indianapolis.

The Immediate Area: The solar installation is on the southern side of West Southport Road. Adjoining parcels to the west, south, and east are agricultural in nature, actively farmed primarily with row crops and large areas of mature trees. There is one single family home on 4.78 acres of land at the northwest corner of the solar site, with frontage on West Southport Road, identified in our analysis as Adjoining Property 9.

To the north, across West Southport Road from the solar site, is the single-family residential subdivision known as Crossfield. Originally developed with over 81 acres of land by the Key Life Insurance Company, the one- and two-story homes in the subdivision were built between approximately 1998 and 2011.

All of the adjacent land parcels to the solar farm are used for agricultural or residential purposes.

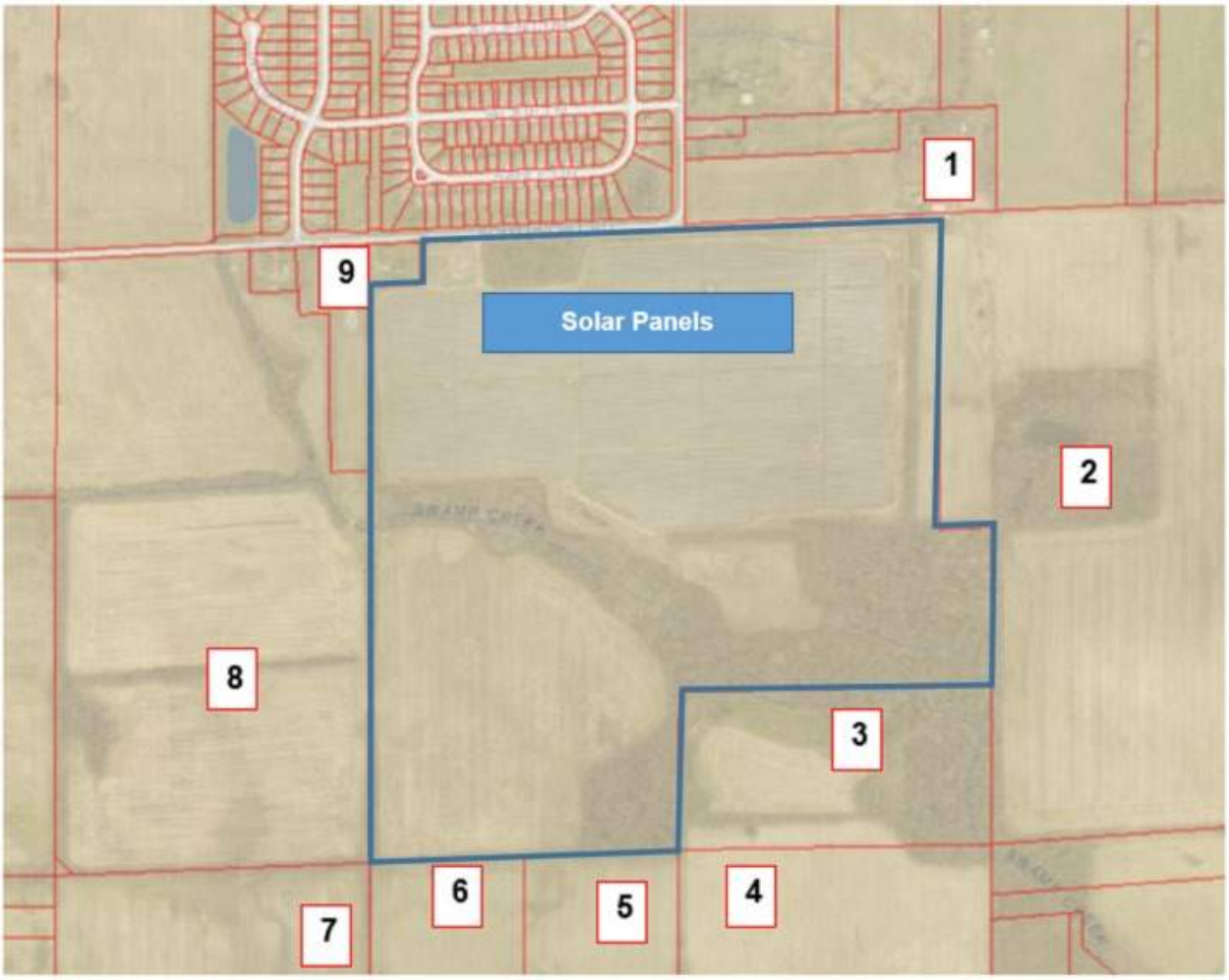
The solar farm is surrounded by a chain link fence around all of the solar panels. Additionally, there are some natural shrubs and trees on all sides of the property; this vegetation was in place before the solar farm was developed.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Real Estate Tax Information: Prior to development of the solar farm, in 2013, the owner of this 129-acre site paid real estate taxes of $1,788 annually. After development of the solar farm development, in 2015, real estate taxes increased to approximately $16,405, an 818 percent increase in tax revenue for the site.

PIN	Acres	2013 Taxes Paid	2015 Taxes Paid	Tax Increase	2013 Assessed Value	2015 Assessed Value	Value Increase
Marion County, IN 49-13-13-113-001.000-200	129.04	$ 1,788	$ 16,405	818%	$ 89,400	$ 109,900	23%
TOTAL	**129.04**	**$ 1,788**	**$ 16,405**	**818%**	**$ 89,400**	**$ 109,900**	**23%**

The map below, and the maps on the following pages, display the parcels within the solar farm is located (outlined in blue). Properties adjoining this site are numbered for subsequent analysis.



Dominion Indy III - Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

PAIRED SALES ANALYSIS

We have considered two types of paired sales analysis with regards to the Dominion Indy III solar farm. The first compares sales of Adjoining Properties (Test Area Sales) to the solar farm after the completion of the solar farm site to similar properties not proximate to the solar farm (Control Area Sales). We utilized this type of paired sale analysis for all three groups of Adjoining Properties under study.

The second type of paired sale analysis is known as a Before and After analysis which compares sales of Adjoining Properties that occurred prior to the announcement of the solar farm with the sales of the same Adjoining Properties after the completion of the solar farm development. We were able to use home sale data from the Crossfield subdivision that is located to the north of the solar site, across West Southport Road, for this analysis.

GROUP 1

Adjoining Property 2 is a vacant 86.96-acre agricultural parcel located to the east of the solar site. Adjoining Property 2 sold in October 2017 and was considered for a paired sale analysis, known as a Test Area Sale, in Group 1.

The property line of this unimproved parcel is approximately 166 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 12.

Test Area Sale Group 1 - Agricultural Land								
Adjoining Property #	Address	Sale Price	Site Size (AC)	NCCPI Index	Wetlands	Floodplain	Sale Price/AC	Sale Date
Adjoining Property 2	5755 W Southport Rd, Indianapolis, IN	$738,584	89.96	63.4	1%	Zone X	$8,210	Oct-17

Soil Productivity and Land Value Trends and the NCCPI Productivity Index

Crop yields have been the basis for establishing a soil productivity index, and are used by county assessors, farmers, and market participants in assessing agricultural land. While crop yields are an integral part in assessing soil qualities, it is not an appropriate metric to rely on because “yields fluctuate from year to year, and absolute yields mean little when comparing different crops. Productivity indices provide a single scale on which soils may be rated according to their suitability for several major crops under specified levels of management such as an average level.”[1] The productivity index, therefore, not crop yields, is best suited for applications in land appraisal and land-use planning.

The United States Department of Agriculture’s (USDA) National Resources Conservation Services (NRCS) developed and utilizes the National Commodity Crop Productivity Index (NCCPI) as a national soil interpreter and is used in the National Soil Information System (NASIS), but it is not intended to replace other crop

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client’s legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

production models developed by individual states.[18] The focus of the model is on identifying the best soils for the growth of commodity crops, as the best soils for the growth of these crops are generally the best soils for the growth of other crops.[19] The NCCPI model describes relative productivity ranking over a period of years and not for a single year where external influences such as extreme weather or change in management practices may have affected production. At the moment, the index only describes non-irrigated crops, and will later be expanded to include irrigated crops, rangeland, and forestland productivity.[20]

Yields are influenced by a variety of different factors including environmental traits and management inputs. Tracked climate and soil qualities have been proven by researchers to directly explain fluctuations in crop yields, especially those qualities that relate to moisture-holding capacity. Some states such as Illinois have developed a soil productivity model that considers these factors to describe "optimal" productivity of farmed land. Except for these factors, "inherent soil quality or inherent soil productivity varies little over time or from place to place for a specific soil (map unit component) identified by the National Cooperative Soil Survey (NCSS)."[21] The NRCS Web Soil Survey website has additional information on how the ratings are determined. The **State of Indiana** does not have its own crop production model and utilizes the NCCPI.

In analyzing agricultural land sales for Control Area Sales with similar characteristics to Adjoining Property 2, we have excluded any parcels with NCCPI soil indices less than 50.0 and greater than 85.0.

We identified and analyzed four Control Area Sales that were comparable in location, size, and use that were not located in close proximity to the solar farm. The Control Area Sales for Adjoining Property 2 are land tracts that were larger than 20 acres and utilized specifically as farmland. We excluded sales that were bank-owned, those between related parties, split transactions, and land with significant improvements.

The Control Area Sales that are included in this analysis sold within a reasonable time frame from the sale date of the Test Area Sale and are similar to the Test Area Sale in physical characteristics.

[18] Agricultural land rental payments are typically tied to crop production of the leased agricultural land and is one of the primary reasons the NCCPI was developed, especially since the model needed to be consistent across political boundaries.
[19] Per the User Guide for the National Commodity Crop Productivity Index, the NCCPI uses natural relationships of soil, landscape and climate factors to model the response of commodity crops in soil map units. The present use of the land is not considered in the ratings.
[20] AgriData Inc. Docs: http://support.agridatainc.com/NationalCommodityCropProductivityIndex(NCCPI).ashx
[21] USDA NRCS's User Guide National Commodity Crop Productivity Index (NCCPI)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Dominion Indy III - Group 1: Test Area Sale Map

The Control Area Sales were adjusted for market conditions using a regression and trend analysis to identify the appropriate monthly market condition adjustment. Using the agricultural land sale data published in the *Land Sales Bulletin,*[22] from January 2016 through December 2017, which includes reliable and credible data for analysis, we extracted a monthly rate of change of 0.50 percent.

The results of our analysis for Adjoining Property 2, in Group 1 are presented on the following page.

[22] https://www.landsalesbulletin.com/

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick Paired Sale Analysis Dominion Indy III Solar Group 1 - Agricultural Land		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per Acre**
Test Area Sale (Adjoining Property 2)	Yes: Solar Farm was completed by the sale date	$8,210
Control Area Sales (4)	No: Not adjoining solar farm	$8,091
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**1.47%**

Noting the relatively low price differential, in which the Test Area Sale was higher than the median for the Control Areas Sales, it does not appear that the Dominion Indy III solar farm had any negative impact on the adjoining agricultural property value.

Dominion Indy III Solar - Adjoining Properties

We idenitified a total of nine Adjoining Properties that sold after the develoment of the solar farm as single-family home uses. Adjoining Properties 11, 13, 14, 15, 18, 20, 22, 24 and 26 were analyzed in two paired sales analyses (Group 2 and Group 3). These nine properties were analyzed as single-family homes and they are located in the Crossfield subdivision, across West Southport Road from the solar site, as seen in the map above.

It should be noted that Adjoining Properties 11 and 24 have sold more than once since the solar farm was constructed, and each sale is included in the analysis. Adjoining Property 11 sold first in December 2015 and

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

later in July 2018, approximately two and a half years later. Adjoining Property 24 sold first in February 2014 and later in April 2019, approximately five years later. Our research indicated that these were arm's-length sales.

The nine Adjoining Properties that were included in our paired sales analysis were divided into two groups, based on the sale dates of the Test Area Sales.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

GROUP 2

For Group 2 (sales in 2014 – 2016), we analyzed four Control Area Sales with similar location, square footages, lot sizes, and ages that sold within a reasonable time frame from the median sale date of the Group 2 Test Area Sales.

Test Area Sales Group 2									
Adj. Property #	Address	Median Sale Price	Median Site Size (AC)	Median Beds	Median Baths	Median Year Built	Median Square Feet	Median Sale Date	Median Price PSF
11, 20, 22, 24	5933 Sable Dr, 5829 Sable Dr, 5813 Sable Dr, 5737 Sable Dr	$129,375	0.23	4	2.0	2008	2,163	Jul-15	$60.61

The Test Area Sales in Group 2 are located between 230 feet and 404 feet from the house to the solar panels. The Control Area Sales for Group 2 are located beyond this area in other areas of the Crossfield Division and in other nearby subdivisions.

Dominion Indy III – Group 2: Test Area Sales

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

GROUP 3

For Group 3 (sales occurring in 2017 - 2019), we analyzed a set of seven Control Area Sales with similar locations, square footages, lot sizes, and ages that sold within a reasonable time frame from the median sale date of the Group 3 Test Area Sales.

Dominion Indy III Solar Test Area Sales Group 3									
Adj. Property #	Address	Median Sale Price	Median Site Size (AC)	Median Beds	Median Baths	Median Year Built	Median Square Feet	Median Sale Date	Median Price PSF
11, 13, 14, 15, 18, 24, 26	5933 Sable Dr, 5921 Sable Dr, 5915 Sable Dr, 5909 Sable Dr, 5841 Sable Dr, 5737 Sable Dr, 5731 Sable Dr	$169,900	0.23	3	2.5	2006	2,412	Jul-18	$72.15

The Test Area Sales in Group 3 are located between 227 feet and 419 feet from the house to the solar panels. The Control Area Sales are located beyond this area, in other areas of the Crossfield Division, and in other nearby subdivisions.

Dominion Indy III – Group 3: Test Area Sales

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Control Area Sales in Groups 2 and 3 were adjusted for market conditions using a regression analysis to identify the appropriate monthly market condition adjustment. The results of our study are presented below.

CohnReznick Paired Sale Analysis Dominion Indy III Solar Group 2		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sales (4)	Adjoining solar farm	$60.61
Control Area Sales (8)	No: Not adjoining solar farm	$57.84
Difference between Unit Price of Test Area Sales and Adjusted Median Unit Price of Control Area Sales		**4.78%**

CohnReznick Paired Sale Analysis Dominion Indy III Solar Group 3		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sales (7)	Adjoining solar farm	$72.15
Control Area Sales (11)	No: Not adjoining solar farm	$71.69
Difference between Unit Price of Test Area Sales and Adjusted Median Unit Price of Control Area Sales		**0.65%**

The Test Area Sales in Group 2 sold between 18 and 75 days on market (0-3 months), while the Control Area Sales in Group 2 sold between 2 and 649 days on market (0-23 months). The Test Area Sales in Group 3 sold between 3 and 75 days on market (0-3 months), while the Control Area Sales in Group 3 sold between 2 and 89 days on market (0-3 months).

Noting the relatively low price differentials, it does not appear that the Dominion Indy III solar farm had any negative impact on adjoining residential property values.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

BEFORE ANNOUNCEMENT AND AFTER CONSTRUCTION OF THE SOLAR FARM ANALYSIS

Due to the number of sales over time in the Crossfield subdivision, we were able to conduct an analysis on the prices of single-family homes before the solar farm announcement date in comparison to the prices of single-family homes after the construction of the Dominion Indy III solar farm. This analysis shows the appreciation rates of homes in the subdivision over the period before the solar farm was announced to after construction was complete. If there were a difference in the appreciation rates of homes within the Test Area (homes adjoining the solar farm) from the homes within the Control Areas (homes not adjoining the solar farm), we would expect to see it in the results of this analysis. We have provided our conclusions from the analysis below, and the following page displays an explanatory chart.

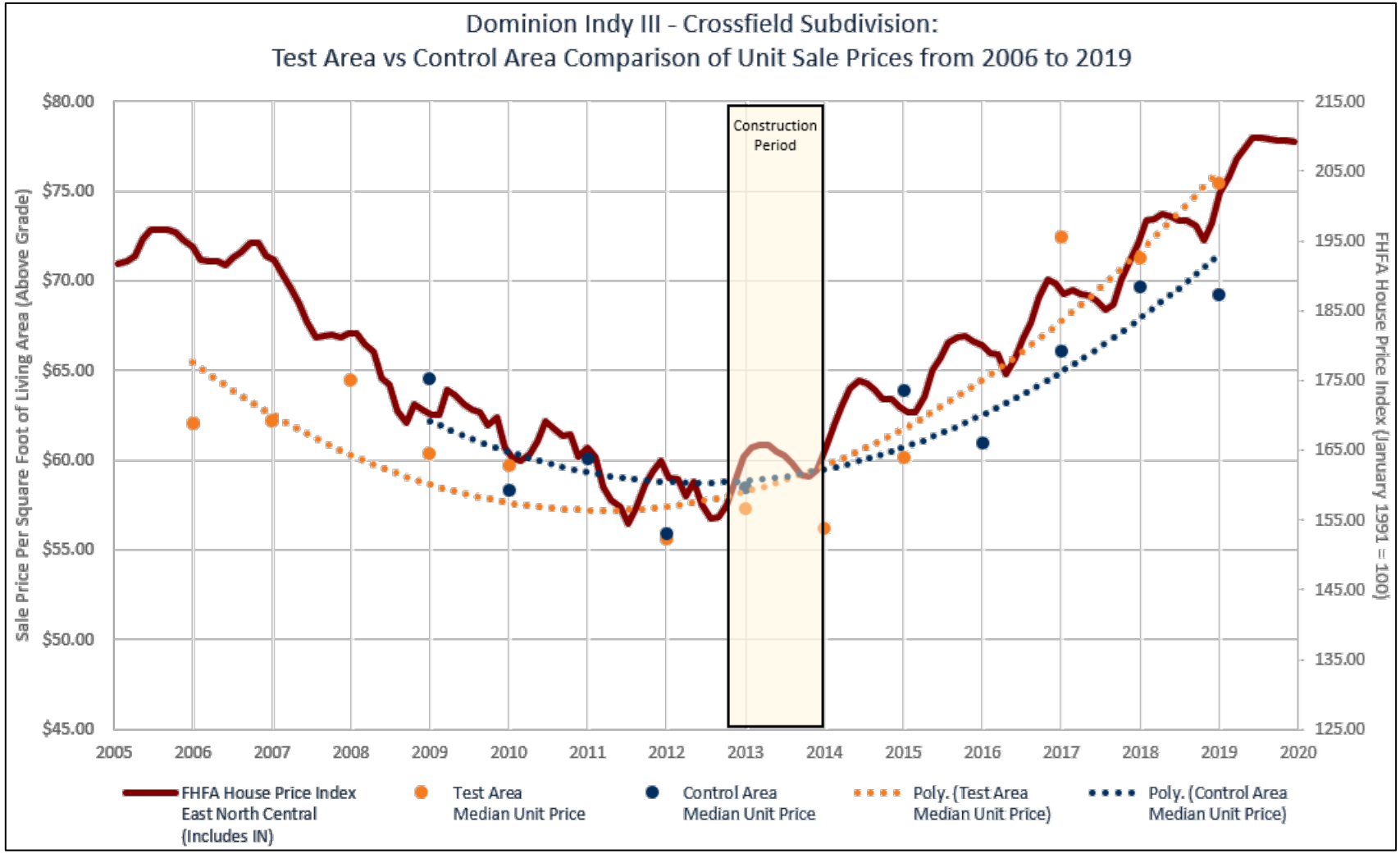
- The Before the Announcement of the solar farm period is from 2006 to July 2012. The After Construction of the solar farm period is from December 2013 to 2019.
- 25 Test Area Sales were sold from 2006 to 2019 and 46 Control Area Sales sold from 2008 to 2019.
    - The Test Area Sales are homes located adjoining the Dominion Indy III Solar Farm in the Crossfield subdivision.
    - The Control Area Sales are homes located in the remainder of the Crossfield subdivision, not adjoining the solar farm.
- In both the Test Area Sales (ORANGE) and Control Area Sales (BLUE) plotted on the chart on the following page, new construction homes sold through 2011, prior to announcement of the solar farm.
- The dotted lines are polynomial trend lines plotted by Microsoft Excel in order to illustrate and approximate the “average” trend of each set of data.
- After construction of the solar farm, in parallel with the improving economic climate (as depicted by the Red lines representing the Federal Housing Finance Agency’s House Price Index for the East North Central region that includes Indiana), it appears that unit prices for both the Test Area Sales and the Control Area Sales appreciated at a similar rate over the period from 2013 to 2019.
- The economic climate improved in the period from 2013 to 2019, as shown by the Red line representing the Federal Housing Finance Agency’s House Price Index for the East North Central region that includes Indiana. After construction of the solar farm, in parallel with the improving economic climate, it appears that unit prices for both the Test Area Sales and the Control Area Sales appreciated at a similar rate over the period from 2013 to 2019.

A difference in appreciation rates does not appear to exist between Test Area Sale homes versus the Control Area Sale homes.

Sale prices of single-family homes after the construction of the solar farm exhibit a similar appreciation trend as sales prior to the solar farm announcement. Overall, our findings indicate that there *is not a consistent and measurable difference* in prices that exists in association with homes proximate to the Dominion Indy III solar farm

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client’s legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

ANALYSIS OF BEFORE ANNOUNCEMENT AND AFTER CONSTRUCTION OF THE DOMINION INDY III SOLAR FAR



Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals), and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 7: O'BRIEN SOLAR FIELDS, DANE COUNTY, WI

Coordinates: Latitude 42.997665, Longitude -89.45895

PINs: 0609-172-3000-2, 0609-172-1000-2

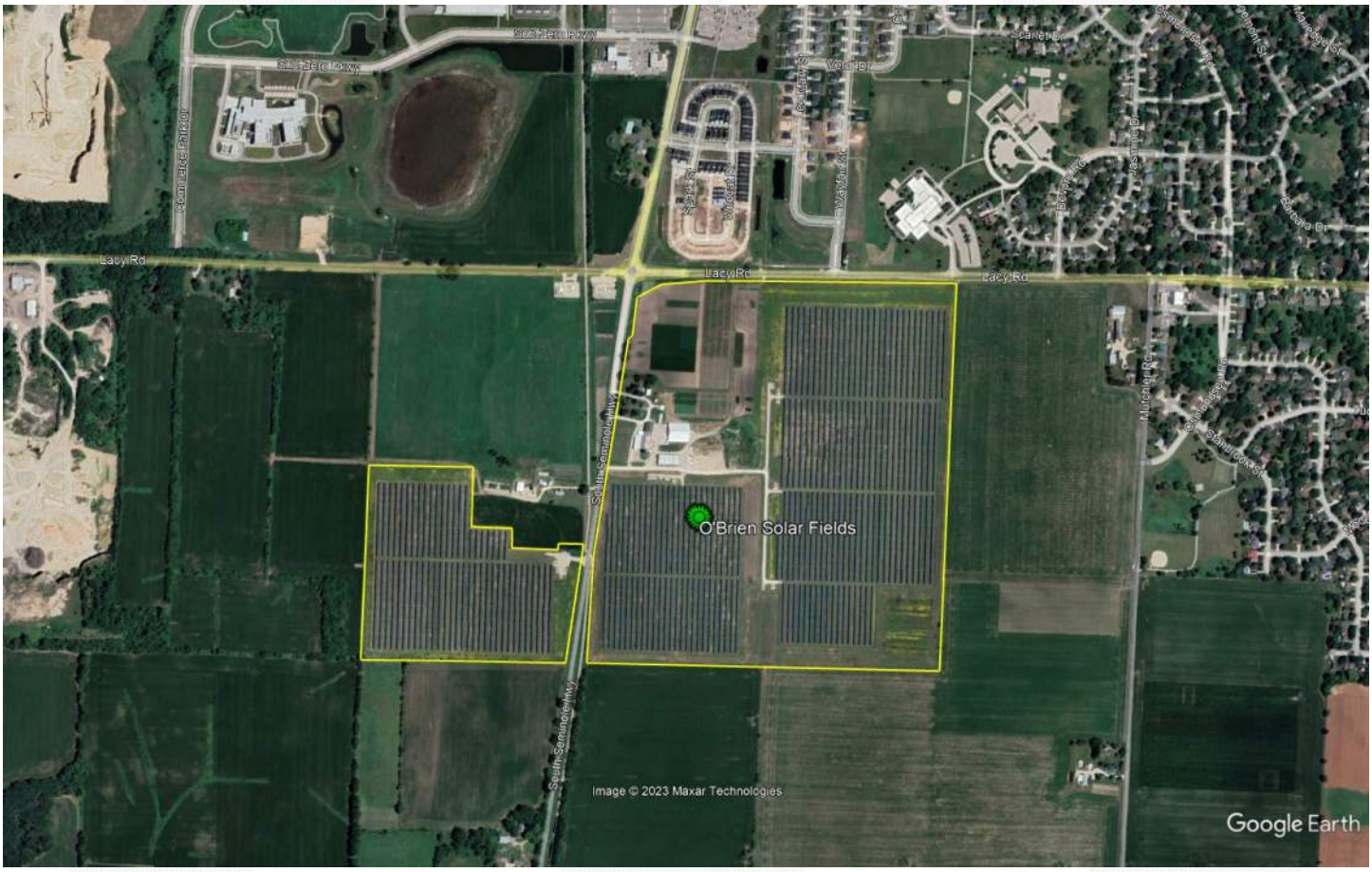
Population Density (2023): 1,682 people per square mile (3-mile radius)

Total Land Size: Approximately 171 acres

Date Project Announced: July 2019

Date Project Completed: June 2021

Output: 22.1 MW AC



Approximate O'Brien Solar Fields boundaries outlined in yellow, aerial imagery provided by Google Earth dated July 2022

The O'Brien Solar Fields project is located in Dane County, Wisconsin and is in between Lacy Road to the north, Whalen Road to the south, and bisected by South Seminole Highway.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The current owner of the solar farm is Madison Gas & Electric Company (MGE) while EDF Renewables developed the solar facility. The electricity generated from the project is being offered by MGE to local businesses, under MGE's Renewable Energy Rider program, to power all or a portion of their businesses. The Renewable Energy Rider program allows MGE to provide all or a significant portion of electricity from renewable generation to businesses interested in utilizing renewable energy, subject to customers with a minimum electric demand level of 200 kW. The solar farm went into operation in June 2021 and is comprised of nearly 60,000 panels.

The Surrounding Area: The O'Brien Solar Fields installation is located in central Dane County, Wisconsin, approximately five miles southwest of the City of Madison, in the south-central portion of Wisconsin. Dane County, the second most populous county in Wisconsin, is home to the Wisconsin State Capital, the City of Madison. The solar site is approximately 75 miles west of the City of Milwaukee, 120 miles northwest of the City of Chicago, Illinois and 125 miles southwest of the City of Green Bay.

The O'Brien Solar Fields project is one of the 46 solar farms in Wisconsin and is one of seven solar farms located within Dane County, Wisconsin. The O'Brien Solar Fields project is the seventh largest solar farm in Wisconsin, and the largest within Dane County, with the largest solar farms in the state being Badger Hollow I Solar farm in Iowa County and Two Creeks Solar Farm Manitowoc County, which both produce an output of 150 MW.

The Immediate Area: The solar farm spans over 170 acres in Dane County and is immediately surrounded by primarily agricultural land with residential properties to the north and a middle school to the northeast. Further to the northeast lies more densely concentrated residential, commercial properties, and the University of Wisconsin-Madison, in the City of Madison, approximately five miles from the Project site.

Real Estate Tax Info: In Dane County, Wisconsin, real property is assessed on annual basis as of January 1 each year. The Notice of Assessment is typically sent out to property owners in March of each year and Tax Bills are send the third Monday of December each year. Property tax bills are then due the following January 31st and July 31st for the preceding tax year.

The two participating parcels that make up the O'Brien Solar Fields site were formerly split into six parcels, "parent parcels", that have since been combined as of the 2023 tax year. The data presented below is from the six "parent parcels" from the 2020 and 2021 tax years.

Pin	Acres	2020 Taxes Paid	2021 Taxes Paid	Tax Increase	2020 Assessed Value	2021 Assessed Value	Value Increase
Dane County, WI							
0609-172-3000-2	35.061						
0609-172-9000-5		$5,109	$9,153	79.15%	$231,400	$402,300	73.85%
0609-172-9610-7		-	-	-	-	-	-
0609-172-1000-2	136.056						
0609-171-8500-3		$265	$0	-100.00%	$11,800	$0	-100.00%
0609-171-9000-6		$272	$0	-100.00%	$12,100	$0	-100.00%
0609-172-8000-7		$15,045	$15,449	2.69%	$663,300	$663,300	0.00%
0609-172-9500-0		$216	$0	-100.00%	$9,600	$0	-100.00%
Total	171.117	$20,907	$24,602	17.67%	$928,200	$1,065,600	14.80%

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

In the State of Wisconsin, solar arrays with above 50 MW of generation capacity are exempt from local property taxes. Instead, solar farms pay a license fee to the State who then distributes payments to the county and township, city, or village in which the solar farm is located to compensate the local governments. Under current law, the local government receive a combined $5,000 per MW of solar capacity annually from the State once the project reaches commercial operation. A formula for how these payments are distributed between counties and towns, villages or cities is presented below.

Local Jurisdiction	Jurisdiction	Percentage	Amount Paid Annually per MW
System is located in a city or village	City/Village	56.70%	$2,833
	County	43.30%	$2,167
System is located in a town	Town	43.30%	$2,167
	County	56.70%	$2,833

The following maps display the parcels developed with the solar farm (outlined in yellow). Properties immediately adjoining the solar parcels (outlined in blue) are numbered for subsequent analysis. It is noted that the aerial imagery provided by Google Earth is dated July 2022.

O'Brien Solar Fields – Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

O'Brien Solar Fields – Adjoining Properties

PAIRED SALES ANALYSIS

In reviewing Adjoining Properties to study in a Paired Sales Analysis, one sale of the four identified was considered but eliminated from further consideration as discussed below.

Adjoining Property 7 is comprised of 40-acres of land formerly used as an agriculture land use that sold to Emerson College in Septmeber 2022 for $734,000. Emerson College has plans to develop an athletic complex on the land that is adjacent to the O'Brien Solar Fields. As the land was purchased by Emerson College, the zoning changed from Agricultural to exempt, per the Dane County Zoning Office. As the property is not subject to zoning after being a former agricultural use, we have not included the sale of Adjoining Property 7 in our analysis due to the unique nature of the property's allowable uses and lack of comparable land sales that are exempt to zoning in the surrounding area.

Group 1 – Improved Single-Family Residential Properties

Adjoining Property 23 to the O'Brien Solar Fields Project was considered for a paired sales anaylsis, and we have anaylzed this property as a single-family home use in Group 1. The property is a two-story, freestanding, 1,605 sqaure foot home with a full unfinished basement and attached garage, located on a 0.10-acre lot that sold in April 2023. The property is located within the Crescent Crossing subdivision, a new development consisting of 117 single-family homes with original home plans. Crescent Crossing is made up of both attached duplexes and freestanding single-family homes. This property line is approximately 495 feet from the closest

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

solar panel, and the improvements are approximately 530 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 23.

SUMMARY OF TEST AREA SALE Group 1 - O'Brien Solar Fields										
Adj .Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
23	2473 Wildcat Drive, Fitchburg	$419,900	3	2.5	2023	1,605	2-Story SFH with Unfinished Basement and Attached Garage	0.10	$261.62	Apr-23

We analyzed 45 Control Area Sales of single-family homes with similar construction and use that were located within the Crescent Crossing subdivision, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 1. The Control Area Sales for Group 1 are freestanding single-family homes located on lots less than 0.5-acres in size with three bedrooms and two and a half baths, consisting of between 1,516 square feet and 1,632 square feet of gross living area, and built between 2021 and 2023. The Control Area Sales also have attached garage parking and unfinished basements.

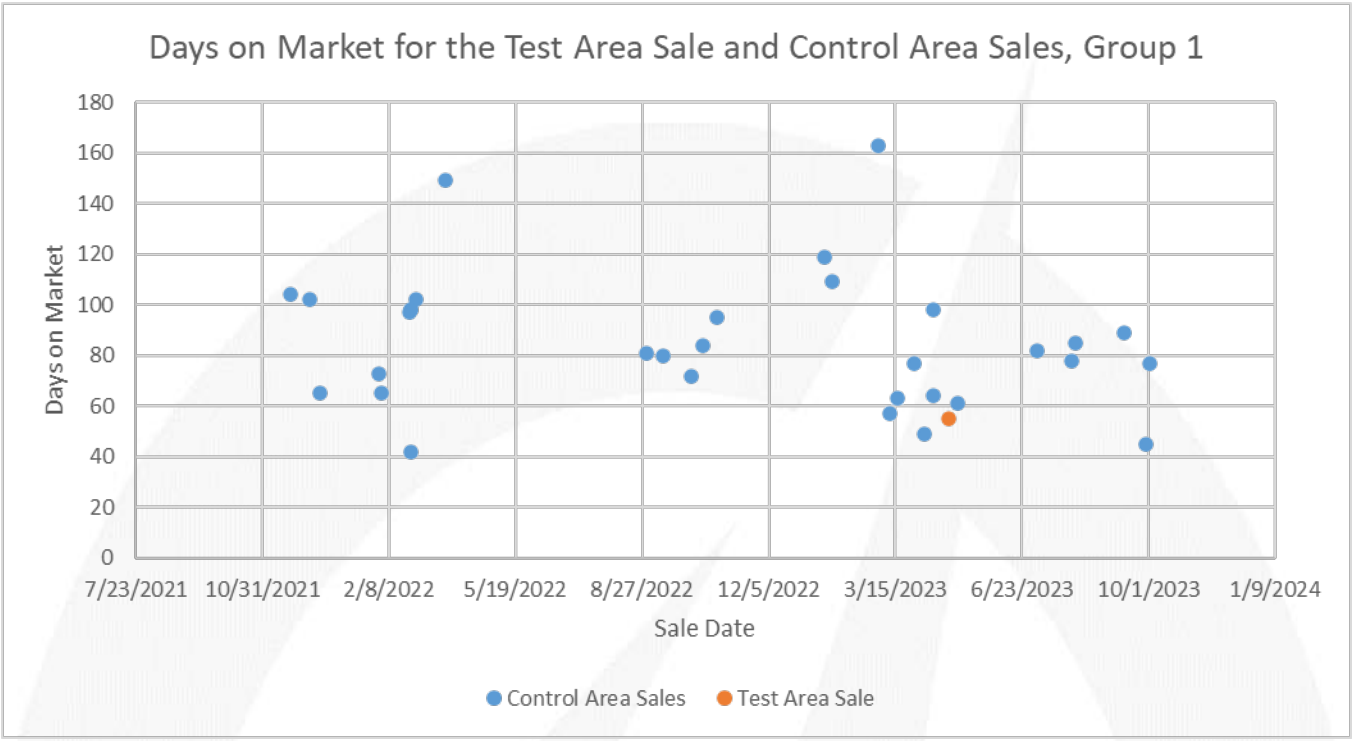
The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the O'Brien Solar Fields – Group 1 is presented below.

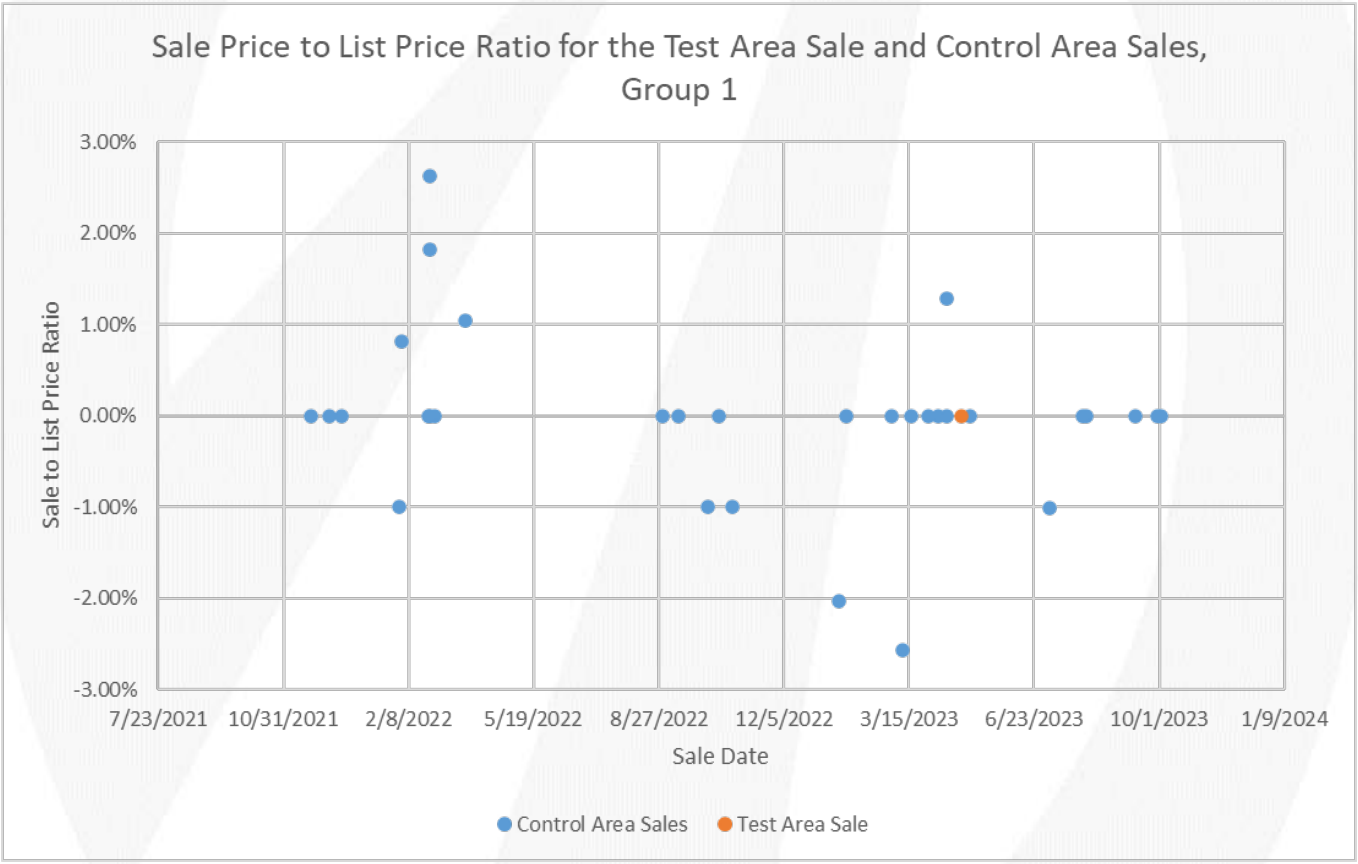
CohnReznick Paired Sale Analysis O'Brien Solar Fields - Group 1		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sale (1)	Adjoining solar farm	$261.62
Control Area Sales (45)	No: Not adjoining solar farm	$268.41
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**-2.53%**

Noting no negative marketing time differential, Adjoining Property 23 sold in 55 days, while the Control Area Sales sold between 42 and 163 days, with a median time on market of 82 days. Additionally, Adjoining Property 23 sold for its' listing price while the Control Area Sales sold for between 2.56 percent below to 2.63 percent above their listing price.

Noting minimal negative price differential, with Test Area Sale 1 having a slightly lower unit sale price than the Control Area Sales, it does not appear that the O'Brien Solar Fields had any negative impact on the sale of the Test Area Sale.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.





Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Crescent Crossing

Fitchburg

VERIDIAN HOMES

Crescent Crossing Subdivision Map, Test Area Sale 1, Adjoining Property 23 (Lot 19) is outlined in yellow above; O'Brien Solar Fields is located adjacent to the southeast as indicated by the red arrow above.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick

Group 2 – Improved Single-Family Residential Properties

Adjoining Property 25 to the O'Brien Solar Fields project was considered for a paired sales analysis, and we have analyzed this property as single-family home use in Group 2. The property is a freestanding, two-story 2,946 square foot home with an attached garage and unfinished basement, located on a 0.25-acre lot and sold in March 2023. The proprety is located within the Stoner Prairie subdivision, a new development consisting of 135 single-family homes. The Stoner Prairie subdivision offers various standard floor plans and features, that can be altered to their preferences, allowing homebuyers ready-to-go properties for quick move-ins. The improvements on this property are located approximately 515 feet to the nearest solar panel while the property line is approximately 465 feet to the nearest solar panel. The following table outlines the other important characteristics of Adjoining Property 25.

SUMMARY OF TEST AREA SALE Group 2 - O'Brien Solar Fields										
Adj. Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
25	2713 Leo Mary Street	$737,200	3	2.5	2023	2,946	2-Story SFH with Attached Garage and Unfinished Basement	0.25	$250.24	Mar-23

We analyzed 22 Control Area Sales of single-family homes with similar construction and use that were located within the Stoner Prairie subdivision, that sold within a reasonable time frame from the sale dates of the Test Area Sales in Group 2. The Control Area Sales for Group 2 are single-family homes located on lots less than 0.5-acres in size with three to four bedrooms and two and a half to three baths, consisting of between 2,483 square feet and 3,250 square feet of gross living area, and built between 2021 and 2023. The Control Area Sales also have additional improvements such as attached garage parking and unfinished basements.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the O'Brien Solar Fields Project – Group 2 is presented below.

CohnReznick Paired Sale Analysis O'Brien Solar Fields - Group 2		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sale (1)	Adjoining solar farm	$250.24
Control Area Sales (22)	No: Not adjoining solar farm	$247.38
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**1.16%**

Noting no negative price differential, it does not appear that the O'Brien Solar Fields use impacted the sale of the Test Area Sale, Adjoining Property 25.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The homes within the Stoner Prairie subdivision are primarily sold directly to the homebuyer, who can select a base floor plan and make slight modifications to their liking. As such, a majority of the control area home sales were not openly marketed, which is also the case for Adjoining Property 25.

Group 3 – Improved Single-Family Residential Properties

Adjoining Property 27 to the O'Brien Solar Fields project was considered for a paired sales analysis, and we have analyzed this property as single-family home use in Group 2. The property is a freestanding, two-story 3,698 square foot home with an attached garage and unfinished basement, located on a 0.24-acre lot and sold in May 2023. The proprety is also located within the Stoner Prairie subdivision, a new development consisting of 135 single-family homes. The Stoner Prairie subdivision offers various standard floor plans and features, that can be altered to their preferences, allowing homebuyers ready-to-go properties for quick move-ins. The improvements on this property are located approximately 470 feet to the nearest solar panel while the property line is approximately 420 feet to the nearest solar panel. The following table outlines the other important characteristics of Adjoining Property 27.

SUMMARY OF TEST AREA SALE Group 3 - O'Brien Solar Fields										
Adj. Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
27	2705 Leo Mary Street	$765,774	5	4.5	2023	3,698	2-Story SFH with Attached Garage and Unfinished Basement	0.24	$207.08	May-23

We analyzed 4 Control Area Sales of single-family homes with similar construction and use that were located within the Stoner Prairie subdivision, that sold within a reasonable time frame from the sale dates of the Test Area Sales in Group 3. The Control Area Sales for Group 3 are single-family homes located on lots less than 0.5-acres in size with four to five bedrooms and two and a half to three and a half baths, consisting of between 3,206 square feet and 3,925 square feet of gross living area, and built between 2021 and 2022. The Control Area Sales also have additional improvements such as attached garage parking, unfinished basements and partially finished basements.

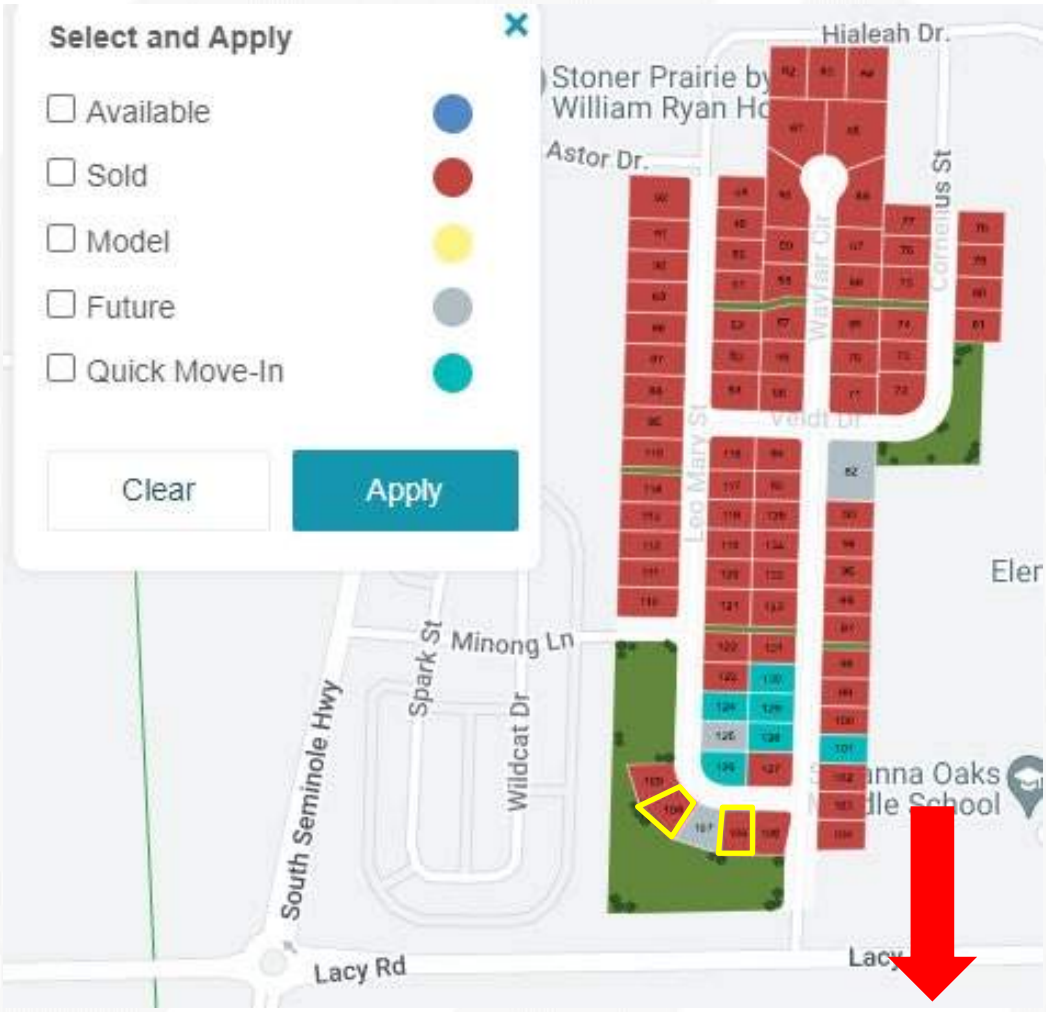
The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the O'Brien Solar Fields Project – Group 3 is presented below.

CohnReznick Paired Sale Analysis O'Brien Solar Fields - Group 3		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sale (1)	Adjoining solar farm	$207.08
Control Area Sales (4)	No: Not adjoining solar farm	$206.42
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**0.32%**

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Noting no negative price differential, it does not appear that the O'Brien Solar Fields use impacted the sale of the Test Area Sale, Adjoining Property 27.

The homes within the Stoner Prairie subdivision are primarily sold directly to the homebuyer, who can select a base floor plan and make slight modifications to their liking. As such, a majority of the control area home sales were not openly marketed, which is also the case for Adjoining Property 27.



Stoner Prairie Subdivision Map, Test Area Sales 2 & 3, Adjoining Properties 25 & 27 are outlined in yellow above; O'Brien Solar Fields is located adjacent to the south as indicated by the red arrow above.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 8: PORTAGE SOLAR FARM, PORTAGE, PORTER COUNTY, INDIANA

Coordinates: Latitude 41.333263, Longitude -87.093015

PIN: 64-06-19-176-001.000-015

Total Land Size: 56 AC

Date Project Announced: February 2012

Date Project Completed: September 2012

Output: 1.96 MW AC (1.5 MW DC)

The solar farm was developed by Ecos Energy, a subsidiary of Allco Renewable Energy Limited, and is currently owned by PLH, Inc. This solar panels are ground-mounted the facility has the capacity for 1.96 Megawatts (MW) AC of power, which is enough to power 300 homes. This solar farm consists of 7,128 solar modules which are of a fixed tilt installation and it contains three inverters.

The Surrounding Area: The Portage Solar Farm is located outside the City of Portage, in Portage Township, approximately 2.5 miles to the southeast of the city center. The solar farm is also approximately two miles northwest of South Haven, a neighboring residential community. Portage Township is in the northern portion of Porter County, which is in the northwestern corner of the state of Indiana. The solar farm is approximately 45 miles southeast of downtown Chicago.

The Immediate Area: This solar farm is located on the south side of Robbins Road, and is surrounded to the west, south, and east by agricultural land. Just beyond the agricultural land buffer, uses to the west and east area single family homes, and to the south is an apartment complex and a commercial development with an IMAX movie theater and restaurants. To the north of the solar farm, across Robbins Road uses consist of a residential subdivision and vacant land. The solar farm and surrounding properties have a Valparaiso mailing address.

The solar farm is fenced from adjacent properties by a fence that surrounds all of the solar panels. Natural vegetation borders the northern, and eastern sides of the larger agricultural parcel the solar farm is nestled within.

Real Estate Tax Information: The taxes on the 56 acres of farmland were $1,400 per year prior to the solar farm development. After the solar farm was developed, only 13 acres (23 percent of the site) were re-assessed and the remaining 43 acres continued to be farmed. The total real estate tax bill increased to $16,350 after the solar farm was built, including both uses on the site. This indicates that the real estate taxes for the solar farm increased from $25 per acre to $1,175 per acre after the solar farm was developed.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The map below displays the solar farm parcel shaded in blue, and the adjoining properties (outlined in red). Adjoining Properties to the solar farm are numbered for subsequent analysis.

Portage Solar Farm - Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Portage Solar Farm - Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

PAIRED SALES ANALYSIS

Adjoining Properties 1 and 7 (Test Area Sales) were each considered for a paired sales analysis. Adjoining Property 1 was analyzed as homestead-small farmland tract since at the time of purchase the site was used only as agricultural land. The buyer bought it as vacant land and subsequently built a home on the site. Adjoining Property 7 was analyzed as a single-family home use.

GROUP 1

For Adjoining Property 1 (Group 1), the property line is approximtately 836 feet from the closest solar panel and the residential home that was eventually built is approximately 1,228 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 10.

Portage Solar Test Area Sale Group 1								
Adj. Property #	Address	Sale Price	Site Size (AC)	PI Index (Corn)	Year Built	Vacant at the Time of Sale	Sale Price per Acre	Sale Date
1	442 W 875 N, Valparaiso	$149,600	18.70	139.30	2017 (After Purchase)	Yes	$8,000	Feb-14

In Group 1, we analyzed nine Control Area Sales of homesteads-small farmland tracts that sold within a reasonable time frame from the sale date of Adjoining Property 1. All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analysis for Group 1 is presented below.

CohnReznick Paired Sale Analysis Portage Solar Group 1		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per Acre
Test Area Sales (1)	Adjoining solar farm	$8,000
Control Area Sales (9)	No: Not adjoining solar farm	$7,674
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**4.25%**

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

GROUP 2

For Adjoining Property 7 (Group 2), the residential home is approximately 1,227 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 7.

Portage Solar Test Area Sale Group 2									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Square Feet	Sale Price per SF	Sale Date
7	836 N 450 W Valparaiso	$149,800	1.00	3.0	1.5	1964	1,776	$84.35	Sep-13

For Adjoining Property 7, we analyzed seven Control Area Sales of similar single family homes that sold within a reasonable time frame from the sale date of Adjoining Property 7. All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

Portage Solar - Group 2: Test Area Sale Map

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The result of our analysis for Group 2 is presented below.

CohnReznick Paired Sale Analysis Portage Solar Group 2		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sales (1)	Adjoining solar farm	$84.35
Control Area Sales (7)	No: Not adjoining solar farm	$84.27
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**0.10%**

Noting the relatively small price differentials between Test Area Sales and Control Area Sales, with both Test Area Sales (Adjoining Property 1 and 7) having higher unit sale prices than the respective Control Area Sales, it does not appear that the Portage Solar Farm had any negative impact on adjacent property values.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 9: IMPA FRANKTON SOLAR FARM, FRANKTON, INDIANA

Location: Frankton, Madison County, Indiana

Coordinates: Latitude 40.125701; Longitude -85.4626.88

PIN: 48-08-06-500-012.001-020

Total Land Size: 13 acres

Date Project Announced: November 2013

Date Project Completed: June 2014

Output: 1.0 MW AC (1.426 MW DC)

IMPA Frankton Solar Farm is located on the west side of South Lafayette Street, in the Town of Frankton. The solar farm was built in 2014 in joint effort by Inovateus Solar and Indiana Municipal Power Agency (IMPA). This solar farm has the capacity for 1 MW AC and its expected annual output is 1,426 MWh (megawatt hours). The solar farm is separated off from the adjacent properties by a 6 foot fence that surrounds the entirety of the solar panels. From our inspection of the site, we noted that the driveway to access the panels slopes downward and allows some views of the site.

The Surrounding Area: The IMPA Frankton solar farm is located in Lafayette Township, in the central portion of Madison County, Indiana. The solar farm is approximately 50 miles northeast of the center of Indianapolis and 65 miles northeast of the Indianapolis International Airport.

The Immediate Area: The solar installation is relatively centrally located in an undeveloped pocket of the town of Frankton, on the western side of South Lafayette Street. Adjoining parcels to the west include park land featuring baseball fields. Land further to the west is agricultural in nature, actively farmed primarily with row crops. Adjoining parcels to the north are residential with large estate homes. Adjoining the solar farm to the southeast is a single-family home identified in our analysis as Adjoining Property 7, and a baseball field. More farmland is directly south of the solar site. The solar site is adjoining a number of homes located east of the panels, along Lafayette Street. Mature trees at the rear of residential properties act as vegetative buffers.

Across Lafayette Street, to the east, are single-family residential homes forming the southeast quadrant of homes in Frankton.

All of the adjacent land parcels to the solar farm are used for agricultural, residential, or recreational purposes.

The solar farm is surrounded by a chain link fence that contains all the solar panels. Additionally, vegetative buffers along sides facing residential properties were planted as part of the solar farm development.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick

Real Estate Tax Information: Prior to development of the solar farm in 2014, the original owner held one parcel of 15.667 acres with a home, pole barn and a utility shed, and no personal property was assessed on this parcel. In 2014 the parcel was split into two parcels and 13 acres was sold to IMPA for development of the solar farm. The owner of the parent parcel of 15.667 acres paid real estate taxes of $1,799 annually, prior to the split. After development of the solar farm, real estate taxes for both parcels, plus personal property tax revenue generated from the solar parcel, caused an increase $8,275, or a 360 percent increase in tax revenue for the entire site.

PIN	Acres	2013 Taxes Paid	2017 Taxes Paid	Tax Increase	2013 Assessed Value	2017 Assessed Value	Value Increase
Madison County, IN							
48-08-06-500-012.000-020 (parent)	15.667 (2013)	$ 1,799	$ 1,402		$ 138,700	$ 127,000	
Personal Property		$ -	$ -		$ -	$ -	
48-08-06-500-012.001-020 (2014 solar parcel split)	13.00 (2017)	$ -	$ 4,063		$ -	$ 137,400	
Personal Property		$ -	$ 2,810		$ -	$ 440,380	
TOTAL	**0.00**	**$ 1,799**	**$ 8,275**	**360%**	**$ 138,700**	**$ 704,780**	**408%**

The map below displays the solar farm parcel (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.

IMPA Frankton Solar Farm - Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

PAIRED SALES ANALYSIS

We have performed a paired sales analysis with regards to the IMPA Frankton solar farm. The analysis compares sales of Adjoining Properties to the solar farm after the completion of the solar farm site (Test Area Sales) to similar properties not proximate to the solar farm (Control Area Sales). We utilized this type of paired sale analysis for both groups of Adjoining Properties under study.

GROUP 1

In Group 1, we identified and analyzed six Control Area Sales that were comparable to the Test Area Sale in location, size, and use that were not located in close proximity to the solar farm. We excluded sales that were bank-owned, or otherwise non arms'-length transactions. Adjoining Property 2 was manufactured single-family home use.

IMPA Frankton Solar Farm Test Area Sales Group 1									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Home Size (SF)	Sale Date	Price PSF
2	607 S. Lafayette St Frankton, IN	$41,900	0.37	2	2	1991	1,466	Jun-15	$28.58

We identified six Control Area Sales that are included in this analysis that sold within a reasonable time frame from the sale date of the Test Area Sale (Adjoining Property 2) and are similar to the Test Area Sale in physical characteristics.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

IMPA Frankton Solar Farm – Group 1: Test Area Sale Map

Control Area Sales in Group 1 were adjusted for market conditions using a regression analysis to identify the appropriate monthly market condition adjustment. The results of our study are presented below.

CohnReznick Paired Sale Analysis IMPA Frankton Solar Farm Group 1		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price per SF**
Test Area Sale (1)	Adjoining Solar Farm	$28.58
Control Area Sales (6)	No: Not adjoining solar farm	$28.42
Difference between Unit Price of Test Area Sales and Adjusted Median Unit Price of Control Area Sales		**0.56%**

GROUP 2

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

In Group 2, we identified and analyzed five Control Area Sales that were comparable to the Test Area Sale (Adjoining Property 7) in location, size, and use that were not located in close proximity to the solar farm. We excluded sales that were bank-owned, or otherwise non arms'-length transactions. Adjoining Property 7 was analyzed as a single-family home use.

IMPA Frankton Solar Farm Test Area Sales Group 2									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Home Size (SF)	Sale Date	Price PSF
7	713 S. Lafeytte St Frankton, IN	$131,000	3.04	4	2	2003	2,500	Oct-16	$52.40

We identified five Control Area Sales that are included in this analysis that sold within a reasonable time frame from the sale date of the Test Area Sale and are similar to the Test Area Sale in physical characteristics.

IMPA Frankton Solar Farm – Group 2: Test Area Sale Map

Control Area Sales in Group 2 were adjusted for market conditions using a regression analysis to identify the appropriate monthly market condition adjustment. The results of our study are presented below.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick Paired Sale Analysis IMPA Frankton Solar Farm Group 2		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price per SF**
Test Area Sale (1)	Adjoining Solar Farm	$52.40
Control Area Sales (5)	No: Not adjoining solar farm	$51.47
Difference between Unit Price of Test Area Sales and Adjusted Median Unit Price of Control Area Sales		**1.81%**

Noting the relatively small price differential, in which the Test Area Sales were higher than the median for the Control Areas Sales, in both Groups 1 and 2, it does not appear that the IMPA Frankton solar farm had any negative impact on adjoining property values.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM 10: VALPARAISO SOLAR, VALPARAISO, PORTER COUNTY, INDIANA

Coordinates: Latitude 41.301180, Longitude –87.094055

PINs: 64-09-07-152-001.000-019 and 64-09-07-152-002.000-019

Total Land Size: 27.9 Acres

Date Project Announced: March 2012

Date Project Completed: December 20, 2012

Output: 1 MW AC (1.3 MW DC)

The Valparaiso solar farm was developed by Sustainable Power Group, LLC and became operational in December 2012. The solar facility has ground mounted capacity for 1.0 Megawatts (MW) AC of power. The panels are mounted in a fixed tilt fashion and there are two inverters in this solar farm.

The Surrounding Area: The Valparaiso solar farm is located in Union Township, in the northwest portion of Porter County, Indiana. Porter County is located in the very northwest corner of the state of Indiana. The solar farm is approximately 10 miles northwest of the Porter County Regional Airport and approximately six and a half miles northwest of the center of the city of Valparaiso.

The Immediate Area: This solar farm is located on the southern side of Indiana Route 130 (Railroad Avenue) in Valparaiso, Porter County, Indiana and is located approximately 35 miles southwest of downtown Chicago.

Adjoining parcels to the solar farm to the east and south are residential homes and to the west and north are agricultural in nature.

The solar farm is lined by a chain link fence that surrounds all of the solar panels. Additionally, there are bushes and trees to the north and west of the solar panels; this vegetation has been in place since before development of the solar farm. Other small trees were planted and spaced out around the perimeter of the solar farm after development. From our inspection, the solar panels cannot be seen from Indiana State Route 130 from the north, nor on N 475 W Road to the east as this is a raised roadway. The adjacent properties to the east of the solar panels have full view of the panels from the backyards of the homes.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

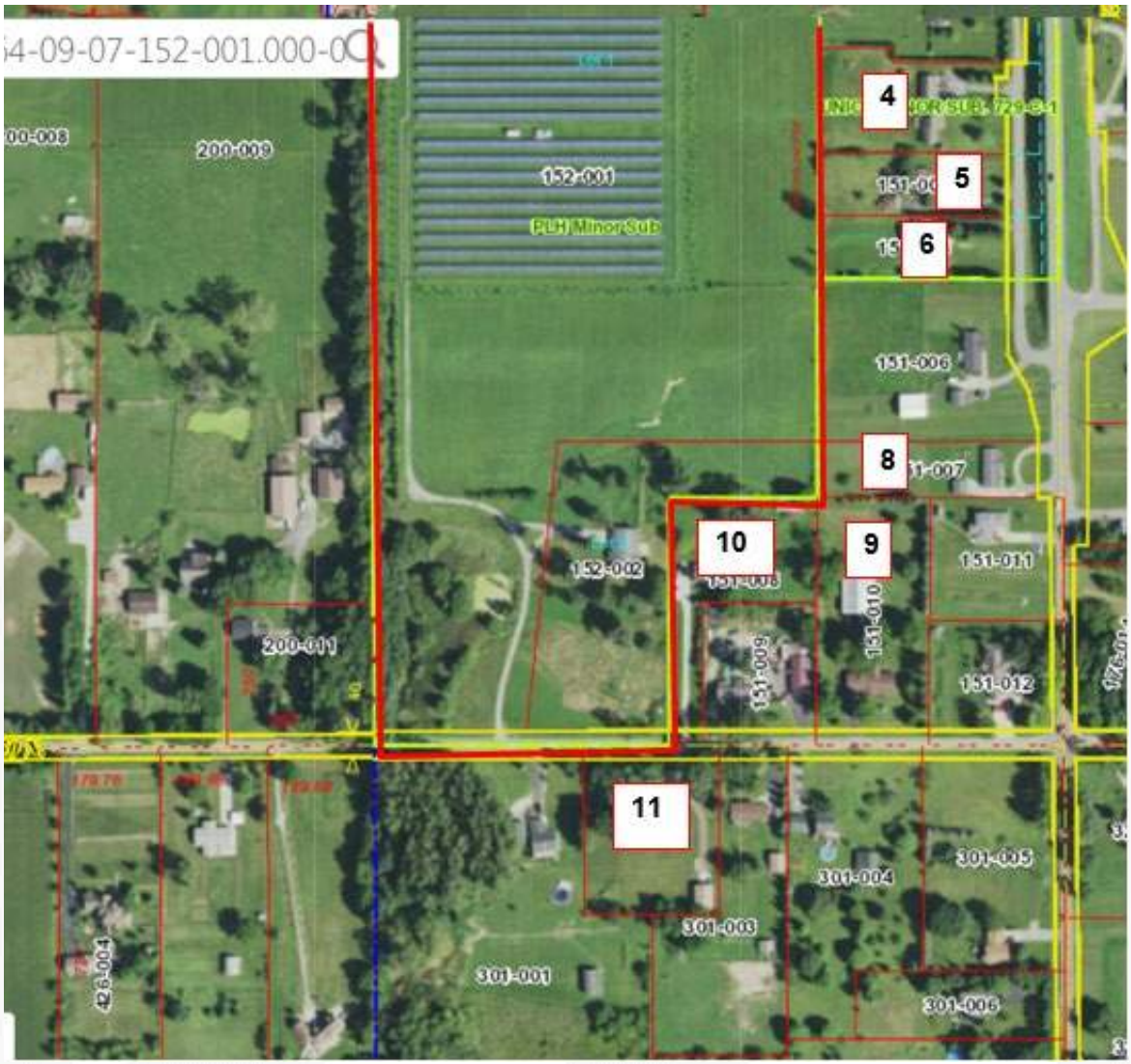
Real Estate Tax Information: Prior to development of the solar farm, in 2011, the original parent parcel contained a home, a homesite, excess land, and agricultural land. In 2012, Valparaiso Solar, LLC bought the entire property to develop the solar farm on. Subsequently when Valparaiso Solar, LLC sold the project to PLH, LLC, they split the parcels so that the home and homesite were one parcel of 3.25 acres and the remaining 24.65 acres were the solar panel site. After development of the solar farm development, in 2015, total real estate taxes for both parcels had increased to approximately $2,587, a 25 percent increase in tax revenue for the site.

PIN	Acres	2011 Taxes Paid	2015 Taxes Paid	Tax Increase	2011 Assessed Value	2015 Assessed Value	Value Increase
Porter County, IN							
64-09-07-151-001.000-019 (parent parcel)		$ 2,072			$ 203,800		
64-09-07-152-001.000-019 (split parcel)	24.65		$ 2,587			$ 156,800	
64-09-07-152-002.000-019 (split parcel)	3.25		$ 1,741			$ 187,900	
TOTAL	**27.90**	**$ 2,072**	**$ 2,587**	**25%**	**$ 203,800**	**$ 344,700**	**69%**

The maps below and on the following page display the solar farm parcels (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.

Valparaiso Solar Farm - Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.



Valparaiso Solar Farm - Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

PAIRED SALES ANALYSIS

Adjoining Properties 10 and 14 (Test Area Sales) were each considered for a paired sales analysis. Both were analyzed as single-family home uses.

GROUP 1

For Adjoining Property 10 (Group 1), the residential home is approximately 514 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 10.

Valparaiso Solar Test Area Sale Group 1									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Square Feet	Price PSF	Sale Date
10	489 W 450 N, Valparaiso, IN	$105,000	1.45	3	2	1993	1,274	$ 82.42	Jul-15

We analyzed five Control Area Sales that sold within a reasonable time frame from the sale date of Adjoining Property 10. All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Valparaiso Solar - Group 1: Test Area Sale Map

The result of our analyses for Group 1 is presented below.

CohnReznick Paired Sale Analysis Valparaiso Solar Group 1		
No. of Sales	**Potentially Impacted by Solar Farm**	**Adjusted Median Price Per SF**
Test Area Sales (1)	Adjoining solar farm	$82.42
Control Area Sales (5)	No: Not adjoining solar farm	$79.95
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		**3.09%**

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

TECHNIQUE 3: MARKET COMMENTARY

Additionally, we have contacted market participants such as appraisers, brokers, and developers familiar with property values around solar farms. Commentary from our conversations with these market participants is recorded below.

Ted Droeste, assessor of Delta Township has the Delta Solar Power facility in his district that was completed in 2018. *He indicated that he has been actively tracking sales of properties surrounding the solar facility and stated that properties have sold fast, at market or above market and he had no evidence of declining value.* Mr. Droeste stated that they have not adjusted assessed values for properties surrounding the solar panels.

A Clark County, Kentucky Property Valuation Administrator, Jason Neely, noted there have been no complaints regarding East Kentucky Power Cooperative, Inc.'s Cooperative Solar One project installed in November 2017 located in the county, which has a capacity to generate 8.5 MW of electricity. Additionally, Neely stated he has not seen any evidence of lowered property values in the area and *no reduction in assessed property values has been made due to proximity to the solar farm.*

A Grant County, Kentucky Assessor stated that *they have not seen a reduction in assessed property values or market values for adjacency to solar farms.*

A McNairy County, Tennessee Assessor stated that they *have not applied reductions to assessed value for adjacency to solar farms.*

Christy Wingate, a real estate broker with Parker Real Estate Group, noted in her experience, *the presence of a solar farm is neither an attraction nor a deterrant for nearby home buyers.*

A Miami Dade County, Florida Assessor stated that they *do not reduce assessed property values for adjacency to Solar Farms*.

A Putnam County, Florida Assessor stated that they *have not seen a reduction in assessed value for adjacency to Solar Farms.*

Renee Davis, Tax Administrator for Bladen County, North Carolina, stated that she *has not seen any effect on property values due to proximity to a solar farm.*

We spoke with Jim Brown, an appraiser for Scotland County, North Carolina, who stated that he *has seen no effect on property values due to proximity to a solar farm.*

We spoke with Gary Rose, a tax assessor for Duplin County, North Carolina, who stated that *he has seen no effect on property values in regards to proximity to a solar farm.*

Kathy Renn, a property Valuation Manager for Vance County, North Carolina, stated that she has *not noticed any effect on property values due to proximity to a solar farm.*

Larry Newton, a Tax Assessor for Anson County, North Carolina, stated that there are six solar farms in the county ranging from 20 to 40 acres and he *has not seen any evidence that solar farms have had any effect on property values due to proximity to a solar farm.*

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

We spoke with Patrice Stewart, a Tax Administrator for Pasquotank County, North Carolina, and she has seen *no effect on land or residential property values due to proximity to the solar farms in Pasquotank County.*

We spoke with the selling broker of the Adjoining Property for Elm City Solar, in North Carolina, Selby Brewer, who said the solar farm *did not impact the buyer's motivation.*

We spoke with Amy Carr, Commissioner of Revenue in Southampton County, Virginia, who stated that most of the solar farms are in rural areas, but she *has not seen any effect or made any adjustments on property values.* They have evaluated the solar farmland considering a more intense use, which increased the assessed value.

The Interim Assessor for the town of Whitestown in Oneida County, New York, Frank Donato, stated that he *has seen no impact on property values of properties nearby solar farms.*

Steve Lehr at the Department of Assessment for Tompkins County, New York, mentioned that the appraisal staff *has made no adjustments regarding assessed values of properties surrounding solar farms. Marketing times for properties have also stayed consistent.* Lehr noted that a few of the solar farms in Thompkins County are on land owned by colleges and universities and a few are in rural areas.

At this point in time, Al Fiorille, Senior Valuation Specialist in the Tompkins County Assessment department in New York, reported that he *cannot measure any negativity from the solar farms and arrays that have been installed within the county.*

Mason Hass, the Riverhead Assessor in Suffolk County, on Long Island, New York stated that the solar farms in his town are in industrial zoned areas, and he *has not seen any impact on adjacent properties.*

The Assessor for the town of Smithtown in Suffolk County, New York, Irene Rice, *has not seen any impact on property values as a result of their location near the newly built solar farms in her town.*

In the Assessor's office in the town of Seneca, Ontario County, New York, Shana Jo Hamilton stated that she *has seen no impact on property values of properties adjacent to solar farms*.

Michael Zazzara, Assessor of the City of Rochester in Monroe County, New York commented that the City has a couple of solar farms, and they *have seen no impact on nearby property values and have received no complaints from property owners.*

While there are one or two homes nearby to existing solar farms in the town of Lisbon in St. Lawrence County, New York, Assessor Stephen Teele *has not seen any impact on property values in his town.* The solar farms in the area are in rural or agricultural areas in and around Lisbon.

The Assessor for the Village of Whitehall in Washington County, New York, Bruce Caza, noted that there are solar farms located in both rural and residential areas in the village and *he has seen no impact on adjacent properties, including any concerns related to glare form solar panels.*

Laurie Lambertson, the Town Assessor for Bethlehem, in Albany County, New York noted that the solar farms in her area are tucked away in rural or industrial areas. *Lambertson has seen no impact on property values in properties adjacent to solar farms.*

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

We spoke with Ken Surface, a Senior Vice President of Nexus Group. Nexus Group is a large valuation group in Indiana and has been hired by 20 counties in Indiana regarding property assessments. Mr. Surface is familiar with the solar farm sites in Harrison County (Lanesville Solar Farm) and Monroe County (Ellettsville Solar Farm) and stated he has noticed *no impact on property values from proximity to these sites*.

We interviewed Missy Tetrick, a Commercial Valuation Analyst for the Marion County Indiana Assessor. She mentioned the Indy Solar III sites and stated that she saw *no impact on land or property prices from proximity to this solar farm*.

We spoke with Dorene Greiwe, Decatur County Indiana Assessor, and she stated that solar farms have only been in the county a couple of years, but she has seen *no impact on land or property prices due to proximity to this solar farm*.

Connie Gardner, First Deputy Assessor for Madison County Indiana, stated that there are three solar farms in her county, and she has seen *no impact on land or property prices due to proximity to these solar farms*.

We spoke with Tara Shaver, Director of Administration for Marion County, Indiana Assessor/Certified Assessor, and she stated that she has seen *no impact on land or property prices due to proximity to solar farms*.

Candace Rindahl of ReMax Results, a real estate broker with 16 years of experience in the North Branch, Minnesota area, said that she has been in most of the homes surrounding the North Star Solar Farm and personally sold two of them. She reported that the neighboring homes sold at market rates comparable to other homes in the area not influenced by the solar farm, and they sold within 45 days of offering, at the end of 2017, *which was in line with the market.*

Dan Squires, Chisago County Tax Assessor, confirmed that the Chisago County Assessor's Office completed their own study on property values adjacent to and in close vicinity to the solar farm from January 2016 to October 2017. From the study, the assessor determined the residential homes adjacent to the North Star Solar Farm *were in-line with the market and were appreciating at the same rate as the market.*[23]

[23] Chisago County Press: County Board Real Estate Update Shows No "Solar Effects" (11/03/2017)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SOLAR FARM FACTORS ON HARMONY OF USE

Zoning changes and conditional use permits often require that the proposed use is compatible with surrounding uses.

The following section analyzes specific physical characteristics of solar farms and is based on research and CohnReznick's personal solar farm site visits and indicate that solar farms are generally harmonious with surrounding property and compliant with most zoning standards.

Appearance: Most solar panels have a similar appearance to a greenhouse or single-story residence can range from 8 to 20 feet but are usually not more than 15 feet high. As previously mentioned, developers generally surround a solar farm with a fence and often leave existing perimeter foliage, which minimizes the visibility of the solar farm. The physical characteristics of solar farms are compatible with adjoining agricultural and residential uses.

Sound: Solar panels in general are effectively silent and sound levels are minimal, like ambient sound. There are limited sound-emitting pieces of equipment on-site, which only produce a quiet hum (e.g., substation). However, these sources are not typically heard outside the solar farm perimeter fence.

Odor: Solar panels do not produce any byproduct or odor.

Greenhouse Gas (GHG) Emissions: Much of the GHG produced in the United States is linked to the combustion of fossil fuels, such as coal, natural gas, and petroleum, for energy use. Generating renewable energy from operating solar panels for energy use does not have significant GHG emissions, promoting cleaner air and reducing carbon dioxide (CO_2) emissions to fight climate change.

Traffic: The solar farm requires minimal daily onsite monitoring by operational employees and thus minimal operational traffic.

Hazardous Material: Modern solar panel arrays are constructed to U.S. government standards. Testing shows that modern solar modules are both safe to dispose of in landfills and are also safe in worst case conditions of abandonment or damage in a disaster.[24] Reuse or recycling of materials would be prioritized over disposal. Recycling is an area of significant focus in the solar industry, and programs for both batteries and solar panels are advancing every year. While the exact method of recycling may not be known yet as it is dependent on specific design and manufacturer protocol, the equipment is designed with recyclability of its components in mind, and it is likely that solar panel and battery energy storage recycling and reuse programs will only improve in 25 years' time.

Agrivoltaics: The land underlying solar farms can serve multiple uses, increasing land-use efficiency, such as growing native plants beneath solar panels or grazing sheep amongst rows of solar panels. Agrivoltaics can further be defined as a farming method that aims to maximize land use by pairing solar panels with cropland,

[24] Virginia Solar Initiative - Weldon Cooper Center for Public Service – University of Virginia (https://solar.coopercenter.org/taxonomy/term/5311)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

thus minimizing competition between energy production and food.[25] Scientists from the Department of Energy's Agronne National Laboratory in Illinois and the National Renewable Energy Laboratory in Colorado conducted tests on two different solar installations in Minnesota that were built on 76 acres of farmland. The land beneath the solar panels was seeded with numerous species of native grasses and flowers, then allowed to grow for one year. The following years, the two sites were visited four times each summer during peak flower season to track the number and type of insects attracted to the newly planted vegetation. After five years of tracking, the population of native bees increased more than 20 times and adjacent soybean farms experienced an increase in bees and other pollinators. Testing shows that if sited properly, habitat-friendly solar energy can be a feasible way to safeguard insect populations and can improve the pollination services in adjacent agricultural fields.[26]

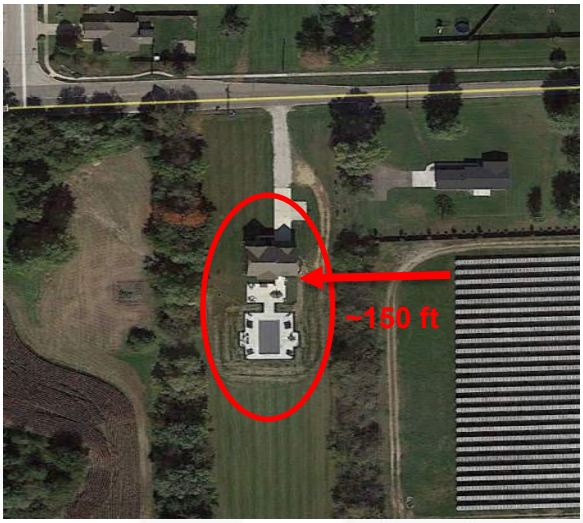
Examples of homes built adjoining to solar farms are presented on the following pages.

[25] (Bryce, Anthropocene Magazine, 2023) (Solar panels handle heat better when combined with crops (anthropocenemagazine.org))
[26] (Cornwall, Solar Farms Could Come with a Pollinator Bonus, 2024) (Solar farms could come with a pollinator bonus (anthropocenemagazine.org))

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

For the Dominion Indy III solar farm, the adjacent land to the west was acquired and subsequently developed with a large estate home – after the solar panels had been in operation for years.

Dominion Indy III Solar Farm
September 2014



Dominion Indy III Solar Farm
October 2016

Estate home adjacent to Dominion Indy III Solar Farm

In ground pool and attached garage (home cost estimated at $450,000 - October 2015)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Innovative Solar 42 (2017)
Cumberland County, NC

Innovative Solar 42 (2019)
Cumberland County, NC

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Developer Built Home
Sold 6/18/19 for $265,900 ($110.75/sf)
Cumberland County, NC (adjacent to Innovative 42 solar farm)

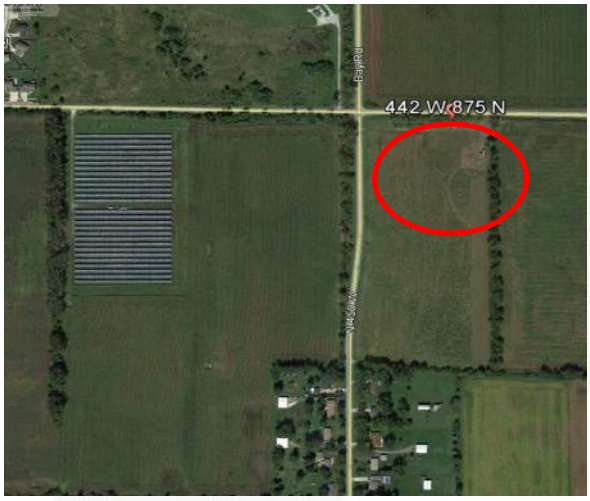
Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Portage Solar Farm located in Indiana

A new 175-home subdivision is currently under construction adjacent the 1.5 MW Portage Solar Farm in Porter County, Indiana. The solar facility was completed in November 2011, and Lennar began construction on the Brookside Subdivision in 2022, with the first homes selling in March 2023. The subdivision is 100 feet from the panels. As of March 2024, there have been 64 closed sales, ranging from $274,900 to $454,675, or $105.00 to $220.54 PSF, with a median of $374,990, with a median of $167.01 PSF. There are two pending sales and nine active listings, ranging from $339,990 to $423,990.

On the next page, we show the same Portage Solar Farm and a newly constructed home to the east of the solar facility, completed in 2016.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.



Portage Solar Farm, IN
October 2015

Portage Solar Farm, IN
October 2016

4,255 square foot estate home under construction, adjacent to Portage Solar Farm located in Indiana

On-site pond and attached garage (cost estimated at $465,000) April 2018

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The Brighton PV Solar farm became operational in December 2012. Located in Adams County, north of Denver, CO, this solar farm has a capacity of 1.8 MW AC and is located on a triangular parcel of land east of an area of existing custom-built estate homes. A photo of one home (15880 Jackson Street) located directly north of the circled area below is presented to the right.

In December 2012, the 2.55-acre lot encircled in red below (15840 Jackson Street) was purchased for future development of a single-family home. This home was built in 2017, and per the county assessor, the two-story home is 3,725 square feet above ground with 4 bedrooms and 3.5 bathrooms. According to the building permit issued in August 2016, the construction cost was budgeted at $410,000.

Brighton PV Solar, Adams County, CO
June 2016

Brighton PV Solar, Adams County, CO
June 2017

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SUMMARY OF ADJOINING USES

The table below summarizes each Existing Solar Farm's adjoining uses.

Composition of Surrounding Uses (% of Surrounding Acreage)							
Solar Farm #	Solar Farm	Acreage % of Surrounding Agricultural Uses	Acreage % of Surrounding Residential Uses	Acreage % of Surrounding Industrial Uses	Acreage % of Surrounding Office Uses	Acreage % of Surrounding Other Uses	Avg. Distance from Panels to Improvements (Feet)
1	2662 Freeport Solar	96.30%	3.50%	0.00%	0.00%	0.00%	243
2	Grand Ridge	97.60%	1.40%	0.00%	0.00%	1.00%	553
3	Stockton CSG	95.40%	3.50%	0.50%	0.00%	0.60%	300
4	Spring Mill Solar	43.50%	54.30%	0.00%	0.00%	2.20%	481
5	Jefferson County Solar	66.90%	33.10%	0.00%	0.00%	0.00%	709
6	Dominion Indy Solar III	97.70%	2.30%	0.00%	0.00%	0.00%	474
7	O'Brien Solar Fields	94.83%	2.03%	0.00%	0.00%	3.14%	613
8	Portage Solar	65.50%	34.50%	0.00%	0.00%	0.00%	991
9	IMPA Frankton	76.30%	5.70%	0.00%	0.00%	18.00%	236
10	Valparaiso Solar LLC	81.60%	18.40%	0.00%	0.00%	0.00%	659

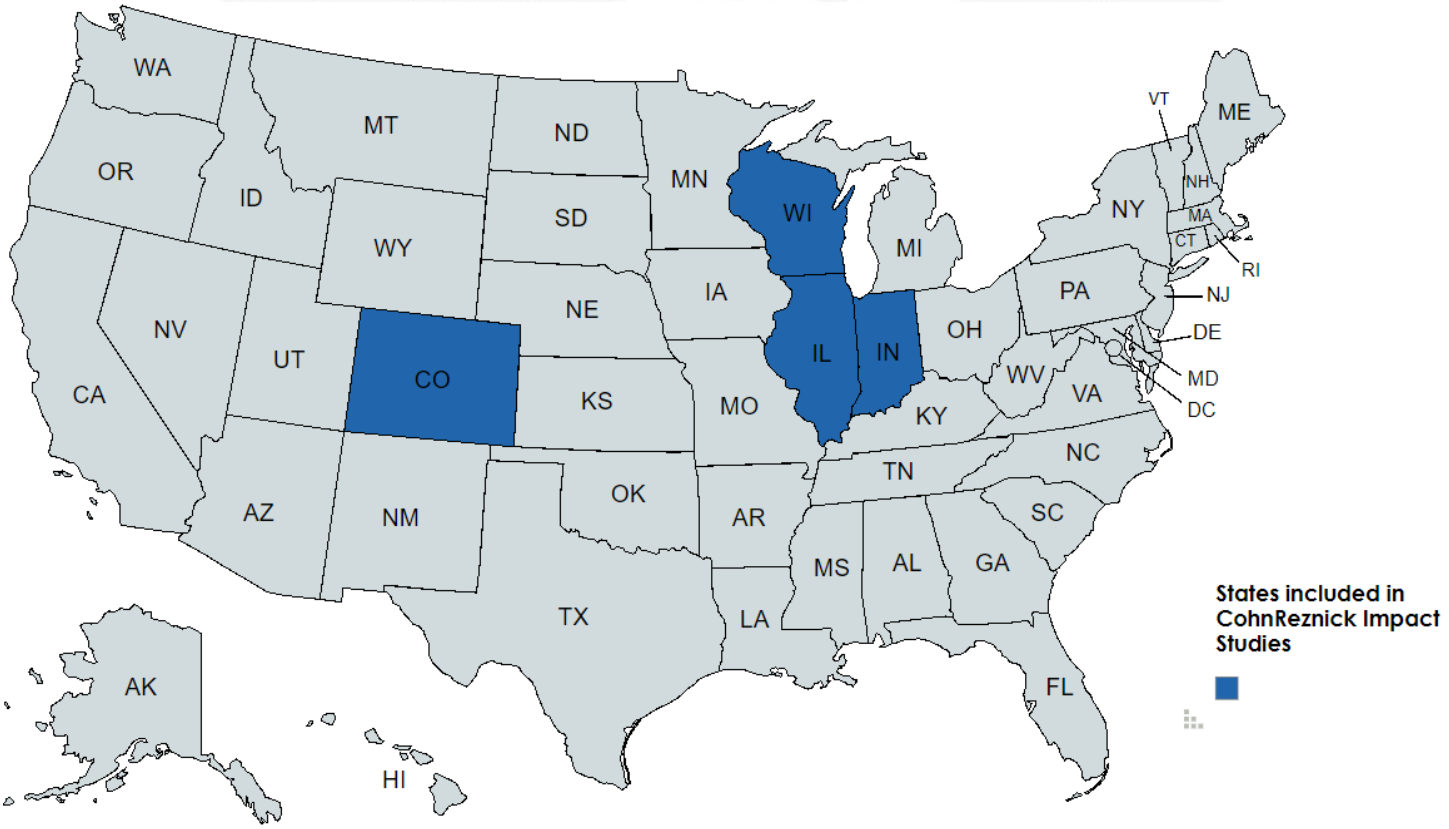
Overall, the vast majority of the surrounding acreage for each comparable solar farm is made up of agricultural land, some of which have homesteads. There are also smaller single-family home sites that adjoin the solar farms analyzed in this report. Generally, these solar farms are sound comparables to ECA Solar's proposed solar project in terms of adjoining uses, location, and size.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

SUMMARY AND FINAL CONCLUSIONS

The purpose of this property value impact report is to determine whether the presence of a solar farm has caused a measurable and consistent impact on adjacent property values. Under the identified methodology and scope of work, CohnReznick reviewed published methodology for measuring impact on property values as well as published reports that analyzed the impact of solar farms on property values. These studies found little to no measurable and consistent difference between Test Area Sales and Control Area Sales attributed to the solar farms.

A summary of the chosen CohnReznick impact studies prepared is presented in the following map and table:



Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick Solar Analysis Conclusions								
Solar Farm No.	Solar Farm	Number of Test Area Sales	Number of Control Area Sales	Median Adjoining Property Sale Price per Unit (Test Area Sales)	Median Control Area Sales Price per Unit	Difference (%)	Avg. Feet from Panel to Lot	Avg. Feet from Panel to House
Single-Family Residential								
1	2662 Freeport Solar	2	14	$77.33	$76.08	+1.65%	114	243
2	Grand Ridge Solar	1	5	$79.90	$74.35	+7.46%	366	479
3	Stockton CSG	1	10	$50.52	$52.20	-3.33%	200	250
4	Spring Mill Solar Group 1	1	7	$97.79	$100.84	-3.03%	55	275
	Spring Mill Solar Group 2	1	15	$110.50	$102.03	+8.30%	450	575
5	Jefferson County Solar Group 1	3	12	$306.15	$270.00	+13.39%	785	873
	Jefferson County Solar Group 2	1	4	$352.94	$356.89	-1.11%	30	80
	Jefferson County Solar Group 3	3	6	$165.15	$164.36	+0.48%	625	660
6	Dominion Indy Solar III Group 2	4	8	$60.61	$57.85	+4.78%	240	350
	Dominion Indy Solar III Group 3	7	11	$72.15	$71.69	+0.65%	165	300
7	O'Brien Solar Fields Group 1	1	45	$261.62	$268.41	-2.53%	495	530
	O'Brien Solar Fields Group 2	1	22	$250.24	$247.38	+1.16%	465	515
8	Portage Solar Group 2	1	7	$84.35	$84.27	+0.10%	1,070	1,233
9	IMPA Frankton Solar Group 1	1	6	$28.58	$28.42	+0.56%	120	153
	IMPA Frankton Solar Group 2	1	5	$52.40	$51.47	+1.81%	163	415
10	Valparaiso Solar Group 1	1	5	$82.42	$79.95	+3.09%	323	516
Median Variance in Sale Prices for Test Area Sales to Control Area Sales						**+0.90%**		
30 Adjoining Test Area Sales studied and compared to 182 Control Area Sales								
** Note, the paired sale analysis for this group is an outlier as determined earlier in this report and was excluded from this summary table.*								

Land (Agricultural/Single Family Lots)								
6	Dominion Indy Solar III Group 1	1	4	$8,210	$8,091	+1.47%	280	-
8	Portage Solar Group 1	1	9	$8,000	$7,674	+4.25%	845	-
Median Variance in Sale Prices for Test to Control Areas						**+2.86%**		
2 Adjoining Test Area Sale studied and compared to 13 Control Area Sales								

As summarized above, we evaluated 32 property sales adjoining existing solar facilities (Test Area Sales) and 195 Control Area Sales. In addition, we studied a total of 27 Test Area Sales and 53 Control Area Sales in three Before and After analyses. In total, we have studied over 305 sale transactions.

The solar farms analyzed reflected sales of property adjoining an existing solar farm (Test Area Sales) in which the unit sale prices were effectively the same or higher than the comparable Control Area Sales that were not near a solar farm. The conclusions support that there is no negative impact for improved residential homes adjacent to solar, nor agricultural acreage. This was confirmed with market participants interviews, which provided additional insight as to how the market evaluates farmland and single-family homes with views of the solar farm.

It can be concluded that since the Adjoining Property Sales (Test Area Sales) were not adversely affected by their proximity to the solar farm, that properties surrounding other proposed solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

Based upon the examination, research, and analyses of the existing solar farm uses, the surrounding areas, and an extensive market database, we have concluded that ***no consistent negative impact has occurred to adjacent property values that could be attributed to proximity to the adjacent solar farm***, with regard to unit sale prices or other influential market indicators. Additionally, in our workfile we have retained analyses of additional existing solar farms, each with their own set of matched control sales, which had consistent results, indicating no consistent and measurable impact on adjacent property values. This conclusion has been confirmed by numerous county assessors who have also investigated this use's potential impact on property values.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

CohnReznick LLP

Andrew R. Lines, MAI, CRE
Principal
Certified General Real Estate Appraiser
Illinois License No. 553.001841
Expires 9/30/2025
Pennsylvania License No. GA004632
Expires 6/30/2025
Indiana License No. CG41500037
Expires 6/30/2026

Erin C. Bowen, MAI
Director
Certified General Real Estate Appraiser
Arizona License No. 32052
Expires 12/31/2024
Oregon License No. C001551
Expires 6/30/2026
California License No. 3004919
Expires 11/13/2025

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CERTIFICATION

We certify that, to the best of our knowledge and belief:

1. The statements of fact and data reported are true and correct.
2. The reported analyses, findings, and conclusions in this consulting report are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, findings, and conclusions.
3. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. We have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of this report or the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value finding, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
8. Our analyses, findings, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, which includes the Uniform Standards of Professional Appraisal Practice (USPAP).
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
10. Andrew R. Lines, MAI, CRE, and Erin C. Bowen, MAI have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.
11. We have not relied on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, and receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value.
12. Joseph Ficenec provided significant appraisal consulting assistance to the persons signing this certification, including data verification, research, and administrative work all under the appropriate supervision.
13. We have experience in reviewing properties similar to the subject and are in compliance with the Competency Rule of USPAP.
14. As of the date of this report, Andrew R. Lines, MAI, CRE, and Erin C. Bowen, MAI have completed the continuing education program for Designated Members of the Appraisal Institute.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

CohnReznick LLP

Andrew R. Lines, MAI, CRE
Principal
Certified General Real Estate Appraiser
Illinois License No. 553.001841
Expires 9/30/2025
Pennsylvania License No. GA004632
Expires 6/30/2025
Indiana License No. CG41500037
Expires 6/30/2026

Erin C. Bowen, MAI
Director
Certified General Real Estate Appraiser
Arizona License No. 32052
Expires 12/31/2024
Oregon License No. C001551
Expires 6/30/2026
California License No. 3004919
Expires 11/13/2025

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

ASSUMPTIONS AND LIMITING CONDITIONS

The fact witness services will be subject to the following assumptions and limiting conditions:

1. No responsibility is assumed for the legal description provided or for matter pertaining to legal or title considerations. Title to the property is assumed to be good and marketable unless otherwise stated. The legal description used in this report is assumed to be correct.
2. The property is evaluated free and clear of any or all liens or encumbrances unless otherwise stated.
3. Responsible ownership and competent management are assumed.
4. Information furnished by others is believed to be true, correct and reliable, but no warranty is given for its accuracy.
5. All engineering studies are assumed to be correct. The plot plans and illustrative material in this report are included only to help the reader visualize the property.
6. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for obtaining the engineering studies that may be required to discover them.
7. It is assumed that the property is in full compliance with all applicable federal, state, and local and environmental regulations and laws unless the lack of compliance is stated, described, and considered in the evaluation report.
8. It is assumed that the property conforms to all applicable zoning and use regulations and restrictions unless nonconformity has been identified, described and considered in the evaluation report.
9. It is assumed that all required licenses, certificates of occupancy, consents, and other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
10. It is assumed that the use of the land and improvements is confined within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in this report.
11. The date of value to which the findings are expressed in this report apply is set forth in the letter of transmittal. The appraisers assume no responsibility for economic or physical factors occurring at some later date which may affect the opinions herein stated.
12. Unless otherwise stated in this report, the existence of hazardous materials, which may or may not be present on the property, was not observed by the appraisers. The appraisers have no knowledge of the existence of such substances on or in the property. The appraisers, however, are not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, radon gas, lead or lead-based products, toxic waste contaminants, and other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for such conditions or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

13. The forecasts, projections, or operating estimates included in this report were utilized to assist in the evaluation process and are based on reasonable estimates of market conditions, anticipated supply and demand, and the state of the economy. Therefore, the projections are subject to changes in future conditions that cannot be accurately predicted by the appraisers, and which could affect the future income or value projections.

14. Fundamental to the appraisal analysis is the assumption that no change in zoning is either proposed or imminent, unless otherwise stipulated. Should a change in zoning status occur from the property's present classification, the appraisers reserve the right to alter or amend the value accordingly.

15. It is assumed that the property does not contain within its confined any unmarked burial grounds which would prevent or hamper the development process.

16. The Americans with Disabilities Act (ADA) became effective on January 26, 1992. We have not made a specific compliance survey and analysis of the property to determine if it is in conformance with the various detailed requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more of the requirements of the Act. If so, this fact could have a negative effect on the value of the property. Unless otherwise noted in this report, we have not been provided with a compliance survey of the property. Any information regarding compliance surveys or estimates of costs to conform to the requirements of the ADA are provided for information purposes. No responsibility is assumed for the accuracy or completeness of the compliance survey cited in this report, or for the eventual cost to comply with the requirements of the ADA.

17. Any value estimates provided in this report apply to the entire property, and any proration or division of the total into fractional interests will invalidate the value estimate, unless such proration or division of interests has been set forth in this report.

18. Any proposed improvements are assumed to have been completed unless otherwise stipulated; any construction is assumed to conform with the building plans referenced in this report.

19. Unless otherwise noted in the body of this report, this evaluation assumes that the subject does not fall within the areas where mandatory flood insurance is effective.

20. Unless otherwise noted in the body of this report, we have not completed nor are we contracted to have completed an investigation to identify and/or quantify the presence of non-tidal wetland conditions on the subject property.

21. This report should not be used as a basis to determine the structural adequacy/inadequacy of the property described herein, but for evaluation purposes only.

22. It is assumed that the subject structure meets the applicable building codes for its respective jurisdiction. We assume no responsibility/liability for the inclusion/exclusion of any structural component item which may have an impact on value. It is further assumed that the subject property will meet code requirements as they relate to proper soil compaction, grading, and drainage.

23. The appraisers are not engineers, and any references to physical property characteristics in terms of quality, condition, cost, suitability, soil conditions, flood risk, obsolescence, etc., are strictly related to their economic impact on the property. No liability is assumed for any engineering-related issues.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

The evaluation services will be subject to the following limiting conditions:

1. The findings reported herein are only applicable to the properties studied in conjunction with the Purpose of the Evaluation and the Function of the Evaluation as herein set forth; the evaluation is not to be used for any other purposes or functions.
2. Any allocation of the total value estimated in this report between the land and the improvements applies only to the stated program of utilization. The separate values allocated to the land and buildings must not be used in conjunction with any other appraisal and are not valid if so used.
3. No opinion is expressed as to the value of subsurface oil, gas or mineral rights, if any, and we have assumed that the property is not subject to surface entry for the exploration or removal of such materials, unless otherwise noted in the evaluation.
4. This report has been prepared by CohnReznick under the terms and conditions outlined by the enclosed engagement letter. Therefore, the contents of this report and the use of this report are governed by the client confidentiality rules of the Appraisal Institute. Specifically, this report is not for use by a third party and CohnReznick is not responsible or liable, legally or otherwise, to other parties using this report unless agreed to in writing, in advance, by both CohnReznick and/or the client or third party.
5. Disclosure of the contents of this evaluation report is governed by the by-laws and Regulations of the Appraisal Institute has been prepared to conform with the reporting standards of any concerned government agencies.
6. The forecasts, projections, and/or operating estimates contained herein are based on current market conditions, anticipated short-term supply and demand factors, and a continued stable economy. These forecasts are, therefore, subject to changes with future conditions. This evaluation is based on the condition of local and national economies, purchasing power of money, and financing rates prevailing at the effective date of value.
7. This evaluation shall be considered only in its entirety, and no part of this evaluation shall be utilized separately or out of context. Any separation of the signature pages from the balance of the evaluation report invalidates the conclusions established herein.
8. **Possession of this report, or a copy thereof, does not carry with it the right of publication, nor may it be used for any purposes by anyone other than the client without the prior written consent of the appraisers, and in any event, only with property qualification.**
9. The appraisers, by reason of this study, are not required to give further consultation or testimony or to be in attendance in court with reference to the property in question unless arrangements have been previously made.
10. Neither all nor any part of the contents of this report shall be conveyed to any person or entity, other than the appraiser's client, through advertising, solicitation materials, public relations, news, sales or other media, without the written consent and approval of the authors, particularly as to evaluation conclusions, the identity of the appraisers or CohnReznick, LLC, or any reference to the Appraisal Institute, or the MAI designation. Further, the appraisers and CohnReznick, LLC assume no obligation, liability, or accountability to any third party. If this report is placed in the hands of anyone

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

but the client, client shall make such party aware of all the assumptions and limiting conditions of the assignment.

11. This evaluation is not intended to be used, and may not be used, on behalf of or in connection with a real estate syndicate or syndicates. A real estate syndicate means a general or limited partnership, joint venture, unincorporated association or similar organization formed for the purpose of, and engaged in, an investment or gain from an interest in real property, including, but not limited to a sale or exchange, trade or development of such real property, on behalf of others, or which is required to be registered with the United States Securities and Exchange commissions or any state regulatory agency which regulates investments made as a public offering. It is agreed that any user of this evaluation who uses it contrary to the prohibitions in this section indemnifies the appraisers and the appraisers' firm and holds them harmless from all claims, including attorney fees, arising from said use.

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

ADDENDUM A:
APPRAISER QUALIFICATIONS

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Andrew R. Lines, MAI, CRE

Principal – Real Estate Valuation
Valuation Advisory Services

1 S. Wacker Drive, Suite 3550
Chicago, IL 60606
312-508-5892 (w)
917-696-9636 (m)
andrew.lines@cohnreznick.com
www.cohnreznick.com

Andrew R. Lines, MAI, CRE is a Principal for CohnReznick Advisory's Valuation Advisory Services practice who has been a CohnReznick employee for over twelve years. Andrew has been involved in the real estate business for more than 20 years and has performed valuations on all real estate classes (industrial, commercial, residential, development land). Special-use valuations include affordable housing (as well as market studies), student housing, senior housing, cannabis facilities (indoor/outdoor, processing and dispensaries), landfills, waste transfer stations, golf courses, marinas, hospitals, universities, telecommunications facilities, data centers, self- storage facilities, racetracks, and corridors. Impact Study Reports have also been generated for zoning hearings related to the development of solar facilities, wind powered facilities, landfills, big box retail, waste transfer stations, private mental health clinics, cannabis dispensaries, concert/stadium venues and day care centers. He is also experienced in the valuation of leasehold, leased fee, and partial interests, as well as purchase price allocations (GAAP, IFRS and IRC 1060) for financial reporting.

Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, tax appeal, estate gifts, asset management, workouts, and restructuring, as well as valuation for financial reporting including purchase price allocations (ASC 805), impairment studies, and appraisals for investment company guidelines and REIS standards. Andrew has qualified as an expert witness, providing testimony for cases in the states of IL, DC, VA, NY and MD, and for zoning hearings in IL, IN, MI, NY, HI, OH, KY, CO, PA, WI and MO. Andrew has also performed appraisal review assignments for accounting purposes (audit support), asset management, litigation and as an evaluator for a large Midwest regional bank.

Andrew has earned the professional designation of Member of the Appraisal Institute (MAI). He has also qualified for certified general commercial real estate appraiser licenses in AZ, CA, IL, IN, WI, MD, OH, NY, NJ, FL,GA, KY and DC. Temporary licenses have been granted in CT, CO, PA, ID, MS, KS, MT and SC.

Education

- Syracuse University: Bachelor of Fine Arts
- MAI Designation (Member of the Appraisal Institute)

Professional Affiliations

- Counselors of Real Estate (CRE)
- Chicago Chapter of the Appraisal Institute
- International Real Estate Management (IREM)
- National Council of Housing and Market Analysts (NCHMA)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Erin C. Bowen, MAI

Director – Real Estate Valuation
Valuation Advisory Services

858-349-8854
erin.bowen@cohnreznick.com
www.cohnreznick.com

Erin Bowen, MAI is a Director with CohnReznick in Valuation Advisory Services. Ms. Bowen is based in Phoenix, Arizona, with presence covering the west coast. Ms. Bowen's work in Commercial Real Estate valuation spans over 12 years.

Ms. Bowen specializes in lodging, cannabis, seniors housing, large scale retail and multifamily conversion properties. Lodging work includes all hotel property types and brand segments including limited, full service and resort properties; additionally, Ms. Bowen has appraised numerous hotel to multifamily conversion properties including market rate and affordable housing. Cannabis work includes dispensaries, cultivation facilities including specialized indoor facilities and greenhouse properties, processing and manufacturing facilities. Senior's housing assignments include assisted living, skilled nursing facilities and rehabilitation centers. Retail work spans power centers, lifestyle centers, outlet centers and malls. She has appraised numerous additional properties including multifamily, office, medical office, industrial, churches, and vacant land.

Ms. Bowen has expertise in appraising properties at all stages of development, including existing as is, proposed, under construction, renovations and conversion to alternate use. Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, eminent domain, tax appeal, estate gifts, asset management, as well as valuation for financial reporting including purchase price allocations (ASC 805). Impact Study Reports have also been generated for zoning hearings related to the development of solar facilities and wind powered facilities. Ms. Bowen has qualified as an expert witness and provided testimony for zoning and county commission hearings.

Education

- Bachelor of Arts, Psychology, Theater, University of California, San Diego 2007, College Honors

Professional Affiliations

- Designated Member of the Appraisal Institute

Licenses

- State of Arizona (Certification #32052)
- State of California (Certification #AG3004919)
- State of Nevada (Certification #A.0208032-CG)
- State of Oregon (Certification #C001551)

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

Joe Ficenec

Consultant, Valuation Advisory Services

621 Capital Mall
Sacramento, CA 95814
916-930-5237
joe.ficenec@cohnreznick.com
www.cohnreznick.com

Joe Ficenec is a consultant in CohnReznick's Valuation Advisory Services practice and is based in the Sacramento office. Joe specializes in Impact Study Reports, which have been conducted for zoning hearings related to the development of solar facilities and wind powered facilities. He also has experience in assisting with the appraisal multifamily, office, industrial, retail, lodging and mixed-use properties for financing and purchase price allocation purposes.

Joe graduated with honors from the University of California, Davis in May 2017 with a major in managerial economics. Prior to joining CohnReznick, Joe worked as a Real Estate Assessor for a county government and as a consultant for a nationwide real estate firm in San Francisco.

Education

- University of California, Davis – B.S. Managerial Economics

Disclaimer: This report is limited to the intended use, intended users (ECA Solar, Monee Community Energy Initiative LLC and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick LLP.

CohnReznick

www.cohnreznick.com

REAL ESTATE
ADJACENT PROPERTY VALUE IMPACT REPORT:

Site Specific Analysis Addendum Report:
For the Proposed 5 MW Woodstock Community Energy Initiative Solar Project
To Be Located in McHenry County, Illinois

Prepared For:

Colin Walker
Development Manager
ECA Solar
203 Crescent Street, Suite 106
Waltham, MA 02453

Submitted By:

CohnReznick Advisory LLC
Valuation Advisory Services
1 S. Wacker Drive, Suite 3550
Chicago, Illinois 60606
(312) 508-5900

Andrew R. Lines, MAI, CRE
Erin C. Bowen, MAI
Andrew G. Hartigan, MAI, AI-GRS

July 16, 2025

LETTER OF TRANSMITTAL

July 16, 2025

Colin Walker
Development Manager
ECA Solar
203 Crescent Street, Suite 106
Waltham, MA 02453

SUBJECT: Addendum - Property Value Impact Report
Proposed 5 MW Woodstock Community Energy Initiative Solar Project
McHenry County, Illinois

Dear Mr. Walker:

This letter and associated report are considered an Addendum to the previously prepared property value impact report with an effective date of July 12, 2024 ("Primary Report"). All facts and circumstances surrounding the property value impact report that analyzes existing solar farm and any effect on adjacent property values are contained within the cited Primary Report. This Addendum cannot be properly understood without the cited Primary Report and should be reviewed in unison.

Per the client's request, we have researched the proposed solar farm on land located in Hartland Township in McHenry County, Illinois. The proposed solar use is called the Woodstock Community Energy Initiative Solar Project and will have a capacity of up to 5 MW AC (megawatts alternating current).

The purpose of this consulting assignment is to determine whether proximity to a renewable energy use (solar farm) has an impact adjacent property values. The intended use of our opinions and conclusions is to assist the client in addressing local concerns and to provide information that local bodies are required to consider in their evaluation of solar project use applications. We have not been asked to value any specific property, and we have not done so.

The client and intended user for the assignment is Woodstock Community Energy Initiative LLC, a project being developed by ECA Solar. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick Advisory LLC ("CohnReznick").

The assignment is intended to conform to the Uniform Standards of Professional Appraisal Practice (USPAP), the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, as well as applicable state appraisal regulations.

Based on the analysis in the accompanying report, and subject to the definitions, assumptions, and limiting conditions expressed in the report, our findings are as follows.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

FINDINGS

I. Academic Studies: CohnReznick reviewed and analyzed published academic studies that specifically analyzed the impact of solar facilities on nearby property values. These studies include multiple regression analyses of hundreds and thousands of sales transactions, and opinion surveys, for both residential homes and farmland properties in rural communities, the majority of the data used in various studies indicates that there is no consistent and measurable impact to surrounding property values. We note that some of these studies do show a very small impact to certain homes, in certain locations, at certain distances, but these conclusions are not necessarily indicative of future projects in other locations.

Peer Authored Studies: CohnReznick also reviewed studies prepared by other real estate valuation experts that specifically analyzed the impact of solar facilities on nearby property values. These studies found little to no measurable or consistent difference in value between the Test Area Sales and the Control Area Sales attributed to the proximity to existing solar farms and noted that solar energy uses are generally considered compatible use.

II. CohnReznick Studies: Further, CohnReznick has performed studies in 22 states, of both residential and agricultural properties, in which we have determined that the existing solar facilities have not caused any consistent and measurable negative impact on property values.

For this Project, we have included ten of these studies which are most similar to the subject in terms of general location and size, summarized as follows:

CohnReznick - Existing Solar Farms Studied

Solar Farm #	Solar Farm	County	State	Power Output (MW AC)	Site Area (Acres)
1	2662 Freeport Solar CSG	Stephenson	IL	2.00	17.84
2	Grand Ridge Solar	LaSalle	IL	20.00	158.00
3	Stockton CSG	Jo Daviess	IL	1.90	23.00
4	Spring Mill Solar	Lawrence	IN	1.10	8.56
5	Jefferson County Solar	Jefferson	CO	1.20	13.63
6	Dominion Indy Solar III	Marion	IN	8.60	129.00
7	O'Brien Solar Fields	Dane	WI	22.10	171.00
8	Portage Solar	Porter	IN	2.00	56.00
9	IMPA Frankton Solar	Madison	IN	1.40	13.00
10	Valparaiso Solar	Porter	IN	1.00	27.90

It is noted that proximity to the solar farms has not deterred sales of nearby agricultural land and residential single-family homes, nor has it deterred the development of new single-family homes on adjacent land.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

This report also includes four "Before and After" analysis, in which sales that occurred prior to the announcement and construction of the solar farm project were compared with sales that occurred after completion of the solar farm project, for both adjoining and non-adjoining properties. No measurable impact on property values was demonstrated.

III. Market Participant Interviews: Our conclusions also consider interviews with over 75 County and Township Assessors, who have at least one solar farm in their jurisdiction, and in which they have determined that solar farms have not negatively affected adjacent property values.

With regards to the Project, we specifically interviewed in Illinois:

- In Otter Creek Township, in LaSalle County, Illinois, we spoke with Viki Crouch, the Township Assessor, who she said that *there has been no impact on property values due to their proximity to the **Grand Ridge Solar Farm***.
- We spoke with Ken Crowley, Rockford Township Assessor in Winnebago County, Illinois, who stated that he has seen *no impact on property values in his township as an effect of proximity to the **Rockford Solar Farm***.
- We spoke with James Weisiger, the Champaign Township Assessor in Champaign County, where the **University of Illinois Solar Farm** is located, and he noted *there appears to have been no impact on property values as a result of proximity to the solar farm*.
- Cindi Lotz of Fayette County, Illinois did indicate that the **Dressor Plains Solar** project *has not had any impact whatsoever on adjacent property values.*
- Angie Dieterman, the Chief County Assessment Officer in Stephenson County where nine solar farms have been constructed since 2020, stated that there has been *no impact on property values due to their proximity to any of the solar farms.*
- Cami Grossenbacher, Stephenson County Deputy Assessor, stated that there has been *no impact on property values due to their proximity to the **2662 Freeport Solar CSG** project.*

To give us additional insight as to how the market evaluates farmland and single-family homes with views of solar farms, we interviewed numerous real estate brokers and other market participants who were party to actual sales of property adjacent to solar; these professionals also confirmed that solar farms did not diminish property values or marketability in the areas they conducted their business.

IV. Solar Farm Factors on Harmony of Use: In the course of our research and studies, we have recorded information regarding the compatibility of these existing solar facilities and their adjoining uses, including the continuing development of land adjoining these facilities.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

CONCLUSION

Considering all of the preceding, the data indicates that no negative trend of property values is evident for properties adjacent to solar facilities.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Very truly yours,

CohnReznick Advisory LLC

Andrew R. Lines, MAI, CRE
Principal - Valuation Advisory Services
Certified General Real Estate Appraiser

Illinois License No. 553.001841
Expires 9/30/2025
Indiana License No. CG41500037
Expires 6/30/2026

Erin C. Bowen, MAI
Director
Certified General Real Estate Appraiser

Arizona License No. 32052
Expires 12/31/2026
Iowa License No. CG04209
Expires 6/30/2026

Andrew G. Hartigan, MAI, AI-GRS
Manager - Valuation Advisory Services
Certified General Real Estate Appraiser

Illinois License No. 553.001873
Expires 9/30/2025

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

TABLE OF CONTENTS

LETTER OF TRANSMITTAL 2

Findings 3
Conclusion 5

SCOPE OF WORK 7

Client 7
Intended Users 7
Intended Use 7
Purpose 7
Definition of Value 7
Effective Date & Date of Report 8
Prior Services 8
Inspection 8

IDENTIFICATION AND DESCRIPTION OF THE PROPOSED PROJECT 9

OVERVIEW OF THE SURROUNDING AREA OF THE PROJECT 15

Traffic Patterns and Connectivity 16
Demographic Factors 16
Conclusion 17

ILLINOIS SOIL PRODUCTIVITY AND VALUE TRENDS 18

NCCPI Productivity Index 18
Area Value Trends - Cropland 22
Area Value Trends – Residential Homes 23

LOCAL LAND DEVELOPMENT TRENDS 26

SUMMARY AND FINAL CONCLUSIONS 28

CERTIFICATION 30

ASSUMPTIONS AND LIMITING CONDITIONS 32

ADDENDUM A: APPRAISER QUALIFICATIONS 36

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

SCOPE OF WORK

CLIENT

The client for this assignment is Woodstock Community Energy Initiative LLC.

INTENDED USERS

Woodstock Community Energy Initiative LLC and ECA Solar; and the client's legal, public affairs, and site development professionals.

INTENDED USE

The intended use of our opinions and conclusions is to assist the client in addressing local concerns and to provide information that local bodies are required to consider in their evaluation of solar project use applications. We have not been asked to value any specific property, and we have not done so. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick Advisory LLC ("CohnReznick").

PURPOSE

The purpose of this consulting assignment is to determine whether proximity to the proposed solar facility will result in a perceived impact on adjacent property values.

DEFINITION OF VALUE

This report utilizes Market Value as the appropriate premise of value. Market value is defined as:

"The most probable price which a property should bring in a competitive and open market under all conditions, requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised, and acting in what they consider their own best interests;
3. A reasonable time is allowed for exposure in the open market.
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."[1]

[1] Code of Federal Regulations, Title 12, Chapter I, Part 34.42[h]

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

EFFECTIVE DATE & DATE OF REPORT

July 16, 2025 (Paired sale analyses contained within each study in the Primary Report are periodically updated.)

PRIOR SERVICES

USPAP requires appraisers to disclose to the client any services they have provided in connection with the subject property in the prior three years, including valuation, consulting, property management, brokerage, or any other services.

We have not previously evaluated the Project site.

INSPECTION

Andrew R. Lines, MAI, CRE, Erin C. Bowen, MAI, Andrew G. Hartigan, MAI, AI-GRS have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

IDENTIFICATION AND DESCRIPTION OF THE PROPOSED PROJECT

The Woodstock Community Energy Initiative Solar Project ("Woodstock Community Solar" or "the Project") is to be located on land in Hartland Township in central McHenry County. The site is bound by U.S. Highway 14 to the north and east, North Rose Farm Road to the west, and Kishwaukee Valley Road to the south.

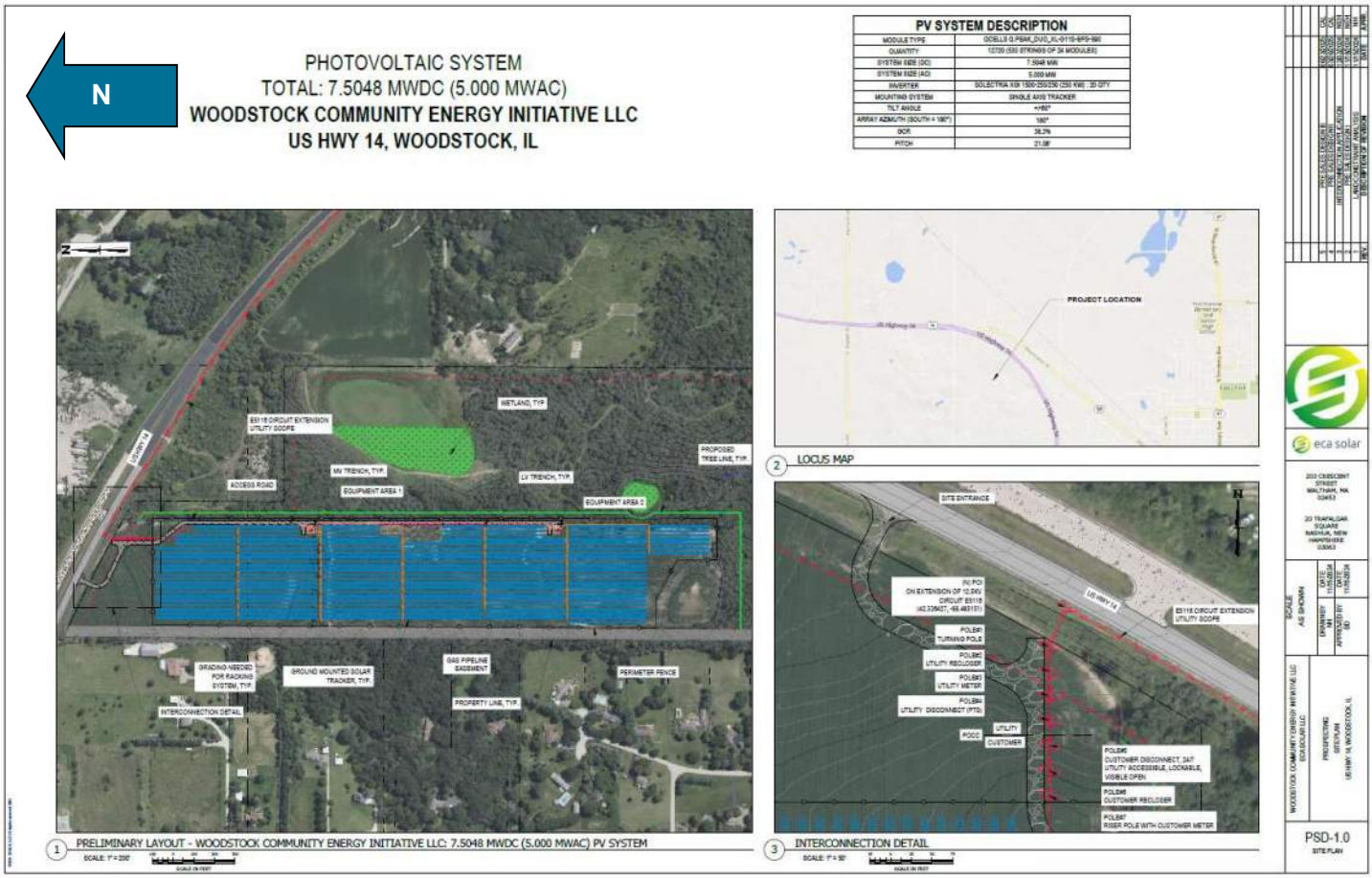
Based on development plans for a typical solar farm, the proposed solar project will have a capacity of up to 5-megawatts and would generally consist of solar photovoltaic arrays, electrical inverters, underground and aboveground collection lines, security fencing, safety lighting, and other axillary infrastructure. The Project will be utilizing bifacial photovoltaic arrays mounted to single-axis trackers, which will be installed on one, 32-acre leased parcel with the solar arrays occupying a much smaller footprint within the leased site. The Project will include eight foot farm-style knot-wire perimeter fencing designed to meet NESC and IEEE standards, with additional green mesh to further mitigate any visual impact. The setbacks for the Project will meet or exceed the minimum required setbacks as determined by the McHenry County Zoning Ordinance.

The Project will be located on approximately 32 acres in McHenry County, in an exurban environment, with solar arrays occupying a much smaller footprint within the leased site. The Project will be situated on a land parcel currently utilized for agricultural purposes and is illustrated by the yellow outlined polygon in the image on the following page. The Project parcel is bordered by agricultural land, rural homesteads, and industrial uses.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

Proposed Woodstock Community Energy Initiative Solar Project boundaries
as provided by Woodstock Community Energy Initiative LLC

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.



Proposed Woodstock Community Energy Initiative Solar Project layout
as provided by Woodstock Community Energy Initiative LLC

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

ZONING REGULATIONS

The Project Area parcel is located in Hartland Township in McHenry County, Illinois and is zoned within the Agricultural (AG-1) District in McHenry County. The AG district is intended to permit agricultural purposes and activities. Permitted uses within the AG district in McHenry County include agricultural uses, animal shelters, day care homes, single-family dwellings, educational facilities, government facilities and wireless telecommunication towers.

Commercial Solar Energy Facilities are considered a conditional use within the AG District of McHenry County and are subject to additional design, safety, and decommissioning standards. We have outlined the commercial solar energy facility development standards below.

A. Site Design

i. Solar panels, structures, and electrical equipment, excluding fences and power lines for interconnection, shall be erected no less than fifty (50) feet from any lot line and no less than one hundred fifty (150) feet from any residence, other than a residence on the same ownership parcel.

ii. No structures, excluding power lines for interconnection, may exceed twenty (20) feet in height. Power lines shall be placed underground to the maximum extent possible.

iii. Lighting must comply with § 16.60.020 (Exterior Lighting).

iv. Solar panels shall have a surface that minimizes glare and shall comply with § 16.60.040D. (Lighting and Glare).

v. The facility shall be situated as to minimize impacts to woodlands, savannas, wetlands, drainage tiles, and encroachment into flood plains. All site development shall comply with the Stormwater Management Ordinance. Any damaged drainage tiles shall be repaired.

vi. In order prevent erosion, manage run-off, and provide ecological benefit, the facility shall be planted with “low-profile” native prairie species, using a mix appropriate for the region and soil conditions per Illinois Department of Natural Resources (IDNR) standards, as amended from time to time.

vii. Fencing shall be provided in compliance with the National Electrical Code, as applicable. The use of barbed wire must comply with § 16.56.050H.1.c.

viii. Any part of the facility that is within five hundred (500) feet of a non-participating residence, or road right-of-way, shall be landscaped with an arrangement of native shrubs, subject to approval by the County Board, unless the facility is screened from view by existing vegetation.

ix. Prior to building permit issuance, the operator shall prepare a landscape monitoring and maintenance plan to ensure the establishment and continued maintenance of the native prairie species, all installed landscape screening, and all existing vegetation that provides required landscape screening.

x. Prior to scheduled public hearing, the operator shall enter into an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture (IDOA), as required by that department.

xi. Prior to building permit issuance, the operator shall provide an executed road use agreement between the Applicant and the appropriate governing road and highway jurisdictions or the Illinois Department of Transportation (IDOT), showing approved entrances.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client’s legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

B. Safety

i. Prior to construction, the operator shall prepare an emergency management plan acceptable to the County and the local fire district and shall be responsible for training of emergency personnel, as needed.

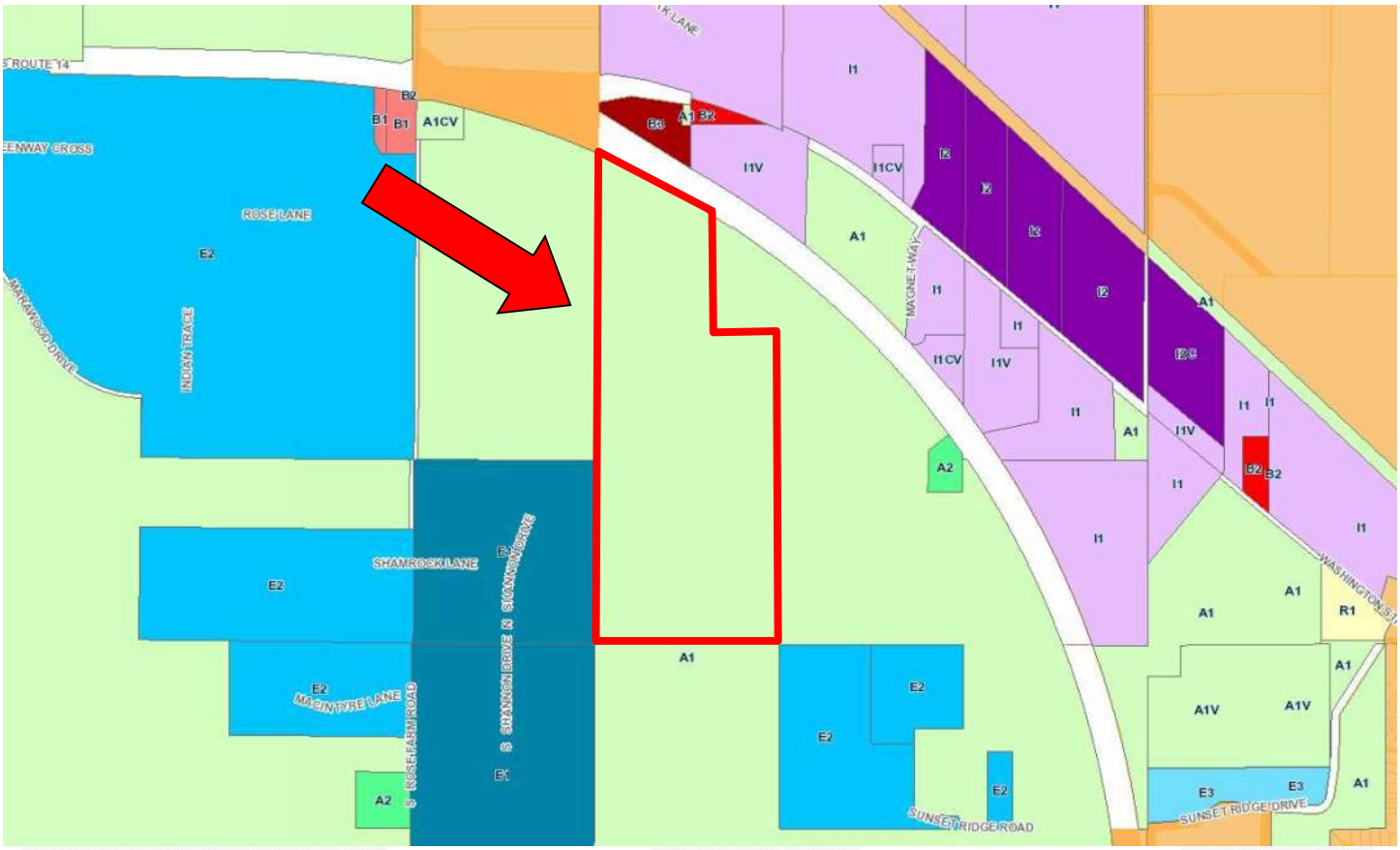
ii. A sign shall be posted providing the name of the operator and a phone number to be used in case of an on-site emergency.

iii. Access shall be granted, provided appropriate advance notice, for periodic inspection of the site by the County or the local fire district.

iv. Damaged solar panels shall be removed, repaired, or replaced within sixty (60) days of the damage. The ground shall remain free of debris from damaged solar panels at all times.

An excerpt from the McHenry County Zoning Map, with the proposed Project boundaries outlined in red, is presented on the following page.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.



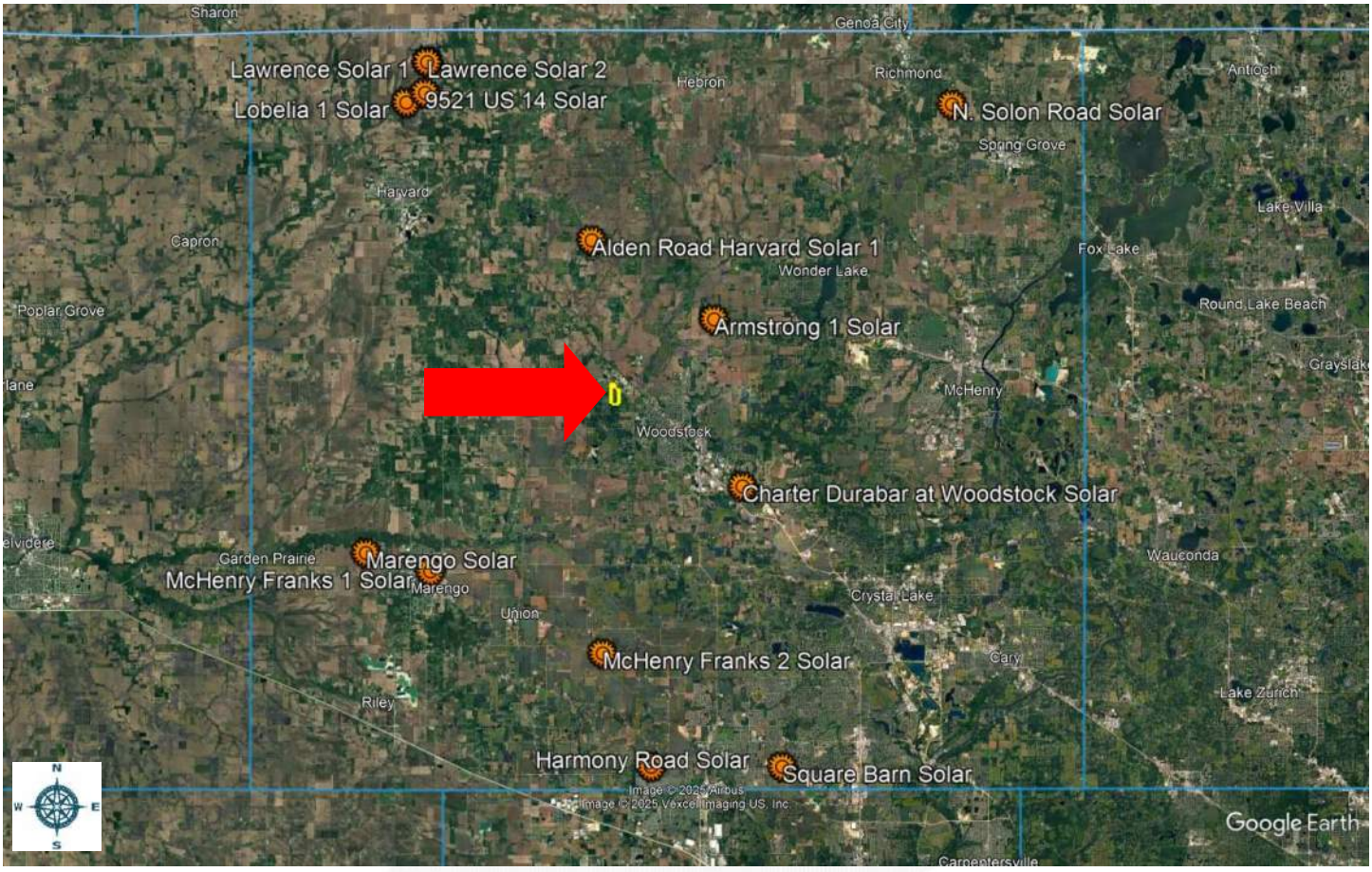
Zoning
Zoning Lot
- A1- Agriculture
- A2- Agriculture (1 ac. min.)
- B1- Neighborhood Business
- B2 -Neighborhood Business
- B3 - General Business
- E1 - Estate (1 ac. min.)
- E2 - Estate (2 ac. min.)
- E3 - Estate (3 ac. min.)
- E5 - Estate (5 ac. min.)
- I1 - Light Industrial
- I2 - Heavy Industrial
- O - Office
- PD - Planned Development
- R1 - Single-Family Residential
- R2 - Two-Family Residential
- R3 - Multifamily Residential

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

OVERVIEW OF THE SURROUNDING AREA OF THE PROJECT

The Project consists of a community-scale, solar energy use in Hartland Township in McHenry County, Illinois known as the 5 MW Woodstock Community Energy Initiative Solar Project. The Project is in northeastern Illinois in McHenry County, to the northwest of the Town of Woodstock.

As of May 2025, per the U.S. Energy Information Administration ("EIA"), there are 14 existing solar projects in McHenry County, developed between 2020 and 2024, and all are community-scale, with average capacity of 1.8 MW. The most recently completed solar projects in McHenry County include five 2.0 MW community scale solar projects that became operational in December 2024. A surrounding area map indicating the location of the nearby community solar projects (yellow suns) within McHenry County (blue lines), and the proposed Project (red arrow) are presented below.



Aerial imagery of site area provided by Google Earth, dated June 2024

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

TRAFFIC PATTERNS AND CONNECTIVITY

The Woodstock Community Energy Initiative Solar Project is to be located on land in Hartland Township in central McHenry County. The site is bound by U.S. Highway 14 to the north and east, North Rose Farm Road to the west, and Kishwaukee Valley Road to the south.

Local east-west roads include Kishwaukee Valley Road, which runs approximately three-quarters of a mile south of the Project. Additional local east-west roads include Nelson Road, Charles Road, and South Street Road. Local north-south roads include N. Rose Farm Road, which runs one-quarter mile south of the Project site, State Route 47, and Lamb Road. The closest highway to the project is U.S. Highway 14, which runs along the northern and eastern boundaries of the Project site. U.S. Highway 14 connects the local area to the Illinois-Wisconsin state border to north and towards the City of Chicago to southeast of the Project.

The nearest major cities to the Project are Rockford, approximately 30 miles to the southwest, Chicago, approximately 50 miles to the southeast, and Milwaukee, Wisconsin, approximately 55 miles northeast of the Project.

DEMOGRAPHIC FACTORS

Demographic data is presented below, as compiled by ESRI, which indicates future population decreasing for the five year period ending in 2030 in the surrounding area, while household levels are expected to remain stable. The data indicates that the area is predominantly owner-occupied. Median household income is lower in the local area than in McHenry County overall, but similar to the state levels.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

DEMOGRAPHIC PROFILE			
	3 Mile Radius	McHenry County	Illinois
Population			
2030 Projection	19,657	312,328	12,270,286
2025 Estimate	20,070	310,506	12,439,592
2010 Census	20,831	308,867	12,830,632
Growth 2025 - 2030	-2.10%	0.58%	-1.36%
Growth 2010 - 2025	-5.64%	1.12%	-3.05%
Total Land Area	28 sq. mi.	603 sq. mi.	55,499 sq. mi.
Population Density	710/sq. mi	515/sq. mi	224/sq. mi
Households			
2030 Projection	7,855	122,713	5,078,665
2025 Estimate	7,855	119,016	5,045,606
2010 Census	7,385	109,242	4,836,972
Growth 2025 - 2030	0.00%	3.11%	0.66%
Growth 2010 - 2025	6.36%	8.95%	4.31%
2025 Owner Occupied (%)	66.20%	78.20%	60.62%
2025 Renter Occupied (%)	33.80%	21.80%	39.38%
2025 Med. Household Income	$83,975	$105,276	$84,176
2025 Avg. Household Income	$107,034	$130,189	$117,457

CONCLUSION

Land uses in the area surrounding the Project can be categorized as a mix of farmland, single-family residential properties, and industrial uses. Population growth in the Project Area has been decreasing since 2010, and is projected to continue decreasing over the next five years, although at a slower rate. The factors presented previously indicate that the proposed Project would not be incompatible with surrounding uses and would not negatively impact surrounding properties.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

ILLINOIS SOIL PRODUCTIVITY AND VALUE TRENDS

NCCPI PRODUCTIVITY INDEX

Crop yields have been the basis for establishing a soil productivity index, and are used by county assessors, farmers, and market participants in assessing agricultural land. While crop yields are an integral part in assessing soil qualities, it is not an appropriate metric to rely on because "yields fluctuate from year to year, and absolute yields mean little when comparing different crops. Productivity indices provide a single scale on which soils may be rated according to their suitability for several major crops under specified levels of management, such as an optimum level."[2] The productivity index, therefore, not crop yields, is best suited for applications in land appraisal and land-use planning.

The United States Department of Agriculture's (USDA) National Resources Conservation Services (NRCS) developed and utilizes the National Commodity Crop Productivity Index (NCCPI) as a national soil interpreter and is used in the National Soil Information System (NASIS), but it is not intended to replace other crop production models developed by individual states.[3] The focus of the model is on identifying the best soils for the growth of commodity crops, as the best soils for the growth of these crops are generally the best soils for the growth of other crops.[4] The NCCPI model describes relative productivity ranking over a period of years and not for a single year where external influences such as extreme weather or change in management practices may have affected production. At the moment the index only describes non-irrigated crops, and will later be expanded to include irrigated crops, rangeland, and forestland productivity.[5]

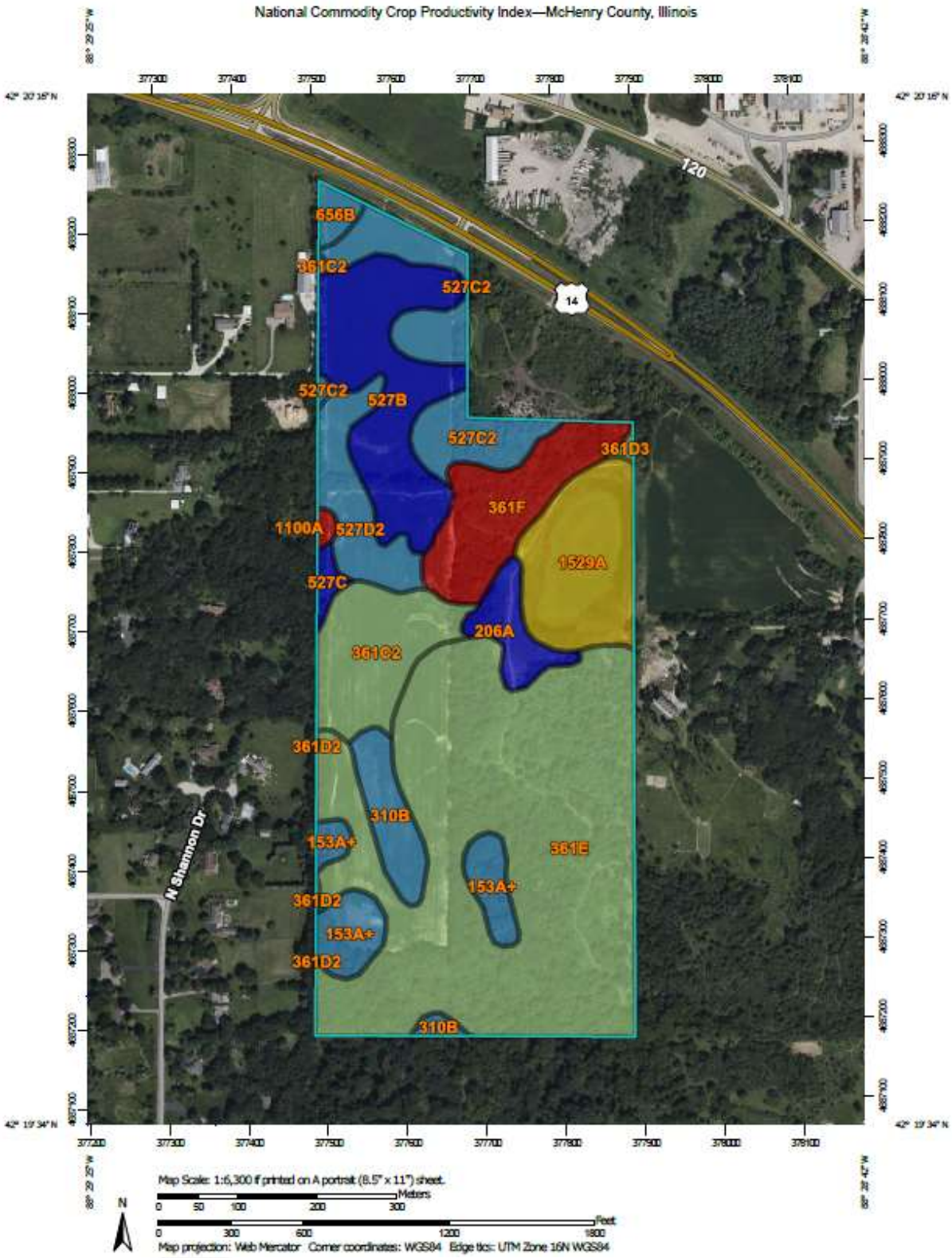
Yields are influenced by a variety of different factors including environmental traits and management inputs. Tracked climate and soil qualities have been proven by researchers to directly explain fluctuations in crop yields, especially those qualities that relate to moisture-holding capacity. Except for these factors, "inherent soil quality or inherent soil productivity varies little over time or from place to place for a specific soil (map unit component) identified by the National Cooperative Soil Survey (NCSS)."[6] The NRCS Web Soil Survey website has additional information on how the ratings are determined.

The proposed solar farm will be located in McHenry County, in the northeastern portion of the state. An excerpt of a soil productivity map is presented below as retrieved from the USDA Web Soil Survey, which provides an illustration of the variation in soil productivity across the local area that is based on the NCCPI. The approximate site area for the Project is within the boundary delineated in the following map. Note, that numerical labels correspond to soil type, not productivity index.

---

[2] Bulletin 811: Optimum Crop Productivity of Illinois Soils. University of Illinois, College of Agricultural, Consumer and Environmental Sciences, Office of Research. August 200.
[3] Agricultural land rental payments are typically tied to crop production of the leased agricultural land and is one of the primary reasons the NCCPI was developed, especially since the model needed to be consistent across political boundaries.
[4] Per the User Guide for the National Commodity Crop Productivity Index, the NCCPI uses natural relationships of soil, landscape and climate factors to model the response of commodity crops in soil map units. The present use of the land is not considered in the ratings.
[5] AgriData Inc. Docs: http://support.agridatainc.com/NationalCommodityCropProductivityIndex(NCCPI).ashx
[6] USDA NRCS's User Guide National Commodity Crop Productivity Index (NCCPI)

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.



Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Low inherent productivity
- Moderately low inherent productivity
- Moderate inherent productivity
- Moderately high inherent productivity
- High inherent productivity
- Not rated or not available

Soil Rating Lines
- Low inherent productivity
- Moderately low inherent productivity
- Moderate inherent productivity
- Moderately high inherent productivity
- High inherent productivity
- Not rated or not available

Soil Rating Points
- Low inherent productivity
- Moderately low inherent productivity
- Moderate inherent productivity
- Moderately high inherent productivity
- High inherent productivity
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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: McHenry County, Illinois
Survey Area Data: Version 20, Aug 21, 2024

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

Date(s) aerial images were photographed: Aug 19, 2022—Sep 30, 2022

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.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

Per the NCCPI, soil productivity is measured on both a numerical scale from 0 to 100, with 0 being the worst and 100 being the best,[7] and by qualitative ratings. The qualitative rating classifications below are determined by the USDA NRCS and provide general comments on the productivity of the soil.

> **High inherent productivity** indicates that the soil, site, and climate have features that are very favorable for crop production. High yields and low risk of crop failure can be expected if a high level of management is employed.
>
> **Moderately high inherent productivity** indicates that the soil has features that are generally quite favorable for crop production. Good yields and moderately low risk of crop failure can be expected.
>
> **Moderate inherent productivity** indicates that the soil has features that are generally favorable for crop production. Good yields and moderate risk of crop failure can be expected.
>
> **Moderately low inherent productivity** indicates that the soil has features that are generally not favorable for crop production. Low yields and moderately high risk of crop failure can be expected.
>
> **Low inherent productivity** indicates that the soil has one or more features that are unfavorable for crop production. Low yields and high risk of crop failure can be expected.

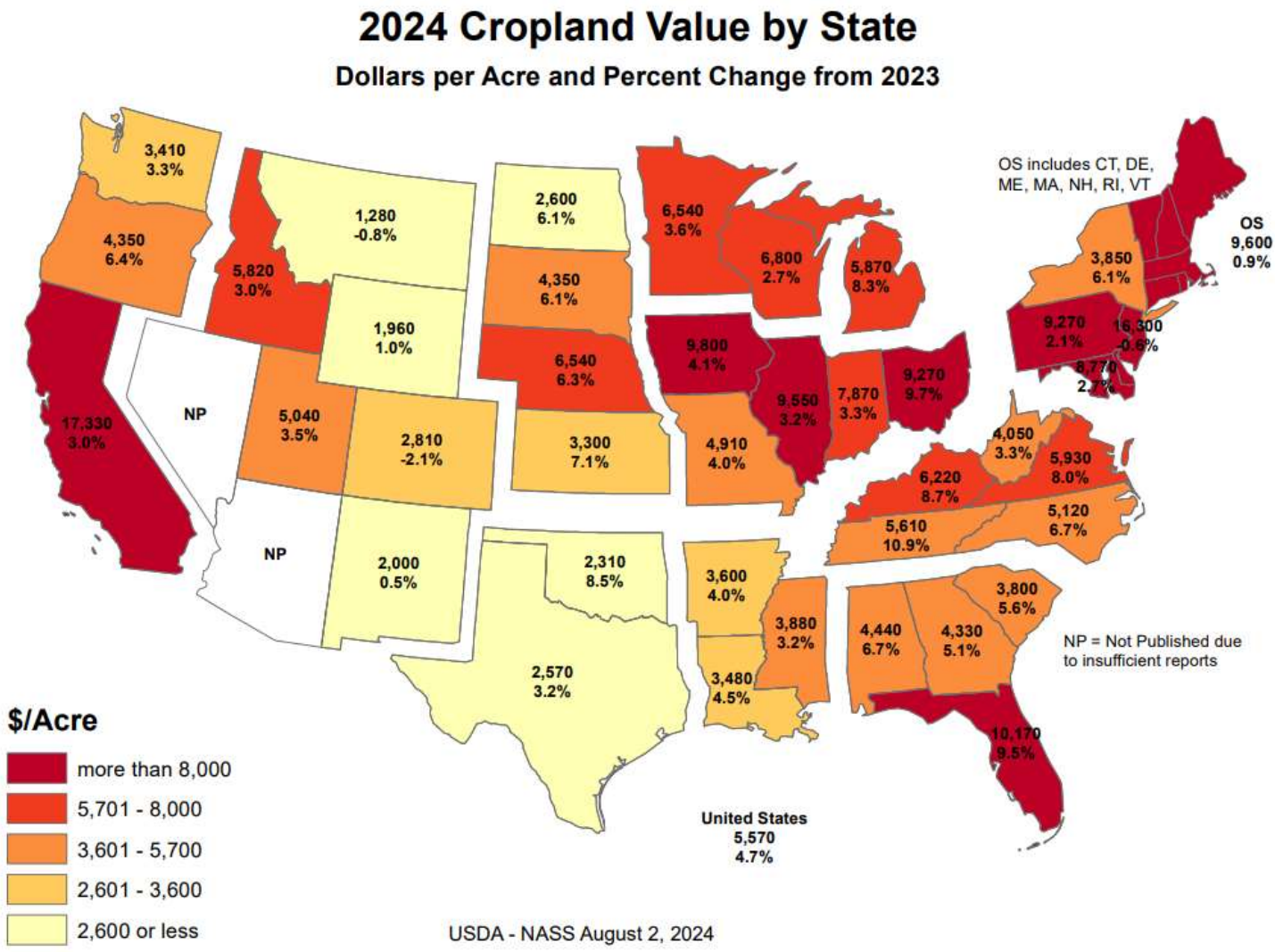
The weighted average soil productivity for the general area was determined to be approximately 57.98. A numerical scale that corresponds to the indicated qualitative ratings above was not available for the NCCPI; however, the soil productivity for this area is in the higher of the range, aligning with the "moderate inherent productivity" category. According to the qualitative scale above, land with a moderate inherent productivity classification is generally favorable for crop production.

[7] Quantitative ratings are also show in ranges of 0.00 to 1.00. AgriData Inc. presents the NCCPI index rating multiplied by 100 in a range of 0.00 to 100.00 to show up to four significant figures.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

AREA VALUE TRENDS - CROPLAND

Agricultural land values are heavily influenced by relative crop production yields. The following exhibit compiled by the USDA National Agricultural Statistics Service (NASS) provides an illustration of how regional conditions such as weather conditions, geographies, and soil conditions can affect crop land real estate values.



Per the NASS report, the average value of cropland in Illinois for 2024 is $9,550 per acre, which is an increase of 3.2 percent from 2023. In addition, the report indicated that the average annual growth rate for farmland values in Illinois from 2020 to 2024 was 5.2 percent.[8]

[8] https://downloads.usda.library.cornell.edu/usda-esmis/files/pn89d6567/vh53zm770/sf269z18h/land0824.pdf

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

AREA VALUE TRENDS – RESIDENTIAL HOMES

The proposed Project is to be located in Hartland Township in McHenry County, Illinois, in the northeastern portion of Illinois. There is a mix of single-family home types in this area, manufactured homes and homes with one- and two-stories. Based on our research, homes in the area that have recently sold were constructed as early as the mid-19th century and as recently as 2008.

There has been steady sale activity in the broader study area surrounding the Project area throughout the last year. From July 2024 through June 2025, we identified 34 market transactions of single-family homes that surround the proposed Project Area. The sale price per square foot ranges from $88 per square foot to $340 per square foot of gross living area. The home sales were on the market for between 21 and 148 days with a median of 52 days. The sales are summarized in the table below.

Home Sales Surrounding Proposed Project Area
(July 2024 through June 2025)

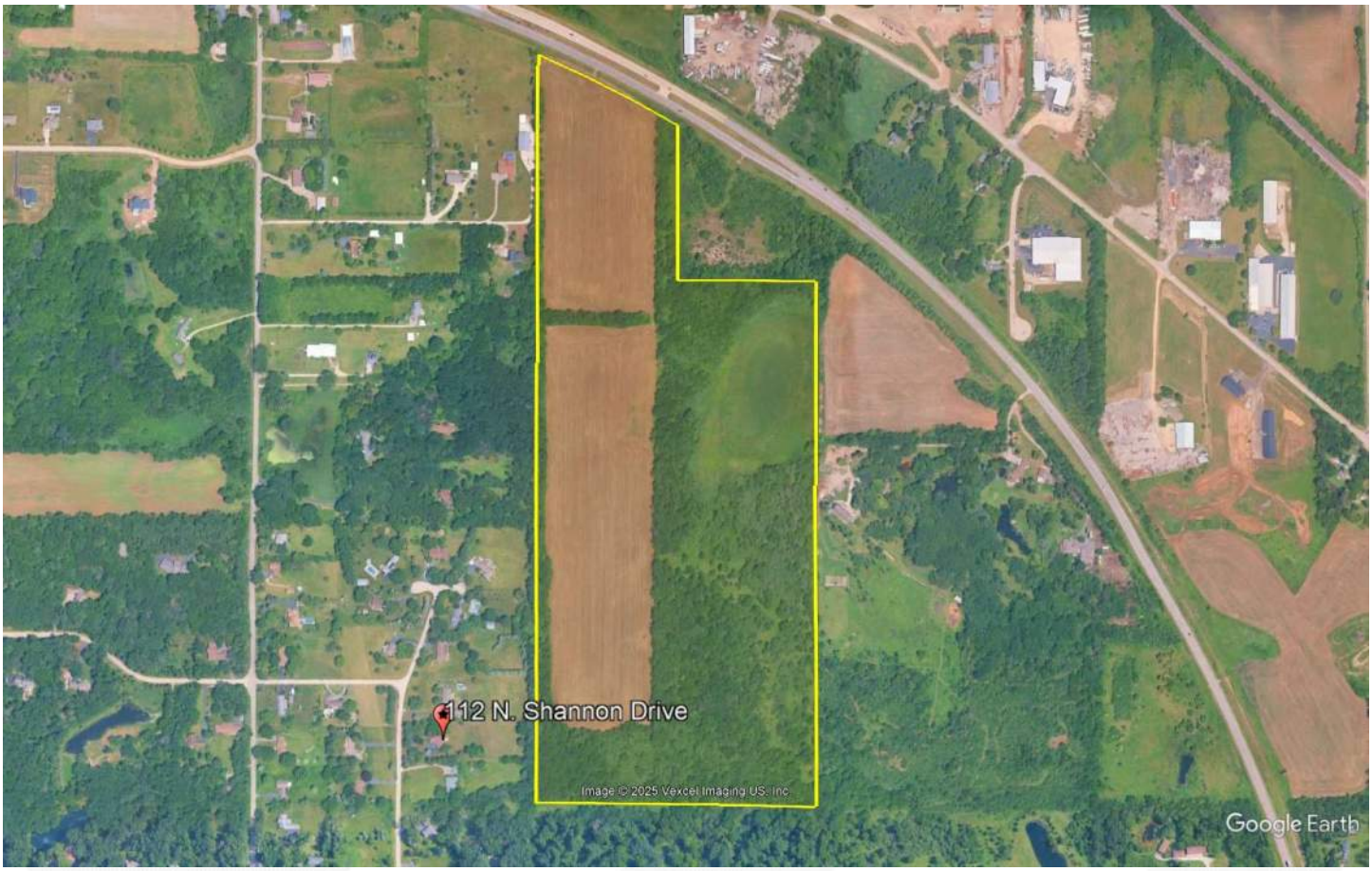
Single Family Homes	Median Lot Size (Acres)	Median Living Area (SF)	Min. Sale Price	Max. Sale Price	Median Sale Price	Median Sale Price PSF
Project Area	2.12	2,560	$183,000	$1,010,000	$463,000	$190.05

We surveyed the surrounding area of the proposed site to identify any transactions of homes adjacent to the site that occurred within the past year. There has been one home adjacent to the project area that sold. The sale price per square foot of gross living area of $99 is within the range of home sales in the surrounding area. The home adjacent to the project area sold after 32 days on market, below the median days on market for home sales in the surrounding area, but above the list price.

Home Sales Adjacent to Proposed Project Area
(July 2024 through June 2025)

Address	Building Size (SF)	Sale Date	DOM	List Price	Sale Price	$ PSF	Lot Size (AC)	Year Built
112 N. Shannon Drive, Woodstock	3,923	10/10/2024	32	$379,900	$389,900	$99.39	2.80	1976

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.



Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

The following table illustrates residential home value trends for the proposed Project's McHenry County location. The source is the Federal Housing Finance Agency's (FHFA) House Price Index (HPI), which is a weighted, repeat-sales index measuring changes in single-family house prices.

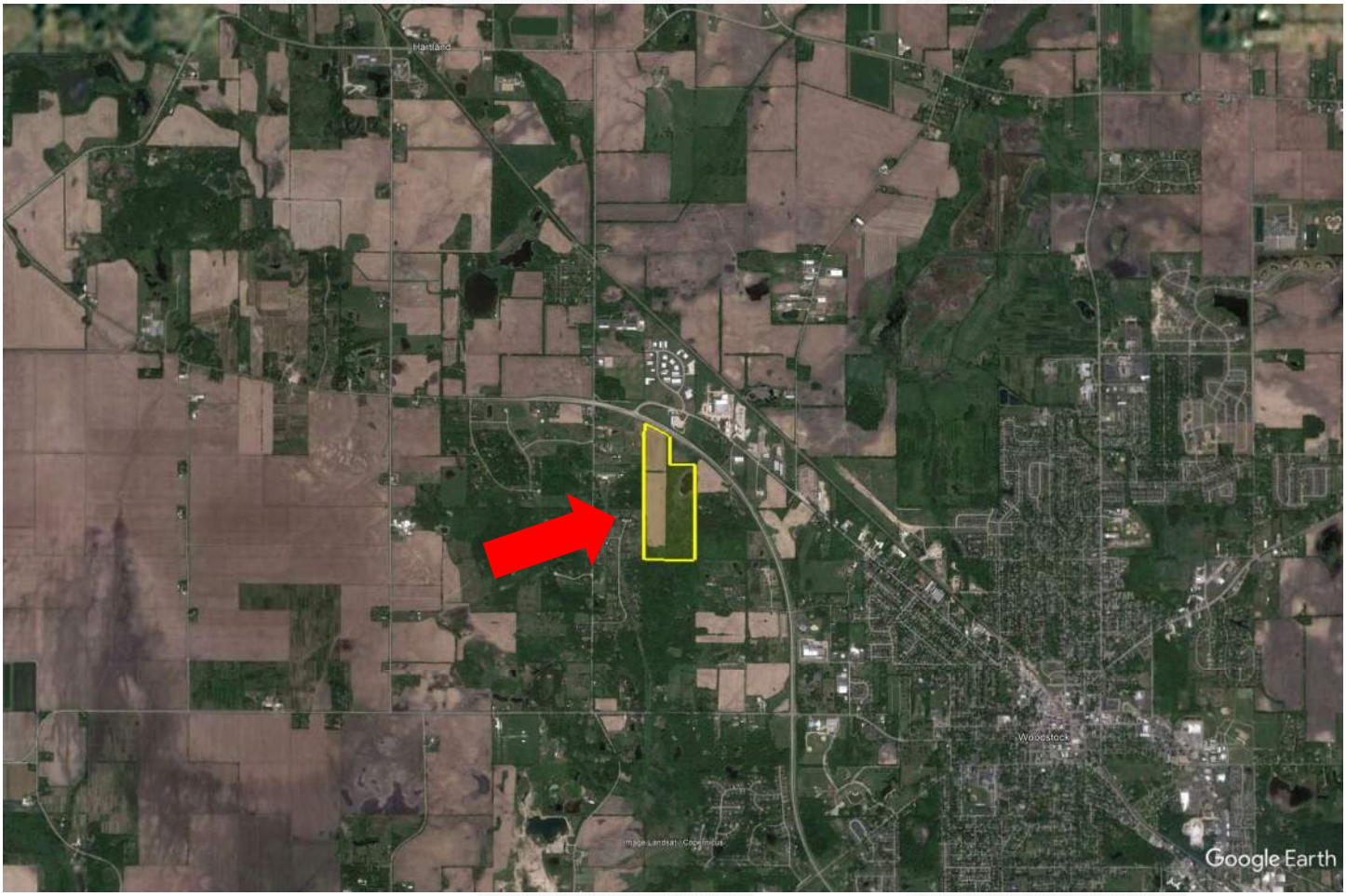
FHFA House Price Index McHenry County, Illinois		
Year	**Annual Change (%)**	**HPI**
2004	-	457.40
2005	8.59	496.68
2006	4.56	519.34
2007	0.20	520.38
2008	-4.44	497.27
2009	-11.02	442.49
2010	-9.33	401.19
2011	-8.53	366.98
2012	-7.81	338.33
2013	0.18	338.94
2014	6.79	361.96
2015	4.56	378.47
2016	2.94	389.59
2017	4.93	408.79
2018	4.54	427.33
2019	2.70	438.89
2020	1.94	447.40
2021	10.30	493.50
2022	14.61	565.60
2023	9.19	617.60
2024	8.02	667.14
Annual Average Compounded % Change	**2.01%**	

Based on the data shown above, the trend in residential home values in McHenry County have increased at an average annual rate of 2.56 percent, over the past twenty years. The housing values in the county grew at a strong rate over the past several years; however, recent macroeconomic conditions have resulted in a market correction based on increases in federal lending rates and general inflation, with a slowing of housing values approaching historical trends.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

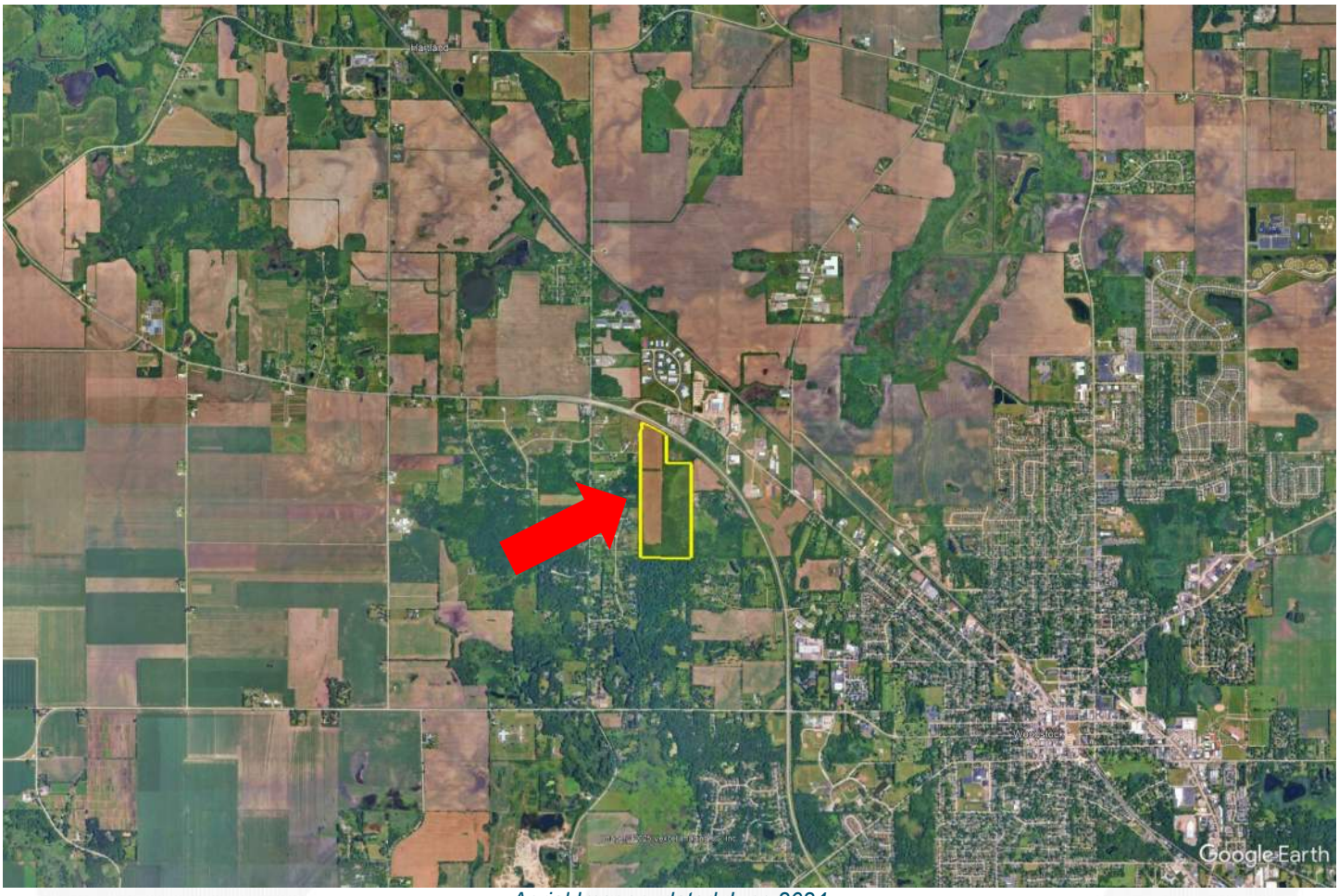
LOCAL LAND DEVELOPMENT TRENDS

Land values can be driven by a site's proximity to the path of development. The closer a property is to the path of development, and without natural barriers to development, the more value a property may have in the future; however, the little development in the area has been towards the City of Crystal Lake and the Village of Lakewood, to the southeast of the Project site. The Project area has been agricultural land for over 15 years.



Aerial Imagery dated December 2009

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.



Aerial Imagery dated June 2024

According to the images presented on the previous page, there has been limited new development in the local area over the past 15 years. Generally, any undeveloped agricultural land is considered to be an interim use as the intensity of uses grows in step with macroeconomic factors.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

SUMMARY AND FINAL CONCLUSIONS

The Project is located in a stable area that is predominantly agricultural in nature with some residential homesteads. The population quotient (persons per square mile) for the three-mile radius is 710, which reflects an exurban environment. Local development has been relatively stagnant over the past 15 years, and the immediate land parcels have a future land use designation of agricultural. Based on our analysis of real estate taxes in the Primary Report, solar farm uses incur anywhere from 131% to ±1,000% increase in real estate tax revenue for the local area, feeding back into essential services, including public roads and schools. Local land and residential home prices have remained stable over the past five years and are anticipated to align in the future with macroeconomic changes. Overall, the proposed Project is considered a locally compatible use.

The purpose of the Primary Report and this addendum is to determine whether the presence of a solar farm has caused a measurable and consistent impact on adjacent property values. Under the identified methodology and scope of work, CohnReznick reviewed published methodology for measuring impact on property values as well as published reports that analyzed the impact of solar farms on property values. These studies found little to no measurable and consistent difference between Test Area Sales and Control Area Sales attributed to the solar farms.

The chosen existing solar farms analyzed in the Primary Report reflected sales of property adjoining an existing solar farm (Test Area Sales) in which the unit sale prices were effectively the same or higher than the comparable Control Area Sales that were not near a solar farm. The conclusions support that there is no negative impact for improved residential homes adjacent to solar, nor agricultural acreage. This was confirmed with market participants interviews, which provided additional insight as to how the market evaluates farmland and single-family homes with views of the solar farm.

It can be concluded that since the Adjoining Property Sales (Test Area Sales) were not adversely affected by their proximity to the solar farm, that properties surrounding other proposed solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

Based upon the examination, research, and analyses of the existing solar farm uses, the surrounding areas, and an extensive market database, we have concluded that ***no consistent negative impact has occurred to adjacent property values that could be attributed to proximity to the adjacent solar farm***, with regard to unit sale prices or other influential market indicators. Additionally, in our workfile we have retained analyses of additional existing solar farms, each with their own set of matched control sales, which had consistent results, indicating no consistent and measurable impact on adjacent property values. This conclusion has been confirmed by numerous county assessors who have also investigated this use's potential impact on property values.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

CohnReznick Advisory LLC

Andrew R. Lines, MAI, CRE
Principal - Valuation Advisory Services
Certified General Real Estate Appraiser

Illinois License No. 553.001841
Expires 9/30/2025
Indiana License No. CG41500037
Expires 6/30/2026

Erin C. Bowen, MAI
Director
Certified General Real Estate Appraiser

Arizona License No. 32052
Expires 12/31/2026
Iowa License No. CG04209
Expires 6/30/2026

Andrew G. Hartigan, MAI, AI-GRS
Manager - Valuation Advisory Services
Certified General Real Estate Appraiser

Illinois License No. 553.001873
Expires 9/30/2025

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

CERTIFICATION

We certify that, to the best of our knowledge and belief:

1. The statements of fact and data reported are true and correct.
2. The reported analyses, findings, and conclusions in this consulting report are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, findings, and conclusions.
3. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. We have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of this report or the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value finding, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
8. Our analyses, findings, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, which includes the Uniform Standards of Professional Appraisal Practice (USPAP).
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
10. Andrew R. Lines, MAI, CRE, Erin C. Bowen, MAI, and Andrew G. Hartigan, MAI, AI-GRS have viewed the exterior of the Project and of all comparable data referenced in this report in person, via photographs, or aerial imagery.
11. We have not relied on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, and receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value.
12. Joe Ficenec provided consulting assistance to the persons signing this certification.
13. We have experience in reviewing properties similar to the subject and are in compliance with the Competency Rule of USPAP.
14. As of the date of this report, Andrew R. Lines, MAI, CRE, Erin Bowen, MAI, and Andrew G. Hartigan, MAI, AI-GRS have completed the continuing education program for Designated Members of the Appraisal Institute.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

CohnReznick Advisory LLC

Andrew R. Lines, MAI, CRE
Principal - Valuation Advisory Services
Certified General Real Estate Appraiser

Illinois License No. 553.001841
Expires 9/30/2025
Indiana License No. CG41500037
Expires 6/30/2026

Erin C. Bowen, MAI
Director
Certified General Real Estate Appraiser

Arizona License No. 32052
Expires 12/31/2026
Iowa License No. CG04209
Expires 6/30/2026

Andrew G. Hartigan, MAI, AI-GRS
Manager - Valuation Advisory Services
Certified General Real Estate Appraiser

Illinois License No. 553.001873
Expires 9/30/2025

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

ASSUMPTIONS AND LIMITING CONDITIONS

The fact witness services will be subject to the following assumptions and limiting conditions:

1. No responsibility is assumed for the legal description provided or for matter pertaining to legal or title considerations. Title to the property is assumed to be good and marketable unless otherwise stated. The legal description used in this report is assumed to be correct.
2. The property is evaluated free and clear of any or all liens or encumbrances unless otherwise stated.
3. Responsible ownership and competent management are assumed.
4. Information furnished by others is believed to be true, correct and reliable, but no warranty is given for its accuracy.
5. All engineering studies are assumed to be correct. The plot plans and illustrative material in this report are included only to help the reader visualize the property.
6. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for obtaining the engineering studies that may be required to discover them.
7. It is assumed that the property is in full compliance with all applicable federal, state, and local and environmental regulations and laws unless the lack of compliance is stated, described, and considered in the evaluation report.
8. It is assumed that the property conforms to all applicable zoning and use regulations and restrictions unless nonconformity has been identified, described and considered in the evaluation report.
9. It is assumed that all required licenses, certificates of occupancy, consents, and other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
10. It is assumed that the use of the land and improvements is confined within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in this report.
11. The date of value to which the findings are expressed in this report apply is set forth in the letter of transmittal. The appraisers assume no responsibility for economic or physical factors occurring at some later date which may affect the opinions herein stated.
12. Unless otherwise stated in this report, the existence of hazardous materials, which may or may not be present on the property, was not observed by the appraisers. The appraisers have no knowledge of the existence of such substances on or in the property. The appraisers, however, are not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, radon gas, lead or lead-based products, toxic waste contaminants,

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

and other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for such conditions or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.

13. The forecasts, projections, or operating estimates included in this report were utilized to assist in the evaluation process and are based on reasonable estimates of market conditions, anticipated supply and demand, and the state of the economy. Therefore, the projections are subject to changes in future conditions that cannot be accurately predicted by the appraisers, and which could affect the future income or value projections.

14. Fundamental to the appraisal analysis is the assumption that no change in zoning is either proposed or imminent, unless otherwise stipulated. Should a change in zoning status occur from the property's present classification, the appraisers reserve the right to alter or amend the value accordingly.

15. It is assumed that the property does not contain within its confined any unmarked burial grounds which would prevent or hamper the development process.

16. The Americans with Disabilities Act (ADA) became effective on January 26, 1992. We have not made a specific compliance survey and analysis of the property to determine if it is in conformance with the various detailed requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more of the requirements of the Act. If so, this fact could have a negative effect on the value of the property. Unless otherwise noted in this report, we have not been provided with a compliance survey of the property. Any information regarding compliance surveys or estimates of costs to conform to the requirements of the ADA are provided for information purposes. No responsibility is assumed for the accuracy or completeness of the compliance survey cited in this report, or for the eventual cost to comply with the requirements of the ADA.

17. Any value estimates provided in this report apply to the entire property, and any proration or division of the total into fractional interests will invalidate the value estimate, unless such proration or division of interests has been set forth in this report.

18. Any proposed improvements are assumed to have been completed unless otherwise stipulated; any construction is assumed to conform with the building plans referenced in this report.

19. Unless otherwise noted in the body of this report, this evaluation assumes that the subject does not fall within the areas where mandatory flood insurance is effective.

20. Unless otherwise noted in the body of this report, we have not completed nor are we contracted to have completed an investigation to identify and/or quantify the presence of non-tidal wetland conditions on the subject property.

21. This report should not be used as a basis to determine the structural adequacy/inadequacy of the property described herein, but for evaluation purposes only.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

22. It is assumed that the subject structure meets the applicable building codes for its respective jurisdiction. We assume no responsibility/liability for the inclusion/exclusion of any structural component item which may have an impact on value. It is further assumed that the subject property will meet code requirements as they relate to proper soil compaction, grading, and drainage.

23. The appraisers are not engineers, and any references to physical property characteristics in terms of quality, condition, cost, suitability, soil conditions, flood risk, obsolescence, etc., are strictly related to their economic impact on the property. No liability is assumed for any engineering-related issues.

The evaluation services will be subject to the following limiting conditions:

1. The findings reported herein are only applicable to the properties studied in conjunction with the Purpose of the Evaluation and the Function of the Evaluation as herein set forth; the evaluation is not to be used for any other purposes or functions.

2. Any allocation of the total value estimated in this report between the land and the improvements applies only to the stated program of utilization. The separate values allocated to the land and buildings must not be used in conjunction with any other appraisal and are not valid if so used.

3. No opinion is expressed as to the value of subsurface oil, gas or mineral rights, if any, and we have assumed that the property is not subject to surface entry for the exploration or removal of such materials, unless otherwise noted in the evaluation.

4. This report has been prepared by CohnReznick under the terms and conditions outlined by the enclosed engagement letter. Therefore, the contents of this report and the use of this report are governed by the client confidentiality rules of the Appraisal Institute. Specifically, this report is not for use by a third party and CohnReznick is not responsible or liable, legally or otherwise, to other parties using this report unless agreed to in writing, in advance, by both CohnReznick and/or the client or third party.

5. Disclosure of the contents of this evaluation report is governed by the by-laws and Regulations of the Appraisal Institute has been prepared to conform with the reporting standards of any concerned government agencies.

6. The forecasts, projections, and/or operating estimates contained herein are based on current market conditions, anticipated short-term supply and demand factors, and a continued stable economy. These forecasts are, therefore, subject to changes with future conditions. This evaluation is based on the condition of local and national economies, purchasing power of money, and financing rates prevailing at the effective date of value.

7. This evaluation shall be considered only in its entirety, and no part of this evaluation shall be utilized separately or out of context. Any separation of the signature pages from the balance of the evaluation report invalidates the conclusions established herein.

8. **Possession of this report, or a copy thereof, does not carry with it the right of publication, nor may it be used for any purposes by anyone other than the client without the prior written consent of the appraisers, and in any event, only with property qualification.**

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

9. The appraisers, by reason of this study, are not required to give further consultation or testimony or to be in attendance in court with reference to the property in question unless arrangements have been previously made.

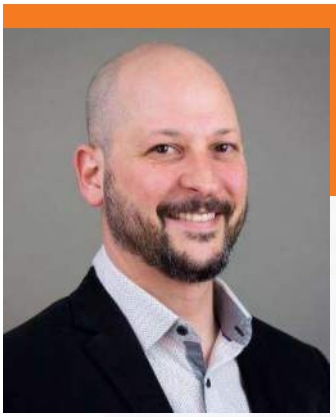
10. Neither all nor any part of the contents of this report shall be conveyed to any person or entity, other than the appraiser's client, through advertising, solicitation materials, public relations, news, sales or other media, without the written consent and approval of the authors, particularly as to evaluation conclusions, the identity of the appraisers or CohnReznick, LLC, or any reference to the Appraisal Institute, or the MAI designation. Further, the appraisers and CohnReznick, LLC assume no obligation, liability, or accountability to any third party. If this report is placed in the hands of anyone but the client, client shall make such party aware of all the assumptions and limiting conditions of the assignment.

11. This evaluation is not intended to be used, and may not be used, on behalf of or in connection with a real estate syndicate or syndicates. A real estate syndicate means a general or limited partnership, joint venture, unincorporated association or similar organization formed for the purpose of, and engaged in, an investment or gain from an interest in real property, including, but not limited to a sale or exchange, trade or development of such real property, on behalf of others, or which is required to be registered with the United States Securities and Exchange commissions or any state regulatory agency which regulates investments made as a public offering. It is agreed that any user of this evaluation who uses it contrary to the prohibitions in this section indemnifies the appraisers and the appraisers' firm and holds them harmless from all claims, including attorney fees, arising from said use.

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

ADDENDUM A:
APPRAISER QUALIFICATIONS

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.



Andrew R. Lines, MAI, CRE

Principal, CohnReznick Advisory

1 S. Wacker Drive, Suite 3550
Chicago, IL 60606
312-508-5892 (w)
917-696-9636 (m)
andrew.lines@cohnreznick.com
www.cohnreznick.com

Andrew R. Lines, MAI, CRE is a Principal for CohnReznick Advisory's Valuation Advisory Services practice who has been a CohnReznick employee for over twelve years. Andrew has been involved in the real estate business for more than 20 years and has performed valuations on all real estate classes (industrial, commercial, residential, development land). Special-use valuations include affordable housing (as well as market studies), student housing, senior housing, cannabis facilities (indoor/outdoor, processing and dispensaries), landfills, waste transfer stations, golf courses, marinas, hospitals, universities, telecommunications facilities, data centers, self- storage facilities, racetracks, and corridors. Impact Study Reports have also been generated for zoning hearings related to the development of solar facilities, wind powered facilities, landfills, big box retail, waste transfer stations, private mental health clinics, cannabis dispensaries, concert/stadium venues and day care centers. He is also experienced in the valuation of leasehold, leased fee, and partial interests, as well as purchase price allocations (GAAP, IFRS and IRC 1060) for financial reporting.

Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, tax appeal, estate gifts, asset management, workouts, and restructuring, as well as valuation for financial reporting including purchase price allocations (ASC 805), impairment studies, and appraisals for investment company guidelines and REIS standards. Andrew has qualified as an expert witness, providing testimony for cases in the states of IL, DC, VA, NY and MD, and for zoning hearings in IL, IN, MI, NY, HI, OH, KY, CO, PA, WI and MO. Andrew has also performed appraisal review assignments for accounting purposes (audit support), asset management, litigation and as an evaluator for a large Midwest regional bank.

Andrew has earned the professional designation of Member of the Appraisal Institute (MAI). He has also qualified for certified general commercial real estate appraiser licenses in AZ, CA, IL, IN, WI, MD, OH, NY, NJ, FL, GA, KY and DC. Temporary licenses have been granted in CT, CO, PA, ID, MS, KS, MT and SC.

Education

- Syracuse University: Bachelor of Fine Arts
- MAI Designation (Member of the Appraisal Institute)

Professional Affiliations

- Counselors of Real Estate (CRE)
- Chicago Chapter of the Appraisal Institute
- International Real Estate Management (IREM)
- National Council of Housing and Market Analysts (NCHMA)

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

Erin C. Bowen, MAI

Director – Real Estate Valuation
Valuation Advisory Services

404-847-7740
erin.bowen@cohnreznick.com
www.cohnreznick.com

Erin Bowen, MAI is a Director with CohnReznick in Valuation Advisory Services. Ms. Bowen is based in Phoenix, Arizona, with presence covering the west coast. Ms. Bowen's work in Commercial Real Estate valuation spans over 15 years.

Ms. Bowen specializes in lodging, cannabis, seniors housing, large scale retail and multifamily conversion properties. Lodging work includes all hotel property types and brand segments including limited, full service and resort properties; additionally, Ms. Bowen has appraised numerous hotel to multifamily conversion properties including market rate and affordable housing. Cannabis work includes dispensaries, cultivation facilities including specialized indoor facilities and greenhouse properties, processing and manufacturing facilities. Senior's housing assignments include assisted living, skilled nursing facilities and rehabilitation centers. Retail work spans power centers, lifestyle centers, outlet centers and malls. She has appraised numerous additional properties including multifamily, office, medical office, industrial, churches, and vacant land.

Ms. Bowen has expertise in appraising properties at all stages of development, including existing as is, proposed, under construction, renovations and conversion to alternate use. Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, eminent domain, tax appeal, estate gifts, asset management, as well as valuation for financial reporting including purchase price allocations (ASC 805). Impact Study Reports have also been generated for zoning hearings related to the development of solar facilities and wind powered facilities. Ms. Bowen has qualified as an expert witness and provided testimony for zoning and county commission hearings.

Education

- University of California, San Diego: Bachelor of Arts in Psychology and Theater; College Honors

Professional Affiliations

- Designated Member of the Appraisal Institute

Licenses

- Certified General Real Estate Appraiser licensed in New Mexico, Arizona, California, Oregon and Nevada

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

Andrew G. Hartigan, MAI, AI-GRS

Manager, Valuation Advisory Services

1 S. Wacker Drive, Suite 3550
Chicago, IL 60606
Andrew.Hartigan@CohnReznick.com
www.cohnreznick.com

Andrew Hartigan is a manager in CohnReznick's Valuation Advisory Services practice group and is based in the Chicago office. He has appraised or assisted in appraisals of a variety of retail shopping centers, hotels, rental apartment properties, Class A office complexes, mixed-use properties, industrial properties, hospitals, golf courses, self-storage facilities, developable land, and historically protected properties. Andrew has 20+ years of valuation experience in 30+ states throughout the country. He is a Designated Member of the Appraisal Institute and is a Certified General Real Estate Appraiser within the State of Illinois. In addition, Andrew has received the AI-GRS Review Designation awarded by the Appraisal Institute. He has provided expert witness testimony at local city zoning hearings as well as county taxing hearings.

Education

- University of Colorado @ Boulder: Psychology
- Loyola University: Masters of Social Work (MSW)

Professional Affiliations and Licenses

- Appraisal Institute, MAI Designation
- Appraisal Institute, AI-GRS Reviewer Designation
- Certified General Real Estate Appraiser in the State of Illinois

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

Joe Ficenec

Consultant, Valuation Advisory Services

621 Capital Mall
Sacramento, CA 95814
916-930-5237
joe.ficenec@cohnreznick.com
www.cohnreznick.com

Joe Ficenec is a consultant in CohnReznick's Valuation Advisory Services practice and is based in the Sacramento office. Joe specializes in Impact Study Reports, which have been conducted for zoning hearings related to the development of solar facilities and wind powered facilities. He also has experience in assisting with the appraisal multifamily, office, industrial, retail, lodging and mixed-use properties for financing and purchase price allocation purposes.

Joe graduated with honors from the University of California, Davis in May 2017 with a major in managerial economics. Prior to joining CohnReznick, Joe worked as a Real Estate Assessor for a county government and as a consultant for a nationwide real estate firm in San Francisco.

Education

- University of California, Davis – B.S. Managerial Economics

Disclaimer: This report is limited to the intended use, intended users (Woodstock Community Energy Initiative LLC, ECA Solar, and the client's legal and site development professionals) and purpose stated within. No part of this report may otherwise be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick Advisory LLC.

McHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

NATURAL RESOURCES INFORMATION REPORT

25-063-4724

August 5, 2025

This report has been prepared for:
Woodstock Community Energy Initiative LLC

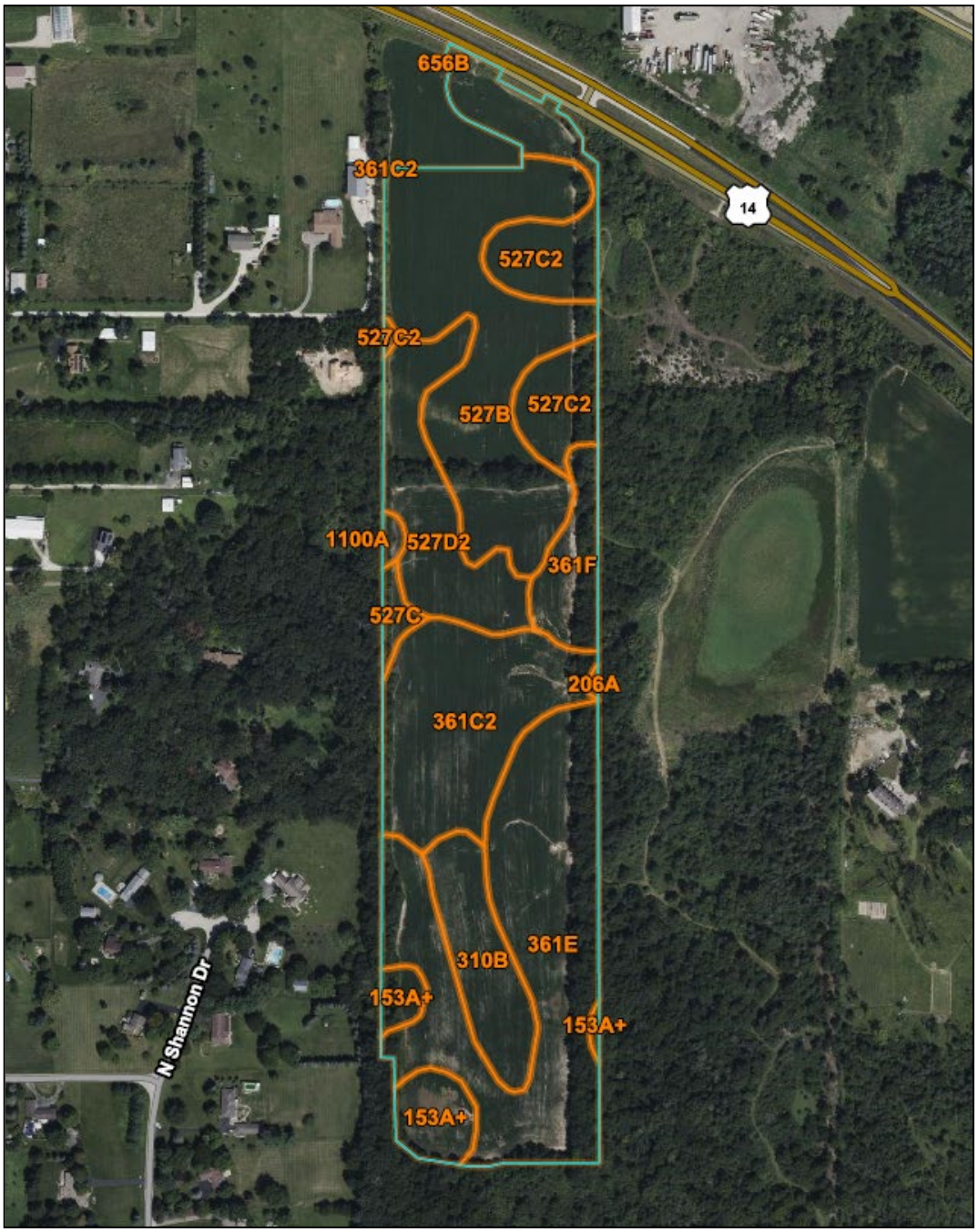
Contact Person:
Hobie Anderson

PREPARED BY:
McHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT
1648 S. EASTWOOD DR.
WOODSTOCK, IL 60098
PHONE: (815) 338-0444
www.mchenryswcd.org

The McHenry-Lake County Soil & Water Conservation District is an equal opportunity provider and employer.

EXECUTIVE SUMMARY OF NRI REPORT #25-063-4724

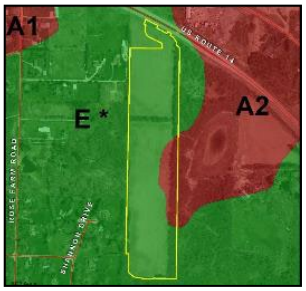
It is the opinion of the McHenry-Lake County Soil and Water Conservation District Board of Directors that this report as summarized on these pages are pertinent to the requested zoning change.



Picture 1: Looking southeast from the northwest property corner.

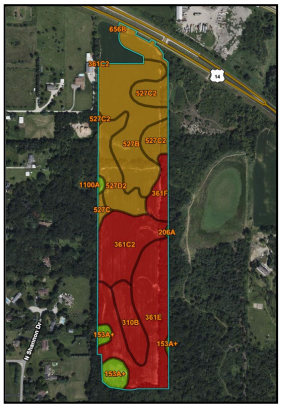
Picture 2: Looking southwest from eastern boundary (just south of the wooded field border located within the northern 1/3 of the parcel).

Groundwater Contamination Potential and Recharge Areas:



Aquifer Sensitivity Map (*This is the area beneath the soil profile down to bedrock)
The Geologic features map indicates that the parcel is comprised of 4.22 acres of A2 and 36.46 acres of E* geologic limitations. A2 has a high aquifer contamination potential and E* has a low aquifer contamination potential.

Sensitive Aquifer Recharge Areas (Includes the soil profile and underlying geology).
The Sensitive Aquifer Recharge Map indicates the parcel is not within an area designated as Sensitive Aquifer Recharge.

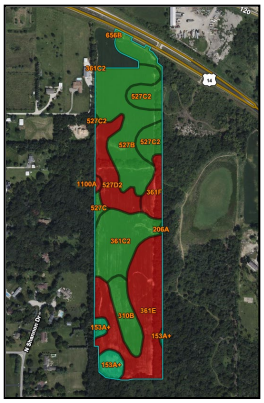


Soil Leachability Map (This is only the soil profile within the parcel from the surface down to approx. 5 feet).
The Soil Leachability Index indicates 20.7 acres or 50.9% of the parcel contains high leachable soils, for fertilizers, on the parcel (identified in red).

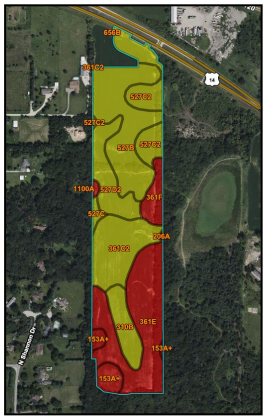
Soil Permeability (This is only the soil profile within the parcel from the surface down to approx. 5 feet. Soil permeability is a reflection of the speed in which water (with or without pollutants) can move through the soil profile.)
The USDA-NRCS Soil Survey Map of the area indicates there are no highly permeable soils on the parcel.

Soil Limitations (This evaluates the parcel from the surface down to approximately 5 feet.):

Erosion Ratings
The NRCS Soils Survey indicates 25.4 acres or 66.4% of the parcel contains highly erodible soils.



Prime Farmland Soils
The Natural Resources Conservation Service (NRCS) Soil Survey indicates 22.8 acres or 55.7% of the parcel is comprised of prime farmland soils and 1.7 acres or 4.2% of the parcel is comprised of prime farmland if drained soils (identified in shades of blue and green).



Ground-Based Solar Arrays
The Natural Resources Conservation Service (NRCS) Soil Survey indicates 14.1 acres or 34.6% of the parcel has very limited soils for ground-based solar arrays (identified in red).

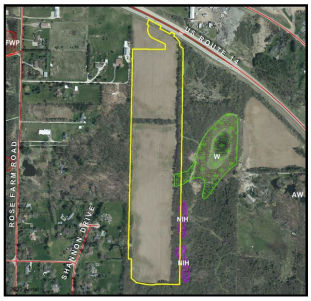
Hydric Soils
The NRCS Soil Survey indicates 1.9 acres or 4.6% of the parcel contains hydric soils (identified in red and orange).

Floodplain Information:

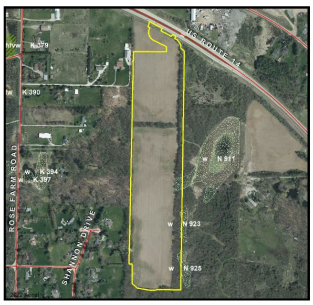
The Flood Insurance Rate Map
Indicates the parcel is outside of the 100-year floodplain.

Flood of Record Map (Hydrologic Atlas)
The Flood of Record Map for this area indicates the site has not previously flooded.

Wetland Information:



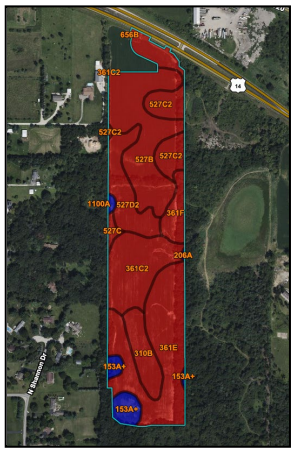
USDA-NRCS Wetland Inventory
The NRCS Wetlands Inventory identifies 0.25 acres of wetland and 0.12 acres of Non-Inventoried Hydric Soil on the parcel.



ADID Wetland Inventory
The ADID Wetland Study identifies 0.25 acres of wetland N911, 0.08 acres of wetland N923, and 0.11 acres of N925 on the parcel.

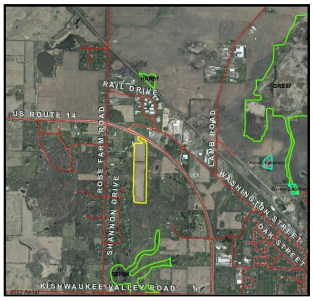
*The Prospecting Site Plan, prepared by Kimley Horn, dated 7/9/2025, indicates the wetland areas will be avoided.

Flooding Frequency
The NRCS Soil Survey indicates that flooding is not probable on the parcel. The chance of flooding is nearly 0% in any year. Flooding occurs less than once in 500 years.



Ponding Frequency
The NRCS Soil Survey indicates that frequent ponding occurs on 1.9 acres or 4.6% of the parcel. Frequent means that ponding occurs, on average, more than once in 2 years. The chance of ponding is more than 50 % in any year (identified in blue).

Cultural Resources: Office maps indicate there are no known cultural/historical features within the parcel in question.



Preserved or Recognized Ecological Sites: Office maps indicate 3 McHenry County Natural Area Inventory Sites and 2 Land Conservancy of McHenry County Easements – Airway Easement and Gavers Easement, in the vicinity of the parcel.

McHenry County Natural Areas Inventory Site – Silver Creek Marsh (GRE07) contains a sedge meadow and streamside marsh threatened by siltation, an upstream impoundment, water table alteration, cattail expansion, Reed Canary Grass, and Development.

McHenry County Natural Areas Inventory Site – Rose Farm Prairie (HAR01) is comprised of mesic silt loam prairies, wet silt loam prairies, and sedge meadows that is threatened by siltation, water table alteration, and brush encroachment.

McHenry County Natural Areas Inventory Site – West Woodstock Prairie (SEN06) contains a mesic silt loam prairie, wet silt loam prairie, basin marsh, and sedge meadows threatened by water table alteration, brush encroachment and Reed Canary Grass.

Woodlands: There are existing mature trees along the eastern boundary of the parcel.

Agricultural Areas: Office Maps indicate there are no State designated agricultural areas on the parcel in question.

Land Evaluation Site Assessment (LESA)
The Land Evaluation Score for the parcel is 71.54. A Site Assessment was not completed due to the Agricultural zoning on the parcel.

Agricultural Impact Mitigation Agreement: We have received notice from the Illinois Department of Agriculture that an Agricultural Impact Mitigation Agreement has been filed.

ADDITIONAL CONCERNS

The Board recommends that areas between panels and within the buffers be planted to a native prairie mix to help increase water infiltration and reduce runoff from the site. It is recommended that a planting and maintenance plan be developed with the landowner to ensure that noxious weeds are controlled, and native plantings are properly installed and managed. The petitioner should refer to the planting requirements of the Illinois Department of Natural Resources and McHenry County Department of Planning & Development.

NATURAL RESOURCE INFORMATION REPORT (NRI)

NRI Report Number	25-063-4724
Applicant's Name	Woodstock Community Energy Initiative LLC
Size of Parcel	40.72 acres
Zoning Change	Solar Facility
Parcel Index Number(s)	07-36-326-003
Common Location	Undefined
Contact Person	Hobie Anderson

Copies of this report or notification of the proposed land-use change were provided to:	***yes***	***no***
The Applicant	x	
The Applicant's Legal Representation/Consultant		x
The Village/City/County Planning and Zoning Department or Appropriate Agency	x	

Report Prepared By: *Spring M. Duffey* Position: *Executive Director*

Contents *Page*

PURPOSE & INTENT..... 3

PARCEL LOCATION..... 4

ARCHAEOLOGIC/CULTURAL RESOURCES INFORMATION..... 5

ECOLOGICALLY SENSITIVE AREAS..... 5

WOODLANDS..... 11

GEOLOGIC INFORMATION..... 12
AQUIFER SENSITIVITY MAP..... 12
SENSITIVE AQUIFER RECHARGE AREAS..... 13

SOILS INFORMATION..... 15
SOILS MAP..... 16
SOIL MAP UNIT DESCRIPTIONS..... 17

SOILS INTERPRETATIONS EXPLANATION..... 17
SOIL LEACHABILITY..... 18
SOIL PERMEABILITY..... 24

SOIL EROSION & SEDIMENT CONTROL..... 25

PRIME FARMLAND SOILS..... 26

SOLAR ARRAYS..... 28

AGRICULTURAL AREAS..... 33
LAND EVALUATION AND SITE ASSESSMENT (LESA)..... 34
LAND USE PLANS..... 35

DRAINAGE, RUNOFF AND FLOOD INFORMATION..... 35
FLOOD OF RECORD MAP..... 37
2 FOOT TOPOGRAPHIC MAP..... 38
FLOOD INSURANCE RATE MAP..... 39
WATERSHED PLANS..... 40

WETLAND INFORMATION..... 42
NRCS WETLAND MAP..... 43
ADID WETLANDS..... 44
HYDRIC SOILS..... 46
FLOODING FREQUENCY..... 50
PONDING FREQUENCY..... 52
WETLAND AND FLOODPLAIN REGULATIONS..... 54

THREATENED & ENDANGERED SPECIES..... 55

GLOSSARY..... 56

REFERENCES..... 58

PURPOSE AND INTENT

The purpose of this report is to inform officials of the local governing body and other decision-makers with natural resource information. This information may be useful when undertaking land use decisions concerning variations, amendments or relief of local zoning ordinances, proposed subdivision of vacant or agricultural lands and the subsequent development of these lands. This report is a requirement under Section 22.02a of the Illinois Soil and Water Conservation Districts Act.

The intent of this report is to present the most current natural resource information available in a readily understandable manner. It contains a description of the present site conditions, the present resources, and the potential impacts that the proposed change may have on the site and its resources. The natural resource information was gathered from standardized data, on-site investigations and information furnished by the petitioner. This report must be read in its entirety so that the relationship between the natural resource factors and the proposed land use change can be fully understood.

Due to the limitations of scale encountered with the various resource maps, the property boundaries depicted in the various exhibits in this report provide a generalized representation of the property location and may not precisely reflect the legal description of the PIQ (Parcel in Question).

This report, when used properly, will provide the basis for proper land use change decisions and development while protecting the natural resource base of the county. It should not be used in place of detailed environmental and/or engineering studies that are warranted under most circumstances, but in conjunction with those studies.

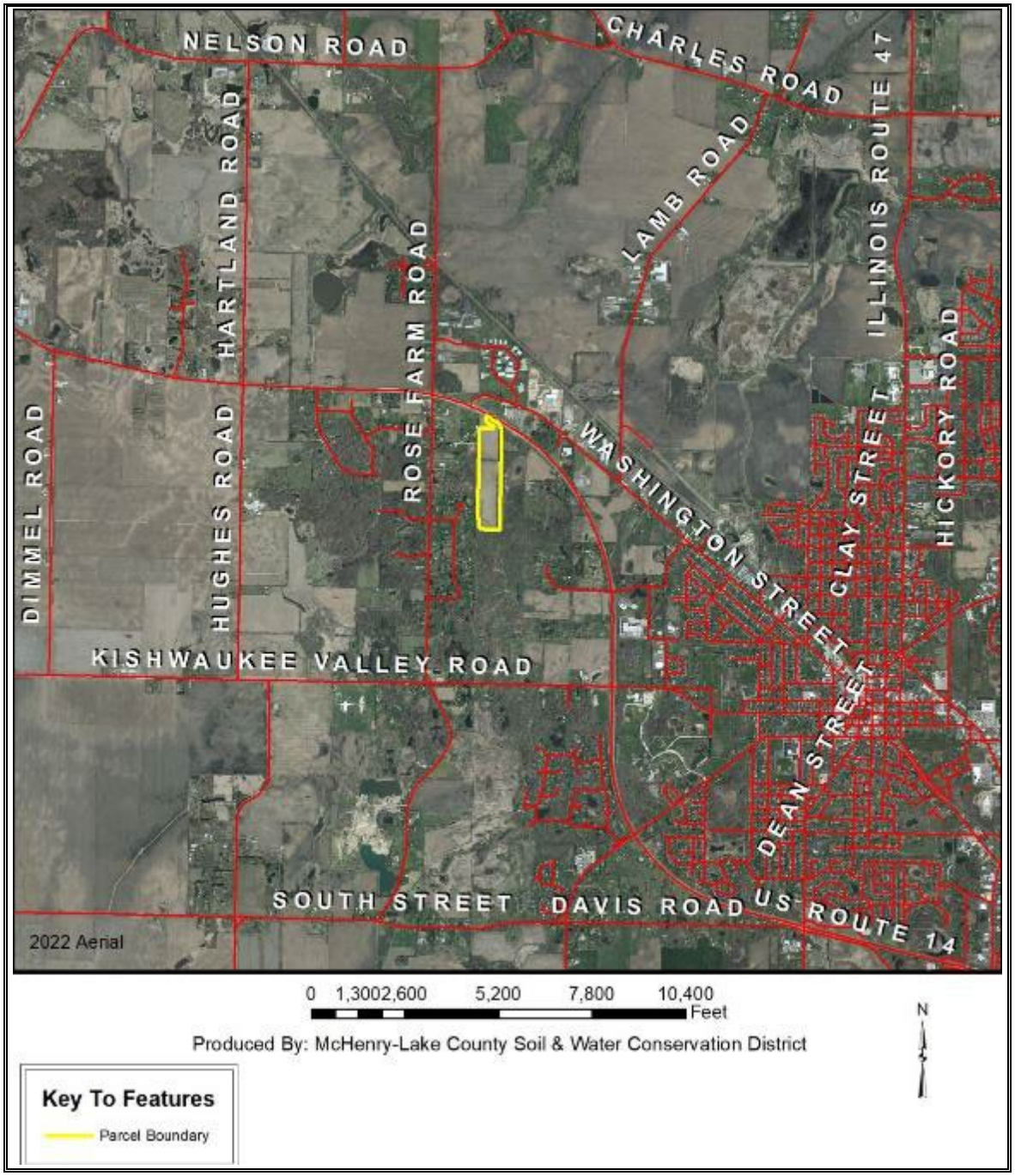
The conclusions of this report in no way indicate that a certain land use is not possible, but it should alert the reader to possible problems that may occur if the capabilities of the land are ignored. Any questions on the technical data supplied in this report or if anyone feels that they would like to see more additional specific information to make the report more effective, please contact:

McHenry-Lake County Soil & Water Conservation District
1648 S. Eastwood Dr.
Woodstock, IL 60098
Phone: (815) 338-0444 ext. 3
www.mchenryswcd.org
E-mail: Spring.Duffey@il.nacdnet.net

PARCEL LOCATION

Location Map for Natural Resources Information Report # 25-063-4724

In the Southwest Quarter of Section 36, Township 45 North, Range 6 East, on 40.72 acres. This parcel is located on the South side of U.S. Highway 14, east of the intersection of U.S. Highway 14 and Rose Farm Road, McHenry County, IL.



ARCHAEOLOGIC/CULTURAL RESOURCES

Simply stated, cultural resources are all the past activities and accomplishments of people. They include the following: buildings; objects made or used by people; locations; and less tangible resources, such as stories, dance forms, and holiday traditions. The Soil and Water Conservation District most often encounters cultural resources as historical properties. These may be prehistoric or historical sites, buildings, structures, features, or objects. The most common type of historical property that the Soil and Water Conservation District may encounter is non-structural archaeological sites. These sites often extend below the soil surface, and must be protected against disruption by development or other earth moving activity if possible. Cultural resources are *non-renewable* because there is no way to "grow" a site to replace a disrupted site.

Landowners with historical properties on their land have ownership of that historical property. However, the State of Illinois owns all of the following: human remains, grave markers, burial mounds, and artifacts associated with graves and human remains.
Non-grave artifacts from archaeological sites and historical buildings are the property of the landowner. The landowner may choose to disturb a historical property, but may not receive federal or state assistance to do so. If an earth moving activity disturbs human remains, the landowner must contact the county coroner within 48 hours.

Office maps indicate there are no known cultural/historical features on the parcel in question. (PIQ)

ECOLOGICALLY SENSITIVE AREAS

What is Biological Diversity and Why Should it be Conserved?[1]

Biological diversity, or biodiversity, is the range of life on our planet. A more thorough definition is presented by botanist Peter H. Raven: "At the simplest level, biodiversity is the sum total of all the plants, animals, fungi and microorganisms in the world, or in a particular area; all of their individual variation; and all of the interactions between them. It is the set of living organisms that make up the fabric of the planet Earth and allow it to function as it does, by capturing energy from the sun and using it to drive all of life's processes; by forming communities of organisms that have, through the several billion years of life's history on Earth, altered the nature of the atmosphere, the soil and the water of our Planet; and by making possible the sustainability of our planet through their life activities now." (Raven 1994)

It is not known how many species occur on our planet. Presently, about 1.4 million species have been named. It has been estimated that there are perhaps 9 million more that have not been identified. What is known is that they are vanishing at an unprecedented rate. Reliable estimates show extinction occurring at a rate several orders of magnitude above "background" in some ecological systems. (Wilson 1992, Hoose 1981)

The reasons for protecting biological diversity are complex, but they fall into four major categories.

First, loss of diversity generally weakens entire natural systems. Healthy ecosystems tend to have many natural checks and balances. Every species plays a role in maintaining this system. When simplified by the loss of diversity, the system becomes more susceptible to natural and artificial perturbations. The chances of a system-wide collapse increase. In parts of the

[1]Taken from *The Conservation of Biological Diversity in the Great Lakes Ecosystem: Issues and Opportunities*, prepared by the Nature Conservancy Great Lakes Program 79W. Monroe Street, Suite 1309, Chicago, IL 60603, January 1994

midwestem United States, for example, it was only the remnant areas of natural prairies that kept soil intact during the dust bowl years of the 1930s. (Roush 1982)

Simplified ecosystems are almost always expensive to maintain. For example, when synthetic chemicals are relied upon to control pests, the target species are not the only ones affected. Their predators are almost always killed or driven away, exasperating the pest problem. In the meantime, people are unintentionally breeding pesticide-resistant pests. A process has begun where people become perpetual guardians of the affected area, which requires the expenditure of financial resources and human ingenuity to keep the system going.

A second reason for protecting biological diversity is that it represents one of our greatest untapped resources. Great benefits can be reaped from a single species. About 20 species provide 90% of the world's food. Of these 20, just three, wheat, maize and rice-supply over one half of that food. American wheat farmers need new varieties every five to 15 years to compete with pests and diseases. Wild strains of wheat are critical genetic reservoirs for these new varieties.

Further, every species is a potential source of human medicine. In 1980, a published report identified the market value of prescription drugs from higher plants at over $3 billion. Organic alkaloids, a class of chemical compounds used in medicines, are found in an estimated 20% of plant species. Yet only 2% of plant species have been screened for these compounds. (Hoose 1981)

The third reason for protecting diversity is that humans benefit from natural areas and depend on healthy ecosystems. The natural world supplies our air, our water, our food and supports human economic activity. Further, humans are creatures that evolved in a diverse natural environment between forest and grasslands. People need to be reassured that such places remain. When people speak of "going to the country," they generally mean more than getting out of town. For reasons of their own sanity and well being, they need a holistic, organic experience. Prolonged exposure to urban monotony produces neuroses, for which cultural and natural diversity cure.

Historically, the lack of attention to biological diversity, and the ecological processes it supports, has resulted in economic hardships for segments of the basin's human population.

The final reason for protecting biological diversity is that species and natural systems are intrinsically valuable. The above reasons have focused on the benefits of the natural world to humans. All things possess intrinsic value simply because they exist.

Biological Resources Concerning the Subject Parcel

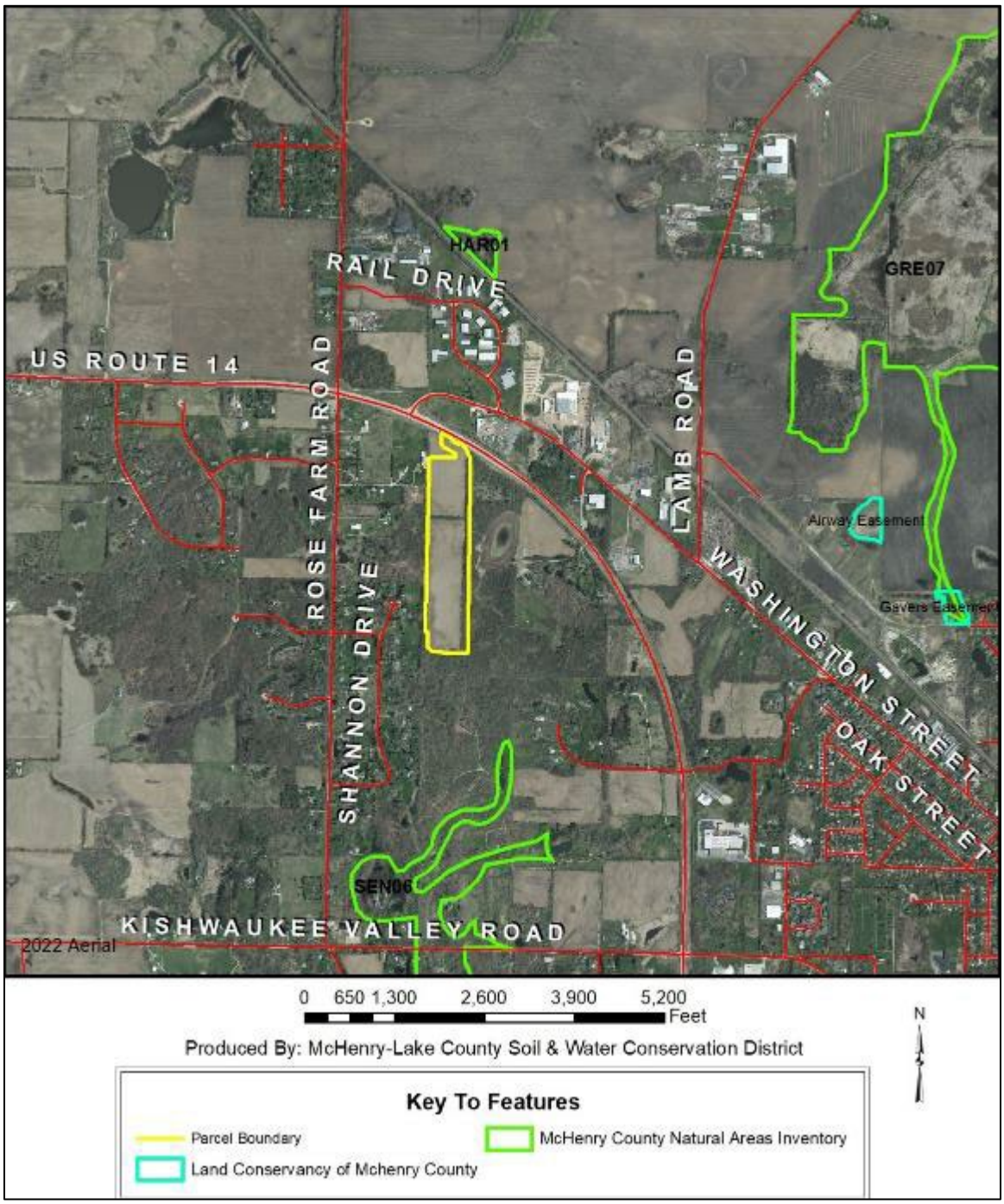
As part of the Natural Resources Information Report, staff checks office maps to determine if any nature preserves are within 500 feet of the parcel in question. If there is a nature preserve in the area, then that resource will be identified as part of the report. The SWCD recommends that every effort be made to protect that resource. Such efforts should include, but are not limited to erosion control, sediment control, stormwater management, and groundwater monitoring.

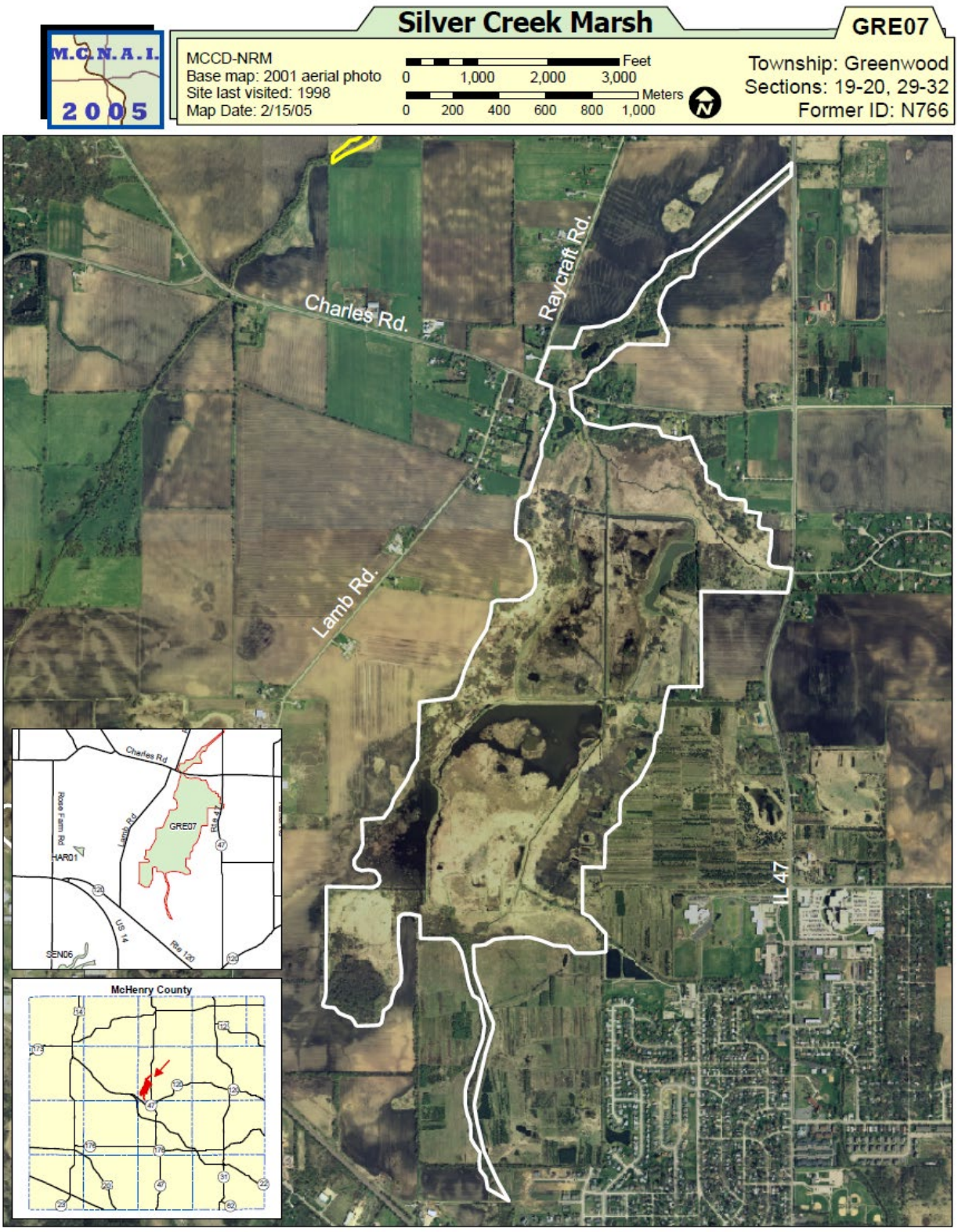
Office maps indicate 3 McHenry County Natural Area Inventory Sites and 2 Land Conservancy of McHenry County Easements – Airway Easement and Gavers Easement, in the vicinity of the parcel.

McHenry County Natural Areas Inventory Site – Silver Creek Marsh (GRE07) contains a sedge meadow and streamside marsh threatened by siltation, an upstream impoundment, water table alteration, cattail expansion, Reed Canary Grass, and Development.

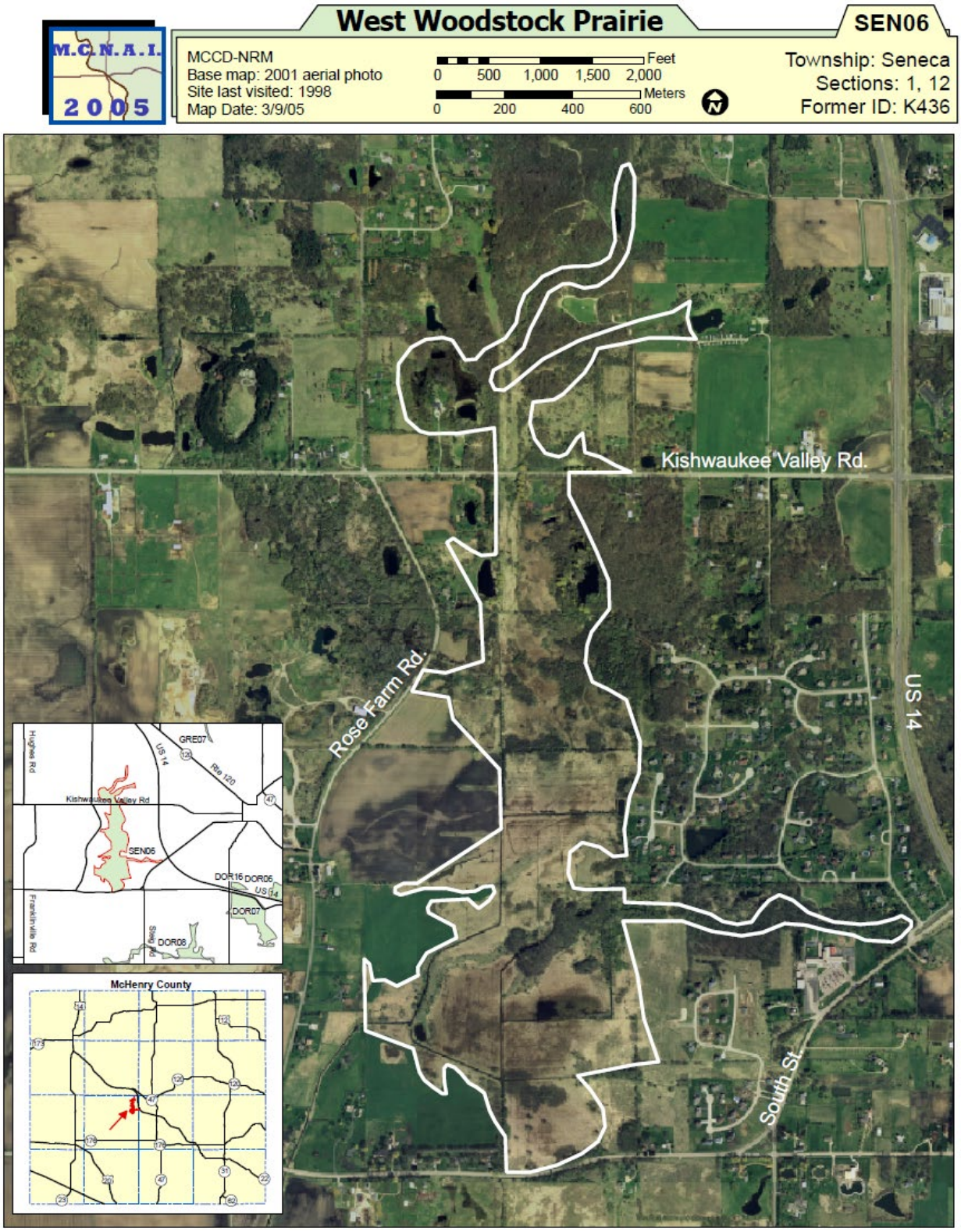
McHenry County Natural Areas Inventory Site – Rose Farm Prairie (HAR01) is comprised of mesic silt loam prairies, wet silt loam prairies, and sedge meadows that is threatened by siltation, water table alteration, and brush encroachment.

McHenry County Natural Areas Inventory Site – West Woodstock Prairie (SEN06) contains a mesic silt loam prairie, wet silt loam prairie, basin marsh, and sedge meadows threatened by water table alteration, brush encroachment and Reed Canary Grass.


HAR01
GRE07
RAIL DRIVE
US ROUTE 14
ROSE FARM ROAD
LAMB ROAD
Airway Easement
Gevers Easement
WASHINGTON STREET
OAK STREET
SHANNON DRIVE
SEN06
KISHWAUKEE VALLEY ROAD
2022 Aerial
0 650 1,300 2,600 3,900 5,200
Feet
N
Produced By: McHenry-Lake County Soil & Water Conservation District
Key To Features
Parcel Boundary
McHenry County Natural Areas Inventory
Land Conservancy of Mchenry County


M.C.N.A.I.
2005
Silver Creek Marsh
GRE07
MCCD-NRM
Base map: 2001 aerial photo
Site last visited: 1998
Map Date: 2/15/05
Feet
0 1,000 2,000 3,000
Meters
0 200 400 600 800 1,000
Township: Greenwood
Sections: 19-20, 29-32
Former ID: N766
Charles Rd.
Raycraft Rd.
Lamb Rd.
IL 47
GRE07
HAR01
SEN06
US 14
McHenry County

M.C.N.A.I.
2005
Rose Farm Prairie
HAR01
MCCD-NRM
Base map: 2001 aerial photo
Site last visited: 1998
Map Date: 2/15/05
Feet
0 100 200 300
Meters
0 20 40 60 80 100
Township: Hartland
Section: 25
Former ID: N890
Charles Rd
GREDT
HAR01
McHenry County


M.C.N.A.I.
2005
West Woodstock Prairie
SEN06
MCCD-NRM
Base map: 2001 aerial photo
Site last visited: 1998
Map Date: 3/9/05
Feet
0 500 1,000 1,500 2,000
Meters
0 200 400 600
Township: Seneca
Sections: 1, 12
Former ID: K436
Kishwaukee Valley Rd.
Rose Farm Rd.
US 14
South St
GRE07
SEN06
DOR16
DOR06
DOR07
DOR08
McHenry County

WOODLANDS

Existing mature trees should be preserved whenever possible. Woodlands provide a large number of benefits such as wildlife habitat, erosion control, air and water quality improvements, as well as aesthetic values. Construction activities can indirectly destroy trees. Oak trees are particularly susceptible to long term, permanent damage caused by construction activities and require special consideration. It is also recommended that invasive non-native species be removed whenever possible.

Native woodlands are no longer a common occurrence throughout much of McHenry County. Although forests originally covered nearly 40% of Illinois, today only about 12% of the state is forested, with most of this being secondary growth (Ill. Natural History Survey Reports, Nov/Dec 1993, No. 324). The composition of Illinois forests has changed markedly over the past three decades. 97% of the timberland is classified as hardwood forest. The forest acreage continues to increase from 4.2 million acres in 1985 to 4.3 million acres in 1998. (IL Forest Development Council News, IL DNR, Winter 2001/Volume 2, No. 1). Oak-hickory forests, which had made up half of the acreage, have declined by 14%, and make up 2.1 million acres. This decline is largely a result of wildfire suppression that allows maples to take over. Thus, the acres of maple-beech forest have risen more than 40-fold from 1962 to 1985, to one quarter of the total forest area, 696 thousand acres. Dutch elm disease and the conversion of forested bottomlands to agriculture have resulted in huge declines in the elm-ash-cottonwood forests, 906 thousand acres, falling from one third - one sixth of the Illinois forest area. Elm accounts for the greatest number of individual trees – 412 million. Other species groups with more than 100 million trees include hickory, red oak, sugar/black maple, ash, hackberry, and black cherry.

Woodlands provide many benefits such as wildlife habitat, erosion control, air and water quality improvements, and aesthetic values. Forests are responsible for much of the biological diversity in the state. Many species are dependent upon forests for food & shelter, including threatened/endangered species.

One of the most serious problems facing Illinois forests is the invasion of exotic plants and animals. Some of the most damaging plants includes European buckthorn, multiflora rose, honeysuckle, purple loosestrife, and garlic mustard.

Many trees, particularly hardwoods (especially oaks) are extremely sensitive to construction-induced disturbances. The area most susceptible to damage is within the "drip radius," the ground surface directly beneath the leafy canopy of the tree. Many trees have an extensive system of feeder roots, located within one foot of the surface, and supply the tree with the majority of its moisture and nutrient needs.

Construction activities can negatively impact trees in several different ways. Earth-moving activities that stockpile soil near trees can suffocate tree roots that, although buried, require oxygen. Vehicle traffic can compact the soil to a point where the roots no longer function effectively. Grading activities for road cuts and foundations can cause a localized drop in the water table, placing the trees under stress. The placement of pavement or stormwater management facilities near established trees can also radically change soil moisture. The removal of the accumulated organic materials normally present on a woodland floor, and the subsequent establishment of turf lawns, can drastically affect the soil temperature and nutrient balance. Injury to the bark of a tree can increase the chance of the tree being subjected to a potentially harmful disease.

If existing trees are to be maintained in a healthy state, the appropriate planning is necessary. Someone with a working knowledge of forestry should assess existing trees to determine which trees should be protected. Some tree species are not considered desirable due to their aggressive growth, behavior, and limited value to local wildlife. Proper management of woodlands and open space includes the selective elimination of such trees and replacement by more desirable species. **Trees that are to be saved should be marked and protected with snow fencing or similar material, installed around the drip radius, to prevent root damage,** and vehicle traffic should

be minimized around the drip line. Contractors should be informed of the intention to preserve trees and be expected to conduct their work accordingly.

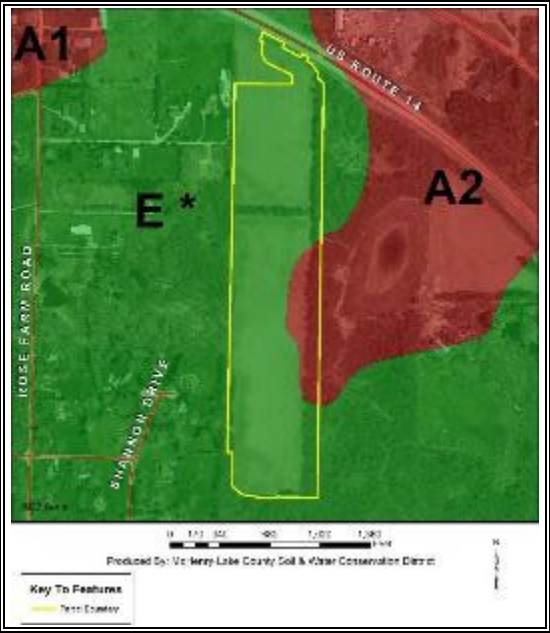
Tree damage resulting from construction activities may not be apparent for a number of years. While it is recognized that some tree loss is unavoidable, this should be minimized to the extent possible. It is highly recommended that trees lost to development activity be replaced by younger specimens of the native trees now found on the PIQ.

GEOLOGIC INFORMATION

Geology and the Proposed Land Use

As density of septic systems increases, the concern for pollution potential of local groundwater rises. Local geology plays an important role in determining the pollution potential. Groundwater pollution potential is an important factor when determining a specific area's suitability for a given land use. The local geology, is an important element of the natural resource base. This information, when compared to soils information, gives a clearer picture of conditions on this parcel.

Geological data comes from the Illinois State Geological Survey Circular 559, *Geologic Mapping for Environmental Planning, McHenry County, Illinois.*



Aquifer Sensitivity, McHenry County, Illinois (e.g., septic systems) (Vaiden et al.)

The Geologic features map indicates that the parcel is comprised of 4.22 acres of A2, and 36.46 acres of E* geologic limitations.

A-2: Geologic limitations. The potential for contaminating shallow aquifers is high. In these areas, contaminants from any source can move rapidly through these sand and gravel deposits to wells or nearby streams. In addition, this thick surficial aquifer is commonly hydraulically connected to underlying aquifers (Berg 1994). Land-use practices should be very conservative in all areas mapped as unit A. (Curran et al 1997) (Contains less than 20 feet Haeger sandy diamicton overlying Henry sand and gravel greater than 50 feet thick.

E' Geologic limitations. The potential for contamination is low. Areas mapped unit E are among the least sensitive to groundwater contamination because of the absence of aquifers and presence of thick fine-grained deposits; however, discontinuous lenses of sand and gravel may be present within the diamicton. (Contains less than 20 feet discontinuous Haeger diamicton overlying greater than 100 feet of fine-grained materials that may contain discontinuous lenses of sand and gravel.)

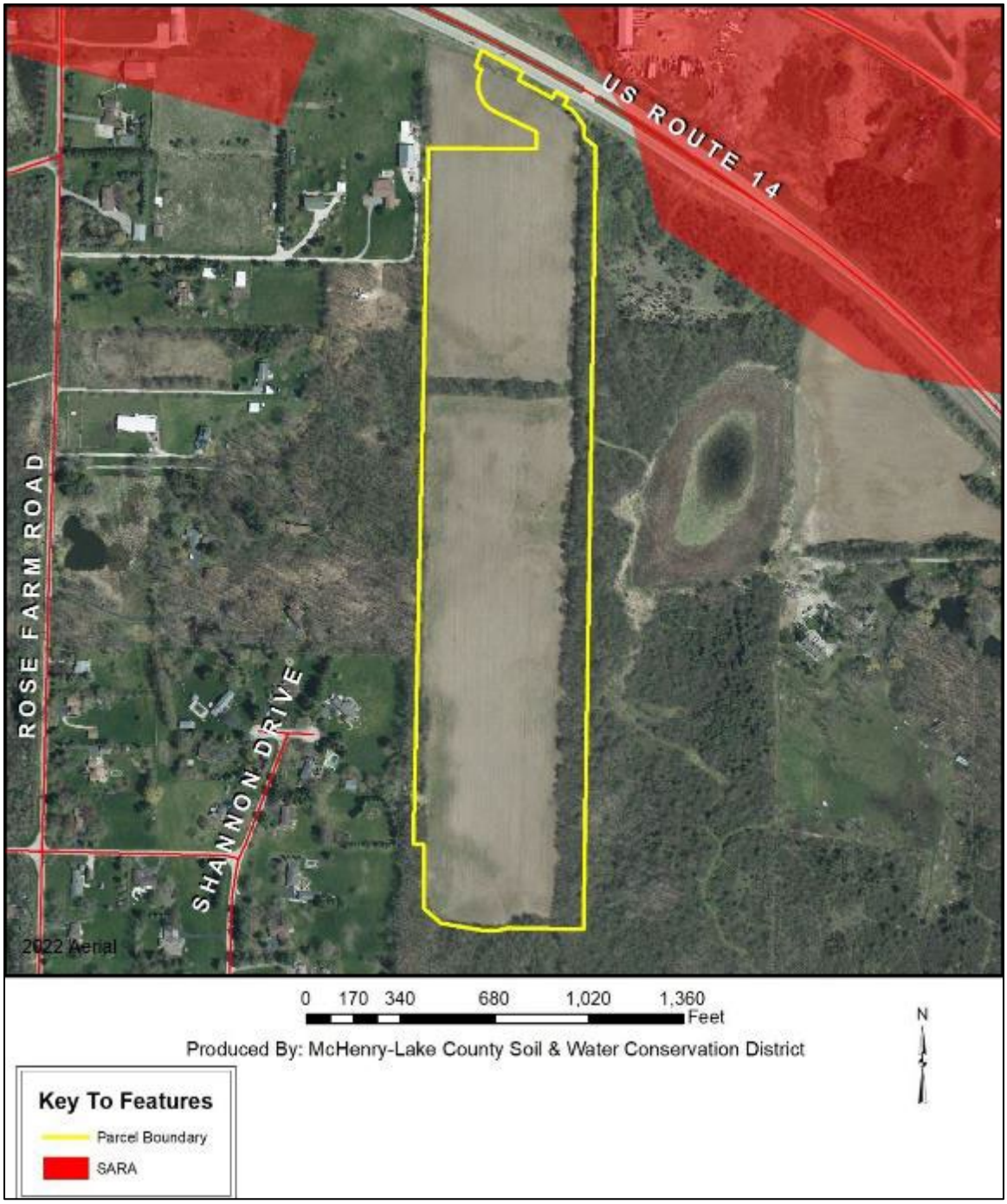
SENSITIVE AQUIFER RECHARGE AREAS

Developed for McHenry County in 2008 and revised in 2018 is the “McHenry County Sensitive Aquifer Recharge Areas” map. Because McHenry County is 100% reliant on groundwater and has been experiencing groundwater quantity/quality issues, the county board in 1995 authorized a groundwater investigation/report titled “County of McHenry Groundwater Resources Management Plan”. Many facts in that report startled decision makers. For example, the report found that in 2000, one township was withdrawing groundwater at unsustainable rates and by 2030 if status-quo, three townships would be doing the same and that three other townships would be approaching that un-sustainability. In 2007, the County Board hired a full time Water Resources Manager and authorized the creation of the McHenry County Groundwater Task Force. The Recharge Subcommittee of the Groundwater Task Force was charged with identifying areas within the county that could be considered to have high potential for recharge of shallow groundwater and develop recommendations for protecting those areas in terms of both quantity and quality. The original main basis for the map identifying recharge is areas of high or moderately high potential for aquifer contamination as identified in the Illinois State Geological Survey’s Circular 559, “Geologic Mapping for Environmental Planning, McHenry County, IL”. In a meeting of the recharge subcommittee, Illinois State Geological Survey and Illinois State Water Survey, it was determined that the areas of high or moderately high potential for aquifer contamination could be qualified by using soil properties. The plan was to remove from the high and moderately high areas those soils with slow permeability, steep slopes and hydric soils that discharge groundwater. Using Table 6 of the Soil Survey of McHenry County a digital layer was developed of soil properties:

- Restricted permeability
- Slopes 4% or greater (except if the soil had excessive permeability, it was not included)

Also digitized were groundwater discharge hydric soils. NRCS Illinois Area 3 Resource Soil Scientists in 2002 developed a hydric soil recharge/flow through/discharge guide to use when designing wetland restoration. Because recharge/flow through/discharge is very complex and changes depending on the year only soils that were thought to be generally only groundwater discharge were used.

Subsequent to the original map development, 3D groundwater modeling has occurred and provided more precise groundwater flow data and thus was the basis for the 2018 map update. *(Information Courtesy of the McHenry County Groundwater Taskforce – Recharge Subcommittee.)*



**The map indicates the parcel is not within a Sensitive Aquifer Recharge Area.*

SOILS INFORMATION

Importance of Soils Information

Soils information comes from Natural Resources Conservation Service Soil Maps and Descriptions for McHenry County. This information is important to all parties involved in determining the suitability of the proposed land use change.

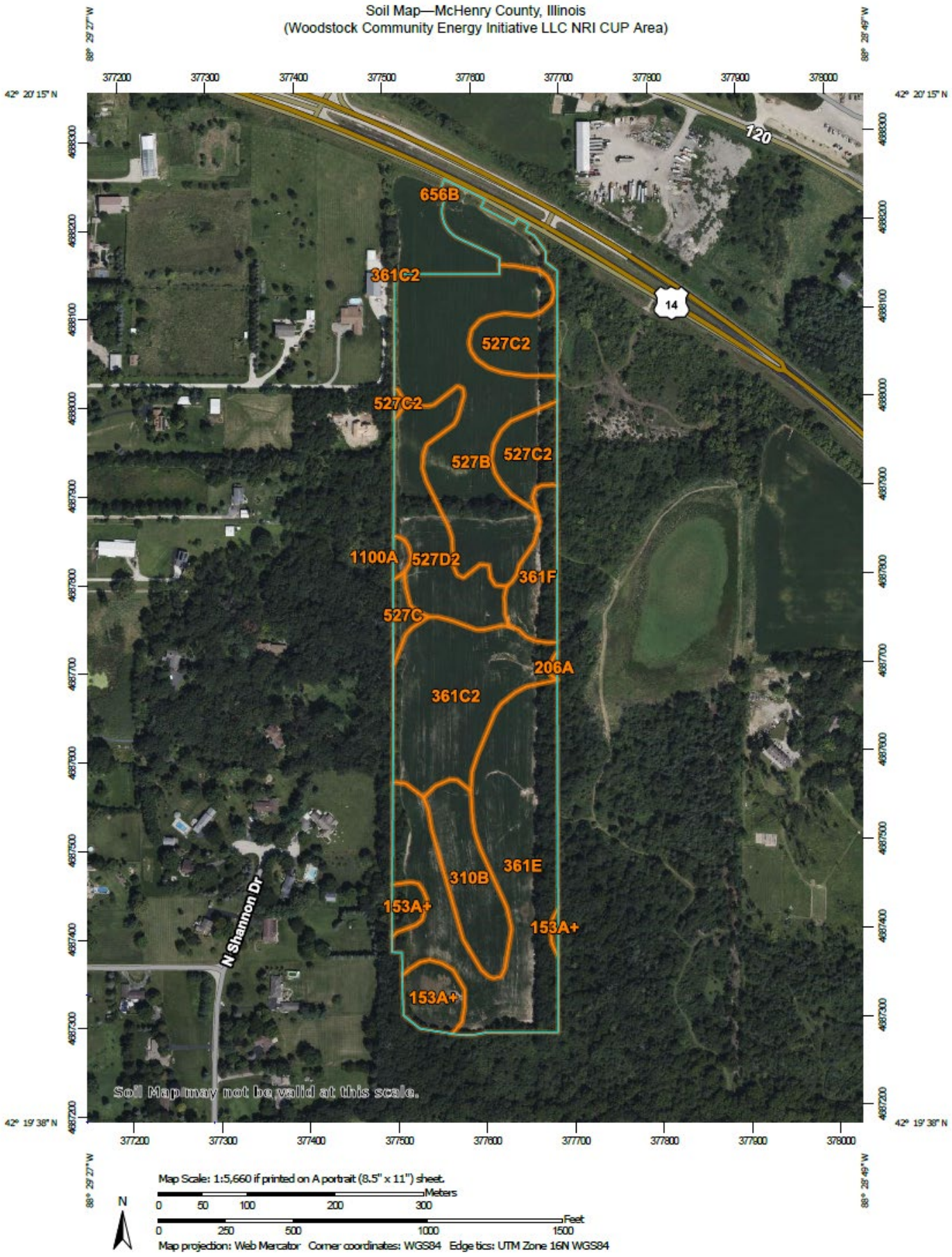
Each soil polygon is given a number, which represents its soil type. The letter found after the soil type number indicates the soils slope class.

Each soil map unit has limitations for a variety of land uses such as septic systems, buildings with basements, and buildings without basements. It is important to remember that soils do not function independently of each other. The behavior of a soil depends upon the physical properties of adjacent soil types, the presence of artificial drainage, soil compaction, and its position in the local landscape.

The limitation categories (slight, moderate or severe) indicate the potential for difficulty in using that soil unit for the proposed activity and, thus, the degree of need for thorough soil borings and engineering studies. A limitation does not necessarily mean that the proposed activity cannot be done on that soil type. It does mean that the reasons for the limitation need to be thoroughly understood and dealt with in order to complete the proposed activity successfully. A severe limitation indicates that the proposed activity will be more difficult and costly to do on that soil type than on a soil type with a moderate or slight rating.

Soil survey interpretations are predictions of soil behavior for specified land uses and specified management practices. They are based on the soil properties that directly influence the specified use of the soil. Soil survey interpretations allow users of soil surveys to plan reasonable alternatives for the use and management of soils.

Soil interpretations do not eliminate the need for on-site study and testing of specific sites for the design and construction for specific uses. They can be used as a guide for planning more detailed investigations and for avoiding undesirable sites for an intended use. The scale of the maps and the range of error limit the use of the soil delineations.


Soil Map—McHenry County, Illinois
(Woodstock Community Energy Initiative LLC NRI CUP Area)
88° 29' 27" W
88° 28' 49" W
42° 20' 15" N
42° 19' 38" N
377200
377300
377400
377500
377600
377700
377800
377900
378000
4688300
4688200
4688100
4688000
4687900
4687800
4687700
4687600
4687500
4687400
4687300
4687200
120
14
656B
361C2
527C2
527C2
527B
527C2
1100A
527D2
361F
527C
206A
361C2
361E
310B
153A+
153A+
153A+
N Shannon Dr
Soil Map may not be valid at this scale.
Map Scale: 1:5,660 if printed on A portrait (8.5" x 11") sheet.
Meters
0
50
100
200
300
Feet
0
250
500
1000
1500
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Map Unit Symbol	Map Unit Name	Acres	Percent
153A+	Pella silt loam, 0 to 2 percent slopes, overwash	1.7	4.1%
206A	Thorp silt loam, 0 to 2 percent slopes	0.0	0.1%
310B	McHenry silt loam, 2 to 4 percent slopes	2.7	6.6%
361C2	Kidder loam, 4 to 6 percent slopes, eroded	5.9	14.4%
361E	Kidder loam, 12 to 20 percent slopes	10.5	25.8%
361F	Kidder silt loam, 20 to 30 percent slopes	1.7	4.2%
527B	Kidami silt loam, 2 to 4 percent slopes	9.1	22.3%
527C	Kidami silt loam, 4 to 6 percent slopes	0.4	1.0%
527C2	Kidami loam, 4 to 6 percent slopes, eroded	4.7	11.4%
527D2	Kidami loam, 6 to 12 percent slopes, eroded	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes	0.2	0.4%

Soil Interpretations Explanation

Nonagricultural

General

These interpretative ratings help engineers, planners, and others to understand how soil properties influence behavior when used for nonagricultural uses such as building site development or construction materials. This report gives ratings for proposed uses in terms of limitations and restrictive features. The tables list only the most restrictive features. Other features may need treatment to overcome soil limitations for a specific purpose.

Ratings come from the soil's "natural" state, that is, no unusual modification occurs other than that which is considered normal practice for the rated use. Even though soils may have limitations, an engineer may alter soil features or adjust building plans for a structure to compensate for most degrees of limitations. Most of these practices, however, are costly. The final decision in selecting a site for a particular use generally involves weighing the costs for site preparation and maintenance.

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for the types of proposed improvements that are listed or inferred by the petitioner as entered on the report application and/or zoning petition. The most common types of building limitation that this report gives limitations ratings for is: septic systems. It is understood that engineering practices can overcome most limitations for buildings with and without basements, and small commercial buildings. Limitation ratings for these types of buildings are not commonly provided. Organic soils, when present on the parcel, are referenced in the hydric soils section of the report. This type of soil is considered to be unsuitable for all types of construction.

Limitations Ratings

1. ***Slight*** - This soil has favorable properties for the use. The degree of limitation is

minor. The people involved can expect good performance and low maintenance.

2. ***Moderate*** - This soil has moderately favorable properties for the use. Special planning, design, or maintenance can overcome this degree of limitation. During some part of the year, the expected performance is less desirable than for soils rated slight.
3. ***Severe or Very Severe***- This soil has one or more properties that are unfavorable for the rated use. These may include the following: steep slopes, bedrock near the surface, flooding, high shrink-swell potential, a seasonal high water table, or low strength. This degree of limitation generally requires major soil reclamation, special design, or intensive maintenance, which in most situations is difficult and costly.

SOIL LEACHABILITY

This interpretation is designed to evaluate the potential for nitrate-nitrogen to be transmitted through the soil profile below the root zone by percolating water under nonirrigated conditions. Leaching nitrates have the potential to contaminate shallow and deep aquifers used for drinking water. The ratings are based on inherent soil and climate properties that affect nitrate leaching and do not account for management practices, such as crop rotation and rates and timing of nitrogen fertilizer applications.

The following soil and climate factors are used in the interpretation criteria:

1. Mean annual precipitation minus potential evapotranspiration - This factor provides an estimate of the amount of water that is available to move through the soil profile on an annual basis. Potential evaporation is estimated from mean annual air temperature using an algorithm (developed by the National Soil Survey Center) that employs the Hamon potential evapotranspiration method.

2. Water travel time through the entire soil profile - This factor uses the saturated hydraulic conductivity (Ksat) and thickness of each soil horizon to estimate the number of hours that would be required for a given volume of water to move through the entire soil profile. One advantage of this method for estimating the rate of water movement is that the properties and thickness of each soil horizon are accounted for instead of using an average saturated hydraulic conductivity for the entire profile. This method accounts for subtle differences between soils in texture, structure, horizon thickness, and depth to water-restricting layers.

3. Available water capacity - This factor accounts for the cumulative amount of water available to plants that the entire soil profile can hold at field capacity to a depth of 150 cm. The more water the soil profile can hold, the less water is available for deep leaching.

4. Depth to and duration of a water table - This factor uses a water table index based on the minimum average depth to a water table and the number of months that the water table is present during the period from April through October. The factor is used to account for the loss of nitrates to the atmosphere as nitrous oxide or nitrogen gas due to denitrification under anaerobic conditions caused by water saturation. The higher the water table and the longer its duration, the larger the quantity of nitrates that would potentially be lost to the atmosphere and therefore would not be available for deep leaching.

5. Slope gradient adjusted for hydrologic soil group - The steeper the slope gradient, the higher the potential for surface runoff and the lower the amount of water available to move through the soil profile. The following adjustments are made to the slope gradient by hydrologic group to account for differences in potential for surface runoff:

Hydrologic group A-slope % x 0.75

Hydrologic group B-slope % x 0.85

Hydrologic group C-slope % x 0.95

Hydrologic group D-no adjustment

The ratings are both verbal and numerical. The ratings for Nitrate Leaching Potential, Nonirrigated Areas, are calculated as follows:

- The Mean Annual Precipitation minus Potential Evapotranspiration subrule is weighted by multiplying by 0.60.
- The Water Travel Time subrule is weighted by multiplying by 0.25.
- The Available Water Capacity subrule is weighted by multiplying by 0.15.
- The sum of these three weighted subrules results in a value between 0.00 and 1.00.
- Adjustments are then made for water table depth and duration and for slope gradient adjusted for hydrologic group. The sum of the values from these subrules is subtracted from the sum in step 4 above. The maximum reduction is 0.50 for the water table index subrule and 0.30 for the slope gradient subrule.

The following rating classes for Nitrate Leaching Potential, Nonirrigated Areas, are assigned based on the final calculation from the factors above:

Low: 0.00 to 0.25

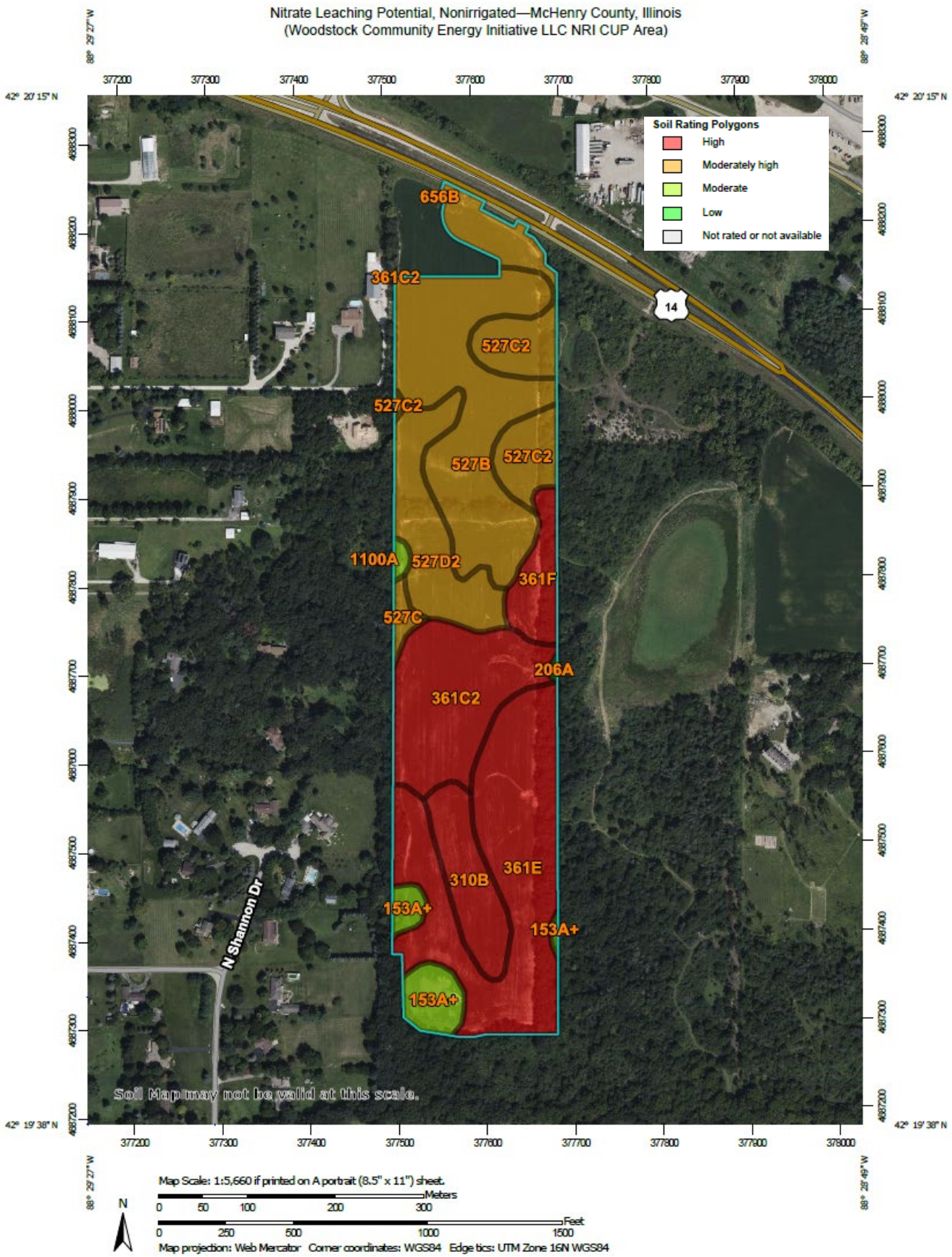
Moderate: 0.26 to 0.50

Moderately high: 0.51 to 0.75High: 0.76 to 1.00

The ratings indicate the potential for nitrate leaching below the root zone, based on inherent soil and climate properties. A "low" rating indicates a low potential for leaching of nitrates below the root zone. A "high" rating indicates a high potential for leaching of nitrates below the root zone. The "moderate" and "moderately high" ratings indicate intermediate potential.

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.


Nitrate Leaching Potential, Nonirrigated—McHenry County, Illinois
(Woodstock Community Energy Initiative LLC NRI CUP Area)
Soil Rating Polygons
High
Moderately high
Moderate
Low
Not rated or not available
656B
361C2
527C2
527C2
527B
527C2
1100A
527D2
361F
527C
206A
361C2
361E
310B
153A+
153A+
153A+
14
N Shannon Dr
Soil Map may not be valid at this scale.
Map Scale: 1:5,660 if printed on A portrait (8.5" x 11") sheet.
Meters
0 50 100 200 300
Feet
0 250 500 1000 1500
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84
N

Nitrate Leaching Potential, Nonirrigated						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres**	**Percent**
153A+	Pella silt loam, 0 to 2 percent slopes, overwash	Moderate	Pella, overwash (90%)	Water quantity available for leaching (0.99)	1.7	4.1%
				Water travel time (0.82)		
				Denitrification due to saturation (0.50)		
			Houghton (5%)	Water travel time (1.00)		
				Water quantity available for leaching (0.99)		
				Denitrification due to saturation (0.50)		
			Harpster (5%)	Water quantity available for leaching (0.97)		
				Water travel time (0.82)		
				Denitrification due to saturation (0.50)		
206A	Thorp silt loam, 0 to 2 percent slopes	Low	Thorp, drained (95%)	Water quantity available for leaching (0.97)	0.0	0.1%
				Denitrification due to saturation (0.50)		
				Water holding capacity (0.14)		
310B	McHenry silt loam, 2 to 4 percent slopes	High	McHenry (90%)	Water quantity available for leaching (1.00)	2.7	6.6%
				Water travel time (0.92)		
				Water holding capacity (0.18)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres	Percent
			Kidder (5%)	Water quantity available for leaching (1.00)		
				Water travel time (0.95)		
				Water holding capacity (0.39)		
361C2	Kidder loam, 4 to 6 percent slopes, eroded	High	Kidder, eroded (95%)	Water quantity available for leaching (1.00)	5.9	14.4%
				Water travel time (0.95)		
				Water holding capacity (0.43)		
			Fox (3%)	Water quantity available for leaching (1.00)		
				Water travel time (0.76)		
				Water holding capacity (0.67)		
361E	Kidder loam, 12 to 20 percent slopes	High	Kidder (85%)	Water quantity available for leaching (0.99)	10.5	25.8%
				Water travel time (0.96)		
				Water holding capacity (0.43)		
				Slope (0.04)		
361F	Kidder silt loam, 20 to 30 percent slopes	High	Kidder (85%)	Water quantity available for leaching (0.99)	1.7	4.2%
				Water travel time (0.96)		
				Water holding capacity (0.43)		
				Slope (0.11)		
527B	Kidami silt loam, 2 to 4 percent slopes	Moderately high	Kidami (85%)	Water quantity available for leaching (0.99)	9.1	22.3%
				Water travel time (0.61)		
527C	Kidami silt loam, 4 to 6 percent slopes	Moderately high	Kidami (85%)	Water quantity available for leaching (0.99)	0.4	1.0%
				Water travel time (0.61)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres	Percent
527C2	Kidami loam, 4 to 6 percent slopes, eroded	Moderately high	Kidami (85%)	Water quantity available for leaching (0.99) Water travel time (0.61)	4.7	11.4%
527D2	Kidami loam, 6 to 12 percent slopes, eroded	Moderately high	Kidami (85%)	Water quantity available for leaching (0.99) Water travel time (0.61)	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes	High	Octagon (85%)	Water quantity available for leaching (0.99) Water holding capacity (0.45) Water travel time (0.38)	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes	Moderate	Palms, muck, ponded (93%)	Water quantity available for leaching (1.00) Water travel time (0.92) Denitrification due to saturation (0.50)	0.2	0.4%

Rating	Acres	Percent
High	20.7	50.9%
Moderately high	18.1	44.4%
Moderate	1.9	4.6%
Low	0.0	0.1%

SOIL PERMEABILITY

Soil permeability is the quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality.

For the purposed of the NRI Report, those soils which have “rapid” to “very rapid” permeability, have been identified as “highly permeable.”

Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow ..... 0.0 to 0.01 inch
Very slow ..... 0.01 to 0.06 inch
Slow ..... 0.06 to 0.2 inch
Moderately slow ..... 0.2 to 0.6 inch
Moderate ..... 0.6 inch to 2.0 inches
Moderately rapid ..... 2.0 to 6.0 inches
Rapid ..... 6.0 to 20 inches
Very rapid ..... more than 20 inches

Highly Permeable Soils

Map Unit Symbol	Highly Permeable	Acres	Percent
153A+	Pella silt loam, 0 to 2 percent slopes, overwash – No	1.7	4.1%
206A	Thorp silt loam, 0 to 2 percent slopes - No	0.0	0.1%
310B	McHenry silt loam, 2 to 4 percent slopes - No	2.7	6.6%
361C2	Kidder loam, 4 to 6 percent slopes, eroded - No	5.9	14.4%
361E	Kidder loam, 12 to 20 percent slopes - No	10.5	25.8%
361F	Kidder silt loam, 20 to 30 percent slopes - No	1.7	4.2%
527B	Kidami silt loam, 2 to 4 percent slopes - No	9.1	22.3%
527C	Kidami silt loam, 4 to 6 percent slopes - No	0.4	1.0%
527C2	Kidami loam, 4 to 6 percent slopes, eroded - No	4.7	11.4%
527D2	Kidami loam, 6 to 12 percent slopes, eroded - No	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes - No	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes – No	0.2	0.4%
Total Highly Permeable		**0.0**	**0.0%**

SOIL EROSION & SEDIMENT CONTROL

Erosion is the wearing away of the soil by water, wind, and other forces. Soil erosion threatens the Nation's soil productivity and contributes the most pollutants in our waterways. Water causes about two thirds of erosion on agricultural land. Four properties, mainly, determine a soil's erodibility:

1. Texture 2. Slope 3. Structure
4. Organic matter content

Slope has the most influence on soil erosion potential when the site is under construction. Erosivity and runoff increase as slope grade increases. The runoff then exerts more force on the particles, breaking their bonds more readily and carrying them farther before deposition. The longer water flows along a slope before reaching a major waterway, the greater the potential for erosion.

Soil erosion during and after this proposed construction can be a primary non-point source of water pollution. Eroded soil during the construction phase can create unsafe conditions on roadways, decrease the storage capacity of lakes, clog streams and drainage channels, cause deterioration of aquatic habitats, and increase water treatment costs. Soil erosion also increases the risk of flooding by choking culverts, ditches and storm sewers, and by reducing the capacity of natural and man-made detention facilities.

The general principles of erosion and sedimentation control measures include:

- reducing or diverting flow from exposed areas, storing flows or limiting runoff from exposed areas,
- staging construction in order to keep disturbed areas to a minimum,
- establishing or maintaining or temporary or permanent groundcover,
- retaining sediment on site and
- properly installing, inspecting and maintaining control measures.

Erosion control practices are useful controls only if they are properly located, installed, inspected and maintained.
The SWCD recommends an erosion control plan for all building sites, especially if there is a wetland or stream nearby.

Highly Erodible Soils (HEL)

Map Unit Symbol	HEL	Acres	Percent
153A+	Pella silt loam, 0 to 2 percent slopes, overwash – No	1.7	4.1%
206A	Thorp silt loam, 0 to 2 percent slopes - No	0.0	0.1%
310B	McHenry silt loam, 2 to 4 percent slopes - No	2.7	6.6%
361C2	Kidder loam, 4 to 6 percent slopes, eroded - Yes	5.9	14.4%
361E	Kidder loam, 12 to 20 percent slopes - Yes	10.5	25.8%
361F	Kidder silt loam, 20 to 30 percent slopes - Yes	1.7	4.2%
527B	Kidami silt loam, 2 to 4 percent slopes - No	9.1	22.3%
527C	Kidami silt loam, 4 to 6 percent slopes - Yes	0.4	1.0%
527C2	Kidami loam, 4 to 6 percent slopes, eroded - Yes	4.7	11.4%

527D2	Kidami loam, 6 to 12 percent slopes, eroded - Yes	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes - No	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes – No	0.2	0.4%
Total Highly Permeable		**25.4**	**66.4%**

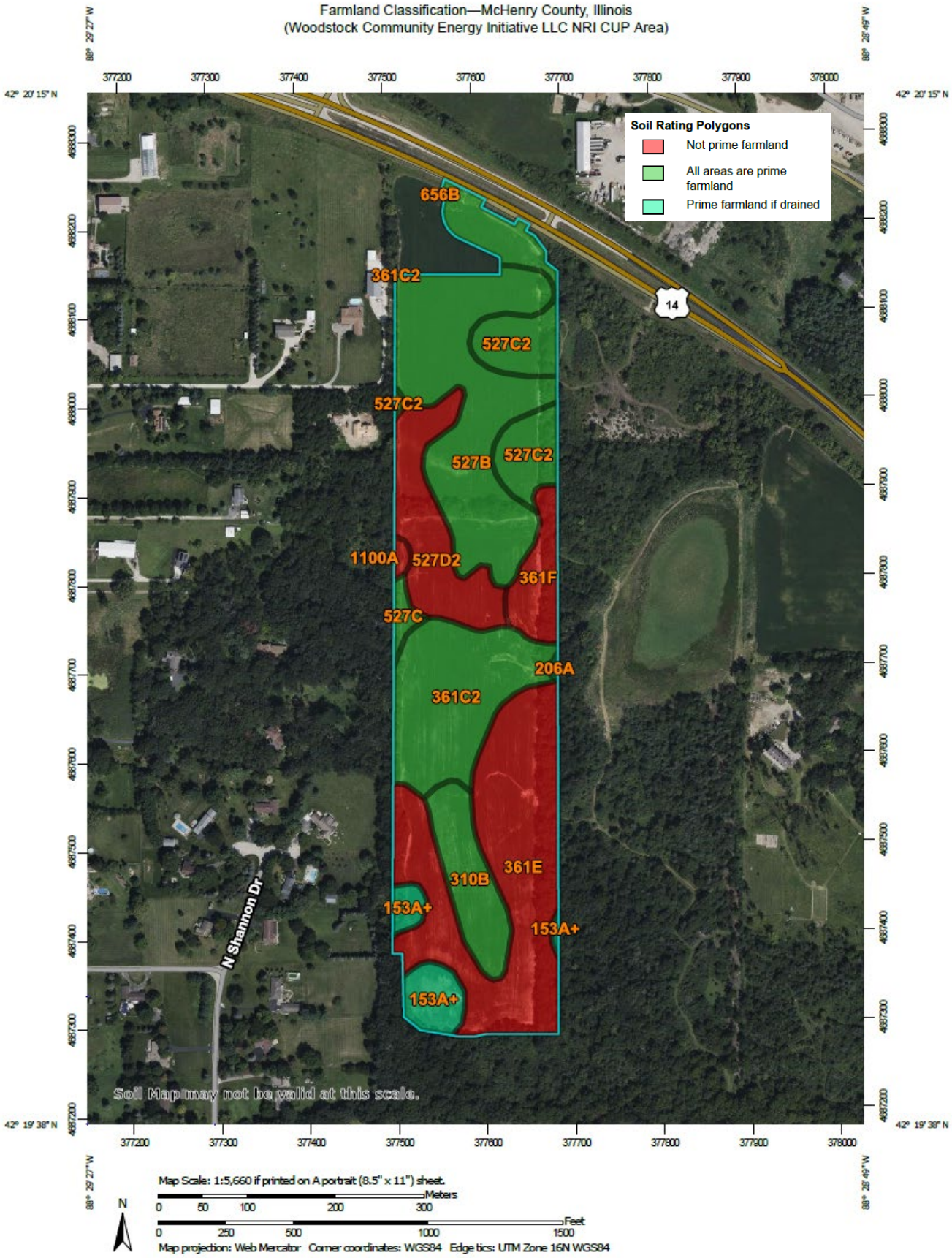
PRIME FARMLAND SOILS

Prime farmland soils are an important resource to McHenry County. Some of the most productive soils in the United States occur locally. Each soil map unit in the United States is assigned a prime or non-prime rating. Prime agricultural land does not need to be in the production of food & fiber.

Section 310 of the NRCS general manual states that urban or built-up land on prime farmland soils is not prime farmland. The percentages of soils map units on the parcel reflect the determination that urban or built up land on prime farmland soils is not prime farmland.

Prime Farmland Soils

Map unit symbol	Map unit name	Rating	Acres	Percent
153A+	Pella silt loam, 0 to 2 percent slopes, overwash	Prime farmland if drained	1.7	4.1%
206A	Thorp silt loam, 0 to 2 percent slopes	Prime farmland if drained	0.0	0.1%
310B	McHenry silt loam, 2 to 4 percent slopes	All areas are prime farmland	2.7	6.6%
361C2	Kidder loam, 4 to 6 percent slopes, eroded	All areas are prime farmland	5.9	14.4%
361E	Kidder loam, 12 to 20 percent slopes	Not prime farmland	10.5	25.8%
361F	Kidder silt loam, 20 to 30 percent slopes	Not prime farmland	1.7	4.2%
527B	Kidami silt loam, 2 to 4 percent slopes	All areas are prime farmland	9.1	22.3%
527C	Kidami silt loam, 4 to 6 percent slopes	All areas are prime farmland	0.4	1.0%
527C2	Kidami loam, 4 to 6 percent slopes, eroded	All areas are prime farmland	4.7	11.4%
527D2	Kidami loam, 6 to 12 percent slopes, eroded	Not prime farmland	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes	All areas are prime farmland	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes	Not prime farmland	0.2	0.4%
Total Prime Farland			**22.8**	**55.7%**
Total Prime if Drained			**1.7**	**4.2%**


Farmland Classification—McHenry County, Illinois
(Woodstock Community Energy Initiative LLC NRI CUP Area)
Soil Rating Polygons
Not prime farmland
All areas are prime farmland
Prime farmland if drained
656B
361C2
527C2
527C2
527B
527C2
1100A
527D2
361F
527C
206A
361C2
361E
310B
153A+
153A+
153A+
14
N Shannon Dr
Soil Map may not be valid at this scale.
Map Scale: 1:5,660 if printed on A portrait (8.5" x 11") sheet.
Meters
0 50 100 200 300
Feet
0 250 500 1000 1500
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

GROUND-BASED SOLAR ARRAYS, SOIL-PENETRATING ANCHOR SYSTEMS

Description

Ground-based solar arrays are sets of photovoltaic panels that are not situated on a building or pole. These installations consist of a racking system that holds the panel in the desired orientation and the foundation structures that hold the racking system to the ground. Two basic methods are used to hold the systems to the ground, based on site conditions and cost. One method employs driven piles, screw augers, or concrete piers that penetrate into the soil to provide a stable foundation. The ease of installation and general site suitability of soil-penetrating anchoring systems depends on soil characteristics such as rock fragment content, soil depth, soil strength, soil corrosivity, shrink-swell tendencies, and drainage. The other basic anchoring system utilizes precast ballasted footings or ballasted trays on the soil surface to make the arrays too heavy to move. The site considerations that impact both basic systems are slope, slope aspect, wind speed, land surface shape, flooding, and ponding. Other factors that will contribute to the function of a solar power array include daily hours of sunlight and shading from hills, trees or buildings.

Soil-penetrating anchoring systems can be used where the soil conditions are not limited. Installation of these systems requires some power equipment for hauling components and either driving piles, turning helices, or boring holes to install the anchoring apparatus.
Soils can be a non-member, partial member or complete members of the set of soils that are limited for "Ground-based Solar Panel Arrays". If a soil's property within 150 cm (60 inches) of the soil surface has a membership indices greater than zero, then that soil property is limiting and the soil restrictive feature is identified. The overall interpretive rating assigned is the maximum membership indices of each soil interpretive property that comprise the "Ground-based Solar Panel Array" interpretive rule. Minor restrictive soil features are identified but not considered as part of the overall rating process. These restrictive features could be important factors where the major restrictive features are overcome through design application.

Soils are placed into interpretive rating classes per their rating indices. These are not limited (rating index = 0), somewhat limited (rating index greater than 0 and less than 1.0), or very limited (rating index = 1.0).

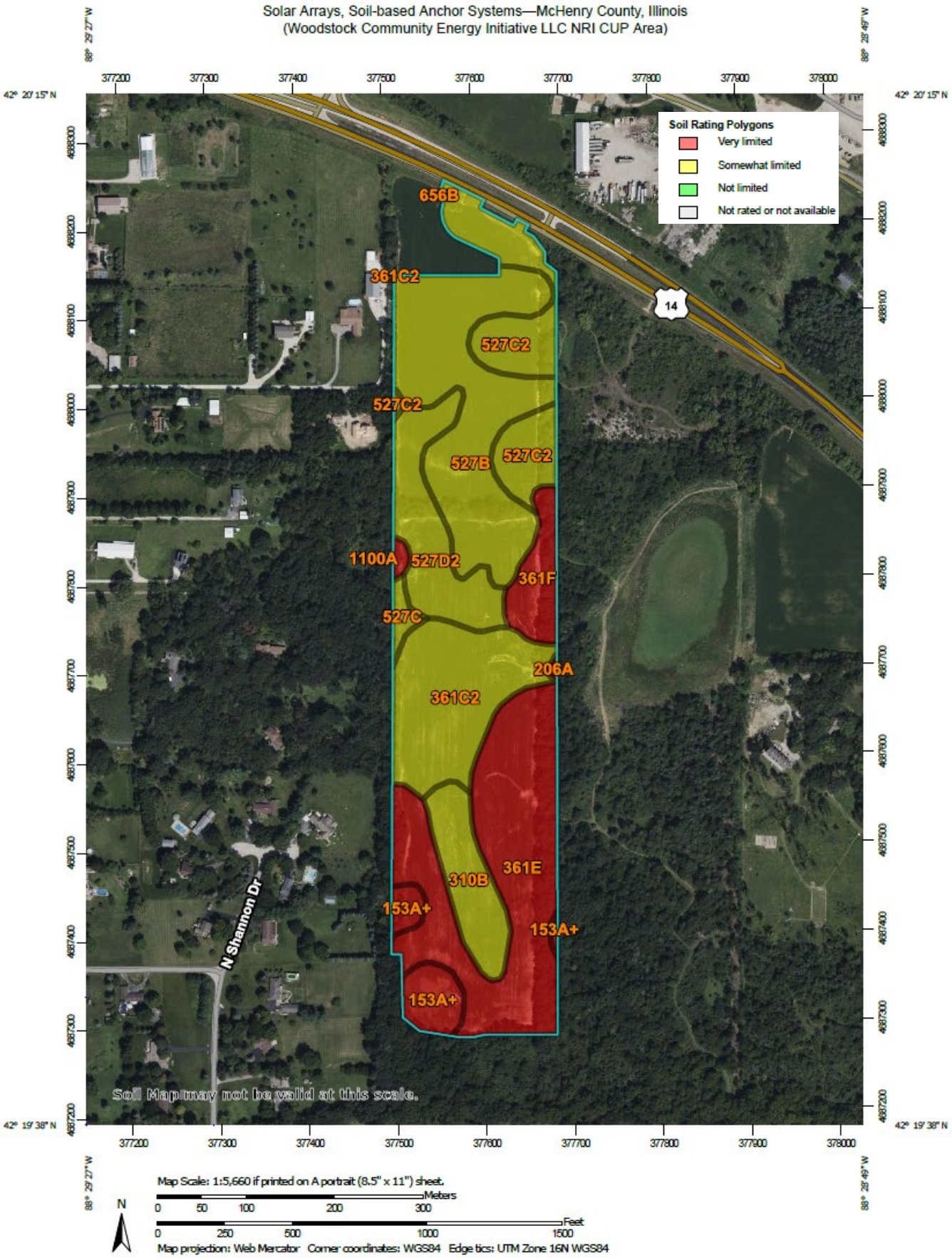
Numerical ratings indicate the degree of limitation. The ratings are shown in decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil has the least similarity to a good site (1.00) and the point at which the soil feature is very much like known good sites (0).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

References:
Canada, S. 2012. Corrosion impacts on steel piles. Solarpro. Solarprofessional.com.

Romanoff, Melvin. 1962. Corrosion of Steel Pilings in Soils. Journal of Research of the National Bureau of Standards. (Volume 66C, No. 3). July/September, 1962.


Solar Arrays, Soil-based Anchor Systems—McHenry County, Illinois
(Woodstock Community Energy Initiative LLC NRI CUP Area)
Soil Rating Polygons
Very limited
Somewhat limited
Not limited
Not rated or not available
656B
361C2
527C2
527C2
527B
527C2
1100A
527D2
361F
527C
206A
361C2
361E
310B
153A+
153A+
153A+
14
N Shannon Dr
Soil Map may not be valid at this scale.
Map Scale: 1:5,660 if printed on A portrait (8.5" x 11") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Solar Arrays, Soil-based Anchor Systems

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres	Percent
153A+	Pella silt loam, 0 to 2 percent slopes, overwash	Very limited	Pella, overwash (90%)	Ponding (1.00)	1.7	4.1%
				Depth to saturated zone (1.00)		
				Frost action (1.00)		
				Steel corrosion (0.75)		
				Low strength (0.55)		
			Houghton (5%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Frost action (1.00)		
				Low strength (1.00)		
				Steel corrosion (0.75)		
			Harpster (5%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Frost action (1.00)		
				Steel corrosion (0.75)		
				Low strength (0.57)		
206A	Thorp silt loam, 0 to 2 percent slopes	Very limited	Thorp, drained (95%)	Ponding (1.00)	0.0	0.1%
				Depth to saturated zone (1.00)		
				Frost action (1.00)		
				Steel corrosion (0.75)		
				Low strength (0.50)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres	Percent
			Elburn (5%)	Frost action (1.00)		
				Low strength (0.79)		
				Steel corrosion (0.75)		
				Depth to saturated zone (0.75)		
				Shrink-swell (0.55)		
310B	McHenry silt loam, 2 to 4 percent slopes	Somewhat limited	McHenry (90%)	Frost action (0.50)	2.7	6.6%
				Slope shape across (0.20)		
				Hillslope position (0.13)		
				Low strength (0.05)		
			Kidder (5%)	Frost action (0.50)		
				Slope shape across (0.20)		
				Hillslope position (0.13)		
361C2	Kidder loam, 4 to 6 percent slopes, eroded	Somewhat limited	Kidder, eroded (95%)	Frost action (0.50)	5.9	14.4%
				Slope shape across (0.20)		
				Hillslope position (0.13)		
			Fox (3%)	Steel corrosion (0.75)		
				Frost action (0.50)		
				Slope shape across (0.20)		
				Hillslope position (0.13)		
361E	Kidder loam, 12 to 20 percent slopes	Very limited	Kidder (85%)	Slope (1.00)	10.5	25.8%
				Frost action (0.50)		
				Slope direction and gradient (0.17)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres	Percent
				Shrink-swell (0.01)		
361F	Kidder silt loam, 20 to 30 percent slopes	Very limited	Kidder (85%)	Slope (1.00)	1.7	4.2%
				Frost action (0.50)		
				Slope direction and gradient (0.17)		
				Shrink-swell (0.01)		
527B	Kidami silt loam, 2 to 4 percent slopes	Somewhat limited	Kidami (85%)	Steel corrosion (0.75)	9.1	22.3%
				Frost action (0.50)		
				Shrink-swell (0.35)		
				Low strength (0.02)		
527C	Kidami silt loam, 4 to 6 percent slopes	Somewhat limited	Kidami (85%)	Steel corrosion (0.75)	0.4	1.0%
				Frost action (0.50)		
				Shrink-swell (0.35)		
				Low strength (0.02)		
527C2	Kidami loam, 4 to 6 percent slopes, eroded	Somewhat limited	Kidami (85%)	Steel corrosion (0.75)	4.7	11.4%
				Frost action (0.50)		
				Shrink-swell (0.35)		
				Low strength (0.02)		
527D2	Kidami loam, 6 to 12 percent slopes, eroded	Somewhat limited	Kidami (85%)	Steel corrosion (0.75)	3.9	9.6%
				Frost action (0.50)		
				Shrink-swell (0.35)		
				Slope direction and gradient (0.10)		
				Slope (0.04)		
656B	Octagon silt loam, 2 to 4 percent slopes	Somewhat limited	Octagon (85%)	Steel corrosion (0.75)	0.0	0.0%

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres	Percent
				Frost action (0.50)		
				Shrink-swell (0.01)		
				Low strength (0.00)		
1100A	Palms muck, ponded, 0 to 2 percent slopes	Very limited	Palms, muck, ponded (93%)	Ponding (1.00)	0.2	0.4%
				Depth to saturated zone (1.00)		
				Frost action (1.00)		
				Low strength (1.00)		
				Steel corrosion (0.75)		
			Houghton, muck (5%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Frost action (1.00)		
				Low strength (1.00)		
				Steel corrosion (0.75)		

Rating	Acres	Percent
Somewhat limited	26.6	65.4%
Very limited	14.1	34.6%

AGRICULTURAL AREAS

The Agricultural Areas Conservation and Protect Act became effective July 1, 1980. The purpose of the Act is to provide a means by which agricultural land may be protected and enhanced as a viable segment of the State's economy and as an economic and environmental resource of major importance. Established Ag Areas tend to influence adjacent and surrounding land use changes since they are voluntary in nature and petitioned before the County Board for approval. Ag Areas are considered a high commitment to agriculture. Designated Ag Areas limit land utilization to specified agricultural uses within their designated boundaries. Ag Areas allow landowners limited benefits such as immunity form locally enacted ordinances, which would limit farming operations and immunity from special tax assessments from local units of government.

Office Maps indicate there are no State Designated agricultural areas on or adjacent to the parcel in question.

LAND EVALUATION & SITE ASSESSMENT (LESA)

The Land Evaluation and Site Assessment system is a tool designed to evaluate the viability of agricultural lands where changes in land-use are proposed. LESA was developed as a decision-making tool used by the Zoning Board of Appeals, City Councils or County Boards to help make unbiased decisions of proper land-use. The LESA system was developed by the USDA-NRCS and takes into consideration local conditions such as physical characteristics of the land, compatibility of surrounding land-uses, urban growth factors, and land-use policies determined by local government. LESA was designed to be used in conjunction with the county's land-use plan, zoning ordinances, and other policies being used to decide land-use changes.

Decision makers use the Land Evaluation and Site Assessment (LESA) System to determine the suitability of a land use change and/or a zoning request as it relates to agricultural land. The LESA System is a two step procedure that includes:

- Land Evaluation (LE), soils value
- Site Assessment (SA), land use

Land Evaluation (**LE**) encompasses information regarding soils found on the site and their suitability for agricultural purposes. McHenry County soils consist of 73 different soil series ranging from gravely loams to wet muck soils and from highly productive agricultural soils to high quality gravel deposits. For purposes of the Land Evaluation portion of the LESA system, each soil is assigned a relative value number, from 0 to 100, a 0 being the worst soils for crop production, 100 the best. Parcels containing higher percentages of higher valued soils will rate higher on the overall LESA score while those containing higher percentages lowered value soils will rate lower in the overall LESA score. McHenry County SWCD provides a weighted average of the soils using a simple, mechanical, unbiased method of determining agricultural suitability of soils on site.

Site Assessment (**SA**) identifies and weighs 10 criteria, other than soils information, that contributes to the quality of a site for agricultural uses. The determination to include the specific site assessment factors directly resulted from the following:

- McHenry County Zoning Ordinance,
- 2030 Land Use Plan,
- Other adopted county policies.

In summary, the LESA evaluation addresses all factors, including soils information, together to provide a rational, consistent, and unbiased determination of the impact to agriculture from the proposed land use and zoning changes.

LAND EVALUATION (LE) WORKSHEET

Map Unit Symbol	LE Score	Acres	Percent	Weighted Ave
153A+	94	1.7	4.1%	3.85
206A	88	0.0	0.1%	0.09
310B	79	2.7	6.6%	5.21
361C2	67	5.9	14.4%	9.65
361E	64	10.5	25.8%	16.51
361F	54	1.7	4.2%	2.27
527B	79	9.1	22.3%	17.62
527C	78	0.4	1.0%	0.78
527C2	75	4.7	11.4%	8.55
527D2	73	3.9	9.6%	7.01
656B	81	0.0	0.0%	-
1100A	0	0.2	0.4%	-
Land Evaluation Score				**71.54**

Explanation of the LE Worksheet:
Symbol: is the soil type of the polygon on the soils map. **Percentage and Acreage**: the percentages of the parcel, and the area that the soil polygon represents. **LE Score**: the numeric value from 0 - 100 that is assigned that soil unit **Weighted Ave**: The acreage multiplied by the value of that soil unit.

SITE ASSESSMENT (SA) WORKSHEET: A Site Assessment was not completed due to the remaining agricultural zoning.

LAND USE PLANS

Many counties, municipalities, villages and townships have developed land-use plans. These plans are intended to reflect the existing and future land-use needs of a give community.

This parcel is within the McHenry County 2030 Land Use Plan Map and is identified as residential.

DRAINAGE, RUNOFF AND FLOOD INFORMATION

U.S.G.S Topographic maps give information on elevations, which are important mostly to determine slopes, drainage directions, and watershed information.

Elevations determine the area of impact of floods of record. Slope information determines steepness and erosion potential. Drainage directions determine where water leaves the PIQ, possibly impacting surrounding natural resources.

Watershed information is given for changing land use to a subdivision type of development on parcels greater than 10 acres.

What is a watershed?

Simply stated, a watershed is the area of land that contributes water to a certain point. The point that we use on these reports is usually the point where water exits the parcel. The point is marked with a "○." The watershed boundary is drawn in using the following marking: (— • • —). Often times, water will flow off the parcel in two or more directions. In that case, there is a watershed break on the parcel. (— • • —), and there are two or more watersheds on the parcel.

The watershed boundary is important because the area of land in the watershed can now be calculated using an irregular shape area calculator such as a dot counter or planimiter.

Using regional storm event information, and site specific soils and land use information, the peak stormwater flow through the point marked "○" for a specified storm event can be calculated. This value is called a "Q" value (for the given storm event), and is measured in cubic feet per second (CFS).

When construction occurs, the Q value naturally increases because of the increase in impermeable surfaces. This process decreases the ability of soils to accept and temporarily hold water. Therefore, more water runs off and increases the Q value.

Theoretically, if each development, no matter how large or small, maintains their preconstruction Q value after construction by the installation of stormwater management systems, the streams and wetlands and lakes will not suffer damage from excessive urban stormwater.

For this reason, the McHenry County SWCD recommends that the developer for intense uses such as a subdivision calculate the preconstruction Q value for the exit point(s). A stormwater management system should be designed, installed, and maintained to limit the postconstruction Q value to be at or below the preconstruction value.

Importance of Flood Information

A floodplain is defined as land adjoining a watercourse (riverine) or an inland depression (non-riverine) that is subject to periodic inundation by high water. Floodplains are important areas demanding protection since they have water storage and conveyance functions which affect upstream and down stream flows, water quality and quantity, and suitability of the land for human activity. Since floodplains play distinct and vital roles in the hydrologic cycle, development that interferes with their hydrologic and biologic functions should be carefully considered.

Flooding is both dangerous to people and destructive to their properties. The following maps, when combined with wetland and topographic information, can help developers and future homeowners to “sidestep” potential flooding or ponding problems.

FIRM is the acronym for the Flood Insurance Rate Map, produced by the Federal Emergency Management Agency. These maps define flood elevation adjacent to tributaries and major bodies of water, and superimpose that onto a simplified USGS topographic map. The scale of the FIRM maps is generally dependent on the size and density of parcels in that area. (This is to correctly determine the parcel location and flood plain location.) The FIRM map has three (3) zones. A is the zone of 100 year flood, zone B is the 100 to 500 year flood, and zone C is outside the flood plain.

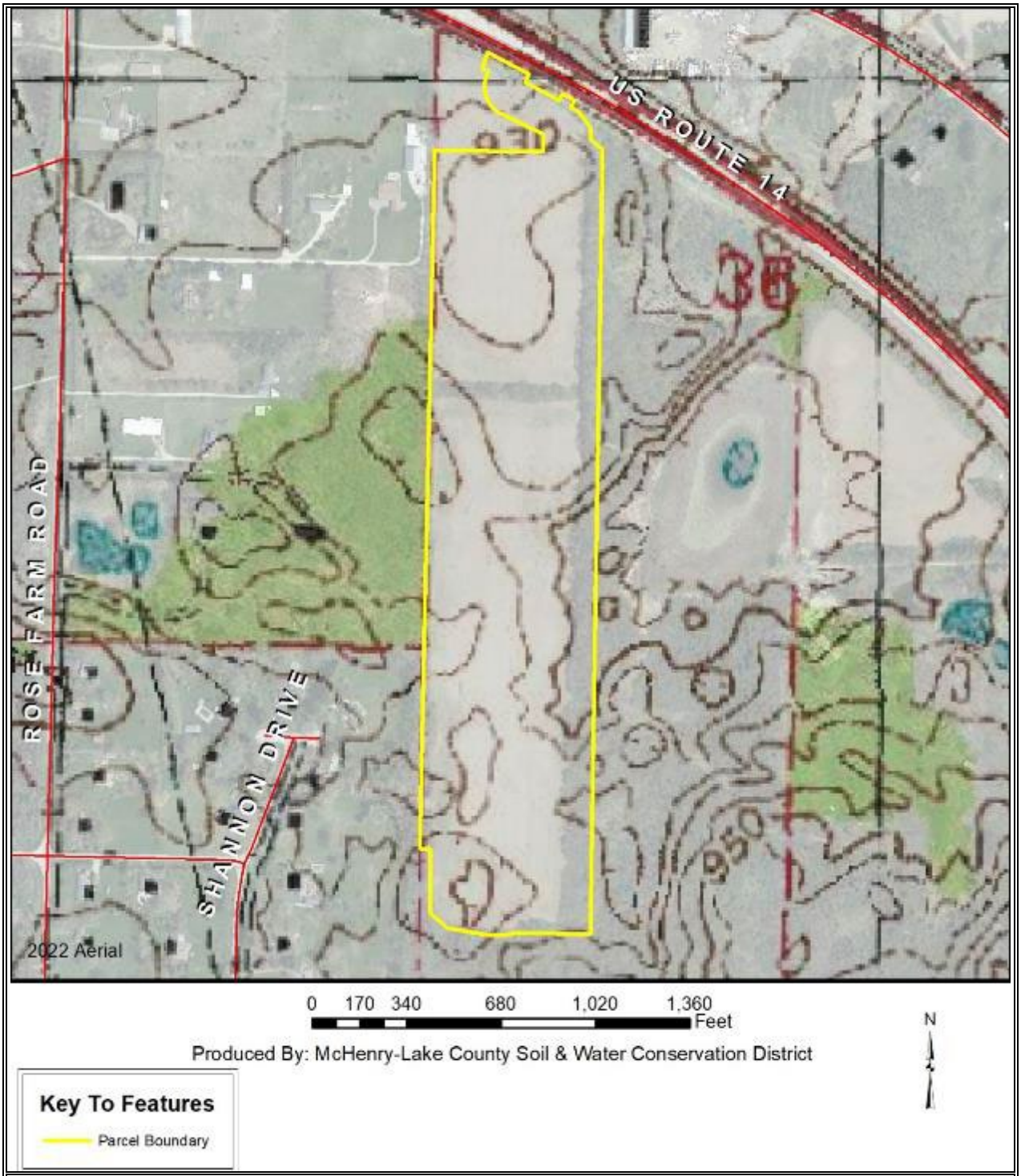
The Hydrologic Atlas (H.A.) Series of the Flood of Record Map is also used for the topographic information. This map is different from the FIRM map mainly because it will show isolated, or pocketed flooded areas. McHenry County uses both these maps in conjunction with each other for flooded area determinations. The Flood of Record maps, show the areas of flood for various years. Both of these maps stress that the recurrence of flooding is merely statistical. That is to say a 100-year flood may occur twice in one year, or twice in one week, for that matter.

It should be noted that greater floods than those shown on the two maps are possible. The flood boundaries indicated provide a historic record only until the map publication date. Additionally, these flood boundaries are a function of the watershed conditions existing when the maps were produced. Cumulative changes in runoff characteristics caused by urbanization can result in an increase in flood height of future flood episodes.

Floodplains play a vital role in reducing the flood damage potential associated with an urbanizing area and, when left in an undisturbed state, also provide valuable wildlife habitat benefits. If it is the petitioner's intent to conduct floodplain filling or modification activities, the petitioner and the Unit of Government responsible need to consider the potentially adverse effects this type of action could have on adjacent properties. The change or loss of natural floodplain storage often increases the frequency and severity of flooding on adjacent property.

If the available maps indicate the presence of a floodplain on the PIQ, the petitioner should contact the IDOT-DWR and FEMA to delineate a floodplain elevation for the parcel. If a portion of the property is indeed floodplain, applicable state, county and local regulations will need to be reflected in the site plans.

Another indication of flooding potential can be found in the soils information. Hydric soils indicate the presence of drainageways, areas subject to ponding, or a naturally occurring high water table. These need to be considered along with the floodplain information when developing the site plan and the stormwater management plan. If the site does include these hydric soils and development occurs, thus raising the concerns of the loss of water storage in these soils and the potential for increased flooding in the area.

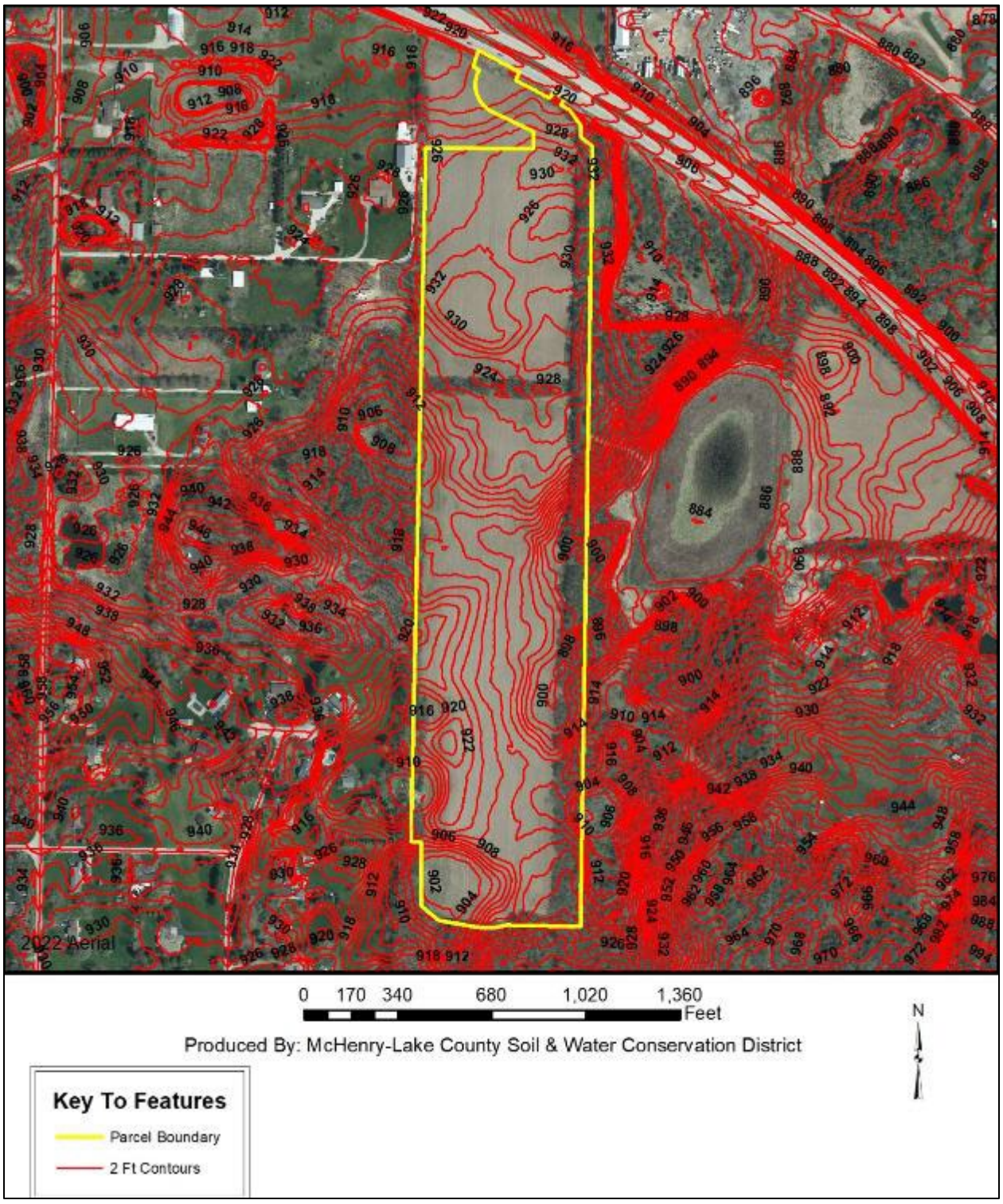


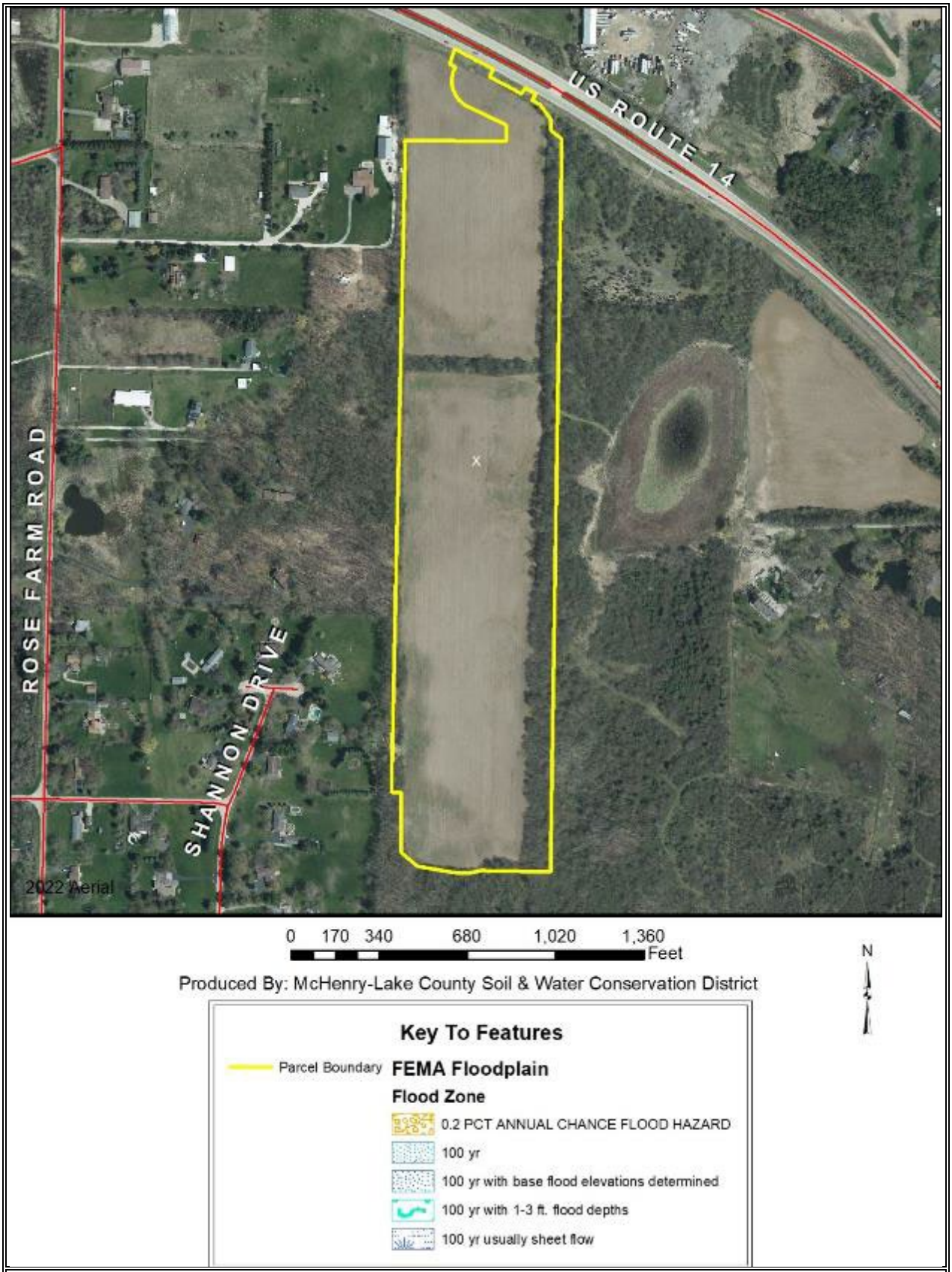
Flood of Record Map Showing Topographic Information

This parcel is located on rolling topography (slopes 0 to 20%) involving high and low areas (elevation ranges from 894' above sea level to 932' above sea level). An erosion control system should include a sedimentation basin to address these exiting concentrated flows during construction. The same area used for a sedimentation basin during construction can be used for a stormwater retention system after construction.

During construction, temporary vegetation can decrease erosion on the slopes if the area is to be mass graded.

Also, the flood of record for this area indicates the parcel has not previously flooded.


2022 Aerial
0 170 340 680 1,020 1,360
Feet
N
Produced By: McHenry-Lake County Soil & Water Conservation District
Key To Features
Parcel Boundary
2 Ft Contours



Federal Emergency Management Agency: Flood Insurance Rate Map Panel 17111C0178J

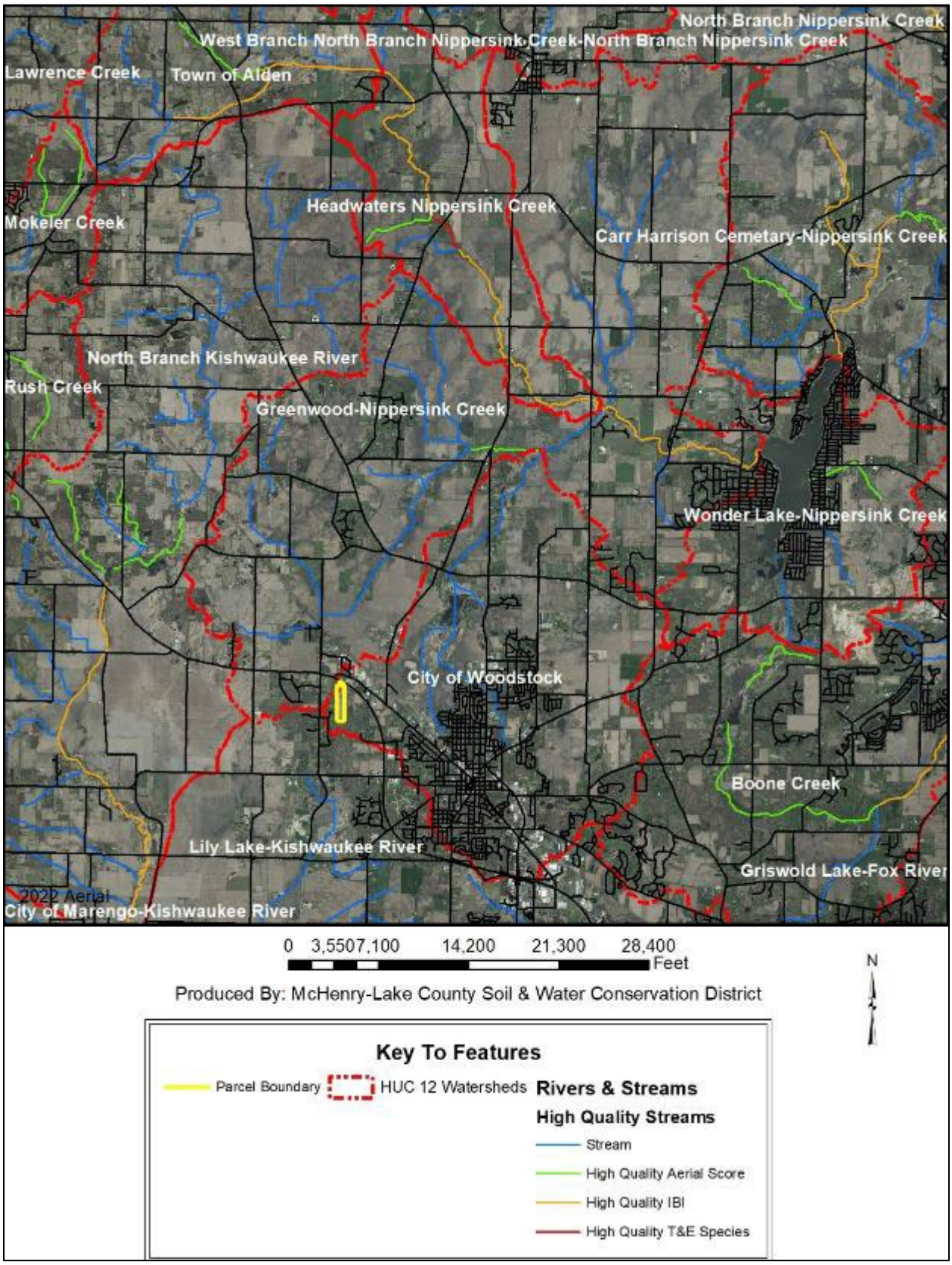
The map indicates the parcel is outside of the 100-year floodplain.

WATERSHED PLANS

Watershed and Subwatershed Information

A watershed is the area of land that drains into a specific point including a stream, lake or other body of water. High points on the Earth's surface, such as hills and ridges define watersheds. When rain falls in the watershed, it flows across the ground towards a stream or lake. Rainwater carries any pollutants it comes in contact with such as oils, pesticides, and soil. Everyone lives in a watershed. Their actions can impact natural resources and people living downstream. Residents can minimize this impact by being aware of their environment and implications of their activities, implementing practices recommended in watershed plans and educating others about their watershed.

The northwestern portion of the parcel is located within the Greenwood Subwatershed (HUC 12 – 071200060904) and the remainder of the parcel is within the City of Woodstock Subwatershed (HUC 12 – 071200060902) of the Nippersink Creek Watershed. The Nippersink Creek Watershed comprises 97,551.80 acres of McHenry County. In 2008 the Nippersink Creek Watershed Committee updated their Watershed Plan (originally developed in 1998) which outlines general watershed management objectives and subwatershed site specific objectives. According to the report, "Without questions, the biggest threat to the health and sustainability of the Nippersink Watershed is the rapid development of agricultural land into suburban land uses. This change in land use continues to be performed using land development methods which do not preserve the interception, infiltration, storage, and slow release of accumulated rainfall to the underlying shallow aquifers and adjacent wetlands and streams." Future impacts and impairments include: degraded water quality from development, additional channel hydromodification, loss of natural wetlands and stream corridor, and reduced groundwater recharge. Their watershed plan can be accessed on their website: http://nippersink.org/plan.htm.


North Branch Nippersink Creek
West Branch North Branch Nippersink Creek-North Branch Nippersink Creek
Lawrence Creek
Town of Alden
Headwaters Nippersink Creek
Mokeler Creek
Carr Harrison Cemetary-Nippersink Creek
North Branch Kishwaukee River
Rush Creek
Greenwood-Nippersink Creek
Wonder Lake-Nippersink Creek
City of Woodstock
Boone Creek
Lily Lake-Kishwaukee River
Griswold Lake-Fox River
2022 Aerial
City of Marengo-Kishwaukee River
0 3,5507,100 14,200 21,300 28,400
Feet
N
Produced By: McHenry-Lake County Soil & Water Conservation District
Key To Features
Parcel Boundary
HUC 12 Watersheds
Rivers & Streams
High Quality Streams
Stream
High Quality Aerial Score
High Quality IBI
High Quality T&E Species

WETLAND INFORMATION

Importance of Wetland Information

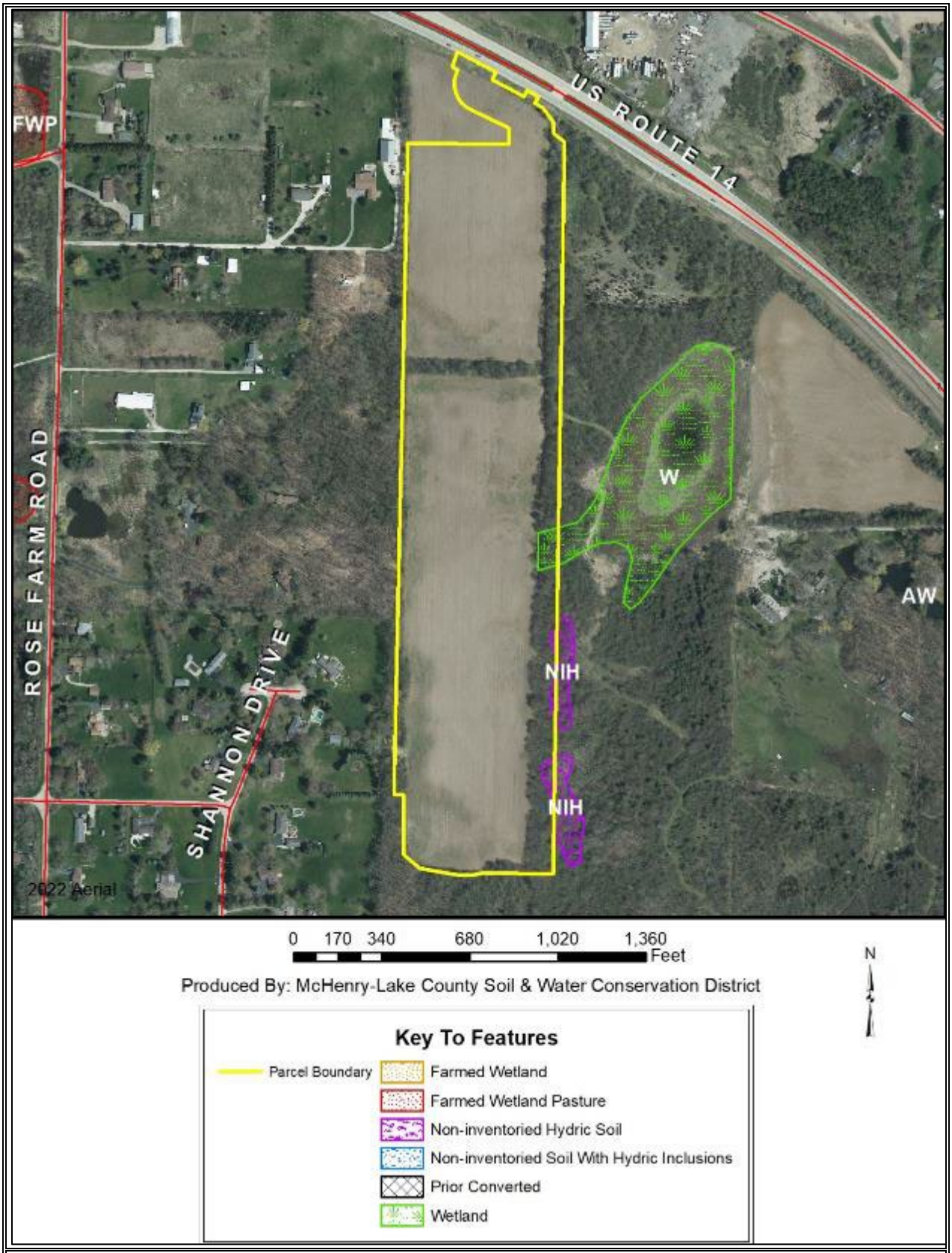
Wetlands function in many ways to provide numerous benefits to society. They control flooding by offering a slow release of excess water downstream or through the soil. They cleanse water by filtering out sediment and some pollutants, and can function as rechargers of our valuable groundwater. They also are essential breeding, rearing, and feeding grounds for many species of wildlife.

These benefits are particularly valuable in urbanizing areas as development activity typically adversely affects water quality, increases the volume of stormwater runoff, and increases the demand for groundwater. In an area where many individual homes rely on shallow groundwater wells for domestic water supplies, activities that threaten potential groundwater recharge areas are contrary to the public good. The conversion of wetlands, with their sediment trapping and nutrient absorbing vegetation, to biologically barren stormwater detention ponds can cause additional degradation of water quality in downstream or adjacent areas.

It has been estimated that over 95% of the wetlands that were historically present in Illinois have been destroyed while only recently has the true environmental significance of wetlands been fully recognized. America is losing 100,000 acres of wetland a year, and has saved 5 million acres total (since 1934). One acre of wetland can filter 7.3 million gallons of water a year. These are reasons why our wetlands are high quality and important.

This section contains the NRCS (Natural Resources Conservation Service) Wetlands Inventory, which is the most comprehensive inventory to date. The NRCS Wetlands Inventory is reproduced from an aerial photo at a scale of 1" equals 660 feet. The NRCS developed these maps in cooperation with U.S. EPA (Environmental Protection Agency,) and the U.S. Fish and Wildlife Service, using the National Food Security Act Manual, 3rd Edition. The main purpose of these maps is to determine wetland areas on agricultural fields and areas that may be wetlands but are in a non-agriculture setting.

The NRCS Wetlands Inventory in no way gives an exact delineation of the wetlands, but merely an outline, or the determination that there is a wetland within the outline. For the final, most accurate wetland **determination** of a specific wetland, a wetland ***delineation*** must be certified by NRCS staff using the National Food Security Act Manual (on agricultural land.) On urban land, a certified wetland delineator must perform the delineation using the ACOE 1987 Manual. *See the glossary section for the definitions of "delineation" and "determination."*



Natural Resources Conservation Service: Wetland Inventory Map.

The map indicates 0.25 acres of wetland (w) and 0.12 acres of Non-Inventoried Hydric Soil (NIH) on the parcel.

ADID (ADVANCED IDENTIFICATION OF AQUATIC RESOURCES)

Wetlands are some of the most productive and diverse ecological systems on Earth. The unique characteristics of plants, soils, and water distinguish these systems. Marshes, wet meadows, fens and bogs are some of the common wetland types found within McHenry County. There are also various streams scattered throughout the county, including several that rank among the highest quality in Illinois.

These wetlands, lakes and streams provide needed habitat and food for fish and wildlife. Diverse plants both common and rare are can be found in wetlands, and over 40 percent of Illinois' threatened and endangered plant and animal species rely on wetlands.

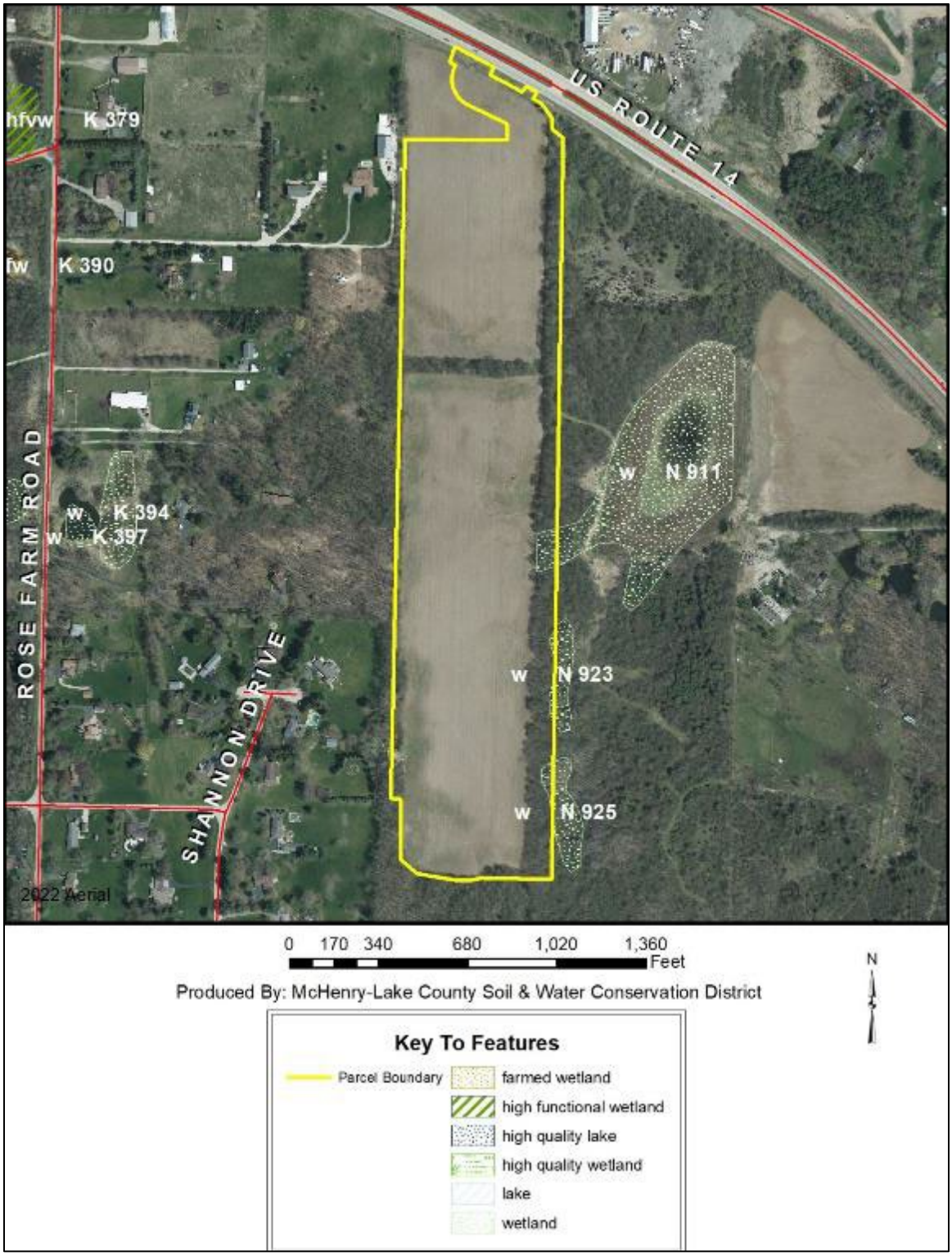
Wetlands have many other roles. They are critical to the control of flooding by storing vast quantities of runoff water during floods, and releasing it slowly to rivers and srteams as the floodwater recedes. This in turn helps to prevent erosion in downstream channels, aids in groundwater recharge, and stabilizes the baseflow in streams and rivers. Wetlands are also crucial in protecting water quality. Wetlands that border lakes and streams prevent erosion by holding soil in place and deflecting erosive flows and waves. They also remove sediment, nutrients, and toxic chemicals from runoff water.

Other benefits include groundwater recharge, discharge of clean water, recreation, enhancement of natural aesthetics and serve as buffers between adjacent developments.

This program designed by the EPA (Environmental Protection Agency), is intended to improve awareness of the functions and values of wetlands and other U.S. waters. It is also intended to inform landowners and developers that high quality sites may not be unsuitable for the disposal of dredged or fill material. These ADID projects can also provide guidance on the long-term protection and management of aquatic resources.

The wetland boundaries shown are not jurisdictional delineations. Any proposed drainage work in wet areas requires a certified wetland determination.

The ADID study identified 0.25 acres of wetland N911, 0.08 acres of wetland N923, and 0.11 acres of N925 on the parcel.


US ROUTE 14
ROSE FARM ROAD
SHANNON DRIVE
hfvw
K 379
fw
K 390
w
K 394
w
K 397
w
N 911
w
N 923
w
N 925
2022 Aerial
0 170 340 680 1,020 1,360
Feet
N
Produced By: McHenry-Lake County Soil & Water Conservation District
Key To Features
Parcel Boundary
farmed wetland
high functional wetland
high quality lake
high quality wetland
lake
wetland

Hydric Soils

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field.

These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States. Federal Register. September 18, 2002. Hydric soils of the United States.

Soils information gives another indication of flooding potential. The soils map on this page indicates the soil(s) on the parcel that the Natural Resources Conservation Service indicates as hydric. Hydric soils by definition have seasonal high water at or near the soil surface and/or have potential flooding or ponding problems. All hydric soils range from poorly suited to unsuitable for building. One group of the hydric soils, are the organic soils, which formed from dead organic material. Organic soils are unsuitable for building because of not only the high water table, but also their subsidence problems.

It is also important to add the possibility of hydric inclusions in a soil type. An inclusion is a soil polygon that is too small to appear on these maps. While relatively insignificant for agricultural use, hydric soil inclusions become more important to more intense uses such as a residential subdivision.
While considering hydric soils and hydric inclusions, it is noteworthy to mention that subsurface agriculture drainage tile occurs in almost all poorly drained and somewhat poorly drained soils. Drainage tile expedites drainage and facilitates farming. It is imperative that these drainage tiles remain undisturbed. A damaged subsurface drainage tile may return original hydrologic conditions to all of the areas that drained through the tile (ranging from less than one acre to many square miles.)

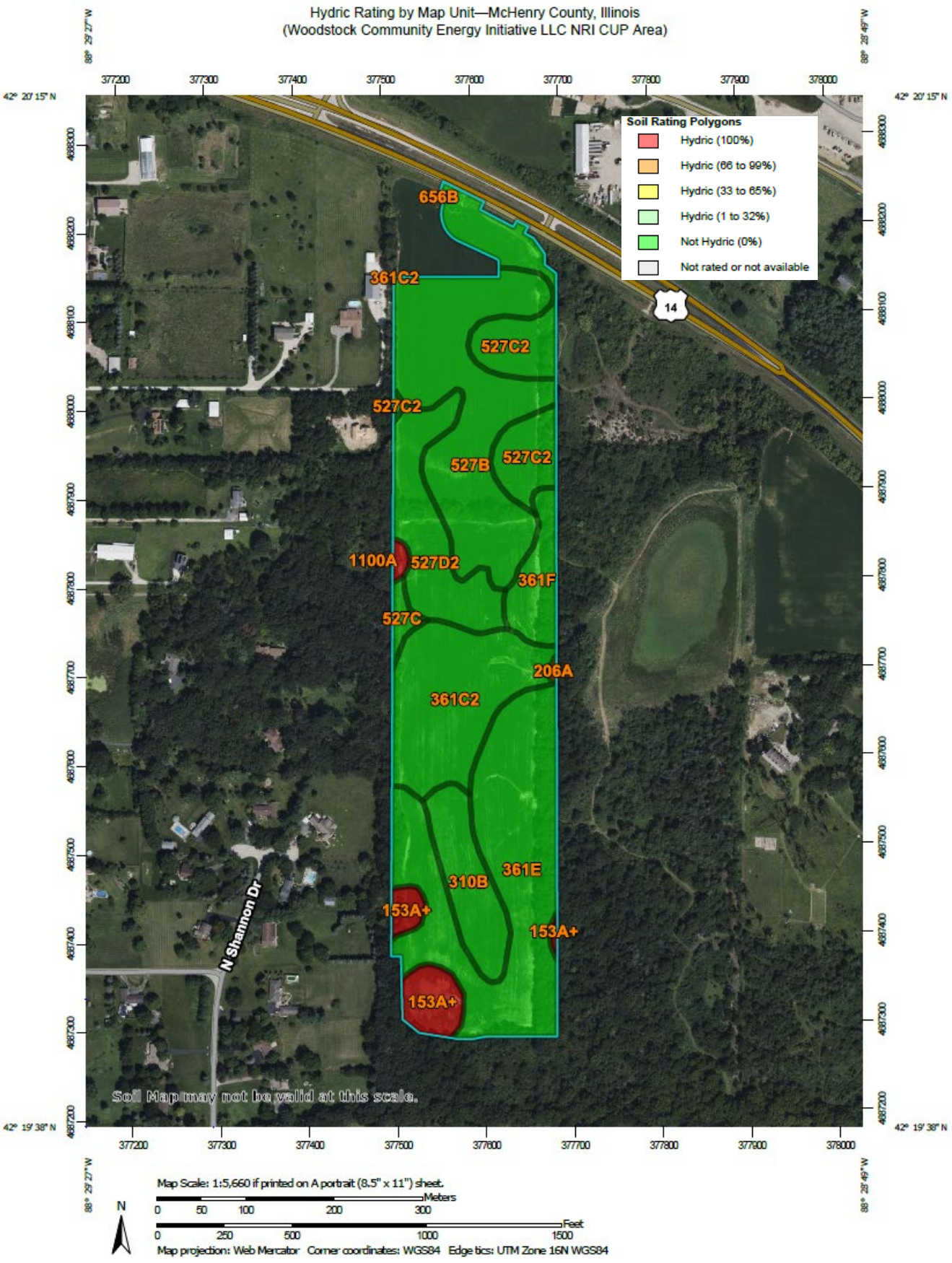
For an intense land use, such as a subdivision, the McHenry County SWCD recommends the following:

1. A topographical survey with 1 foot contour intervals to accurately define the flood area on the parcel.
2. An intensive soil survey to define most accurately the locations of the hydric soils and inclusions
3. A drainage tile survey on the area to locate the tiles that must be preserved.

In general, the District does not recommend building on hydric soils because of the unfavorable properties they exhibit and because of their long term, negative effects on the structures built.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
153A+	Pella silt loam, 0 to 2 percent slopes, overwash	100 - Hydric	1.7	4.1%
206A	Thorp silt loam, 0 to 2 percent slopes	95 - Hydric	0.0	0.1%
310B	McHenry silt loam, 2 to 4 percent slopes	0	2.7	6.6%
361C2	Kidder loam, 4 to 6 percent slopes, eroded	0	5.9	14.4%
361E	Kidder loam, 12 to 20 percent slopes	0	10.5	25.8%
361F	Kidder silt loam, 20 to 30 percent slopes	0	1.7	4.2%
527B	Kidami silt loam, 2 to 4 percent slopes	0	9.1	22.3%
527C	Kidami silt loam, 4 to 6 percent slopes	0	0.4	1.0%
527C2	Kidami loam, 4 to 6 percent slopes, eroded	0	4.7	11.4%
527D2	Kidami loam, 6 to 12 percent slopes, eroded	0	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes	0	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes	100 - Hydric	0.2	0.4%
Totals for Area of Interest			**1.9**	**4.6%**


Hydric Rating by Map Unit—McHenry County, Illinois
(Woodstock Community Energy Initiative LLC NRI CUP Area)
Soil Rating Polygons
Hydric (100%)
Hydric (66 to 99%)
Hydric (33 to 65%)
Hydric (1 to 32%)
Not Hydric (0%)
Not rated or not available
656B
361C2
527C2
527C2
527B
527C2
1100A
527D2
361F
527C
206A
361C2
361E
310B
153A+
153A+
153A+
14
N Shannon Dr
Soil Map may not be valid at this scale.
Map Scale: 1:5,660 if printed on A portrait (8.5" x 11") sheet.
Meters
0 50 100 200 300
Feet
0 250 500 1000 1500
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84
N

FLOODING FREQUENCY

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent.

"None" means that flooding is not probable. The chance of flooding is nearly 0 percent in any year. Flooding occurs less than once in 500 years.

"Very rare" means that flooding is very unlikely but possible under extremely unusual weather conditions. The chance of flooding is less than 1 percent in any year.

"Rare" means that flooding is unlikely but possible under unusual weather conditions. The chance of flooding is 1 to 5 percent in any year.

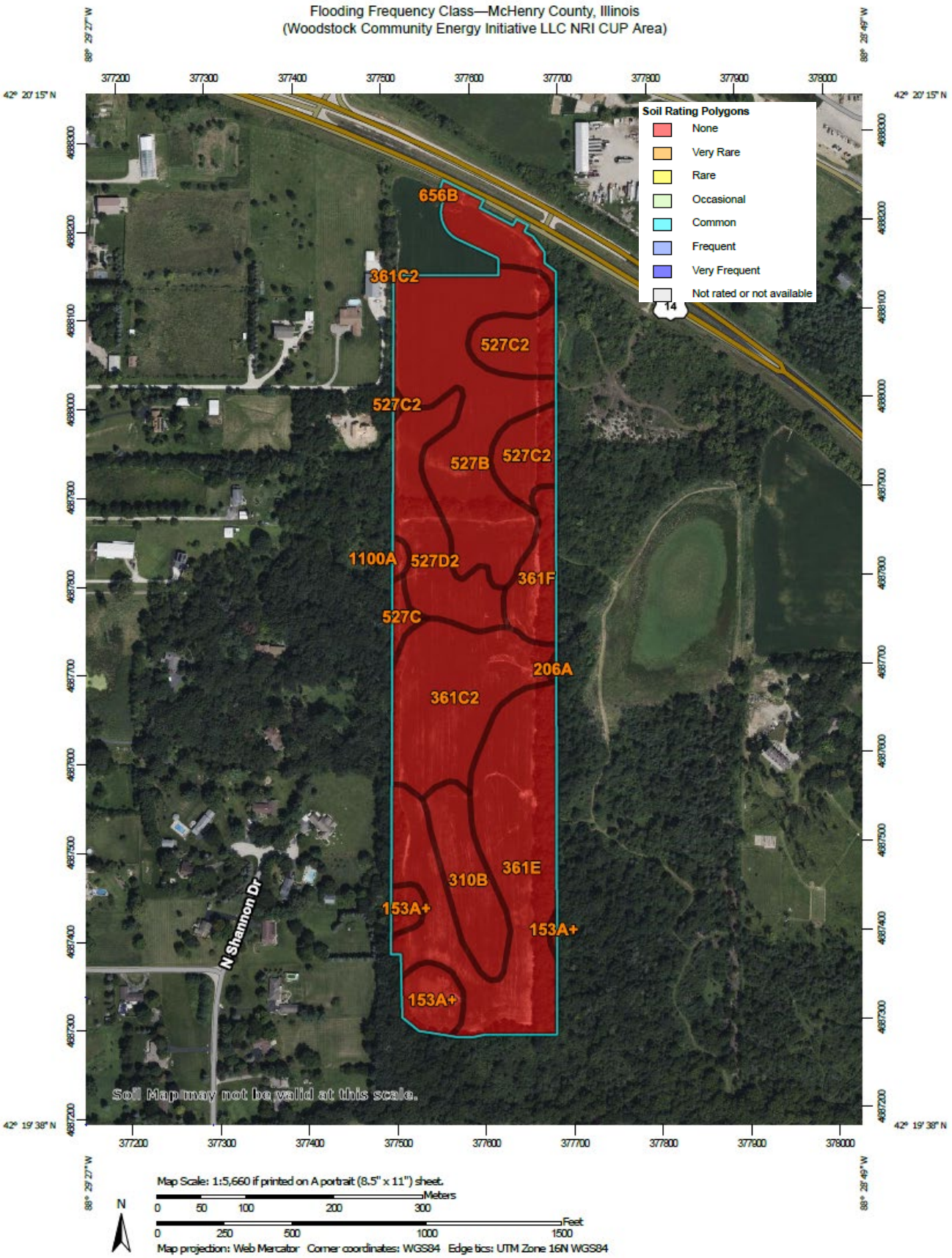
"Occasional" means that flooding occurs infrequently under normal weather conditions. The chance of flooding is 5 to 50 percent in any year.

"Frequent" means that flooding is likely to occur often under normal weather conditions. The chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year.

"Very frequent" means that flooding is likely to occur very often under normal weather conditions. The chance of flooding is more than 50 percent in all months of any year.

Flooding Frequency Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
153A+	Pella silt loam, 0 to 2 percent slopes, overwash	None	1.7	4.1%
206A	Thorp silt loam, 0 to 2 percent slopes	None	0.0	0.1%
310B	McHenry silt loam, 2 to 4 percent slopes	None	2.7	6.6%
361C2	Kidder loam, 4 to 6 percent slopes, eroded	None	5.9	14.4%
361E	Kidder loam, 12 to 20 percent slopes	None	10.5	25.8%
361F	Kidder silt loam, 20 to 30 percent slopes	None	1.7	4.2%
527B	Kidami silt loam, 2 to 4 percent slopes	None	9.1	22.3%
527C	Kidami silt loam, 4 to 6 percent slopes	None	0.4	1.0%
527C2	Kidami loam, 4 to 6 percent slopes, eroded	None	4.7	11.4%
527D2	Kidami loam, 6 to 12 percent slopes, eroded	None	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes	None	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes	None	0.2	0.4%
Total Flooding			**0.0**	**0.0%**


Flooding Frequency Class—McHenry County, Illinois
(Woodstock Community Energy Initiative LLC NRI CUP Area)
Soil Rating Polygons
None
Very Rare
Rare
Occasional
Common
Frequent
Very Frequent
Not rated or not available
656B
361C2
527C2
527C2
527B
527C2
1100A
527D2
361F
527C
206A
361C2
310B
361E
153A+
153A+
153A+
N Shannon Dr
Soil Map may not be valid at this scale.
Map Scale: 1:5,660 if printed on A portrait (8.5" x 11") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

PONDING FREQUENCY

Ponding is standing water in a closed depression. The water is removed only by deep percolation, transpiration, or evaporation or by a combination of these processes. Ponding frequency classes are based on the number of times that ponding occurs over a given period. Frequency is expressed as none, rare, occasional, and frequent.

"None" means that ponding is not probable. The chance of ponding is nearly 0 percent in any year.

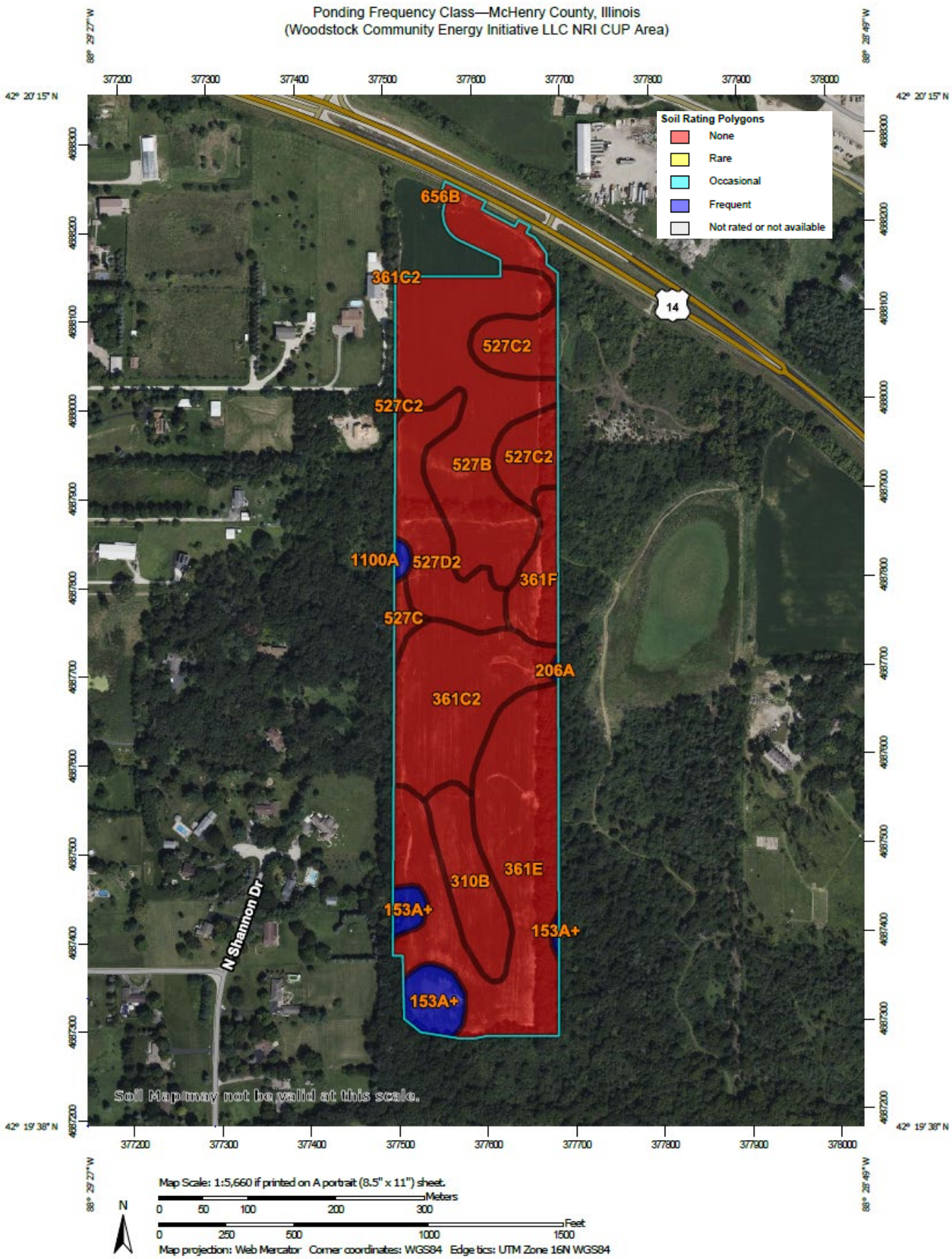
"Rare" means that ponding is unlikely but possible under unusual weather conditions. The chance of ponding is nearly 0 percent to 5 percent in any year.

"Occasional" means that ponding occurs, on the average, once or less in 2 years. The chance of ponding is 5 to 50 percent in any year.

"Frequent" means that ponding occurs, on the average, more than once in 2 years. The chance of ponding is more than 50 percent in any year.

Ponding Frequency Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
153A+	Pella silt loam, 0 to 2 percent slopes, overwash	Frequent	1.7	4.1%
206A	Thorp silt loam, 0 to 2 percent slopes	Frequent	0.0	0.1%
310B	McHenry silt loam, 2 to 4 percent slopes	None	2.7	6.6%
361C2	Kidder loam, 4 to 6 percent slopes, eroded	None	5.9	14.4%
361E	Kidder loam, 12 to 20 percent slopes	None	10.5	25.8%
361F	Kidder silt loam, 20 to 30 percent slopes	None	1.7	4.2%
527B	Kidami silt loam, 2 to 4 percent slopes	None	9.1	22.3%
527C	Kidami silt loam, 4 to 6 percent slopes	None	0.4	1.0%
527C2	Kidami loam, 4 to 6 percent slopes, eroded	None	4.7	11.4%
527D2	Kidami loam, 6 to 12 percent slopes, eroded	None	3.9	9.6%
656B	Octagon silt loam, 2 to 4 percent slopes	None	0.0	0.0%
1100A	Palms muck, ponded, 0 to 2 percent slopes	Frequent	0.2	0.4%
Total Frequent			**1.9**	**4.6%**


Ponding Frequency Class—McHenry County, Illinois
(Woodstock Community Energy Initiative LLC NRI CUP Area)
Soil Rating Polygons
None
Rare
Occasional
Frequent
Not rated or not available
656B
361C2
527C2
527C2
527B
527C2
1100A
527D2
361F
527C
206A
361C2
361E
310B
153A+
153A+
153A+
N Shannon Dr
14
Soil Map may not be valid at this scale.
Map Scale: 1:5,660 if printed on A portrait (8.5" x 11") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

WETLAND AND FLOODPLAIN REGULATIONS

PLEASE READ THE FOLLOWING IF YOU ARE PLANNING TO DO ANY WORK NEAR A STREAM (THIS INCLUDES SMALL UNNAMED STREAMS), LAKE, WETLAND OR FLOODWAY.

The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State's boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against flood way encroachments, maintenance and enhancement of water quality, protection of fish and wildlife habitat and recreational resources, and, in general, the protection of total public interest. Unregulated use of the waters within the State of Illinois could permanently destroy or alter the character of these valuable resources and adversely impact the public. Therefore, please contact the proper regulatory authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

WHO MUST APPLY

Anyone proposing to dredge, fill, rip rap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, flood plain or flood way subject to County, State or Federal regulatory jurisdiction should apply for agency approvals.

REGULATORY AGENCIES:

- **Wetlands or U.S. Waters: U.S. Army Corps of Engineers**, Chicago District,
  231 S. LaSalle St., Suite 1500
  Chicago, IL 60604
  Phone: (312) 846-5330
- **Isolated Wetlands and Floodplain: McHenry County Department of Planning & Development Stormwater Division,**
  2200 N. Seminary Ave., Woodstock, IL 60098
  Phone: (815) 334-4560
- **Flood plains: Illinois Department of Natural Resources \ Office of Water Resources**, 201 W. Center Court, Schaumburg, IL 60196-1096, phone (847).705.
- **Water Quality \ Erosion Control: Illinois Environmental Protection Agency**, Division of Water Pollution Control, Permit Section, Watershed Unit, 2200 Churchill Road, Springfield, IL 62706, phone (217).782.0610.

COORDINATION

We recommend Early coordination with the regulatory agencies BEFORE finalizing work plans. This allows the agencies to recommend measures to mitigate or compensate for adverse impacts. Also, the agency can make possible environmental enhancement provisions early in the project planning stages. This could reduce time required to process necessary approvals.

CAUTION: Contact with the United States Army Corps of Engineers is strongly advised before commencement of any work in or near a water of the United States. This could save considerable time and expense. Persons responsible for willful and direct violation of Section 10 of the River And Harbor Act of 1899 or Section 404 of the Federal Water Pollution Control Act are subject to fines ranging up to $27,500 per day of violation and imprisonment for up to one year or both.

THREATENED & ENDANGERED SPECIES

The State of Illinois provides habitat for 500 threatened and endangered species, including 356 plants and 144 animals. Twelve counties in Illinois have 50 or more endangered species, 5 of which are in northeastern Illinois. ("Endangered Species of Illinois," by the U.S. Fish & Wildlife Service, IDOC Division of Natural Heritage & Endangered Species Protection Board).

Approximately 40% of the state's listed species depend on wetlands for survival. The two main causes for species decline are the loss of habitat and the degradation of habitat. While habitat loss is the primary reason species become endangered, the effects of habitat change are not always seen overnight. It is seldom simply a case of individual animals or plants being killed. More often, habitat loss and the resulting species declines are indirectly caused and are the result of cumulative impacts over a period of time.

It is because of this slow encroachment of habitat degradation, fragmentation and loss that wildlife habitat must be looked at on a greater scale than just the site. Cumulative impacts occur because a small amount of damage is being done over here and little over there and no one is looking at the whole picture. Thus, the villages and county are strongly encouraged to look at habitat management on a regional scale.

THERE IS A POSSIBILITY FOR ENDANGERED SPECIES ON THE SITE. IF A REQUEST HAS NOT ALREADY BEEN SUBMITTED, THE PETITIONER SHOULD ASK THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES TO CHECK THIS PARCEL FOR THE PRESENCE OF THREATENED OR ENDANGERED SPECIES. SHOULD ANY SUCH SPECIES BE IDENTIFIED AS UTILIZING THIS PARCEL, THE PETITIONER WILL BE NOTIFIED ACCORDINGLY. FOR MORE INFORMATION ON HOW TO REQUEST AN ENDANGERED SPECIES CHECK ON THIS PARCEL, PLEASE VISIT
www.dnrecocat.state.il.us/ecopublic.

GLOSSARY

AGRICULTURAL PROTECTION AREAS (AG AREAS) - Allowed by P.A. 81-1173. An AG AREA consists of a minimum of 350 acres of farmland, as contiguous and compact as possible. Petitioned by landowners, AG AREAS protect for a period of ten years initially, then reviewed every eight years thereafter. AG AREA establishment exempts landowners from local nuisance ordinances directed at farming operations, and designated land can not receive special tax assessments on public improvements that do not benefit the land, e.g. water and sewer lines.

AGRICULTURE - The growing, harvesting and storing of crops including legumes, hay, grain, fruit and truck or vegetable including dairying, poultry, swine, sheep, beef cattle, pony and horse production, fur farms, and fish and wildlife farms; farm buildings used for growing, harvesting and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants or seasonal or year around hired farm workers.

B.G. - Below Grade. Under the surface of the Earth.

BEDROCK - Indicates depth at which bedrock occurs. Also lists hardness as rippable or hard.

FLOODING - Indicates frequency, duration, and period during year when floods are likely to occur.

HIGH LEVEL MANAGEMENT - The application of effective practices adapted to different crops, soils, and climatic conditions. Such practices include providing for adequate soil drainage, protection from flooding, erosion and runoff control, near optimum tillage, and planting the correct kind and amount of high quality seed. Weeds, diseases, and harmful insects are controlled. Favorable soil reaction and near optimum levels of available nitrogen, phosphorus, and potassium for individual crops are maintained. Efficient use is made of available crop residues, barnyard manure, and/or green manure crops. All operations, when combined efficiently and timely, can create favorable growing conditions and reduce harvesting losses -- within limits imposed by weather.

HIGH WATER TABLE - A seasonal high water table is a zone of saturation at the highest average depth during the wettest part of the year. May be apparent, perched, or artesian kinds of water tables.

Water Table, Apparent - A thick zone of free water in the soil. An apparent water table is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil.

Water Table, Artesian - A water table under hydrostatic head, generally beneath an impermeable layer. When this layer is penetrated, the water level rises in an uncased borehole.

Water Table, Perched - A water table standing above an unsaturated zone. In places an upper, or perched, water table is separated from a lower one by a dry zone.

DELINEATION - For Wetlands: A series of orange flags placed on the ground by a certified professional that outlines the wetland boundary on a parcel.

DETERMINATION - A polygon drawn on a map using map information that gives an outline of a wetland.

HYDRIC SOIL - This type of soil is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part (USDA Natural Resources Conservation Service 1987)

INTENSIVE SOIL MAPPING - Mapping done on a smaller more intensive scale than a modern soil survey to determine soil properties of a specific site, e.g. mapping for septic suitability.

LAND EVALUATION AND SITE ASSESSMENT (L.E.S.A.) - LESA is a systematic approach for evaluating a parcel of land and to determine a numerical value for the parcel for farmland preservation purposes.

MODERN SOIL SURVEY - A soil survey is a field investigation of the soils of a specific area, supported by information from other sources. The kinds of soil in the survey area are identified and their extent shown on a map, and an accompanying report describes, defines, classifies, and interprets the soils. Interpretations predict the behavior of the soils under different used and the soils' response to management. Predictions are made for areas of soil at specific places. Soils information collected in a soil survey is useful in developing land-use plans and alternatives involving soil management systems and in evaluating and predicting the effects of land use.

PALUSTRINE - Name given to inland fresh water wetlands

PERMEABILITY - Values listed estimate the range (in rate and time) it takes for downward movement of water in the major soil layers when saturated, but allowed to drain freely. The estimates are based on soil texture, soil structure, available data on permeability and infiltration tests, and observation of water movement through soils or other geologic materials.

PIQ - Parcel in question

POTENTIAL FROST ACTION - Damage that may occur to structures and roads due to ice lens formation causing upward and lateral soil movement. Based primarily on soil texture and wetness.

PRIME FARMLAND - Prime farmland soils are lands that are best suited to food, feed, forage, fiber and oilseed crops. It may be cropland, pasture, woodland, or other land, but it is not urban and built up land or water areas. It either is used for food or fiber or is available for those uses. The soil qualities, growing season, and moisture supply are those needed for a well managed soil economically to produce a sustained high yield of crops. Prime farmland produces in highest yields with minimum inputs of energy and economic resources, and farming the land results in the least damage to the environment.

Prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The level of acidity or alkalinity is acceptable. Prime farmland has few or no rocks and is permeable to water and air. It is not excessively erodible or saturated with water for long periods and is not frequently flooded during the growing season. The slope ranges mainly from 0 to 5 percent. (Source USDA Natural Resources Conservation Service)

PRODUCTIVITY INDEXES - Productivity indexes for grain crops express the estimated yields of the major grain crops grown in Illinois as a single percentage of the average yields obtained under basic management from several of the more productive soils in the state. This group of soils is composed of the Muscatine, Ipava, Sable, Lisbon, Drummer, Flanagan, Littleton, Elburn and Joy soils. Each of the 425 soils found in Illinois are found in Circular 1156 from the Illinois Cooperative Extension Service.

SEASONAL - When used in reference to wetlands indicates that the area is flooded only during a portion of the year.

SHRINK-SWELL POTENTIAL - Indicates volume changes to be expected for the specific soil material with changes in moisture content.

SOIL MAPPING UNIT - A map unit is a collection of soil areas of miscellaneous areas delineated in mapping. A map unit is generally an aggregate of the delineations of many different bodies of a kind of soil or miscellaneous area but may consist of only one delineated body. Taxonomic class names and accompanying phase terms are used to name soil map units. They are described in terms of ranges of soil properties within the limits defined for taxa and in terms of ranges of taxadjuncts and inclusions.

SOIL SERIES - A group of soils, formed from a particular type of parent material, having horizons that, except for texture of the A or surface horizon, are similar in all profile characteristics and in arrangement in the soil profile. Among these characteristics are color, texture, structure, reaction, consistence, and mineralogical and chemical composition.

SUBSIDENCE - Applies mainly to organic soils after drainage. Soil material subsides due to shrinkage and oxidation.

TERRAIN - The area or surface over which a particular rock or group of rocks is prevalent.

TOPSOIL - That portion of the soil profile where higher concentrations of organic material, fertility, bacterial activity and plant growth take place. Depths of topsoil vary between soil types.

WATERSHED - An area of land that drains to an associated water resource such as a wetland, river or lake. Depending on the size and topography, watersheds can contain numerous tributaries, such as streams and ditches, and ponding areas such as detention structures, natural ponds and wetlands.

WETLAND - An area that has a predominance of hydric soils and that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of

hydrophytic vegetation typically adapted for life in saturated soil conditions.

REFERENCES

A Citizens' Guide to Protecting Wetlands. By The National Wildlife Federation. Washington, D.C., March 1989

Agricultural Areas Inventory
McHenry County Soil & Water Conservation District

FIRM - Flood Insurance Rate Maps for McHenry County. Prepared by FEMA - Federal Emergency Management Agency.

Flood of Record (Hydrologic Atlas) for McHenry County
U.S. Geologic Survey

Geologic Mapping for Environmental Planning, McHenry County, Illinois. Department of Natural Resources Illinois State Geological Survey, Circular 559, 1997

Geology For Planning in Boone and Winnebago Counties. State Geological Survey Division, Circular 531. 1984

Hydrologic Unit Map for McHenry County.
Natural Resources Conservation Service, United States Department of Agriculture

Hydric Soils of the United States. USDA Natural Resources Conservation Service, 1987.

Illinois Natural Areas Inventory
Illinois Department of Natural Resources

Land Evaluation and Site Assessment System. 2005. The McHenry County Department of Planning and McHenry County Soil and Water Conservation District. In cooperation with: USDS, Natural Resources Conservation Service

McHenry County Advanced Identification of Wetlands (ADID)
Northeastern Illinois Planning Commission

McHenry County Health Code relating to septic system suitability

McHenry County 2030 Land Use Plan
McHenry County Dept. of Planning and Development

McHenry County Natural Areas Inventory
McHenry County Conservation District

McHenry County, Illinois Fire Protection Districts
McHenry County Dept. of Planning and Development

McHenry County, Illinois Historic Landmarks
McHenry County Historic Preservation Committee

Natural Resources Conservation Service Wetland Inventory Map. United States Department of Agriculture

The Conservation of Biological Diversity in the Great Lakes Ecosystem: Issues and Opportunities, prepared by the Nature Conservancy Great Lakes Program 79W. Monroe Street, Suite 1309, Chicago, IL 60603, January 1994

Wetlands - The Corps of Engineers' Administration of the Section 404 Program July 1988 (GAO/RCED-88-110)

Soil Erosion by Water - United States Department of Agriculture Natural Resources Conservation Service. Agriculture Information Bulletin 513.

Soil Survey of McHenry County, Illinois Part 1 and Part 2
Natural Resources Conservation Service, United States Department of Agriculture.

CONDITIONAL USE PERMIT PLANS

FOR

WOODSTOCK COMMUNITY ENERGY INITIATIVE, LLC

LOCATED AT

US HIGHWAY 14,

WOODSTOCK, IL 60098

42.336900, -88.486695

PROJECT TEAM

APPLICANT/PROJECT OWNER
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
CONTACT: BEN DYKEMA, P.E.
PHONE: (630) 209-5270
EMAIL: BD@ECASOLAR.COM

DEVELOPER
ECA SOLAR
203 CRESCENT STREET #106
WALTHAM, MA 02453
CONTACT: BEN DYKEMA, P.E.
PHONE: (630) 209-5270
EMAIL: BD@ECASOLAR.COM

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD, SUITE 200
DEERFIELD, IL 60015
CONTACT: ANDREW CLICK, P.E.
EMAIL: ANDREW.CLICK@KIMLEY-HORN.COM
PHONE: (629) 278-4026
ENGINEER OF RECORD: ANDREW CLICK, P.E.

SURVEYOR
COMPASS SURVEYING, LTD.
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
EMAIL: ADMIN@CLSURVEYING.COM
PHONE: (630) 820-9100

ELECTRIC UTILITY COMPANY
COMED
1950 DUNCAN PL
WOODSTOCK, IL 60098
PHONE: (877) 426-6331

AUTHORITY HAVING JURISDICTION (AHJ)
MCHENRY COUNTY
667 WARE RD
WOODSTOCK, IL 60098
CONTACT: KIM SCHARLOW
PHONE: (815) 334-4560
EMAIL: KBSCHARLOW@MCHENRYCOUNTYIL.GOV

IDOT
201 WEST CENTER COURT
SCHAUMBURG, IL 60196
CONTACT: YELEINA HAYDEL
EMAIL: YELEINA.HAYDEL@ILLINOIS.GOV

SURVEY NOTE

ALTA/TOPO: COMPASS SURVEYING LTD DATED MAY 5, 2025
BASIS OF BEARINGS: ILLINOIS STATE PLANE COORDINATES, EAST ZONE, US FOOT

FLOOD ZONE NOTE:

PER FEMA FIRM MAP 17111C0178J EFFECTIVE DATE 11/16/2006, NO FLOOD PLAINS ARE ARE PRESENT WITHIN THE PROJECT AREA. THE AREA IS DESIGNATED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD.

SITE INFORMATION

PARCEL ZONING
AGRICULTURAL (A-1)
PARCEL SIZE
88.075 ACRES
PROJECT DESCRIPTION
5.00MWAC SINGLE AXIS TRACKER SOLAR ARRAY PROJECT

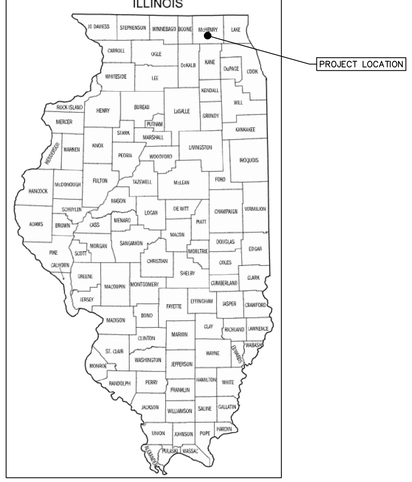
LOCATION MAP

(NOT TO SCALE)

STATE COUNTY MAP

(NOT TO SCALE)

ILLINOIS



Sheet List Table	
Sheet Number	Sheet Title
C-100	COVER SHEET
C-200	SITE LAYOUT
C-300	GRADING AND DRAINAGE PLAN
C-400	LANDSCAPE PLAN
C-500	CONSTRUCTION DETAILS
C-501	CONSTRUCTION DETAILS

SETBACK TABLE	
OCCUPIED COMMUNITY BUILDINGS AND DWELLINGS ON NON-PARTICIPATING PROPERTIES	150'
BOUNDARY LINES OF PARTICIPATING PROPERTY	NONE
PUBLIC ROAD RIGHTS OF WAY	50'
BOUNDARY LINES OF NON-PARTICIPATING PROPERTY	50'
*SETBACKS PER MCHENRY COUNTY UNIFIED DEVELOPMENT ORDINANCE PRINCIPAL USE STANDARDS OUTLINED IN §16.56.030.PP	

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.

570 LAKE COOK ROAD, SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE:
184.002012-0006 062.045338

KHA PROJECT 118938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NEW
CHECKED BY AMC

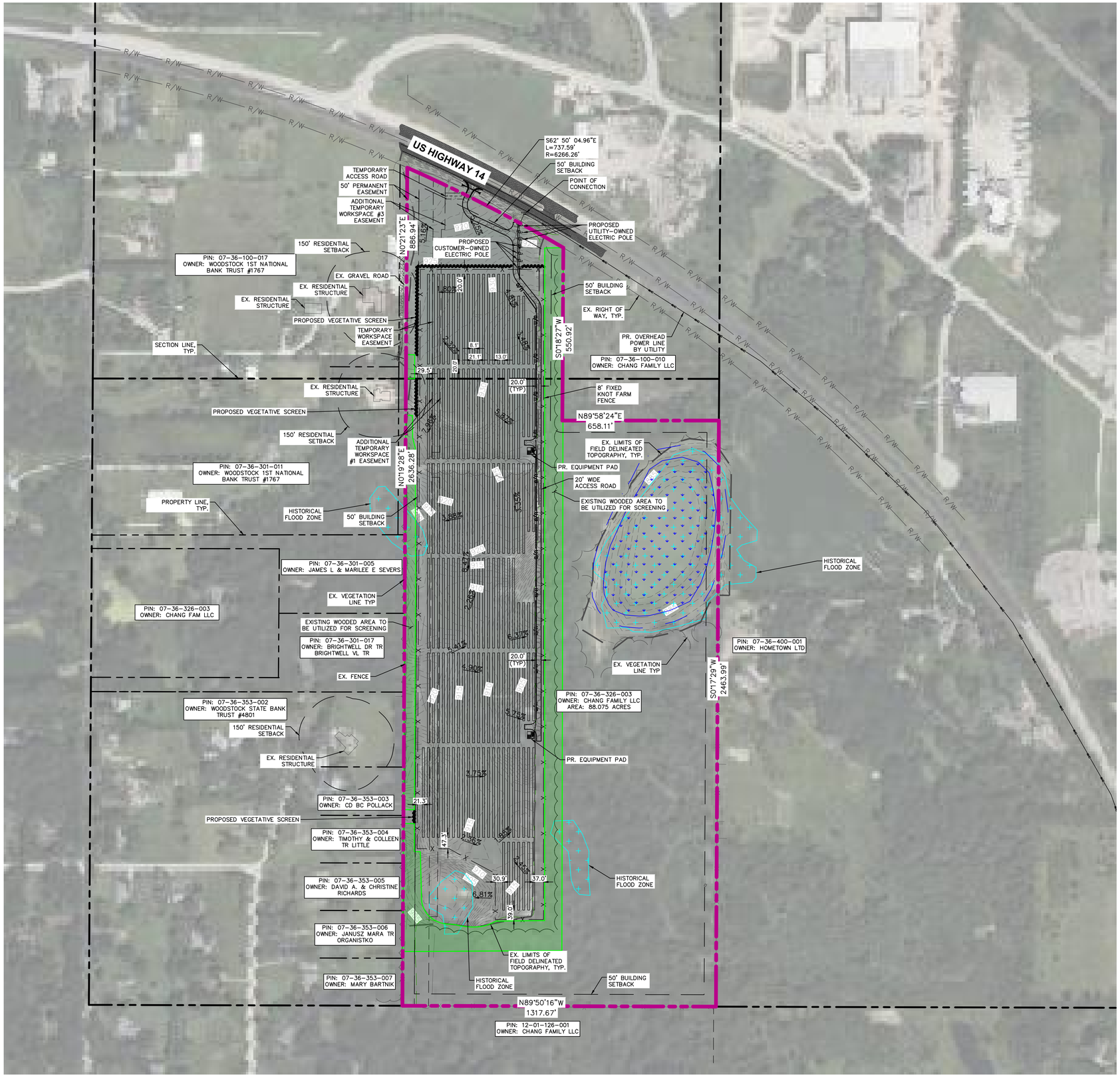
COVER SHEET

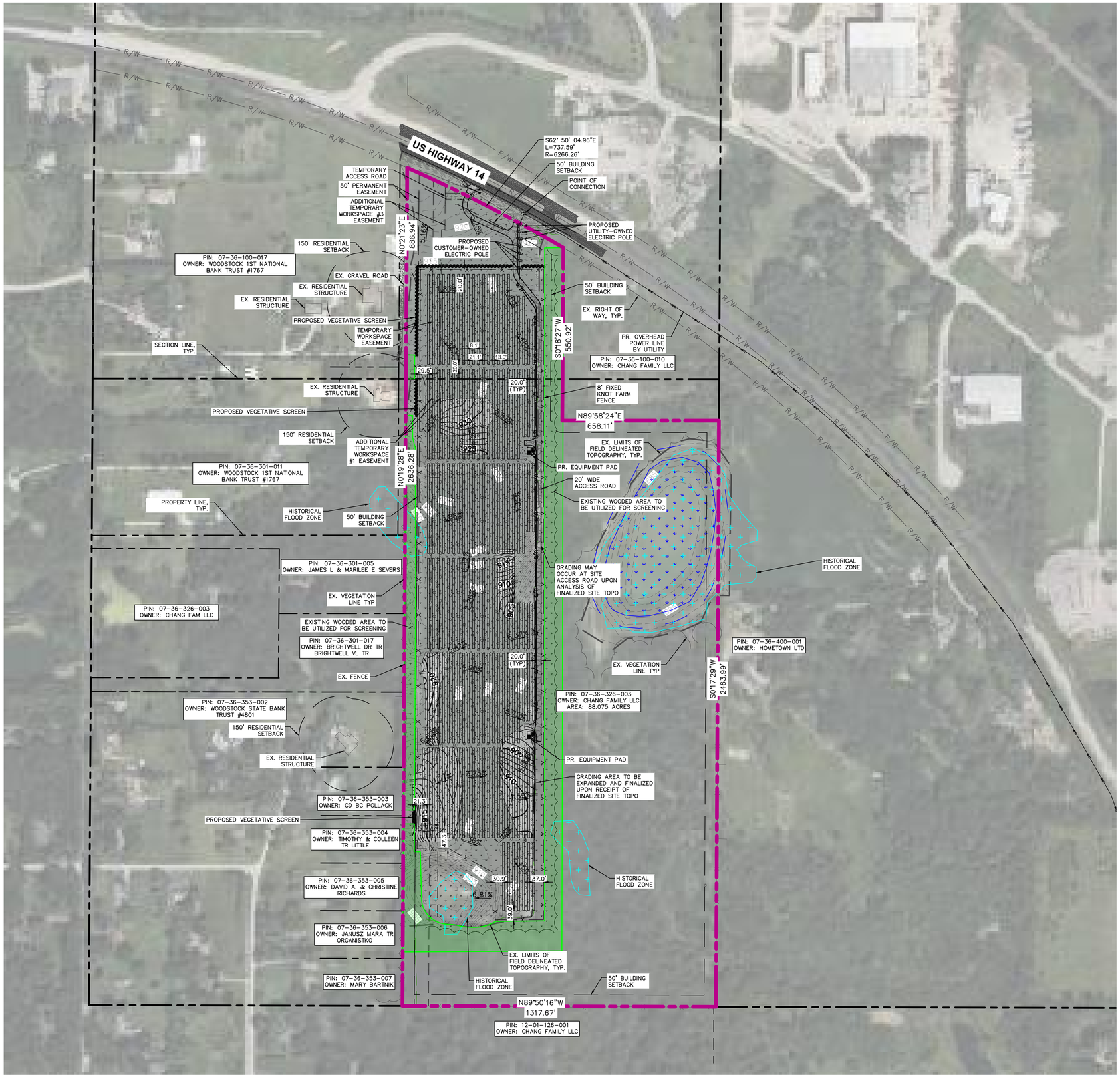
WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-100

Drawing name: K:\MSN_Energy\118938000 - ECA US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-100 COVER SHEET.dwg C-100 COVER SHEET Aug 08, 2025 9:40am by: Ethan.Horst

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.


US HIGHWAY 14
S62° 50' 04.96"E
L=737.59'
R=6266.26'
50' BUILDING SETBACK
POINT OF CONNECTION
TEMPORARY ACCESS ROAD
50' PERMANENT EASEMENT
ADDITIONAL TEMPORARY WORKSPACE #3 EASEMENT
PROPOSED UTILITY-OWNED ELECTRIC POLE
PROPOSED CUSTOMER-OWNED ELECTRIC POLE
150' RESIDENTIAL SETBACK
PIN: 07-36-100-017
OWNER: WOODSTOCK 1ST NATIONAL BANK TRUST #1767
EX. GRAVEL ROAD
EX. RESIDENTIAL STRUCTURE
EX. RESIDENTIAL STRUCTURE
PROPOSED VEGETATIVE SCREEN
TEMPORARY WORKSPACE EASEMENT
SECTION LINE, TYP.
EX. RESIDENTIAL STRUCTURE
PROPOSED VEGETATIVE SCREEN
150' RESIDENTIAL SETBACK
ADDITIONAL TEMPORARY WORKSPACE #1 EASEMENT
PIN: 07-36-301-011
OWNER: WOODSTOCK 1ST NATIONAL BANK TRUST #1767
PROPERTY LINE, TYP.
HISTORICAL FLOOD ZONE
50' BUILDING SETBACK
PIN: 07-36-301-005
OWNER: JAMES L & MARILEE E SEVERS
EX. VEGETATION LINE TYP
PIN: 07-36-326-003
OWNER: CHANG FAM LLC
EXISTING WOODED AREA TO BE UTILIZED FOR SCREENING
PIN: 07-36-301-017
OWNER: BRIGHTWELL DR TR BRIGHTWELL VL TR
EX. FENCE
PIN: 07-36-353-002
OWNER: WOODSTOCK STATE BANK TRUST #4801
150' RESIDENTIAL SETBACK
EX. RESIDENTIAL STRUCTURE
PIN: 07-36-353-003
OWNER: CD BC POLLACK
PROPOSED VEGETATIVE SCREEN
PIN: 07-36-353-004
OWNER: TIMOTHY & COLLEEN TR LITTLE
PIN: 07-36-353-005
OWNER: DAVID A. & CHRISTINE RICHARDS
PIN: 07-36-353-006
OWNER: JANUSZ MARA TR ORGANISTKO
PIN: 07-36-353-007
OWNER: MARY BARTNIK
HISTORICAL FLOOD ZONE
EX. LIMITS OF FIELD DELINEATED TOPOGRAPHY, TYP.
50' BUILDING SETBACK
N89°50'16"W
1317.67'
PIN: 12-01-126-001
OWNER: CHANG FAMILY LLC
N0°21'23"E
886.94'
S0°18'27"W
550.92'
PROPOSED VEGETATIVE SCREEN
PR. OVERHEAD POWER LINE BY UTILITY
PIN: 07-36-100-010
OWNER: CHANG FAMILY LLC
8' FIXED KNOT FARM FENCE
N89°58'24"E
658.11'
EX. LIMITS OF FIELD DELINEATED TOPOGRAPHY, TYP.
PR. EQUIPMENT PAD
20' WIDE ACCESS ROAD
EXISTING WOODED AREA TO BE UTILIZED FOR SCREENING
N0°19'28"E
2636.28'
HISTORICAL FLOOD ZONE
PIN: 07-36-400-001
OWNER: HOMETOWN LTD
EX. VEGETATION LINE TYP
S0°17'29"W
2463.99'
PIN: 07-36-326-003
OWNER: CHANG FAMILY LLC
AREA: 88.075 ACRES
PR. EQUIPMENT PAD
HISTORICAL FLOOD ZONE
EX. RIGHT OF WAY, TYP.
50' BUILDING SETBACK
20.0' (TYP)
29.5'
21.3'
30.9'
37.0'
39.0'
6.81%
3.53%
3.86%
6.37%
4.90%
5.75%
4.45%
5.68%
3.45%
3.37%
2.45%
2.45%
8.47%
3.47%
4.98%
3.47%
3.47%
3.47



LEGEND

- PROJECT BOUNDARY
- PROPERTY LINE
- PROPERTY SETBACK
- ROAD CENTERLINE
- EX OHE — EX OHE — EX OVERHEAD ELECTRIC
- R/W — R/W — EX RIGHT-OF-WAY
- EXISTING RESIDENCE/STRUCTURE
- EX. WETLAND AREA
- EX. WETLAND BUFFER
- EX. TREELINE
- EX. EXISTING TREELINE
- X — X — X — EX. FENCE
- EX. UTILITY EASEMENT
- EX. HISTORICAL FLOOD ZONE
- EX. WOODED AREA TO BE UTILIZED FOR SCREENING
- X — X — X — PR. SECURITY FENCE
- PR. TREELINE
- PR. UTILITY POLE
- PR. ELECTRICAL EQUIPMENT AREA
- PR. SOLAR ARRAY
- OHW — PR. OVERHEAD ELECTRIC
- U/G — U/G — U/G — PR. UNDERGROUND ELECTRIC (AC)
- PR. SITE ACCESS
- PR. SITE ACCESS SHOULDER
- PR. ACCESS ROAD
- PR. GRADING LIMITS
- PR. CULVERT OUTLET
- PR. CULVERT
- PR. VEGETATIVE SCREENING

GENERAL NOTES

1. PHOTOVOLTAIC PANELS, INVERTERS, AND INTERCONNECTION EQUIPMENT LOCATIONS SHOWN FOR REFERENCE ONLY. DESIGN AND FINAL LAYOUT PER DRAWINGS BY ELECTRICAL AND STRUCTURAL ENGINEER.
2. PROJECT ENTRANCE DESIGN TO BE DESIGNED AND PERMITTED THROUGH IDOT REGION 1, DISTRICT 1. SEE SEPARATE PERMIT SET FOR DESIGN INFORMATION.
3. DESIGN PARAMETERS FOR GRADING WERE 0.75' DEFLECTION, 5% NORTH FACING SLOPES AND 10% EAST/WEST/SOUTH FACING SLOPES AND A +/- 12.0" TOLERANCE (1.0' REVEAL RANGE FOR PILES). DESIGN PARAMETERS USED AS BASIS OF DESIGN - REFER TO MANUFACTURERS SPECS FOR FINAL DESIGN CRITERIA.

CUT/FILL VOLUMES

CUT	4790 CY
FILL	4530 CY
NET	260 CY <CUT>
ASSUMED FILL FACTOR	1.200

NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.

570 LAKE COOK ROAD SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE: 184.002012-0006 062.045338

KHA PROJECT	118938000
DATE	7/25/2025
SCALE	AS SHOWN
DESIGNED BY	AMC
DRAWN BY	NBW
CHECKED BY	AMC

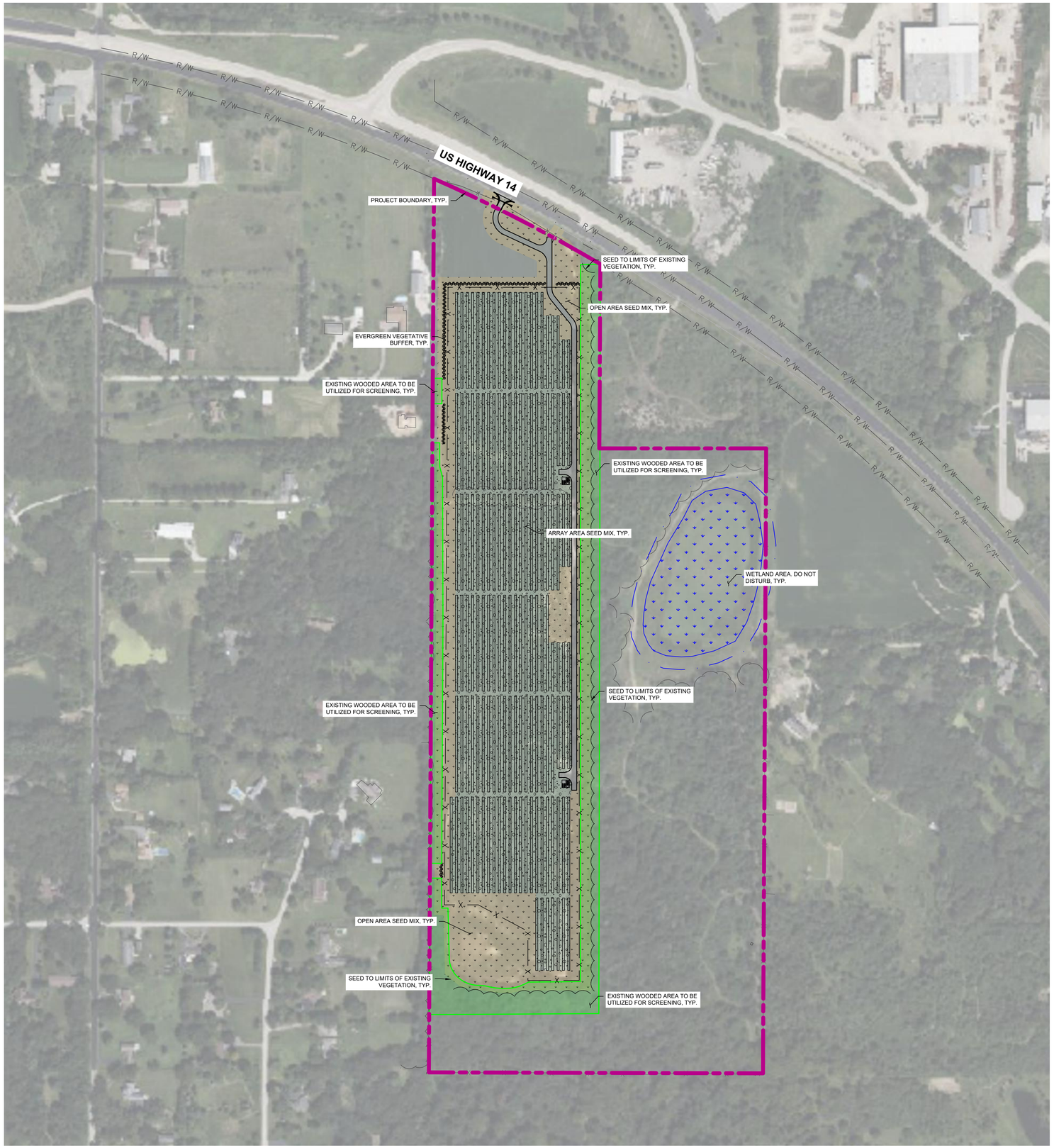
GRADING AND DRAINAGE PLAN

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-300

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Drawing name: K:\WSH_Energy\118938000 - ECA US Hwy 14 Woodstock IL\CAD\Plansheets\CUP Plan Set\C-300 GRADING AND DRAINAGE PLAN.dwg C-300 GRADING AND DRAINAGE PLAN Aug 08, 2025 9:41am by: Ethan.Horst



PLANT SCHEDULE

	EVERGREEN TREES	144
	OPEN AREA SEED MIX	
	ARRAY AREA SEED MIX	
	EXISTING WOODED AREA TO BE UTILIZED FOR SCREENING	

NOTE: SEED MIX SPECIFICATIONS TO FOLLOW AT A LATER DATE AFTER FINAL SITE LAYOUT DETERMINED. SEED MIX WILL ADHERE TO ILLINOIS STATE POLLINATOR PROGRAM PARAMETERS. FINAL TREE SPECIES AND SPECIFICATIONS TO COMPLY WITH LOCAL AND COUNTY ORDINANCES.

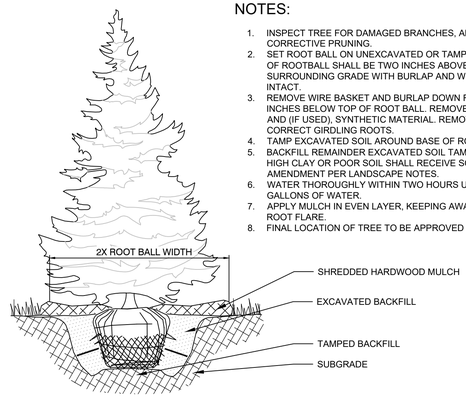
NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

GENERAL LANDSCAPE NOTES

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MATERIALS AND PLANTS SHOWN ON THE LANDSCAPE PLAN. THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION OR DURING THE SPECIFIED MAINTENANCE PERIOD. CALL FOR UTILITY LOCATIONS PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR SHALL REPORT ANY DISCREPANCY IN PLAN VS. FIELD CONDITIONS IMMEDIATELY TO THE LANDSCAPE ARCHITECT, PRIOR TO CONTINUING WITH THAT PORTION OF WORK.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
5. DO NOT DISTURB THE EXISTING PAVING, LIGHTING, OR LANDSCAPING THAT EXISTS ADJACENT TO THE SITE UNLESS OTHERWISE NOTED ON PLAN.
6. PLANT QUANTITIES SHOWN ARE FOR THE CONVENIENCE OF THE OWNER AND JURISDICTIONAL REVIEW AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES AS DRAWN.
7. THE CONTINUED MAINTENANCE OF ALL REQUIRED LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY ON WHICH SAID MATERIALS ARE REQUIRED. ALL PLANT MATERIALS REQUIRED BY THIS SECTION SHALL BE MAINTAINED AS LIVING VEGETATION AND SHALL BE PROMPTLY REPLACED IF THE PLANT MATERIAL HAS DIED PRIOR TO FINAL ACCEPTANCE.
8. NO GENERAL SPRAY OF HERBICIDES IS TO BE USED FOR ANY SEEDED AREAS.
9. ONLY HERBICIDES FORMULATED FOR ANIMAL SAFETY SHALL BE USED.
10. ALL WORK DEEMED NATURAL AREA TO BE SEEDED OR PLANTED SHALL BE PERFORMED BY A QUALIFIED LANDSCAPE CONTRACTOR.
11. SEED SHALL BE OBTAINED FROM SOURCE SPECIALIZING IN NATIVE SPECIES, WHERE AVAILABLE OR AS APPROVED BY CLIENT OR CLIENT'S REPRESENTATIVE.
12. ALL SEED MIXES SHALL BE INSTALLED WITH A COVER CROP DEPENDENT ON SEASON AND REQUIREMENTS SPECIFIED PER SEED MIX / SEED SUPPLIER.

PLANTING DETAIL



NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.

1 EVERGREEN TREE PLANTING

NTS

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE:
184.002012-0006 062.045338

KHA PROJECT	118938000
DATE	7/25/2025
SCALE	AS SHOWN
DESIGNED BY	AMC
DRAWN BY	NEW
CHECKED BY	AMC

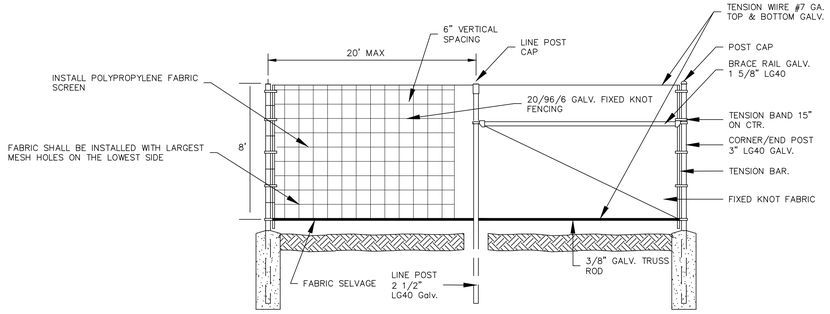
LANDSCAPE PLAN

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

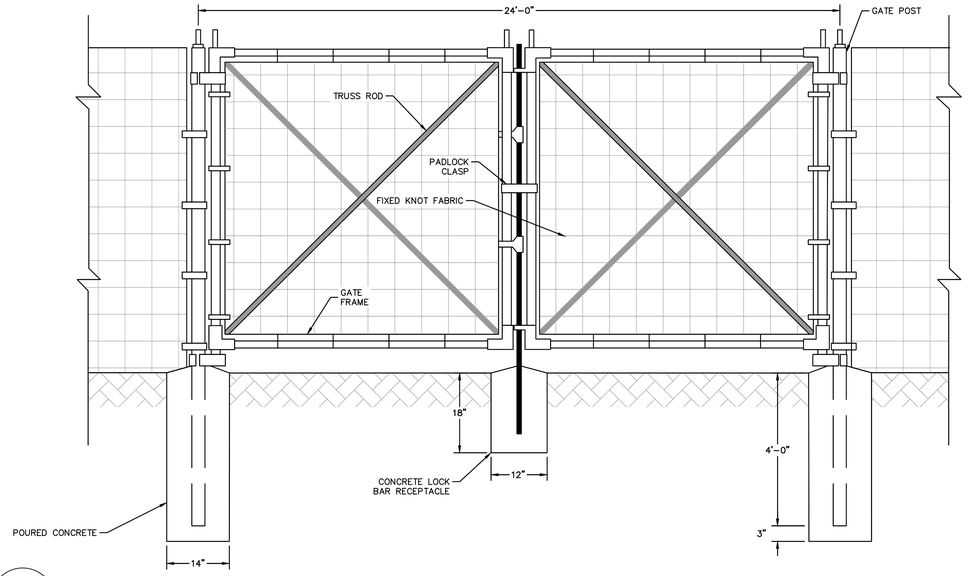
SHEET NUMBER
C-400

Drawing name: K:\WDH_Energy\118938000 - ECA US Hwy 14 Woodstock IL\CAD\Drawings\CUP Plan Set\C-400 LANDSCAPE PLAN.dwg C-400 LANDSCAPE PLAN Aug 08, 2025 9:41am by Ethan.Horst

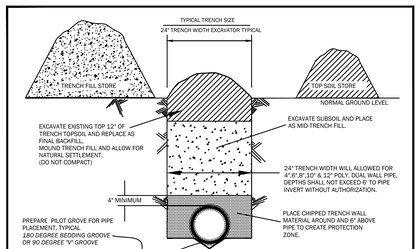
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



1 C-500 FIXED KNOT FARM FENCE – STEEL POSTS



2 C-500 DOUBLE SWING GATE DETAIL (FIXED KNOT FENCE)

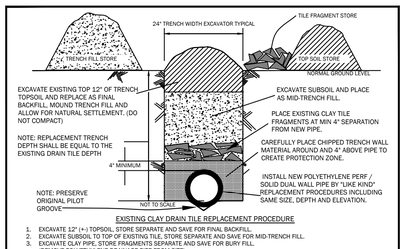


NEW POLYETHYLENE DUAL WALL PERFORATED DRAIN TILE INSTALLATION FOR AGRICULTURAL LAND USE.

1. EXCAVATE 12" (+-) TOPSOIL, STORE SEPARATE AND SAVE FOR FINAL BACKFILL.
2. EXCAVATE SUBSOIL TO PROPOSED GRADE LINE, STORE SEPARATE AND SAVE FOR MID-TRENCH FILL.
3. HAND EXCAVATE DRAIN TILE PILOT GROVE TO PROPOSED LASER GRADE, AND INSTALL NEW POLYETHYLENE PERFORATED DUAL WALL DRAIN TILE (ADS N-12 OR EQUAL) *(FILTER PIPE WRAP OPTIONAL FOR SANDY SOILS)*
4. PLACE "HAND SPADED CHIPPED" CLEAN TOP SOIL MATERIAL AROUND NEW PIPE TO CREATE BEDDING SUPPORT AND PIPE PROTECTION.
5. BACKFILL EXCAVATION TRENCH WITH MID TRENCH MATERIAL AND REPLACE SAVED TOP SOIL AS FINAL BACKFILL.

TYPICAL SINGLE WALL POLYETHYLENE PERFORATED DRAIN TILE INSTALLATION BY AGRICULTURAL DRAINAGE TRENCHERS IN ACCORDANCE WITH A.S.T.M. F-405, F-449 OR F-667, A.A.S.H.T.O. M-252, OR M-294. INSTALLATION PROCEDURE MAY BE ALLOWED ONLY BY DIRECTION OF THE RESIDENT PROJECT ENGINEER.

EX. CLAY DRAIN TILE REPLACEMENT SECTION
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING AGRICULTURAL DRAIN TILE REPLACEMENT SECTION
TYPICAL FIELD INSTALLATION FOR POLYETHYLENE DUAL WALL DRAIN TILE
TYPICAL SECTION NO. 20A



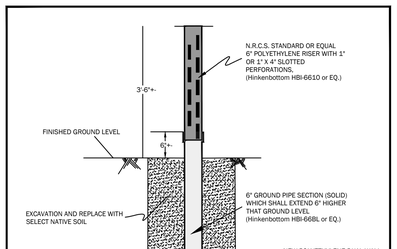
EXISTING CLAY DRAIN TILE REPLACEMENT PROCEDURE

1. EXCAVATE 12" (+-) TOPSOIL, STORE SEPARATE AND SAVE FOR FINAL BACKFILL.
2. EXCAVATE SUBSOIL TO TOP OF EXISTING TILE, STORE SEPARATE AND SAVE FOR MID-TRENCH FILL.
3. EXCAVATE CLAY PIPE, STORE FRAGMENTS SEPARATE AND SAVE FOR BURY FILL. (REMOVE POLYETHYLENE DRAINAGE PIPE FROM SITE)
4. CAREFULLY PRESERVE ORIGINAL DRAIN TILE PILOT GROOVE. CLEAN WITH HAND SHOVEL AND INSTALL NEW POLYETHYLENE SOLID or PERFORATED DUAL WALL PIPE WITH IN EXISTING PILOT GROVE POSITION. (ADS N-12 OR EQUAL) (A.S.T.M. F-405 OR F-477, A.A.S.H.T.O.M.-252 OR M-294). INSTALLATION BY "LIKE KIND PROCEDURES INCLUDING SAME PIPE SIZE AT SAME LOCATION AND ELEVATION.
(PIPE SIZE MY BE MODIFIED IF APPROVED BY RESIDENT ENGINEER OR PROJECT OWNER)
5. PLACE "SPADE CHIPPED" CLEAN TRENCH WALL MATERIAL AROUND AND 4" ABOVE NEW PIPE TO CREATE BEDDING SUPPORT AND PIPE PROTECTION.
6. BACKFILL EXCAVATION TRENCH IN FOLLOWING SEQUENCE.
   (1) EXISTING CLAY FRAGMENTS OVER BEDDING SOIL,.
   (2)- BACKFILL TRENCH SUBSOIL
   (3)- BACKFILL FINAL LIFT WITH SAVED TOPSOIL.
7. FINAL RECORD MAPPING SHALL BE PREPARED INCLUDING GPS SURVEY LOCATION.

SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

NOTE: ALL EXISTING UNKNOWN LATERAL DRAIN TILES ENCOUNTERED DURING "LIKE KIND" REPLACEMENT PROCESS SHALL BE REPLACED BY SAME PROCEDURE

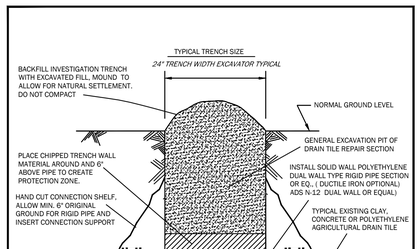
EXISTING DRAIN TILE REPLACEMENT SECTION
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING AGRICULTURAL DRAIN TILE "LIKE KIND" REPLACEMENT
TRENCH REPLACEMENT INCLUDING EXISTING LATERALS BY MID SIZE EXCAVATOR
TYPICAL SECTION NO. 20A/1



NOTE: THESE TYPICAL STANDARD SPECIFICATION MAY BE FIELD ADJUSTED WITH THE PROPER AUTHORIZATION FROM THE PROJECT MANAGER, ALL CHANGES SHALL BE RECORDED ON FINAL AS-BUILT DRAWINGS.

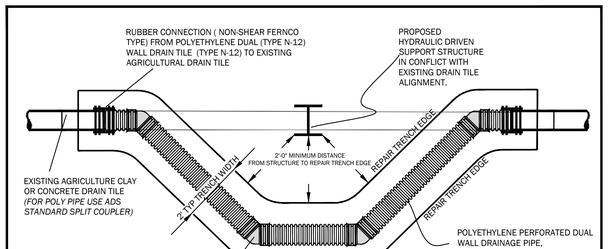
SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

6" OBSERVATION RISER STRUCTURE
FOR COMMERCIAL SOLAR ENERGY PROJECTS
6" ONLINE RISER FOR IDENTIFICATION AND OBSERVATION
INSTALLED AT PARCEL INGRESS AND EGRESS LOCATIONS
TYPICAL SECTION NO. 27D



SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

EXISTING CLAY DRAIN TILE REPAIR SECTION
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING AGRICULTURAL DRAIN TILE REPLACEMENT SECTION
TYPICAL REPAIR SECTION FOR DRAIN TILE "BLOWOUT" OR FAILURE
DRAINAGE TYPICAL SECTION NO. 62A



PLAN VIEW

SAFETY NOTE: OPEN CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AND AS MAY BE NECESSARY TO PROTECT LIFE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

EXISTING DRAIN TILE BYPASS REROUTE
FOR COMMERCIAL SOLAR ENERGY PROJECTS
EXISTING DRAIN TILE REROUTE WHICH IS IN CONFLICT WITH FIXED IMPROVEMENT
INSTALLED AS MODIFICATION TO ORIGINAL ROUTE
TYPICAL SECTION NO. 360D

EXISTING CLAY DRAIN TILE REPAIR SECTION DETAILS (FOR REFERENCE ONLY – CONSULT WITH DRAIN TILE CONSULTANT FOR FINAL DETAILS)
N.T.S.

3 C-500

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD SUITE 200
DEERFIELD, IL 60015 (847) 260-7804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE: 184.002012-0006 062.045338

KHA PROJECT 118938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NBW
CHECKED BY AMC

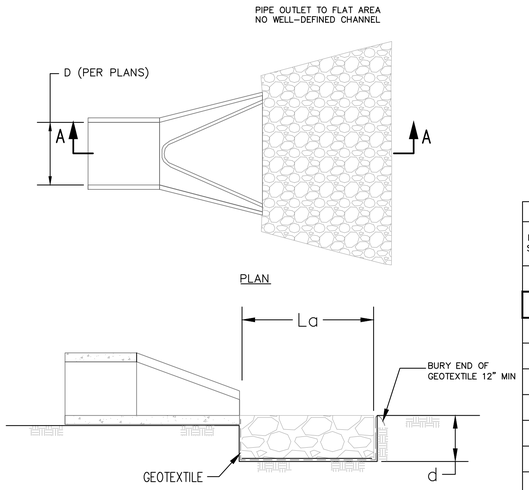
CONSTRUCTION DETAILS

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-500

Drawing name: K:\WSH_Energy\118938000 – ECA, US Hwy 14 Woodstock _\CAD\Panelsets\CUP Plan Set\C-500 CONSTRUCTION DETAILS.dwg C-500 CONSTRUCTION DETAILS Aug 08, 2025 9:41am by: Ethan.Horst

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES:

1. THE ROCK RIPRAP SHALL MEET IDOT REQUIREMENTS FOR GRADATION NO. RR-3 & RR-4 , QUALITY DESIGNATION "A".

2. GEOTEXTILE (NON-WOVEN) MINIMUM CRITERIA:
   - 2.1. WEIGHT OF GEOTEXTILE (OZ/SQ.YD.) 6
   - 2.2. TENSILE STRENGTH (LB) ASTM D 4632 180
   - 2.3. ELONGATION AT FAILURE (%) ASTM D 4632 ≥ 50
   - 2.4. PUNCTURE (LB) ASTM D 4833 80
   - 2.5. ULTRAVIOLET LIGHT (% RESIDUAL TENSILE STRENGTH) ASTM D 4355 MIN 70
   - 2.6. APPARENT OPENING SIZE (AOS) ASTM D 4751 MAX 40 SIEVE
   - 2.7. PERMITTIVITY SEC^{-1} ASTM D 4491 MIN 0.70

3. ANY GEOTEXTILE SPLICES SHALL OVERLAP A MINIMUM OF 18 INCHES, WITH UPSTREAM OR UPSLOPE GEOTEXTILE OVERLAPPING THE ABUTTING DOWNSLOPE GEOTEXTILE.

4. REFER TO PLAN FOR RIPRAP DIMENSIONS.

5. ROCK THICKNESS D SHALL BE AT LEAST 1.5 TIMES THE RIPRAP D_{100} SIZE.

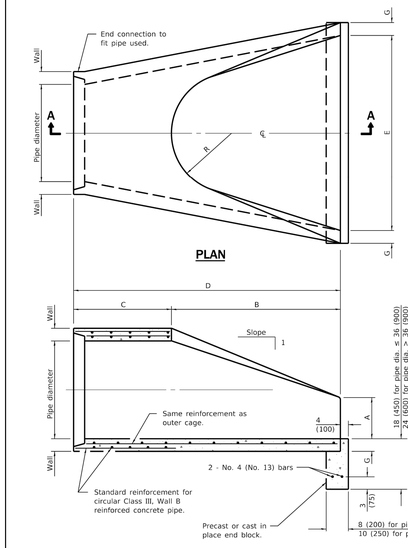
6. APRON LENGTH L_a AND ROCK RIPRAP HAS BEEN SIZED ACCORDING TO ILLINOIS URBAN MANUAL ROCK OUTLET PROTECTION STANDARD 910 BASED CALCULATED VELOCITY FOR THIS PROJECT SITE. WIDTH HAS BEEN ADJUSTED TO FIT EXISTING DITCH. PLEASE SEE TABLE 1 FOR DETAILS.

RIPRAP DIMENSION TABLE

INLET PIPE SIZE d (IN)	LENGTH OF APRON La (FT)	MEDIAN RIPRAP SIZE C (IN)	WIDTH OF APRON U/S FACE W1 (FT)	WIDTH OF APRON D/S FACE W2 (FT)	DEPTH OF RIPRAP d (IN)	AREA OF RIPRAP (SY)	VOLUME OF RIPRAP (CY)
12	10	6	3.00	13.00	15	8.89	3.7
15	10	6	3.75	13.75	15	9.72	4.1
18	15	9	4.50	19.50	20	20.00	11.1
21	15	9	5.25	20.25	20	21.25	11.8
24	18	9	6.00	24.00	20	30.00	16.7
27	18	9	6.75	24.75	20	31.50	17.5
30	20	9	7.50	27.50	20	38.89	21.6
36	24	12	9.00	33.00	28	56.00	43.6
42	27	12	10.50	37.50	30	72.00	60.0
48	27	15	12.00	39.00	32	76.50	68.0
54	27	15	13.50	40.50	32	81.00	72.0
60	36	15	15.00	51.00	32	132.00	118.0
72	44	18	18.00	62.00	32	195.56	174.0

1 C-501 RIP RAP OUTLET PROTECTION

SCALE: NTS



PIPE DIA.	APPROX. QTY. lbs. (kg)	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12 (300)	530 (240)	2 (51)	4 (102)	24 (610)	4'-0⅜" (1.241 m)	6'-0⅜" (1.851 m)	24 (610)	2 (51)	9 (229)	1:2.4
15 (375)	740 (335)	2¼ (57)	6 (152)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	30 (762)	2¼ (57)	11 (280)	1:2.4
18 (450)	990 (450)	2½ (64)	9 (229)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	36 (914)	2½ (64)	12 (305)	1:2.4
21 (525)	1280 (580)	2¾ (70)	9 (229)	35 (889)	38 (965)	6'-1" (1.854 m)	3'-6" (1.067 m)	2¾ (70)	13 (330)	1:2.4
24 (600)	1520 (690)	3 (76)	9½ (241)	3'-7½" (1.105 m)	30 (762)	6'-1½" (1.867 m)	4'-0" (1.219 m)	3 (76)	14 (356)	1:2.5
27 (675)	1930 (875)	3¼ (83)	10½ (267)	4'-0" (1.219 m)	25⅝ (648)	6'-1½" (1.867 m)	4'-6" (1.372 m)	3¼ (83)	14½ (368)	1:2.4
30 (750)	2190 (995)	3½ (89)	12 (305)	4'-6" (1.375 m)	19¾ (502)	6'-1⅜" (1.874 m)	5'-0" (1.524 m)	3½ (89)	15 (381)	1:2.5
33 (825)	3200 (1450)	3¾ (95)	13⅜ (343)	4'-10½" (1.486 m)	39¼ (997)	8'-1⅜" (2.483 m)	5'-6" (1.676 m)	3¾ (95)	17½ (445)	1:2.5
36 (900)	4100 (1860)	4 (102)	15 (381)	5'-3" (1.6 m)	34⅞ (883)	8'-1⅜" (2.483 m)	6'-0" (1.829 m)	4 (102)	20 (508)	1:2.5
42 (1050)	5380 (2440)	4½ (114)	21 (533)	5'-3" (1.6 m)	35 (889)	8'-2" (2.489 m)	6'-6" (1.981 m)	4½ (114)	22 (559)	1:2.5
48 (1200)	6550 (2970)	5 (127)	24 (610)	6'-0" (1.829 m)	26 (660)	8'-2" (2.489 m)	7'-0" (2.134 m)	5 (127)	22 (559)	1:2.5
54 (1350)	8240 (3740)	5½ (140)	27 (686)	5'-5" (1.651 m)	35 (889)	8'-4" (2.54 m)	7'-6" (2.286 m)	5½ (140)	24 (610)	1:2.0
60 (1500)	8730 (3960)	6 (152)	35 (889)	5'-0" (1.524 m)	39 (991)	8'-3" (2.515 m)	8'-0" (2.438 m)	5 (127)	*	1:1.9
66 (1650)	10710 (4860)	6½ (165)	30 (762)	6'-0" (1.829 m)	27 (686)	8'-3" (2.515 m)	8'-6" (2.591 m)	5½ (140)	*	1:1.7
72 (1800)	12520 (5680)	7 (178)	36 (914)	6'-6" (1.981 m)	21 (533)	8'-3" (2.514 m)	9'-0" (2.743 m)	6 (152	*	1:1.8
78 (1950)	14770 (6700)	7½ (191)	36 (914)	7'-6" (2.286 m)	21 (533)	9'-3" (2.819 m)	9'-6" (2.896 m)	6½ (165)	*	1:1.8
84 (2100)	18160 (8240)	8 (203)	36 (914)	7'-6½" (2.299 m)	21 (533)	9'-3½" (2.832 m)	10'-0" (3.048 m)	6½ (165)	*	1:1.6

* Radius as furnished by manufacturer

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2011
ENGINEER OF BRIDGES AND STRUCTURES

APPROVED January 1, 2011
ENGINEER OF DESIGN AND ENVIRONMENT

BC400 1-1-97

DATE	REVISIONS
1-1-11	Clarified ref. to pipe dia.
	on Section A-A. Changed
	'inner' to 'outer' cage ref.
1-1-09	Switched units to
	English (metric).

PRECAST REINFORCED CONCRETE FLARED END SECTION

STANDARD 542301-03

2 C-501 PRECAST REINFORCED CONCRETE FLARED END SECTION

SCALE: NTS

Drawing name: K:\WSH_Energy\118938000 - ECA US Hwy 14 Woodstock IL\CAD\Plansheets\Civil Plan Set\C-500 CONSTRUCTION DETAILS\C-501 CONSTRUCTION DETAILS.dwg Aug 08, 2025 9:41am by: Ethan.Horst

No.	REVISIONS	DATE

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
203 CRESCENT STREET #106
WALTHAM, MA 02453
(508) 460-2068

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
570 LAKE COOK ROAD, SUITE 200
DEERFIELD, IL 60015 (847) 267-2804
WWW.KIMLEY-HORN.COM
IDFPR DESIGN FIRM LICENSE: 184.002012-0006 062.045338

KHA PROJECT 118938000
DATE 7/25/2025
SCALE AS SHOWN
DESIGNED BY AMC
DRAWN BY NBW
CHECKED BY AMC

CONSTRUCTION DETAILS

WOODSTOCK COMMUNITY ENERGY INITIATIVE LLC
MCHENRY COUNTY, IL

SHEET NUMBER
C-501

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft.

VICINITY MAP
NO SCALE

SCHEDULE B EXCEPTIONS

10. EASEMENT BETWEEN ANNA KUCERA AND ILLINOIS BELL TELEPHONE COMPANY, DATED AUGUST 14, 1961 AND RECORDED FEBRUARY 27, 1962 IN BOOK 683 PAGE 488 INSTRUMENT 92315, IN MCHENRY COUNTY, ILLINOIS.

11. ANY AND ALL MATTERS DISCLOSED ON THE MAP ENTITLED "PLAT OF DEDICATION OF PUBLIC HIGHWAY" DATED MAY 3, 1960 AND RECORDED JUNE 14, 1960 IN BOOK 1 PAGE 283, INSTRUMENT 370779 IN MCHENRY COUNTY, ILLINOIS.

12. EASEMENT AND RIGHT OF WAY AGREEMENT BETWEEN CHANG FAMILY LLC, AN ILLINOIS LIMITED LIABILITY COMPANY; AND ANR PIPELINE COMPANY, A DELAWARE CORPORATION, DATED OCTOBER 2, 2022 AND RECORDED FEBRUARY 15, 2024 IN INSTRUMENT 2024R0003553, IN MCHENRY COUNTY, ILLINOIS.

NOTES

REGARDING SCHEDULE B:

SCHEDULE B EXCEPTIONS 1, 2, 3, 4, 5, 6, 7, 8, 9 AND 13 ARE NOT SURVEY RELATED AND THEREFORE NOT SHOWN.

10. ILLINOIS BELL TELEPHONE COMPANY EASEMENT, RECORDED FEBRUARY 27, 1962 IN BOOK 683 PAGE 488 INSTRUMENT 92315, IS LOCATED ON THE NORTH SIDE OF U.S. ROUTE 14, NOT ON THE SURVEYED PROPERTY. NOT PLOTTABLE.
11. THE PLAT OF DEDICATION OF PUBLIC HIGHWAY, RECORDED JUNE 14, 1960 IN BOOK 1 PAGE 283, INSTRUMENT 370779, ALLOWS AN INDUSTRIAL/COMMERCIAL ENTRANCE TO THE SURVEYED PROPERTY FROM U.S. ROUTE 14 AT THE OPENING IN THE MEDIAN. SHOWN HEREON.
12. AN EXCLUSIVE PERPETUAL EASEMENT AND 50 FOOT RIGHT OF WAY FOR ANR PIPELINE COMPANY FACILITIES, RECORDED FEBRUARY 15, 2024 IN INSTRUMENT 2024R0003553, IS LOCATED ALONG THE WEST LINE OF THE SURVEYED PROPERTY. SEE DOCUMENT FOR DETAILS OF COVENANTS. PERMANENT AND TEMPORARY EASEMENTS SHOWN HEREON.

GENERAL NOTES

1. THIS SURVEY IS BASED ON THE LEGAL DESCRIPTION AND EASEMENTS OF RECORD AS IDENTIFIED IN TITLE COMMITMENT NUMBER ECA-204697-C ISSUED BY TOWER TITLE, LLC HAVING AN EFFECTIVE DATE OF FEBRUARY 4, 2025.
2. THE BASIS OF BEARINGS FOR THIS SURVEY IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (2011), ZONE 1201 (ILLINOIS EAST)
3. THIS SITE FALLS WITHIN "OTHER AREAS: ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DEFINED BY THE FLOOD INSURANCE RATE MAP, MAP NUMBER 17111C0178J, HAVING AN EFFECTIVE DATE OF NOVEMBER 16, 2006.
4. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A TOPOGRAPHIC SURVEY OR TOPOGRAPHIC MAP, AND IS BASED ON FIELD WORK PERFORMED ON 4/22/2025.
5. THE SURVEYOR CONTACTED J.U.L.I.E. FOR A DESIGN STAGE REQUEST FOR THIS SITE WHICH WAS ASSIGNED A DIG NUMBER OF A251073092. INQUIRIES WERE SENT OUT TO THE VARIOUS UTILITY COMPANIES REQUESTING MAPS AND/OR ATLASES OF THEIR RESPECTIVE FACILITIES. THE INFORMATION RECEIVED TO DATE IS SHOWN HEREON. ALSO, PRIOR TO FIELD WORK ON THIS SITE, TRI-COUNTY LOCATORS WAS CONTRACTED TO PROVIDE UTILITY LOCATING SERVICES ON SITE AND DALE MERRIMAN REPORTED THAT "THERE WAS NOTHING IN THE AREA TO BE LOCATED. MY TECH WENT OVER WHOLE AREA. NO CONFLICTS".
6. IN ACCORDANCE WITH TABLE A ITEMS 6(A) AND 6(B), A ZONING REPORT WAS NOT PROVIDED TO THE SURVEYOR.
7. ADJOINING OWNER INFORMATION SHOWN HEREON IS FROM AVAILABLE TAX RECORDS.
8. EVIDENCE OF RECENT EARTH MOVING WORK WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK.
9. NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES BASED ON INFORMATION RECEIVED FROM THE CONTROLLING JURISDICTION AT THE TIME OF THE SURVEY. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
10. IN ACCORDANCE WITH TABLE A ITEM 18, NO PLOTTABLE OFFSITE APPURTENANT EASEMENTS WERE DISCLOSED IN DOCUMENTS PROVIDED TO THE SURVEYOR.
11. THERE WERE NO WETLAND DELINEATION MARKERS OBSERVED IN THE PROCESS OF CONDUCTING FIELD WORK.
12. NO ABOVE GROUND EVIDENCE OF CEMETERIES, BURIAL GROUNDS OR GRAVE SITES OBSERVED IN THE PROCESS OF CONDUCTING FIELD WORK.
13. NO EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LAND FILL OBSERVED IN THE PROCESS OF CONDUCTING FIELD WORK.
14. THE PROPERTY HAS DIRECT AND PHYSICAL PEDESTRIAN AND VEHICULAR INGRESS AND EGRESS TO U.S. ROUTE 14, A PUBLIC RIGHT-OF-WAY.
15. THE SURVEYED SITE IS ONE PARCEL THAT CLOSES WITHOUT GAPS, GORES OR OVERLAPS.
16. ALL PARCELS COMPRISING THE SUBJECT PROPERTY ARE CONTIGUOUS WITHOUT GAPS, GORES OR OVERLAPS.
17. THE SURVEYED PROPERTY IS THE SAME AS THAT DESCRIBED IN THE TITLE COMMITMENT

ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
MS = MULTI-STEM TREE

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- AREA OF CONSTRUCTION/GRADING

LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- SPRINKLER CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- WATER VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- COMMUNICATION PEDESTAL
- CABLE TELEVISION PEDESTAL
- AIR CONDITION UNIT
- CONTROL BOX
- WETLAND FLAG
- CAMERA
- CHARGING STATION
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN
- GAS MAIN
- ELECTRIC LINE
- OVERHEAD WIRES
- COMMUNICATION LINE
- FIBER OPTIC LINE
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE METAL
- PVC FENCE
- GUARDRAIL
- OVERHEAD TRAFFIC ARM
- TELLER CHUTE
- DRAIN
- SPEAKER
- BUILDING LIGHT

LEGAL DESCRIPTION

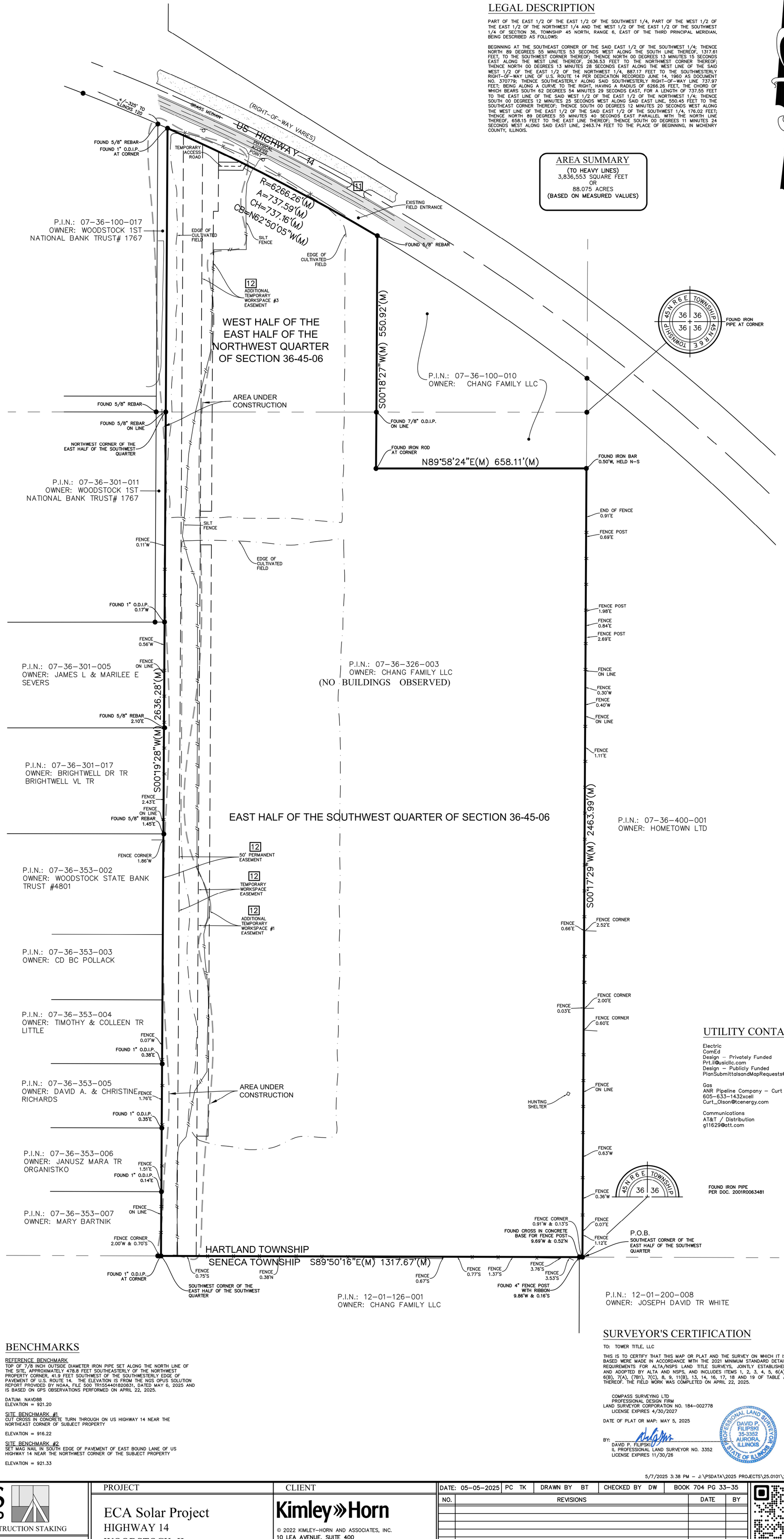
PART OF THE EAST 1/2 OF THE EAST 1/2 OF THE SOUTHWEST 1/4, PART OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 AND THE WEST 1/2 OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 36, TOWNSHIP 45 NORTH, RANGE 6, EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE SAID EAST 1/2 OF THE SOUTHWEST 1/4; THENCE NORTH 89 DEGREES 55 MINUTES 53 SECONDS WEST ALONG THE SOUTH LINE THEREOF, 1317.61 FEET, TO THE SOUTHWEST CORNER THEREOF; THENCE NORTH 00 DEGREES 13 MINUTES 15 SECONDS EAST ALONG THE WEST LINE THEREOF, 2636.53 FEET TO THE NORTHWEST CORNER THEREOF; THENCE NORTH 00 DEGREES 13 MINUTES 28 SECONDS EAST ALONG THE WEST LINE OF THE SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4, 887.17 FEET TO THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF U.S. ROUTE 14 PER DEDICATION RECORDED JUNE 14, 1960 AS DOCUMENT NO. 370779; THENCE SOUTHEASTERLY ALONG SAID SOUTHWESTERLY RIGHT-OF-WAY LINE 737.97 FEET; BEING ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 6266.26 FEET, THE CHORD OF WHICH BEARS SOUTH 62 DEGREES 54 MINUTES 29 SECONDS EAST, FOR A LENGTH OF 737.55 FEET TO THE EAST LINE OF THE SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4; THENCE SOUTH 00 DEGREES 12 MINUTES 25 SECONDS WEST ALONG SAID EAST LINE, 550.45 FEET TO THE SOUTHEAST CORNER THEREOF; THENCE SOUTH 00 DEGREES 12 MINUTES 20 SECONDS WEST ALONG THE WEST LINE OF THE EAST 1/2 OF THE SAID EAST 1/2 OF THE SOUTHWEST 1/4, 176.02 FEET; THENCE NORTH 89 DEGREES 55 MINUTES 40 SECONDS EAST PARALLEL WITH THE NORTH LINE THEREOF, 658.15 FEET TO THE EAST LINE THEREOF; THENCE SOUTH 00 DEGREES 11 MINUTES 24 SECONDS WEST ALONG SAID EAST LINE, 2463.74 FEET TO THE PLACE OF BEGINNING, IN MCHENRY COUNTY, ILLINOIS.

AREA SUMMARY

(TO HEAVY LINES)
3,836,553 SQUARE FEET
OR
88.075 ACRES
(BASED ON MEASURED VALUES)

GRID NORTH



BENCHMARKS

REFERENCE BENCHMARK
TOP OF 7/8 INCH OUTSIDE DIAMETER IRON PIPE SET ALONG THE NORTH LINE OF THE SITE, APPROXIMATELY 478.8 FEET SOUTHEASTERLY OF THE NORTHWEST PROPERTY CORNER, 41.9 FEET SOUTHWEST OF THE SOUTHWESTERLY EDGE OF PAVEMENT OF U.S. ROUTE 14. THE ELEVATION IS FROM THE NGS OPUS SOLUTION REPORT PROVIDED BY NOAA, FILE 500 TR1554401820831, DATED MAY 6, 2025 AND IS BASED ON GPS OBSERVATIONS PERFORMED ON APRIL 22, 2025.

DATUM: NAVD88
ELEVATION = 921.20

SITE BENCHMARK #1
CUT CROSS IN CONCRETE TURN THROUGH ON US HIGHWAY 14 NEAR THE NORTHEAST CORNER OF SUBJECT PROPERTY

ELEVATION = 916.22

SITE BENCHMARK #2
SET MAG NAIL IN SOUTH EDGE OF PAVEMENT OF EAST BOUND LANE OF US HIGHWAY 14 NEAR THE NORTHWEST CORNER OF THE SUBJECT PROPERTY

ELEVATION = 921.33

UTILITY CONTACTS

Electric
ComEd
Design – Privately Funded
Prt.il@usicllc.com
Design – Publicly Funded
PlanSubmittalsandMapRequests@exeloncorp.com

Gas
ANR Pipeline Company – Curt Olson
605-633-1432xcell
Curt_Olson@tcenergy.com

Communications
AT&T / Distribution
g11629@att.com

SURVEYOR'S CERTIFICATION

TO: TOWER TITLE, LLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(A), 6(B), 7(A), (7B1), 7(C), 8, 9, 11(B), 13, 14, 16, 17, 18 AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON APRIL 22, 2025.

COMPASS SURVEYING LTD
PROFESSIONAL DESIGN FIRM
LAND SURVEYOR CORPORATION NO. 184-002778
LICENSE EXPIRES 4/30/2027

DATE OF PLAT OR MAP: MAY 5, 2025

BY: _____
DAVID P. FILIPSKI
IL PROFESSIONAL LAND SURVEYOR NO. 3352
LICENSE EXPIRES 11/30/26

PROFESSIONAL LAND SURVEYOR — DAVID P. FILIPSKI — 35-3352 — AURORA, ILLINOIS — STATE OF ILLINOIS

5/7/2025 3:38 PM – J:\PSDATA\2025 PROJECTS\25.0101\25.0101 LTS TOPO.DWG

PROJ. NO.: 25.0101
1 OF 3
SCALE: 1" = 150'

COMPASS SURVEYING LTD
ALTA SURVEYS ● TOPOGRAPHY ● CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

PROJECT
ECA Solar Project
HIGHWAY 14
WOODSTOCK, IL

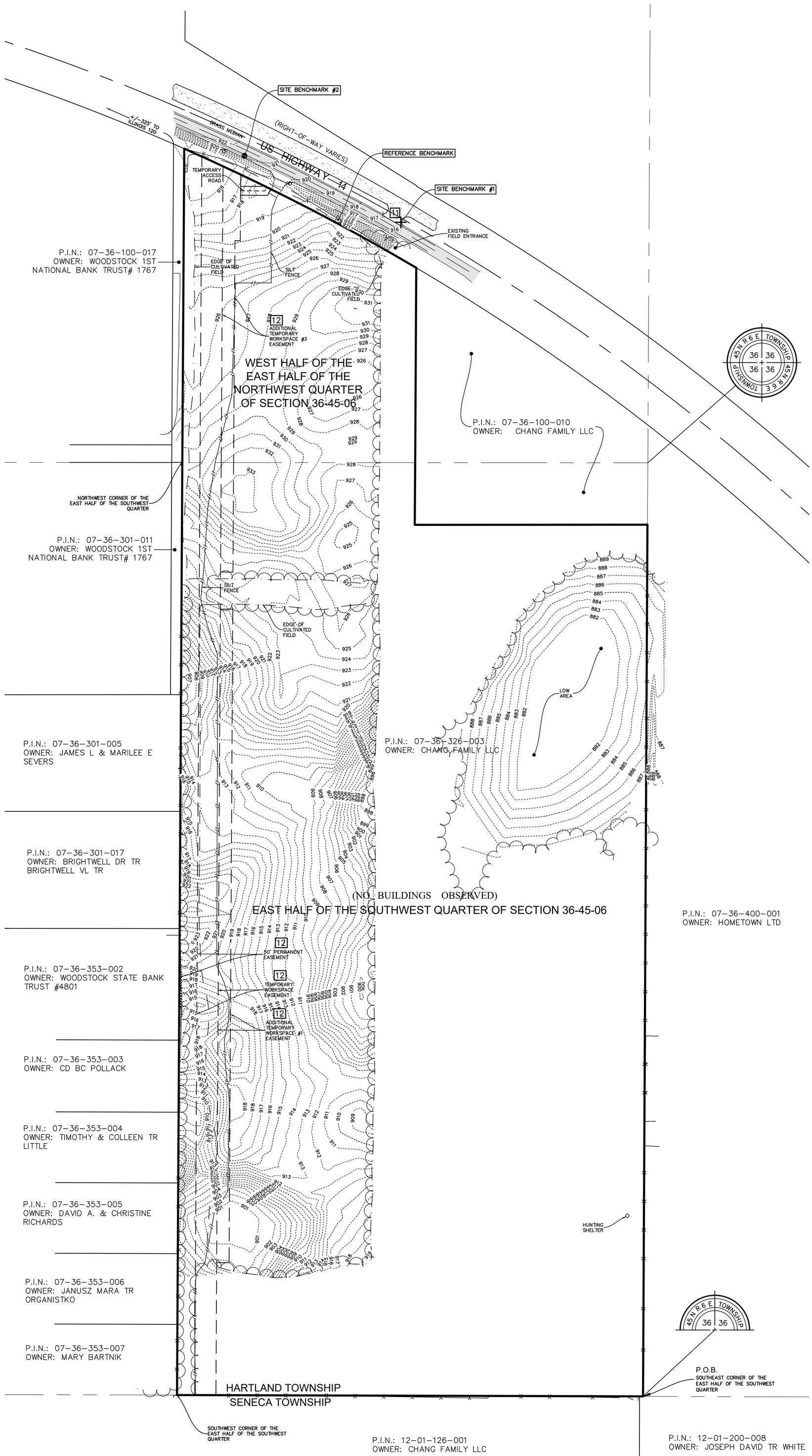
CLIENT
Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
WWW.KIMLEY-HORN.COM

DATE: 05-05-2025 | PC TK | DRAWN BY BT | CHECKED BY DW | BOOK 704 PG 33-35

NO.	REVISIONS	DATE	BY

ALTA/NSPS LAND TITLE
AND TOPOGRAPHIC SURVEY

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft.



ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
HDPE = HIGH-DENSITY POLYETHYLENE PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
BC = BACK OF CURB
BDC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALL
TP = TOP OF PIPE
IE = INVERT ELEVATION
PL = PROPERTY LINE
DS = DOWN SPOUT
S.F. = SQUARE FEET
SL = SHORE LINE
TSF = TRANSFORMER
B = PAVERS
MS = MULTI-STEM TREE

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR
- FLOOD ZONE DIVISION LINE

LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- SPRINKLER CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- WATER VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- COMMUNICATION PEDESTAL
- CABLE TELEVISION PEDESTAL
- AIR CONDITION UNIT
- CONTROL BOX
- WETLAND FLAG
- CAMERA
- CHARGING STATION

- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN
- GAS MAIN
- ELECTRIC LINE
- OVERHEAD WIRES
- COMMUNICATION LINE
- FIBER OPTIC LINE
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE METAL
- PVC FENCE
- GUARDRAIL
- OVERHEAD TRAFFIC ARM
- TELLER CHUTE
- DRAIN
- SPEAKER
- BUILDING LIGHT

5/7/2025 3:38 PM – J:\PSDATA\2025 PROJECTS\25.0101\25.0101 LTS TOPO.DWG

PROJ. NO.: 25.0101
2 OF 3
SCALE: 1" = 150'

COMPASS SURVEYING LTD
ALTA SURVEYS ● TOPOGRAPHY ● CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

PROJECT
ECA Solar Project
HIGHWAY 14
WOODSTOCK, IL

CLIENT
Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
WWW.KIMLEY-HORN.COM

DATE: 05-05-2025 | PC TK | DRAWN BY BT | CHECKED BY DW | BOOK 704 PG 33-35

NO.	REVISIONS	DATE	BY

ALTA/NSPS LAND TITLE
AND TOPOGRAPHIC SURVEY

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR
- FLOOD ZONE DIVISION LINE

ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
HDPE = HIGH-DENSITY POLYETHYLENE PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
BC = BACK OF CURB
BDC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALL
TP = TOP OF PIPE
IE = INVERT ELEVATION
PL = PROPERTY LINE
DS = DOWN SPOUT
S.F. = SQUARE FEET
SL = SHORE LINE
TSF = TRANSFORMER
B = PAVERS
MS = MULTI-STEM TREE

LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- SPRINKLER CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- WATER VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- COMMUNICATION PEDESTAL
- CABLE TELEVISION PEDESTAL
- AIR CONDITION UNIT
- CONTROL BOX
- WETLAND FLAG
- CAMERA
- CHARGING STATION
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN
- GAS MAIN
- ELECTRIC LINE
- OVERHEAD WIRES
- COMMUNICATION LINE
- FIBER OPTIC LINE
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE METAL
- PVC FENCE
- GUARDRAIL
- OVERHEAD TRAFFIC ARM
- TELLER CHUTE
- DRAIN
- SPEAKER
- BUILDING LIGHT

US HIGHWAY 14

BENCHMARK #2

BENCHMARK #1

REFERENCE BENCHMARK

TBT-INV. IE=917.65

16" INV. IE=917.60

15" CMP IE=912.39

15" CMP IE=911.81

END OF WIRE FENCE 0.02'W'LY & 0.29'E

GRADING IN THIS AREA COMMENCED AFTER TOPOGRAPHY WAS MEASURED

TEMPORARY ACCESS ROAD

ACCESS DRIVE

FIELD ENTRANCE

SILT FENCE

WIRE FENCE 4.51'NW'LY

APPROXIMATE LIMITS OF TREE LINE

EDGE OF CULTIVATED FIELD

GRAVEL DRIVE 9.9'W

(NO BUILDINGS OBSERVED)

12 ADDITIONAL TEMPORARY WORKSPACE #3 EASEMENT

GRID NORTH

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

NO.	DATE	REVISIONS	DRAWN BY	PC	TK	DATE: 05-05-2025
			BT			

BOOK 704 PG 33-35	CHECKED BY	DW	DATE	BY

CLIENT

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
WWW.KIMLEY-HORN.COM

PROJECT

ECA Solar Project
HIGHWAY 14
WOODSTOCK, IL

COMPASS SURVEYING LTD
ALTA SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, ILLINOIS 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

SCALE: 1" = 30'

3 OF 3

PROJ. NO.: 25.0101

5/7/2025 3:39 PM – J:\PSDATA\2025 PROJECTS\25.0101\25.0101 LTS TOPO.DWG

IN THE MATTER OF THE APPLICATION OF	)
WOODSTOCK COMMUNITY ENERGY INITIATIVE, LLC, *APPLICANT*	)
FOR AN AMENDMENT OF THE UNIFIED DEVELOPMENT	) LEGAL NOTICE OF PUBLIC HEARING
ORDINANCE OF McHENRY COUNTY, ILLINOIS FOR A	) Z25-0074
CONDITIONAL USE	)

Notice is hereby given in compliance with the McHenry County Unified Development Ordinance, that a public hearing will be held before the **McHenry County Zoning Board of Appeals,** in connection with this Ordinance, which would result in a ***CONDITIONAL USE*** for the following described real estate:

PART OF THE EAST ½ OF THE EAST ½ OF THE SOUTHWEST ¼, PART OF THE WEST ½ OF THE EAST ½ OF THE NORTHWEST ¼ AND THE WEST ½ OF THE EAST ½ OF THE SOUTHWEST ¼ OF SECTION 36, TOWNSHIP 45 NORTH, RANGE 6, EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF THE SAID EAST ½ OF THE SOUTHWEST ¼; THENCE NORTH 89 DEGREES 55 MINUTES 53 SECONDS WEST ALONG THE SOUTH LINE THEREOF; 1317.61 FEET, TO THE SOUTHWEST CORNER THEREOF; THENCE NORTH 00 DEGREES 13 MINUTES 15 SECONDS EAST ALONG THE WEST LINE THEREOF, 2636.53 FEET TO THE NORTHWEST CORNER THEREOF; THENCE NORTH 00 DEGREES 13 MINUTES 28 SECONDS EAST ALONG THE WEST LINE OF THE SAID WEST ½ OF THE EAST ½ OF THE NORTHWEST ¼, 887.17 FEET TO THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF U.S. ROUTE 14 PER DEDICATION RECORDED JUNE 14, 1960 AS DOCUMENT NO. 370779; THENCE SOUTHEASTERLY ALONG SAID SOUTHWESTERLY RIGHT OF WAY LINE 737.97 FEET; BEING ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 6266.26 FEET, THE CHORD OF WHICH BEARS SOUTH 62 DEGREES 54 MINUTES 29 SECONDS EAST, FOR A LENGTH OF 737.55 FEET TO THE EAST LINE OF THE SAID WEST ½ OF THE EAST ½ OF THE NORTHWEST ¼; THENCE SOUTH 00 DEGREES 12 MINUTES 25 SECONDS WEST ALONG SAID EAST LINE, 550.45 FEET TO THE SOUTHEAST CORNER THEREOF; THENCE SOUTH 00 DEGREES 12 MINUTES 20 SECONDS WEST ALONG THE WEST LINE OF THE EAST ½ OF THE SAID EAST ½ OF THE SOUTHWEST ¼, 176.02 FEET; THENCE NORTH 89 DEGREES 55 MINUTES 40 SECONDS EAST PARALLEL WITH THE NORTH LINE THEREOF, 658.15 FEET TO THE EAST LINE THEREOF; THENCE SOUTH 00 DEGREES 11 MINUTES 24 SECONDS WEST ALONG SAID EAST LINE, 2463.74 FEET TO THE PLACE OF BEGINNING, IN MCHENRY COUNTY, ILLINOIS.

PIN 07-36-326-003

The subject property is located ***on the south side of U.S. Highway 14, approximately three hundred fifty (350) feet east of the intersection of U.S. Highway 14 and Washington Street, in Hartland Township, Illinois.***

The subject property is presently zoned ***"A-1" Agriculture District*** and consists of approximately ***88.075 acres*** with ***"B-3" General Business District to the north, "A-1" Agriculture District to the east and south, and "A-1" Agriculture District and "E-1" Estate District to the west.***

The Applicant is requesting **a CONDITIONAL USE** ***of the subject property to allow for a commercial solar energy facility.***

The Applicant, Woodstock Community Energy Initiative, LLC is wholly owned by ECA Solar, LLC (under ECA Illinois HoldCo, LLC.) The officers of Woodstock Community Energy Initiative, LLC are: Todd Fryatt. They can be reached at 203 Crescent Street, #106, Waltham, MA.
The property owner is Chang Family, LLC. The officers of Chang Family, LLC are Jae C. Chang (President), Soon J. Chang (Secretary), Eun J. Chang (Shareholder) and Eun S. Chang (Shareholder). They can be reached at 1782 Millburne Road, Lake Forest, IL.

A hearing on this Petition will be held on the 17th day of September 2025 at 1:30 P.M. in the County Board conference room at the McHenry County Government Center Administration Building 667 Ware Rd, Woodstock, Illinois at which time and place any person desiring to be heard may be present. The McHenry County Government Center Mailing address is 2200 N. Seminary Avenue, Woodstock, Illinois 60098.

DATED THIS 25TH DAY OF AUGUST 2025.

By: Linnea Kooistra, Chair
McHenry County Zoning Board of Appeals
2200 N. Seminary Avenue
Woodstock, IL 60098

Petitions for all Zoning Board of Appeals hearings can be accessed at the following link: www.mchenrycountyil.gov/county-government/new-meeting-portal and choosing the "Agenda" link for the specific meeting date.

Live audio streams of all Zoning Board of Appeals hearings can be accessed at the following link: www.mchenrycountyil.gov/county-government/new-meeting-portal and choosing the "Video" link for the specific meeting date.

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: Chang Family LLC

Name	Title (officers, directors, shareholders/stockholders)	Address (address, city, state, zip)	Percent of ownership interest
JAE C. CHANG	PRESIDENT	1782 MILLBURN RD LAKE FOREST IL 60045	25%
SOON J. CHANG	SECRETARY	〃 〃	25%
EUN JI CHANG	SHAREHOLDER	〃 〃	25%
EUN S. CHANG (LUKE)	SHAREHOLDER	〃 〃	25%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: ECA Solar LLC

Name	**Title (officers, directors, shareholders/stockholders)**	**Address (address, city, state, zip)**	**Percent of ownership interest**
Todd Fryatt	Manager	203 Crescent St #106 Waltham, MA 02453	100%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: ECA Illinois HoldCo LLC

Name	Title (officers, directors, shareholders/stockholders)	Address (address, city, state, zip)	Percent of ownership interest
ECA Solar LLC	Owner	203 Crescent St #106 Waltham, MA 02453	100%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

MCHENRY COUNTY PLANNING AND DEVELOPMENT
2200 N. SEMINARY AVENUE, WOODSTOCK, IL 60098
815-334-4560

Office Use Only

Petition #/Permit # _____

CORPORATE DISCLOSURE

Applications shall be brought in the name of the record title owner or the owner(s) of the beneficial interest through authorized agents. If application is made by a corporation or partnership for any zoning map amendment, variation, or conditional use permit, the application and notice shall identify the names and addresses of all officers and directors and all shareholders/stockholders owning an interest in excess of seven and one-half percent (7.5%)

If an owner, officer, director, shareholder/stockholder is another legal entity and not an individual, we require the same information (name, title, address) for that entity.

Name of Entity: Woodstock Community Energy Initiative LLC

Name	**Title (officers, directors, shareholders/stockholders)**	**Address (address, city, state, zip)**	**Percent of ownership interest**
ECA Illinois HoldCo LLC	Owner	203 Crescent St #106 Waltham, MA 02453	100%

Please attach additional information, if needed.

*Extracted from Title 16: Unified Development Ordinance §16.16.020 §§ A1-4 (2014).

Kimley»Horn

MEMORANDUM

To:	Ben Dykema *ECA Solar*
From:	Sarah Skowronski *Kimley-Horn and Associates, Inc.*
Date:	October 28, 2025
Subject:	Woodstock Community Energy Initiative, LLC Due Diligence Tree Survey & Technical Memorandum

INTRODUCTION

ECA Solar has engaged Kimley-Horn and Associates, Inc. (Kimley-Horn) to perform a comprehensive tree survey per the request of the Zoning Board of Appeals (ZBA) Board Members for projects located in unincorporated McHenry County. While there are no dedicated tree preservation ordinances enforced in unincorporated McHenry County, several documents produced by the local conservation authorities have been reviewed and determined how they shall apply in this project. The property (Parcel ID Number: 07-36-326-003) is located in McHenry County, Illinois, south of US Route 14. The property is currently zoned A1, Agricultural, and is a vacant agricultural field.

On September 30 & October 2, 2025, a certified arborist conducted an inventory of all viable trees on the subject property with a Diameter at Breast Height (DBH) of 3 inches or greater, documenting species, size, and general health condition. The arborist's assessment provides the necessary technical basis for site planning and regulatory decisions. Enclosed you will find a summary table of the tree survey (**Attachment A**) and georeferenced digital files in a .kmz format.

SUMMARY OF FINDINGS:

Tree Survey Procedures

Sarah Skowronski, ISA Certified Arborist, Cert-ID IL-9854A, conducted a tree survey on September 30 & October 2, 2025, for the purposes of identifying viable trees. The survey protocol included inventory of all trees with a DBH of 3 inches or greater, excluding invasive species such as *Rhamnus cathartica* (Buckthorn) and *Lonicera mackii/tartarica* (Honeysuckle spp).

For multistem trees, the total DBH was calculated by measuring the DBH of the dominant stem and adding 50% of the DBH of each additional stem to this value. Tree condition was measured as good, fair, poor, or dead, based upon a visual evaluation of the tree individual's health at the time of the survey.

In alignment with McHenry County's conservation priorities as outlined in the McHenry County Conservation District's Natural Areas Protection Guide and the Oaks of McHenry County addendum, special attention was given to oak and hickory species during the survey.

The tree survey area was limited to the land of development (LOD) and proposed tree clearing areas. A summary of trees identified as meeting survey requirements and their associated species and condition is included below in **Table 1.** A total of 512 trees were identified with DBH values greater than or equal to 3 inches. **Figure 1** summarizes the location of all trees surveyed within the limits of the tree clearing activity and **Attachment A** lists all surveyed trees with their associated attributes.

Of the identified trees, ***9 trees are considered of note to McHenry County***. The criteria to define this are those of oak and hickory species of fair or good quality with DBHs greater than 12 inches. This criterion was established due to the significant contributions of the older individuals of this species subset to the McHenry County ecosystem.

Other notable species are also called out in **Table 1**. These include oak and hickory individuals with DBH values less than 12 inches and other higher quality species. Trees considered as an invasive species, such as *Rhamnus cathartica* (Buckthorn) and *Lonicera maackii* (Honeysuckle), are not included.

Table 1: Tree Survey Summary

Trees Meeting Protocol Requirements	Total Number of Trees Surveyed & Proposed for Removal	Total Number of Trees in Good or Fair Condition	Total Number of Trees in Poor or Dead Condition
Oaks & Hickories with DBH Values 12 Inches or Greater	12	9	3
Notable Species - (Oaks & Hickories with DBH Values Less Than 12 Inches, Elms)	32	19	13
Other Species Surveyed	468	318	150
Total	**512**	**346**	**166**

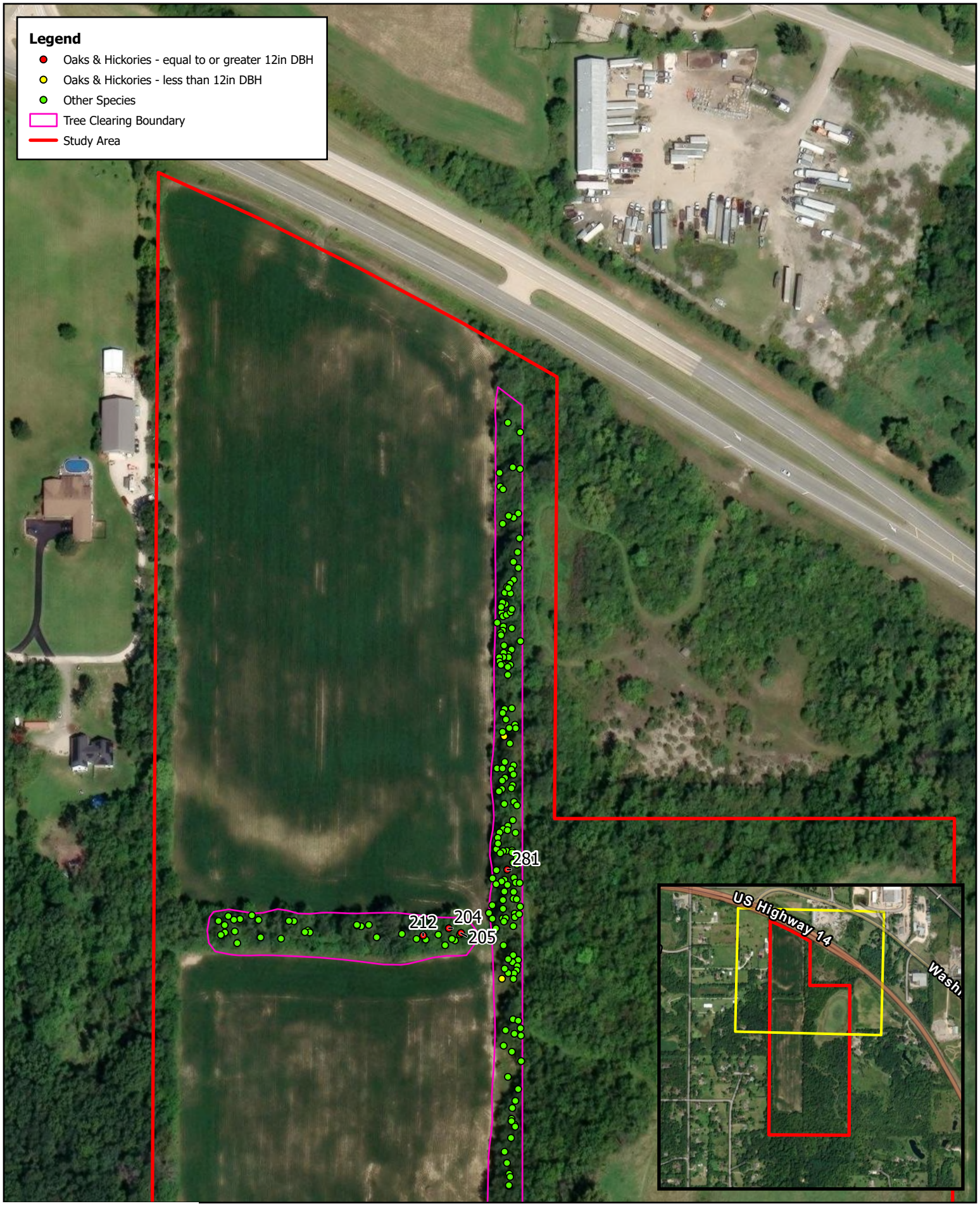
Tree Preservation & Removal Plan Requirements

At this time, based on publicly available information, McHenry County does not have an active tree preservation ordinance or removal requirement. This tree survey was conducted for due diligence purposes on request of the Zoning Board of Appeals (ZBA).

While formal approval is not mandated, McHenry County encourages property owners to retain mature trees, with an emphasis on native species such as oak and hickory species. When tree removal is necessary it is recommended to document the tree's condition and to consider replacement or mitigation. In cases where tree replacement is feasible, McHenry County guidelines suggest planting native, non-invasive tree species with a minimum caliper of two inches.

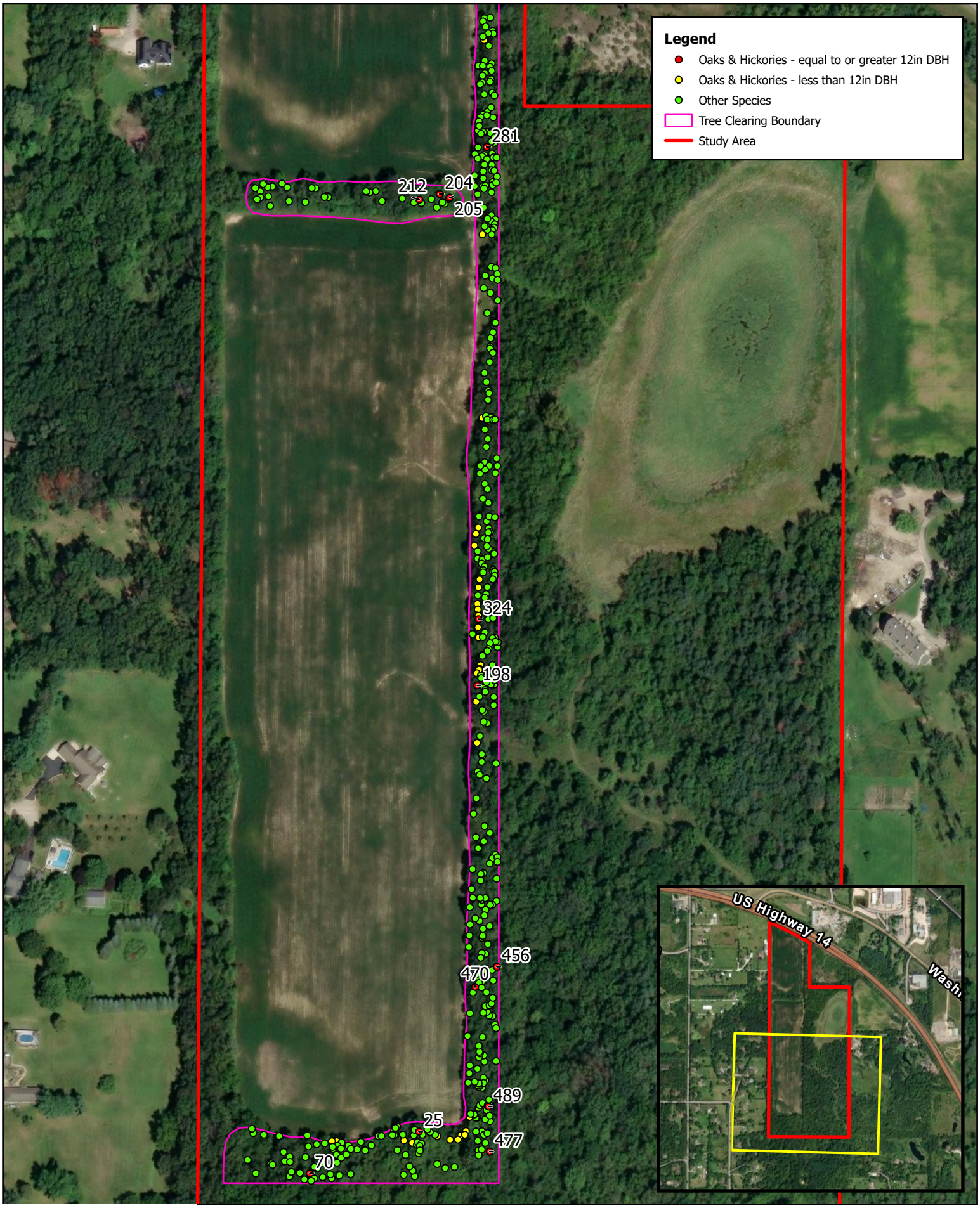
CONCLUSIONS AND RECOMMENDATIONS:

Based on the information reviewed, Kimley-Horn has identified 12 trees that are oak or hickory species that contribute to a larger ecosystem identified as of importance to McHenry County. Of these 12 trees, 9 were of good or fair condition. A .kmz file of all 512 surveyed trees and all associated information has been included. Recommendations for replacements can be provided upon request.



Kimley»Horn

Figure 1.1 Tree Clearing Map
Hartland Township, McHenry County
ECA Solar



Kimley»Horn

Figure 1.2 Tree Clearing Map
Hartland Township, McHenry County
ECA Solar

ATTACHMENT A

Tree Survey Table

OBJECTID	SPECIES-COMMON	DBH	CONDITION
1	ASH-GREEN	14	POOR
2	CHERRY-BLACK	6	POOR
3	ASH-GREEN	8	POOR
4	ASH-GREEN	16	POOR
5	WALNUT-BLACK	9	POOR
6	CHERRY-BLACK	22	POOR
7	CHERRY-BLACK	19	POOR
8	CHERRY-BLACK	14	POOR
9	CHERRY-BLACK	12	POOR
10	CHERRY-BLACK	21	POOR
11	CHERRY-BLACK	16	POOR
12	CHERRY-BLACK	18	POOR
13	WALNUT-BLACK	3	FAIR
14	WALNUT-BLACK	5	POOR
15	WALNUT-BLACK	3	POOR
16	WALNUT-BLACK	6	POOR
17	WALNUT-BLACK	7	POOR
18	CHERRY-BLACK	6	FAIR
19	CHERRY-BLACK	7	POOR
20	CHERRY-BLACK	10	FAIR
21	WALNUT-BLACK	9	FAIR
22	OAK-RED	7	FAIR
23	CHERRY-BLACK	10	FAIR
24	CHERRY-BLACK	14	FAIR
25	OAK-RED	13	POOR
26	MAPLE-BOXELDER	9	FAIR
27	CHERRY-BLACK	10	POOR
28	OAK-WHITE	6	POOR
29	CHERRY-BLACK	18	FAIR
30	MULBERRY-RED	8	FAIR
31	MULBERRY-RED	5	FAIR
32	MULBERRY-RED	3	FAIR
33	MULBERRY-RED	10	FAIR
34	CHERRY-BLACK	6	FAIR
35	CHERRY-BLACK	8	POOR
36	WALNUT-BLACK	7	FAIR
37	WALNUT-BLACK	12	FAIR
38	WALNUT-BLACK	13	POOR
39	CHERRY-BLACK	7	POOR
40	WALNUT-BLACK	8	POOR
41	CHERRY-BLACK	14	FAIR
42	CHERRY-BLACK	8	FAIR
43	CHERRY-BLACK	4	FAIR
44	CHERRY-BLACK	4	FAIR
45	CHERRY-BLACK	8	FAIR
46	OAK-WHITE	4	FAIR
47	OAK-RED	5	FAIR
48	CHERRY-BLACK	7	FAIR
49	CHERRY-BLACK	17	POOR
50	WALNUT-BLACK	11	POOR
51	WALNUT-BLACK	12	POOR
52	WALNUT-BLACK	9	POOR
53	WALNUT-BLACK	6	FAIR
54	WALNUT-BLACK	6	FAIR
55	WALNUT-BLACK	4	FAIR
56	WALNUT-BLACK	6	FAIR
57	CHERRY-BLACK	16	FAIR
58	CHERRY-BLACK	16	POOR
59	WALNUT-BLACK	14	FAIR
60	WALNUT-BLACK	4	FAIR
61	WALNUT-BLACK	7	FAIR

62	WALNUT-BLACK	5	FAIR
63	WALNUT-BLACK	6	FAIR
64	CHERRY-BLACK	5	FAIR
65	CHERRY-BLACK	11	FAIR
66	CHERRY-BLACK	3	POOR
67	WALNUT-BLACK	10	FAIR
68	CHERRY-BLACK	5	FAIR
69	ASH-WHITE	8	FAIR
70	OAK-RED	14	FAIR
71	CHERRY-BLACK	12	FAIR
72	CHERRY-BLACK	24	FAIR
73	WALNUT-BLACK	10	FAIR
74	WALNUT-BLACK	10	FAIR
75	WALNUT-BLACK	9	FAIR
76	OAK-RED	5	FAIR
77	MULBERRY-RED	12	FAIR
78	OAK-RED	3	POOR
79	OAK-RED	9	FAIR
80	OAK-RED	8	FAIR
81	CHERRY-BLACK	34	POOR
82	OAK-RED	10	POOR
83	OAK-RED	8	FAIR
84	OAK-RED	11	FAIR
85	CHERRY-BLACK	3	FAIR
86	CHERRY-BLACK	8	POOR
87	MAPLE-BOXELDER	3	FAIR
88	CHERRY-BLACK	9	POOR
89	MULBERRY-SPP	15	FAIR
90	CHERRY-BLACK	12	FAIR
91	CHERRY-BLACK	7	POOR
92	CHERRY-BLACK	6	FAIR
93	ELM-AMERICAN	6	FAIR
94	SPRUCE-SPP	3	FAIR
95	CHERRY-BLACK	5	FAIR
96	CHERRY-BLACK	5	FAIR
97	CHERRY-BLACK	4	FAIR
98	CHERRY-BLACK	3	FAIR
99	MAPLE-BOXELDER	14	FAIR
100	CHERRY-BLACK	14	DEAD
101	CHERRY-BLACK	16	FAIR
102	CHERRY-BLACK	18	FAIR
103	CHERRY-BLACK	15	FAIR
104	WALNUT-BLACK	6	POOR
105	CHERRY-BLACK	6	FAIR
106	CHERRY-BLACK	4	FAIR
107	CHERRY-BLACK	6	FAIR
108	CHERRY-BLACK	3	FAIR
109	CHERRY-BLACK	3	FAIR
110	CHERRY-BLACK	3	FAIR
111	CHERRY-BLACK	6	POOR
112	MULBERRY-RED	6	FAIR
113	MULBERRY-RED	3	FAIR
114	MULBERRY-RED	4	FAIR
115	CHERRY-BLACK	28	POOR
116	CHERRY-BLACK	6	POOR
117	CHERRY-BLACK	8	POOR
118	CHERRY-BLACK	32	DEAD
119	CHERRY-BLACK	3	FAIR
120	CHERRY-BLACK	5	FAIR
121	CHERRY-BLACK	6	FAIR
122	CHERRY-BLACK	3	FAIR
123	MULBERRY-RED	5	FAIR

124	CHERRY-BLACK	10	FAIR
125	MULBERRY-RED	4	FAIR
126	CHERRY-BLACK	4	FAIR
127	CHERRY-BLACK	9	FAIR
128	CHERRY-BLACK	4	FAIR
129	CHERRY-BLACK	3	POOR
130	CHERRY-BLACK	6	POOR
131	MULBERRY-RED	10	FAIR
132	CEDAR-RED	3	FAIR
133	CHERRY-BLACK	6	FAIR
134	MAPLE-BOXELDER	4	FAIR
135	MULBERRY-RED	4	FAIR
136	CHERRY-BLACK	32	POOR
137	CHERRY-BLACK	4	FAIR
138	CHERRY-BLACK	5	FAIR
139	CHERRY-BLACK	6	FAIR
140	CHERRY-BLACK	5	FAIR
141	MULBERRY-RED	3	FAIR
142	CHERRY-BLACK	5	FAIR
143	CHERRY-BLACK	3	FAIR
144	CHERRY-BLACK	18	FAIR
145	MULBERRY-RED	3	FAIR
146	CHERRY-BLACK	10	DEAD
147	HICKORY-SPP	10	FAIR
148	CHERRY-BLACK	3	FAIR
149	WALNUT-BLACK	5	FAIR
150	CHERRY-BLACK	20	FAIR
151	CHERRY-BLACK	4	FAIR
152	CHERRY-BLACK	3	FAIR
153	MAPLE-BOXELDER	14	FAIR
154	MULBERRY-RED	3	FAIR
155	CHERRY-BLACK	10	POOR
156	CHERRY-BLACK	8	DEAD
157	CHERRY-BLACK	24	FAIR
158	CHERRY-BLACK	8	FAIR
159	CHERRY-BLACK	10	POOR
160	CHERRY-BLACK	3	FAIR
161	CHERRY-BLACK	3	FAIR
162	CHERRY-BLACK	5	FAIR
163	WALNUT-BLACK	6	FAIR
164	WALNUT-BLACK	5	POOR
165	WALNUT-BLACK	7	POOR
166	WALNUT-BLACK	7	FAIR
167	WALNUT-BLACK	6	POOR
168	WALNUT-BLACK	8	POOR
169	MULBERRY-SPP	7	FAIR
170	WALNUT-BLACK	8	POOR
171	WALNUT-BLACK	4	POOR
172	WALNUT-BLACK	9	FAIR
173	CHERRY-BLACK	15	POOR
174	OAK-RED	10	FAIR
175	CHERRY-BLACK	14	POOR
176	CHERRY-BLACK	17	POOR
177	MULBERRY-SPP	5	POOR
178	CHERRY-BLACK	26	FAIR
179	CHERRY-BLACK	22	FAIR
180	CHERRY-BLACK	24	FAIR
181	CHERRY-BLACK	10	FAIR
182	CHERRY-BLACK	11	FAIR
183	WALNUT-BLACK	13	POOR
184	CHERRY-BLACK	13	FAIR
185	WALNUT-BLACK	5	POOR

186	CHERRY-BLACK	12	FAIR
187	CHERRY-BLACK	7	FAIR
188	MULBERRY-SPP	8	FAIR
189	CHERRY-BLACK	42	FAIR
190	CHERRY-BLACK	25	FAIR
191	CHERRY-BLACK	15	FAIR
192	CHERRY-BLACK	9	FAIR
193	UNKNOWN	22	FAIR
194	CHERRY-BLACK	10	FAIR
195	CHERRY-BLACK	20	FAIR
196	OAK-RED	10	FAIR
197	ASH-WHITE	7	POOR
198	OAK-RED	12	FAIR
199	ASPEN-QUAKING	14	FAIR
200	ASPEN-QUAKING	13	FAIR
201	ASPEN-QUAKING	13	FAIR
202	ASPEN-QUAKING	14	FAIR
203	OAK-RED	8	FAIR
204	OAK-RED	12	FAIR
205	OAK-RED	17	FAIR
206	CHERRY-BLACK	16	FAIR
207	CHERRY-BLACK	6	POOR
208	CHERRY-BLACK	4	POOR
209	CHERRY-BLACK	5	POOR
210	CHERRY-BLACK	16	POOR
211	CHERRY-BLACK	13	FAIR
212	OAK-RED	14	POOR
213	CHERRY-BLACK	23	FAIR
214	CHERRY-BLACK	39	FAIR
215	CHERRY-BLACK	23	FAIR
216	ELM-AMERICAN	8	FAIR
217	MULBERRY-SPP	12	FAIR
218	MULBERRY-SPP	5	POOR
219	MULBERRY-SPP	20	FAIR
220	MAPLE-BOXELDER	14	POOR
221	CHERRY-BLACK	21	FAIR
222	CHERRY-BLACK	14	FAIR
223	WALNUT-BLACK	14	FAIR
224	MULBERRY-SPP	6	POOR
225	CHERRY-BLACK	22	POOR
226	MULBERRY-SPP	6	POOR
227	WALNUT-BLACK	12	FAIR
228	CHERRY-BLACK	21	POOR
229	MULBERRY-SPP	9	POOR
230	CHERRY-BLACK	17	POOR
231	MULBERRY-SPP	8	FAIR
232	WALNUT-BLACK	7	POOR
233	MULBERRY-SPP	12	POOR
234	CHERRY-BLACK	12	POOR
235	CHERRY-BLACK	8	POOR
236	CHERRY-BLACK	16	POOR
237	MULBERRY-SPP	6	POOR
238	WALNUT-BLACK	6	POOR
239	WALNUT-BLACK	8	POOR
240	CEDAR-RED	5	FAIR
241	CHERRY-BLACK	3	FAIR
242	CHERRY-BLACK	11	POOR
243	CHERRY-BLACK	14	POOR
244	CHERRY-BLACK	11	POOR
245	ELM-AMERICAN	12	FAIR
246	MULBERRY-RED	3	FAIR
247	CHERRY-BLACK	11	DEAD

248	MULBERRY-RED	3	FAIR
249	CHERRY-BLACK	12	POOR
250	CHERRY-BLACK	12	POOR
251	CHERRY-BLACK	6	FAIR
252	CHERRY-BLACK	6	FAIR
253	CHERRY-BLACK	24	FAIR
254	PINE-SPP	11	DEAD
255	CHERRY-BLACK	16	FAIR
256	CHERRY-BLACK	14	POOR
257	CHERRY-BLACK	12	POOR
258	MULBERRY-RED	3	FAIR
259	OAK-RED	6	FAIR
260	CHERRY-BLACK	21	POOR
261	MAPLE-BOXELDER	19	FAIR
262	CHERRY-BLACK	28	GOOD
263	CHERRY-BLACK	28	FAIR
264	CHERRY-BLACK	21	GOOD
265	CHERRY-BLACK	12	GOOD
266	MAPLE-BOXELDER	5	FAIR
267	CHERRY-BLACK	4	FAIR
268	CHERRY-BLACK	18	FAIR
269	MULBERRY-RED	4	FAIR
270	MAPLE-BOXELDER	6	FAIR
271	CHERRY-BLACK	15	GOOD
272	CHERRY-BLACK	13	POOR
273	CHERRY-BLACK	19	POOR
274	CHERRY-BLACK	17	POOR
275	CHERRY-BLACK	16	FAIR
276	CHERRY-BLACK	13	POOR
277	CHERRY-BLACK	4	FAIR
278	CHERRY-BLACK	13	POOR
279	CHERRY-BLACK	12	FAIR
280	CHERRY-BLACK	18	POOR
281	OAK-WHITE	18	FAIR
282	CHERRY-BLACK	16	POOR
283	CHERRY-BLACK	7	FAIR
284	MAPLE-BOXELDER	14	FAIR
285	CHERRY-BLACK	32	GOOD
286	CHERRY-BLACK	12	POOR
287	MAPLE-BOXELDER	19	POOR
288	CHERRY-BLACK	19	POOR
289	ELM-AMERICAN	16	FAIR
290	WALNUT-BLACK	10	FAIR
291	MAPLE-BOXELDER	3	FAIR
292	MAPLE-BOXELDER	6	FAIR
293	OAK-RED	7	FAIR
294	ELM-AMERICAN	8	FAIR
295	OAK-RED	7	FAIR
296	OAK-RED	7	FAIR
297	MULBERRY-SPP	10	FAIR
298	MULBERRY-SPP	9	FAIR
299	CHERRY-BLACK	10	FAIR
300	MAPLE-BOXELDER	26	FAIR
301	CHERRY-BLACK	15	FAIR
302	CHERRY-BLACK	20	POOR
303	CHERRY-BLACK	24	FAIR
304	MULBERRY-RED	7	FAIR
305	CHERRY-BLACK	28	FAIR
306	MULBERRY-RED	6	FAIR
307	MULBERRY-SPP	10	POOR
308	CHERRY-BLACK	12	DEAD
309	CHERRY-BLACK	12	FAIR

310	MAPLE-BOXELDER	6	FAIR
311	CHERRY-BLACK	3	FAIR
312	OAK-RED	11	POOR
313	OAK-RED	6	POOR
314	MULBERRY-SPP	8	POOR
315	CHERRY-BLACK	8	FAIR
316	OAK-RED	8	POOR
317	CHERRY-BLACK	4	FAIR
318	OAK-RED	5	POOR
319	CHERRY-BLACK	5	POOR
320	OAK-RED	10	POOR
321	CHERRY-BLACK	10	FAIR
322	OAK-RED	5	POOR
323	CHERRY-BLACK	14	FAIR
324	OAK-RED	12	FAIR
325	CHERRY-BLACK	6	POOR
326	OAK-RED	7	FAIR
327	CHERRY-BLACK	23	FAIR
328	CHERRY-BLACK	14	FAIR
329	WALNUT-BLACK	9	POOR
330	OAK-RED	4	POOR
331	CHERRY-BLACK	9	FAIR
332	OAK-RED	8	POOR
333	OAK-RED	11	FAIR
334	OAK-RED	4	POOR
335	CHERRY-BLACK	18	FAIR
336	CHERRY-BLACK	30	GOOD
337	MULBERRY-RED	3	FAIR
338	CHERRY-BLACK	6	FAIR
339	WALNUT-BLACK	4	FAIR
340	CHERRY-BLACK	26	FAIR
341	CHERRY-BLACK	12	POOR
342	CHERRY-BLACK	19	FAIR
343	CHERRY-BLACK	29	GOOD
344	MAPLE-BOXELDER	6	FAIR
345	UNKNOWN	12	DEAD
346	CHERRY-BLACK	7	FAIR
347	CHERRY-BLACK	11	FAIR
348	MULBERRY-RED	3	FAIR
349	CHERRY-BLACK	9	FAIR
350	CHERRY-BLACK	29	GOOD
351	CHERRY-BLACK	10	FAIR
352	CHERRY-BLACK	10	FAIR
353	CHERRY-BLACK	25	FAIR
354	CHERRY-BLACK	8	POOR
355	MULBERRY-RED	4	FAIR
356	CHERRY-BLACK	7	FAIR
357	CHERRY-BLACK	4	FAIR
358	CHERRY-BLACK	7	FAIR
359	CHERRY-BLACK	12	FAIR
360	CHERRY-BLACK	15	FAIR
361	OAK-RED	6	FAIR
362	CHERRY-BLACK	27	FAIR
363	CHERRY-BLACK	13	FAIR
364	CHERRY-BLACK	13	POOR
365	CHERRY-BLACK	6	POOR
366	CHERRY-BLACK	12	FAIR
367	CHERRY-BLACK	8	FAIR
368	WALNUT-BLACK	6	POOR
369	CHERRY-BLACK	26	FAIR
370	CHERRY-BLACK	11	FAIR
371	CHERRY-BLACK	3	FAIR

372	CHERRY-BLACK	9	FAIR
373	CHERRY-BLACK	25	GOOD
374	UNKNOWN	9	DEAD
375	CHERRY-BLACK	17	GOOD
376	MULBERRY-SPP	8	FAIR
377	CHERRY-BLACK	14	GOOD
378	CHERRY-BLACK	15	FAIR
379	CHERRY-BLACK	14	GOOD
380	CHERRY-BLACK	17	POOR
381	CHERRY-BLACK	13	POOR
382	CHERRY-BLACK	10	POOR
383	CHERRY-BLACK	9	FAIR
384	CHERRY-BLACK	6	FAIR
385	CHERRY-BLACK	10	POOR
386	CHERRY-BLACK	30	FAIR
387	CHERRY-BLACK	10	FAIR
388	CHERRY-BLACK	23	POOR
389	CHERRY-BLACK	14	FAIR
390	CHERRY-BLACK	10	POOR
391	CHERRY-BLACK	23	POOR
392	MAPLE-BOXELDER	5	POOR
393	CHERRY-BLACK	15	GOOD
394	CHERRY-BLACK	21	GOOD
395	CHERRY-BLACK	14	FAIR
396	CHERRY-BLACK	19	GOOD
397	CHERRY-BLACK	16	DEAD
398	CHERRY-BLACK	19	GOOD
399	CHERRY-BLACK	32	GOOD
400	CHERRY-BLACK	10	FAIR
401	CHERRY-BLACK	12	POOR
402	CHERRY-BLACK	11	GOOD
403	CHERRY-BLACK	10	FAIR
404	CHERRY-BLACK	13	POOR
405	CHERRY-BLACK	11	FAIR
406	CHERRY-BLACK	11	FAIR
407	CHERRY-BLACK	27	GOOD
408	CHERRY-BLACK	11	POOR
409	CHERRY-BLACK	15	FAIR
410	WALNUT-BLACK	13	FAIR
411	CHERRY-BLACK	12	GOOD
412	CHERRY-BLACK	14	POOR
413	CHERRY-BLACK	26	FAIR
414	CHERRY-BLACK	13	FAIR
415	CHERRY-BLACK	21	FAIR
416	MULBERRY-SPP	8	FAIR
417	CHERRY-BLACK	22	FAIR
418	CHERRY-BLACK	8	FAIR
419	CHERRY-BLACK	14	GOOD
420	CHERRY-BLACK	18	FAIR
421	CHERRY-BLACK	11	FAIR
422	CHERRY-BLACK	9	FAIR
423	CHERRY-BLACK	17	FAIR
424	CHERRY-BLACK	8	DEAD
425	CHERRY-BLACK	8	FAIR
426	CHERRY-BLACK	12	FAIR
427	CHERRY-BLACK	7	POOR
428	CHERRY-BLACK	9	POOR
429	CHERRY-BLACK	41	GOOD
430	CHERRY-BLACK	23	FAIR
431	CHERRY-BLACK	12	GOOD
432	CHERRY-BLACK	26	GOOD
433	CHERRY-BLACK	14	FAIR

434	CHERRY-BLACK	20	FAIR
435	CHERRY-BLACK	8	FAIR
436	CHERRY-BLACK	20	FAIR
437	CHERRY-BLACK	15	FAIR
438	CHERRY-BLACK	18	POOR
439	CHERRY-BLACK	11	FAIR
440	CHERRY-BLACK	21	FAIR
441	CHERRY-BLACK	13	FAIR
442	CHERRY-BLACK	18	FAIR
443	CHERRY-BLACK	13	FAIR
444	CHERRY-BLACK	16	POOR
445	CHERRY-BLACK	13	POOR
446	CHERRY-BLACK	10	FAIR
447	CHERRY-BLACK	9	FAIR
448	CHERRY-BLACK	12	FAIR
449	CHERRY-BLACK	25	GOOD
450	CHERRY-BLACK	14	FAIR
451	MAPLE-BOXELDER	10	POOR
452	CHERRY-BLACK	19	FAIR
453	MAPLE-BOXELDER	22	POOR
454	CHERRY-BLACK	20	GOOD
455	CHERRY-BLACK	28	FAIR
456	OAK-RED	33	GOOD
457	CHERRY-BLACK	14	POOR
458	CHERRY-BLACK	22	FAIR
459	CHERRY-BLACK	17	FAIR
460	CHERRY-BLACK	18	POOR
461	WALNUT-BLACK	10	POOR
462	CHERRY-BLACK	23	POOR
463	CHERRY-BLACK	14	POOR
464	CHERRY-BLACK	24	POOR
465	CHERRY-BLACK	11	DEAD
466	CHERRY-BLACK	16	POOR
467	CHERRY-BLACK	26	GOOD
468	MULBERRY-SPP	9	FAIR
469	ELM-SPP	7	POOR
470	OAK-RED	14	FAIR
471	CHERRY-BLACK	12	FAIR
472	CHERRY-BLACK	9	FAIR
473	CHERRY-BLACK	12	FAIR
474	CHERRY-BLACK	7	FAIR
475	CHERRY-BLACK	21	FAIR
476	CHERRY-BLACK	11	FAIR
477	OAK-RED	26	FAIR
478	CHERRY-BLACK	12	GOOD
479	CHERRY-BLACK	33	GOOD
480	CHERRY-BLACK	20	GOOD
481	CHERRY-BLACK	12	DEAD
482	WALNUT-BLACK	10	FAIR
483	OAK-RED	3	POOR
484	MULBERRY-SPP	4	POOR
485	CHERRY-BLACK	23	FAIR
486	CHERRY-BLACK	12	POOR
487	CHERRY-BLACK	15	GOOD
488	CHERRY-BLACK	12	FAIR
489	OAK-RED	12	POOR
490	CHERRY-BLACK	5	POOR
491	CHERRY-BLACK	13	FAIR
492	CHERRY-BLACK	20	FAIR
493	CHERRY-BLACK	16	FAIR
494	CHERRY-BLACK	14	GOOD
495	UNKNOWN	18	DEAD

496	CHERRY-BLACK	9	POOR
497	CHERRY-BLACK	12	GOOD
498	CHERRY-BLACK	14	FAIR
499	CHERRY-BLACK	15	FAIR
500	CHERRY-BLACK	15	FAIR
501	CHERRY-BLACK	30	FAIR
502	WALNUT-BLACK	6	FAIR
503	CHERRY-BLACK	18	FAIR
504	CHERRY-BLACK	14	FAIR
505	CHERRY-BLACK	13	FAIR
506	CHERRY-BLACK	13	FAIR
507	CHERRY-BLACK	7	FAIR
508	CHERRY-BLACK	10	FAIR
509	CHERRY-BLACK	5	POOR
510	CHERRY-BLACK	9	FAIR
511	CHERRY-BLACK	11	FAIR
512	MULBERRY-SPP	11	FAIR