March 14, 2024

Mark VanKerkhoff
Director
Kane County Development Department
Zoning Division, Kane County Government Center
719 S. Batavia Avenue
Geneva, IL 60134

Re: Special Use Permit Application - Lorang Solar
Proposed 5.00-MW(AC) Commercial Solar Energy Facility

Applicant: Lorang Solar, LLC
Project Location: Lorang Road, Kane County, IL

Dear Mr. VanKerkhoff, Members of the Zoning Board, and County Board:

On behalf of Lorang Solar, LLC., please find enclosed and below is our:

- Project narrative and with project details
- Special Use Permit Application:
    - Attachment A: Special Use Permit Application
    - Attachment B: Special Use Permit Site Plan Set
    - Attachment C: ALTA/NSPS Survey
    - Attachment D: Property Aerial Photo
    - Attachment E: Applicant Information
    - Attachment F: Property Legal Description
    - Attachment G: Copy of Trust Disclosure
    - Attachment H: Executed AIMA Agreement
    - Attachment I: Manufacturer Specifications
    - Attachment J: Decommissioning Plan
    - Attachment K: NRI Application/Correspondence
    - Attachment L: USFWS Results
    - Attachment M: IDNR SHPO Review and Sign Off Letter
    - Attachment N: Proof of Compliance with Noise Regulations
- Application Fee (sent under separate cover)

Project Narrative:

Lorang Solar, LLC is requesting approval of a Special Use Permit to allow for development and operation of a 5.00 (AC) ground-mounted distributed generation commercial solar energy facility on the approximately 42.6-acre subject property (PIN: 11-31-100-009). Lorang Solar, LLC is requesting for SUP approval to be valid for 2 years from the date of issuance. The arrays would be installed over existing farmland and enclosed with a fenced area for safety and security measures.

Nexamp Background:

In 2007, U.S. Army veterans Will Thompson and Dan Leary realized a vision for making a range of renewable energy options more affordable and accessible to homeowners and businesses throughout the Commonwealth of Massachusetts. The pair launched NexGen Energy Solutions, a turnkey provider of renewable energy and carbon solutions, in their hometown of North Andover, Massachusetts. NexGen became Nexamp later in 2007.

During the early years, Nexamp delivered a variety of energy systems for residential, commercial, municipal and agricultural customers. Energy solutions offered included solar PV, solar thermal, micro-wind, geothermal heating and cooling, and a wide array of energy efficiency services. In 2011, the company began shifting its focus fully toward commercial and industrial solar facilities, working with businesses and municipalities that wanted to offset their traditional utility energy power using on-site renewable solar generation.

2015 marked Nexamp's first Community Solar project and the beginning of a new chapter for the company. Leveraging its integrated approach of developing, building, owning and operating solar plants, Nexamp turned its focus to community solar, and alongside that the mission of making the benefits of solar power available to everyone—homeowners, renters, non-profits, small businesses, farms and more. Nexamp was named NECEC Clean Energy Company of the Year in 2015 and a Solar Power World Top 3 Commercial Solar Developer in 2017.

In 2016, Mitsubishi's Diamond Generating Corporation made a significant investment in Nexamp, and in 2018 the group made an additional investment that gave it a controlling interest. Nexamp secured an additional round of investment in 2021, this time with Generate Capital, a leading clean energy private equity firm. Serving a rapidly expanding network of individuals, property owners, businesses and communities that benefit from its nationally distributed portfolio of solar assets, Nexamp is a Massachusetts-based, nationally headquartered solar company that is laying the groundwork for a cleaner, more secure and resilient energy future.

Nexamp entered the Illinois market in 2018, and has since become a market leader, with a large share of the currently operating community solar projects in the state.

Project Details:

In your review of this Special Use Permit request, we ask that staff, the Zoning Board, and County Board consider the following:

I. Project components:

- Solar modules (i.e. panels) are mounted on racking that slowly rotate and track the sun; there are approximately 11,256 modules proposed to be installed;
- At full tilt, the height of the solar array will be no more than 20 feet in height;
- The solar modules are treated with anti-reflective coating to minimize glare;
- The racking is mounted to metal piles. Concrete foundations are not anticipated;
- The system will be remotely monitored, meaning there will be little traffic generated;
- Electrical cables will be connected to an existing overhead utility line located along western side of Lorang Road;
- Perimeter security fencing up to 8 ft. in height;
- Location of proposed structures is in compliance with County setback requirements;
- Existing drainage patterns will be maintained throughout the site to the maximum extent possible;
- Limited area of gravel driveway for site access and maintenance;
- The inverter and transformer with be located on a fenced-in concrete equipment pad;
- Disturbed areas will be re-vegetated with a pollinator friendly seed mix;

II. Construction:

- Estimated approximately 20 to 30 jobs will be created during construction;
- Most jobs will be local but some may be brought in if the skill set required is not available;
- Typical jobs created include construction jobs - i.e. equipment operators, electricians, fence installers, laborers and construction managers;

III. Development Schedule:

- Anticipated construction start is Spring 2025, depending on a number of factors;
- Duration of construction is typically +/- 6 months;

IV. Traffic:

- Construction traffic will typically be standard semi-tractor trailers – oversized loads are not anticipated;

- At the start of construction there may be a half dozen deliveries a day and will then taper off to 1 to 2 delivery trucks per day;
- There will be proximately 15 –25 employees at a time during construction;

V. Maintenance:

- There are typically several site visits per year to maintain the system;
- No employees will be permanently located on-site;
- The site will be remotely monitored;
- Typically, Nexamp relies on rainfall to clean the panel surfaces. As such, it is not anticipated chemicals for cleaning the solar panels will be used, stored or disposed of on this site;
- Typically, any snowfall will slide off the panels. Therefore, we do not anticipate any snow removal unless necessary.
- Nexamp anticipates utilizing sheep grazing for vegetative maintenance inside the array.

VI. Compliance with Standards for Special Use (Zoning Ordinance No. 25-4-8-2)

General standards. A special use permit shall be granted only if the planning and zoning board finds the application has demonstrated that the proposed use complies with the following general standards:

(1) ***That the establishment, maintenance or operation of the special use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort or general welfare;***

The proposed project contains equipment that has been tested for toxicity and impacts to public health and safety. The modules proposed for this project do not pose a material risk of toxicity. The entire solar array will be secured with a fence to provide safety and prevent unintended access to the project area. Of all the components, the inverter generates the most noise, which is comparable to household appliances. Additionally, the solar array is setback from nearby properties according to the County ordinance. As such, it is not anticipated to affect the public's comfort or welfare. There will be no lighting, odors, fumes, dust, or vibration generated from the operation of the solar facility.

(2) ***That the special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;***

The proposed project will not be injurious to the use and enjoyment of other property in the immediate vicinity. Once operational, the project is not anticipated to require additional development or construction. For these reasons, the establishment of this special use will not present any adverse impacts to the other neighboring properties.

Although solar facilities are relatively new to Illinois, there is significant research showing solar farms do not materially impact property values of adjacent properties. There are various publicly available studies conducted by consulting firms such as Cohn Reznick conclude that properties adjacent to solar projects have not experienced consistent negative impacts on property values. Further, Nexamp has consulted with a certified general appraiser for other projects in the state, who concluded there is no available market data indicating that solar projects have a negative impact on nearby property values.

(3) That the establishment of the special use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;

Once operational, the proposed special use will not generate traffic or activity aside from a few maintenance trips per year. Given its static and quiet operation, the proposed use will not impede the orderly development of surrounding properties for uses permitted in the district.

(4) That adequate utility, access roads, drainage and/or other necessary facilities have been or are being provided;

Adequate utilities, access drive, drainage, and/or other necessary facilities are available or will not be necessary to serve the proposed use. Generally, the proposed solar development does not require access to utilities such as natural gas, water, or sanitary sewer. The routing of the electrical infrastructure required to connect to the Utility electric system is shown on the enclosed plans. The project will be required to maintain current drainage patterns with design considerations or stormwater management.

(5) Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets and roads;

The proposed access point will be designed and constructed as required by the County Highway and Road District Commissioner to minimize traffic impacts on public streets. During construction, impacts to roads will be minimal as oversize truck loads will be not necessary. During operation, the facility will generate very little traffic as there will only be several scheduled on-site maintenance related visits per year.

(6) That the special use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the County Board pursuant to the recommendations of the Zoning Board of Appeals.

Yes. The proposed special use shall conform to all applicable regulations of the district including Sections 25-4-8-2 and 25-5-4-9 of the Kane County, IL Code of Ordinances, as well as the Kane County 2040 Land Use Plan.

On behalf of Lorang Solar, LLC we thank you in advance for your consideration of our request for approval. We look forward to review of our submittal at the Public Hearing with the Zoning Board of Appeals and County Board. In the interim, please contact us with any questions regarding our submittal or if any additional information is required.

Sincerely,

Matt Kwiatkowski
Business Development Manager
P: 317-760-3190
E: MKwiatkowski@nexamp.com

ATTACHMENT A

Special Use Permit Application

KANE COUNTY DEVELOPMENT DEPARTMENT
Zoning Division, Kane County Government Center
719 S. Batavia Avenue
Geneva, Illinois 60134
Office (630) 444-1236 Fax: (630) 232-3411

Received Date

APPLICATION FOR ZONING MAP AMENDMENT AND/OR SPECIAL USE

Instructions:

To request a map amendment (rezoning) for a property, complete this application and submit it with all required attachments to the Subdivision and Zoning Division.

When the application is complete, we will begin the review process.

The information you provide must be complete and accurate. If you have a question please call the subdivision and zoning division, and we will be happy to assist you.

1. Property Information:	**Parcel Number (s):** 11-31-100-009
	Street Address (or common location if no address is assigned): Lorang Road, Kane County, Illinois (Blackberry Township, Unincorporated Kane County, Illinois)

2. Applicant Information:	**Name** Lorang Solar, LLC c/o Matt Kwiatkowski	**Phone** 317-760-3190
	Address 101 North Wacker Drive, Suite 200 Chicago, IL 60606	**Fax**
		Email Mkwiatkowski@nexamp.com

3. Owner of record information:	**Name** Snamals LLC Timothy P Slamans	**Phone** 630-488-1048
	Address 44W029 Hazelcrest Dr. Sugar Grove, IL 60554	**Fax**
		Email tim@lindoo.net

Zoning and Use Information:

2040 Plan Land Use Designation of the property: Resource Management

Current zoning of the property: Other (Property Class - SU)

Current use of the property: Cropland

Proposed zoning of the property: N/A

Proposed use of the property: Commercial Solar Energy Facility

If the proposed Map Amendment is approved, what improvements or construction is planned? (An accurate site plan may be required)

Construction and operation of a Commercial Solar Energy Facility as outlined in the attached site plans.

Attachment Checklist

- ☑ Plat of Survey prepared by an Illinois Registered Land Surveyor.
- ☑ Legal description
- ☑ Completed Land Use Opinion (Available in pdf form at www.kanedupageswed.org/luo.pdf), as required by state law, mailed to: The Kane Dupage Soil and Water Conservation District, 545 S. Randall Road, St. Charles, IL 60174.
- ☑ Endangered Species Consultation Agency Action Report (available in pdf form at http://dnr.illinois.gov/ecopublic/) to be filed with the Illinois Department of Natural Resources. (* This report may best be accessed with Internet Explorer on some computers, per the State)
- ☑ List of record owners of all property within 250 feet of the subject property
- ☑ Trust Disclosure (If applicable)
- ☑ Findings of Fact Sheet
- ☑ Application fee (make check payable to Kane County Development Department)

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

Tim Sloan 3/14/2024

Record Owner Date

Matthew Walsh VP of Business Development 3/14/24

Applicant or Authorized Agent Date

Findings of Fact Sheet – Map Amendment and/or Special Use

- *The Kane County Zoning Board is required to make findings of fact when considering a rezoning. (map amendment)*
- *You should "make your case" by explaining specifically how your proposed rezoning relates to each of the following factors.*

Lorang Solar / Lorang Solar, LLC c/o Matt Kwiatkowski — *Name of Development/Applicant*

03/05/24 — *Date*

1. How does your proposed use relate to the existing uses of property within the general area of the property in question?

Please see attached Project Narrative.

2. What are the zoning classifications of properties in the general area of the property in question?

Please see attached Project Narrative.

3. How does the suitability of the property in question relate to the uses permitted under the existing zoning classification?

Please see attached Project Narrative.

4. What is the trend of development, if any, in the general area of the property in question?

Please see attached Project Narrative.

5. How does the projected use of the property, relate to the Kane County 2040 Land Use Plan?

Please see attached Project Narrative.

Findings of Fact Sheet – Special Use

Commercial Solar Energy Facility
Special Use Request

03/05/24
Date

- *The Kane County Zoning Board is required to make findings of fact when considering a special use.*
- *Special Uses shall be considered at a public hearing before the Zoning Board of Appeals. In its report of findings of facts, recommendations shall be made to the County Board following the public hearing. The Zoning Board **will not** recommend a special use **unless** the following items are addressed:*

6. Explain how the establishment, maintenance or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.

Please see attached Project Narrative.

7. Explain how the special use will not be injurious to the use, enjoyment and value of other property in the immediate vicinity.

Please see attached Project Narrative.

8. Explain how the special use will not impede the normal, orderly development and improvement of the surrounding property.

Please see attached Project Narrative.

9. Will adequate utility, access roads, drainage and other necessary facilities be provided? Please explain:

Please see attached Project Narrative.

10. Will adequate measures be provided for ingress and egress and so designed to minimize the traffic and congestion? Please explain:

Please see attached Project Narrative.

11. Will the special use conform to the regulations of the district in which it is located? Please explain:

Please see attached Project Narrative.

CERTIFICATION OF NOTIFICATION
OF PROPERTY OWNERS WITHIN 250 FEET OF SUBJECT PROPERTY

Date: 03/05/24

To: KANE COUNTY ZONING BOARD OF APPEALS
From: Lorang Solar, LLC c/o Matt Kwiatkowski

(Ph #) 317-760-3190

The undersigned, being sworn upon this oath, deposes and says that the list below includes the names and addresses of all owners of property within 250 feet of the property referred to in petition for

(circle one) Variance Rezoning **Special Use**

for the purpose of Construction and operation of a 5.00-MW(AC) Commercial Solar Energy Facility

and, further, that all persons owning property within 250 feet of the parcel referred to in petition have been notified of the intent of the petitioner(s).

Petitioner's property is located in Section 31, Township 39N, County of Kane. (Legal Description Attached)

List names of property owners below. (Property Owners do not have to sign this form)

NAME	ADDRESS (street, city, state and zip code)
Please see attached List of Record Owners.	

By: Tim Lorang
(Property Owner or Agent)

Subscribed and sworn to before me

this 14th day of March, 2024

Jane Carbonaro
Notary

OFFICIAL SEAL
JANE CARBONARO
NOTARY PUBLIC STATE OF ILLINOIS
MY COMMISSION EXPIRES 01/14/2026

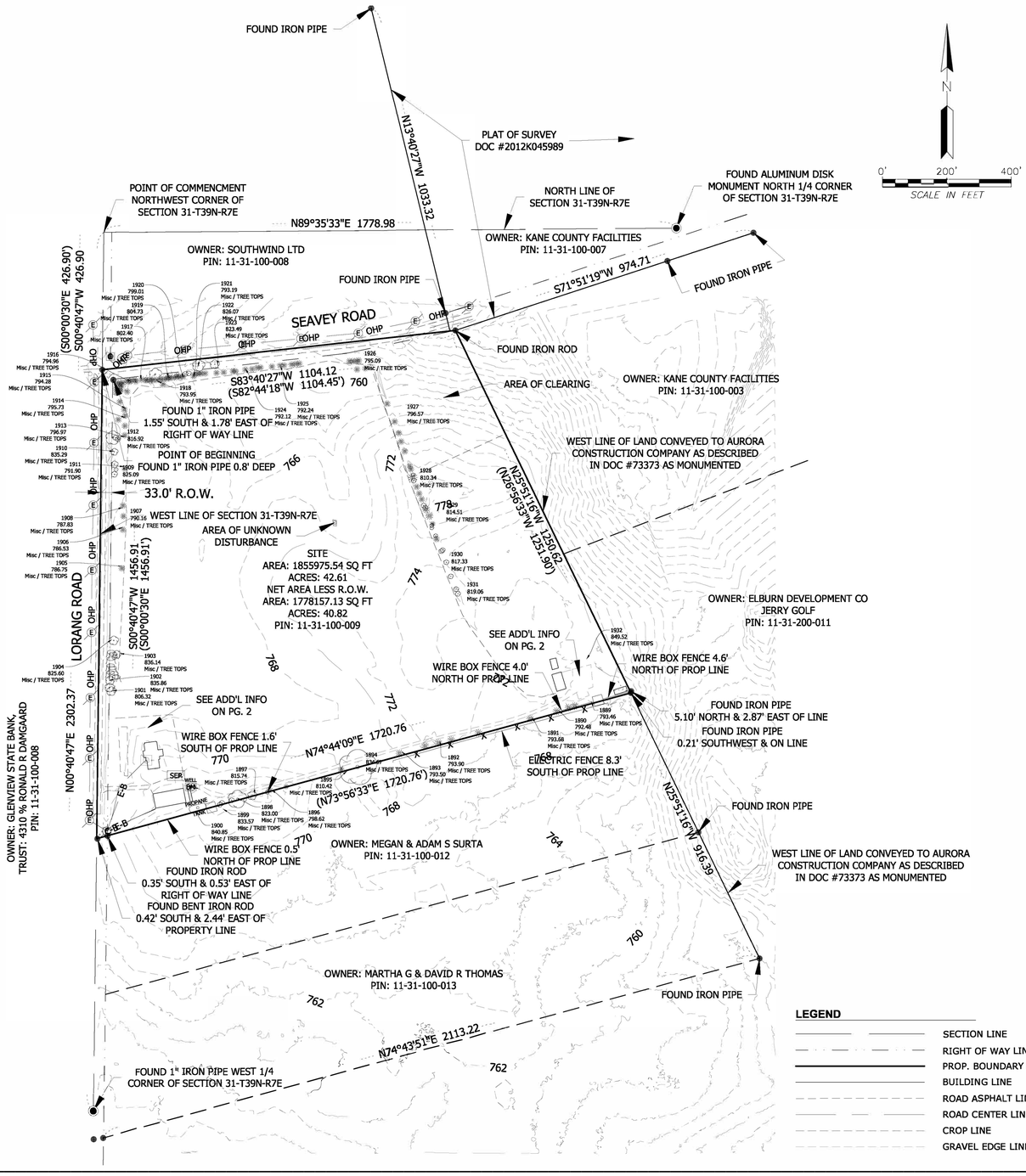
List of Record Owners within 250 feet

Owner Name	Owner Address
Southwind Financial Ltd	2250 Southwind Blvd Bartlett, IL 60103-1304
Kane County Facilities Management	719 Batavia Ave Geneva, IL 60134-3077
Elburn Development C/o Jerry Golf	2174 S Vista Ave Lombard, IL 60148-5135
David R & Martha Thomas	03S385 S Lorang Rd Elburn, IL 60119
Adam S & Meghan Surta	3S361 Lorang Rd Elburn, IL 60119-9795
Glenview State Bank Trust: 4310 C/o Ronald R Damgaard	PO Box 167 Kaneville, IL 60144
Lawson-Calhoun Living Trust L Lawson & D J Calhoun Jr, Trustees	45W110 Seavy Rd Elburn, IL 60119-9746

ATTACHMENT C

ALTA/NSPS Survey

ALTA/NSPS SURVEY
PART OF THE W 1/2 OF SEC. 31, T.39N, R.7E
KANE COUNTY, ILLINOIS



LEGAL DESCRIPTION

That part of the West 1/2 of Section 31, Township 39 North, Range 7 East of the Third Principal Meridian, described as follows:

Beginning at the Point of Intersection of the centerline of Seavey Road with the Westline of said Section 31, said point being 426.9 feet South of the Northwest corner of said Section 31; thence South 00 degrees 00 minutes 30 seconds East, along the West line of said Section 31, 1456.91 feet; thence North 73 degrees 56 minutes 33 seconds East, 1720.76 feet to the West line of land conveyed to the Aurora Construction Company by Deed dated December 20, 1904 and recorded January 24, 1905 as Document Number 73373 in Book 451, Page 11; thence North 26 degrees 28 minutes 55 seconds West along the West line of said Aurora Construction Company's lands, 1251.90 feet to the Northwest corner thereof; thence South 82 degrees 44 minutes 18 seconds West, 1104.45 feet to the Point of Beginning, in the Township of Blackberry, Kane County, Illinois.

TABLE "A" OPTIONAL ITEMS

1. *Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the surveyed property, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner. MONUMENTS FOUND OR SET AS SHOWN ON PLAT.*
2. *Address(es) of the surveyed property if disclosed in documents provided to or obtained by the surveyor or observed while conducting the fieldwork. 3S 257 Lorang Road, Elburn, IL. 60119*
3. *Flood zone classification: this property is located in Zone "X" (area of minimal flood hazard) according to FEMA Flood Insurance Rate Map Number 17089C0305J which has an effective date of July 17, 2012.*
4. *Gross land area: 1855975.54 Square Feet. (Acres: 42.61)*
5. *Vertical relief with the source of information (e.g., ground survey, aerial map), contour interval, datum, with originating benchmark, when appropriate. AS SHOWN ON PLAT.*
6. *(a) If the current zoning classification, setback requirements, the height and floor space area restrictions, and parking requirements specific to the surveyed property are set forth in a zoning report or letter provided to the surveyor by the client or the client's designated representative, list the above items on the plat or map and identify the date and source of the report or letter. NO ZONING REPORTS PROVIDED TO SURVEYOR.*
7. *(a) Exterior dimensions of all buildings at ground level. AS SHOWN ON PLAT.*
7. *(b) (1) Square footage of exterior footprint of all buildings at ground level. AS SHOWN ON PLAT.*
7. *(c) Measured height of all buildings above grade at a location specified by the client. If no location is specified, the point of measurement shall be identified. AS SHOWN ON PLAT.*
8. *Substantial features observed in the process of conducting the fieldwork (in addition to the improvements and features required pursuant to Section 5 above) (e.g., parking lots, billboards, signs, swimming pools, landscaped areas, substantial areas of refuse). AS SHOWN ON PLAT.*
11. *Evidence of underground utilities existing on or serving the surveyed property (in addition to the observed evidence of utilities required pursuant to Section 5.E.iv.) as determined by: NOTE, SURVEYOR NOT PROVIDED UTILITY MAPPING, UTILITIES AS SHOWN FROM OBSERVATION. AS SHOWN ON PLAT.*
13. *Names of adjoining owners according to current tax records. If more than one owner, identify the first owner's name listed in the tax records followed by "et al." OBTAINED FROM KANE COUNTY ILLINOIS GIS MAPPING.*
16. *Evidence of recent earth moving work, building construction, or building additions observed in the process of conducting the fieldwork. AS SHOWN ON PLAT.*
19. *Professional liability insurance policy obtained by the surveyor in the minimum amount of $100,000,000 to be in effect throughout the contract term. Certificate of insurance to be furnished. STANTEC CARRIES PROFESSIONAL LIABILITY INSURANCE, CERTIFICATES OF INSURANCE WILL BE PROVIDED UPON REQUEST.*

SCHEDULE B PART II

Items corresponding to Schedule B Part II as provided in Stewart Title Guaranty Company, Title Commitment No. 23000030707, July 25, 2023, at 8:00 am.

Items 1, 2. Standard Exceptions; a, d, e, f, g. Items 3, 4 & 5 are not survey related and are not addressed herein.

2. *Standard Exceptions:*
   b. Easements, or claims of easements, not shown by the public records.
   c. Encroachments, overlaps, boundary line disputes or other matters which would be disclosed by an accurate survey and inspection of the premises. SURVEYOR HAS MADE A GOOD FAITH EFFORT TO DISCLOSE ANY ISSUES DESCRIBED ABOVE THAT WERE OBSERVED DURING THE COURSE OF THE SURVEY.
6. *Rights of way for drainage ditches, tiles, feeders and laterals, and other drainage easements, if any. SURVEYOR HAS MADE A GOOD FAITH EFFORT TO DISCLOSE ANY ISSUES DESCRIBED ABOVE THAT WERE OBSERVED DURING THE COURSE OF THE SURVEY.*
7. *Rights of the public, State of Illinois, and the municipality in and to that part of the Land used or taken for road purposes, if any. RIGHT-OF-WAY REFERENCED ON PLAT.*

CERTIFICATION

To: Nexamp Solar, LLC, its successors and assigns, and Stewart Title Insurance Company: 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, 6a, 7a, 7b1, 7c, 8, 11a, 13, 16 and 19 of Table A thereof.

I further certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Illinois.

Date of fieldwork: 01/04/2024

DRAFT COPY *xx/xx/2024*

Corey E. Worthel, IL. License No. 3440 *Date*

This Professional Service conforms to the current Illinois minimum standards for a boundary survey. My license expires 11/30/2024.

GENERAL NOTES

1. *Bearing shown are based on the West Line of Section 31, Township 39 North, Range 7 East of the Third Principal Meridian, Illinois State Plane – East Zone, Kane County Illinois. Elevations and Contours shown hereon were Established with GPS and are relative to the NAVD88 Vertical Datum.*
2. *Survey Completed utilizing information provided by Stewart Title Guaranty Company, Title Commitment No. 23000030707, July 25, 2023, at 8:00 am.*
4. *Referenced Title Commitment provides NO Right-Of-Way documentation for Lorang Road OR Seavy Road. Right-Of-Ways as shown are assumed by occupation.*

COREY E WORTHEL
3440
PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
COTTAGE GROVE, WI

PARCEL LOCATION

VICINITY MAP

LEGEND

- SECTION LINE
- RIGHT OF WAY LINE
- PROP. BOUNDARY LINE
- BUILDING LINE
- ROAD ASPHALT LINE
- ROAD CENTER LINE
- CROP LINE
- GRAVEL EDGE LINE
- E-B E-B UNDERGROUND ELECTRIC
- C-B C-B UNDERGROUND COMM.
- OHP OHP OVERHEAD POWER LINE
- FENCE LINE (WIRE BOX)
- X X X FENCE LINE (ELECTRIC)
- TOPO BREAK LINE
- BREAK LINE
- (XX°XX'XX", XXX.XX') DEED DESCRIPTION BEARING & DIST
- SECTION CORNER
- FOUND IRON
- BM BENCHMARK
- SEP SEPTIC TANK
- WELL WELL CAP
- PROPANE TANK PROPANE TANK
- ELECTRIC METER
- E POWER POLE
- GUY WIRE
- C COMM. PED
- C COMM. MANHOLE
- TRAFFIC SIGN
- DECIDUOUS TREE
- CONIFEROUS TREE
- STUMP

Stantec

Cottage Grove Office
209 Commerce Pkwy.
Cottage Grove, WI 53527
Phone: 608.839.1750
Website:www.stantec.com

DATE	
	SURVEY BY : CEW & PJE
	DRAWN BY : CEW & PJE
	DESIGNED BY :
	CHECKED BY : CEW
	APPROVED BY : CEW
	DATE : 2023-XX-XX

ALTA/NSPS SURVEY
PART OF THE W 1/2 SE 1/4
OF SEC. 31, T.39N, R.7E
KANE COUNTY, ILLINOIS

CLIENT
NEXAMP SOLAR, LLC

PROJECT NUMBER
193806625

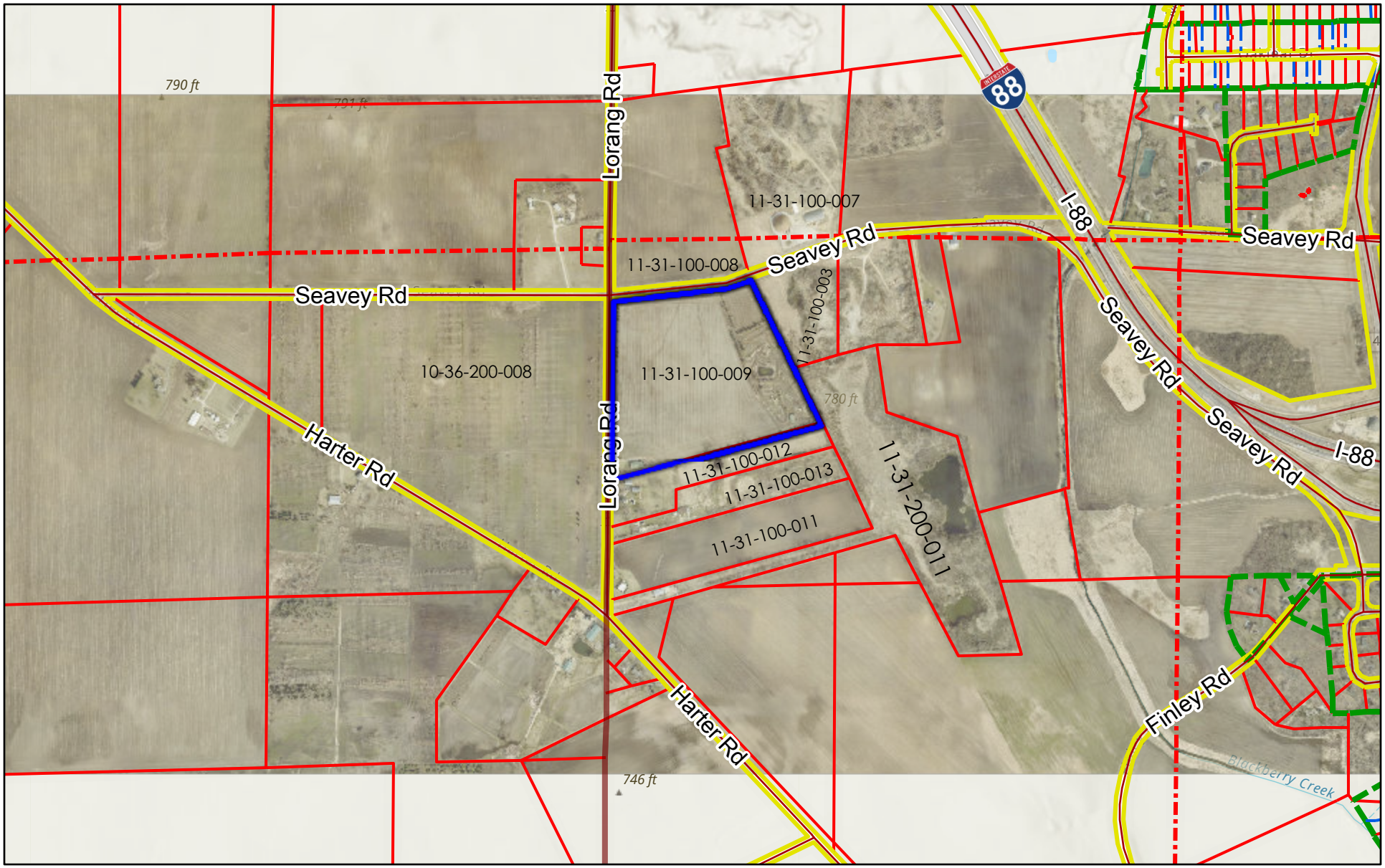
SHEET NUMBER
1 of 2

Plot Date: 01/19/2024 - 9:41am
Drawing name: V:\2277\resource\survey\193806625 Nexamp - Lorang\Survey\CAD\193806625 LORANG.dwg
Xrefs:

ATTACHMENT D

Property Aerial Photo

Lorang Solar Location Map



1/29/2024

1:17,238

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, County of Kane, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/

ATTACHMENT E

Applicant Information

Applicant Information

Lorang Solar, LLC, a Delaware Limited Liability Company registered to do business in Illinois.

Officers and Directors:

Zaid A. Ashai, President - 101 Summer Street, Flr 2, Boston, MA 02110,

John Murphy, Senior Vice President - 101 Summer Street, Flr 2, Boston, MA 02110,

Chris Clark, Senior Vice President - 101 Summer Street, Flr 2, Boston, MA 02110,

Will Thompson, Senior Vice President - 101 Summer Street, Flr 2, Boston, MA 02110,

Peter Tawczynski, Treasurer - 101 Summer Street, Flr 2, Boston, MA 02110,

Kamran Idrees, Secretary - 101 Summer Street, Flr 2, Boston, MA 02110

Main Office: 101 Summer Street, Flr 2, Boston, MA 02110

ATTACHMENT F

Property Legal Description

Lorang Solar Legal Descrip on

THAT PART OF THE WEST HALF OF SECTION 31, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF THE CENTERLINE OF SEAVEY ROAD WITH THE WEST LINE OF SAID SECTION 31, SAID POINT BEING 426.9 FEET SOUTH OF THE NORTHWEST CORNER OF SAID SECTION 31, THENCE SOUTH 0 DEGREES 00 MINUTES 30 SECONDS EAST, ALONG THE WEST LINE OF SAID SECTION 31, 1456.91 FEET; THENCE NORTH 73 DEGREES 56 MINUTES 33 SECONDS EAST, 1720.76 FEET TO THE WEST LINE OF LAND CONVEYED TO THE AURORA CONSTRUCTION COMPANY BY DEED DATED DECEMBER 30, 1904 AND RECORDED JANUARY 24, 1905 AS DOCUMENT 73373 IN BOOK 451, PAGE 11; THENCE NORTH 26 DEGREES 28 MINUTES 55 SECONDS WEST ALONG THE WEST LINE OF SAID AURORA CONSTRUCTION COMPANY'S LANDS, 1251.90 FEET TO THE NORTHWEST CORNER THEREOF; THENCE SOUTH 82 DEGREES 44 MINUTES 18 SECONDS WEST 1105.45 FEET TO THE POINT OF BEGINNING, IN THE TOWNSHIP OF BALCKBERRY, KANE COUNTY, ILLINOIS

ATTACHMENT G

Copy of Trust Disclosure

1999K081763

MEMORANDUM

This Memorandum, made, entered into and executed this 17th day of August, 1999, by and between ST. PAUL TRUST COMPANY AS TRUSTEE UNDER TRUST AGREEMENT DATED JULY 18, 1989 AND KNOWN AS TRUST NO. 74-1973 (hereinafter called Seller) and TIMOTHY P. SLAMANS hereinafter called Purchaser):

St Paul Trust Company as Successor Trustee to Beverly Trust Company

WITNESSETH:

That the Seller and Purchaser have entered into an Installment Agreement for Deed, dated August 17, 1999 covering the following described property located in Kane County, Illinois:

THAT PART OF THE WEST HALF OF SECTION 31, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF SEAVEY ROAD WITH THE WEST LINE OF SAID SECTION 31, SAID POINT BEING 426.9 FEET SOUTH OF THE NORTHWEST CORNER OF SAID SECTION 31, THENCE SOUTH 0 DEGREES 00 MINUTES 30 SECONDS EAST, ALONG THE WEST LINE OF SAID SECTION 31, 1456.91 FEET; THENCE NORTH 73 DEGREES 56 MINUTES 33 SECONDS EAST, 1720.76 FEET TO THE WEST LINE OF LAND CONVEYED TO THE AURORA CONSTRUCTION COMPANY BY DEED DATED DECEMBER 30, 1904 AND RECORDED JANUARY 24, 1905 AS DOCUMENT 73373 IN BOOK 451, PAGE 11; THENCE NORTH 26 DEGREES 28 MINUTES 55 SECONDS WEST ALONG THE WEST LINE OF SAID AURORA CONSTRUCTION COMPANY'S LANDS, 1251.90 FEET TO THE NORTHWEST CORNER THEREOF; THENCE SOUTH 82 DEGREES 44 MINUTES 18 SECONDS WEST 1104.45 FEET TO THE POINT OF BEGINNING, IN THE TOWNSHIP OF BLACKBERRY, KANE COUNTY, ILLINOIS.

P.I.N.: 11-31-100-009

FILED FOR RECORD
KANE COUNTY, ILL.
1999 AUG 20 PM 1:15
Lynda M. Ruiz
RECORDER

NW 31/39/7 Y8883

(3)

RETURN TO:
TICOR TITLE INSURANCE
2020 DEAN STREET, SUITE G
ST. CHARLES, IL 60174

pd 15.00

1999K081763

Both parties agree to the terms, covenants and conditions provided and contained in that certain Installment Agreement for Deed between the parties hereto dated August 17, 1999 detailing, implementing and controlling the provisions of said installment sale.

This Memorandum is for the purpose of giving notice to all persons interested in the above-described real estate of the execution of said Installment Agreement for Deed.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum the day and year first above written.

SELLER: **St Paul Trust Company as Successor Trustee to Beverly Trust Company**

ST. PAUL TRUST COMPANY A/T/U/T/A
DATED 7/18/89 A/K/A TR. 74-1989

BY: _____

PURCHASER: _____

TIMOTHY F. SLAMANS

This document is made by St Paul Trust Company as Trustee and accepted upon the express understanding that the St Paul Trust Company enters into the same not personally, but only as Trustee and that no personal liability is assumed by nor shall be asserted or enforced against St Paul Trust Company because of or on account of the making or executing this document or of anything therein contained, all such liability, if any being expressly waived, nor shall St Paul Trust Company be held personally liable upon or in consequence of any of the covenants of this document, either expressed, or implied.

STATE OF ILLINOIS)
) SS.
COUNTY OF C O O K)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY THAT Rosemary Mazur of ST. PAUL TRUST COMPANY who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that she signed and delivered the said instrument as her own free and voluntary act and as the free and voluntary act of said Bank, as Trustee as aforesaid, for the uses and purposes therein set forth; and then and there acknowledged, as custodian of the corporate seal of said Bank, did affix the corporate seal of said Bank to said instrument as her own free and voluntary act and as the free and voluntary act of said Bank, as Trustee as aforesaid, for the uses and purposes therein set forth.

GIVEN UNDER MY HAND AND OFFICIAL SEAL this 17th day of August, 1999.

Kathleen D. Mitchell
Notary Public

OFFICIAL SEAL
KATHLEEN D. MITCHELL
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 3-30-2003

STATE OF ILLINOIS)
) SS.
COUNTY OF)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that Timothy P. Slamans personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that she signed, sealed and delivered the said instrument as her free and voluntary act, for the uses and purposes therein set forth.

GIVEN UNDER MY HAND AND OFFICIAL SEAL this 17 day of Aug 1999.

Notary Public

OFFICIAL SEAL
CHARLES E PETERSEN
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES:08/01/00

THIS INSTRUMENT WAS PREPARED BY: & Return To

JOHN G. POSTWEILER
SCHREIBER, MACK AND POSTWEILER
10600 West 143rd Street
Orland Park, IL 60462
(708) 460-4600

3

1999K081763

ATTACHMENT H

Executed AIMA Agreement

Illinois Department of Agriculture

JB Pritzker, Governor
Jerry Costello II, Director

Bureau of Land and Water Resources
State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/782-6297 • TDD 866/287-2999 • Fax 217/557-0993

February 1, 2024

Dear Landowner:

As the landowner across which the Lorang Solar, LLC is planning to construct a community scale solar farm and related ±5 MW Commercial Solar Energy Facility, that will consist of solar panel arrays, racking systems, access roads, an onsite underground collection system, inverters and transformers, the Illinois Department of Agriculture would like to inform you of the following matter.

Effective February 1, 2024, Lorang Solar, LLC and the Illinois Department of Agriculture (IDOA) entered into an Agricultural Impact Mitigation Agreement (AIMA) establishing standards and policies that Lorang Solar, LLC will follow as it constructs a ±5 MW community scale commercial Solar Energy Facility over agricultural land in Kane County. The enclosed AIMA will provide a high level of protection to such land, but it may not address specific concerns that you may have. Such concerns must be addressed individually in your own easement contract to accomplish your specific goals.

As you review the AIMA, you may identify procedures that you would like to change. Your right to negotiate changes is preserved by Paragraph B. on page one of the AIMA. It states, "Except for Section 17B. 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." It is your decision as to whether you discuss the changes you desire with the right-of-way agent that is assigned to you. Of course, you also have the option to seek your own attorney to make sure your interests are protected.

As you consider your personal interests, you may want to include the owner indemnification clause in your individual easement agreement to protect yourself, your family and future heirs against future claims or expenses arising from the commercial solar energy facility's construction, repairs and maintenance. This item is covered in Section 16 of the AIMA. We feel it is best that such issues are left to landowners to address in their individual easement contracts if specific items are of concern.

Please note that although the IDOA has entered the AIMA with the Lorang Solar, LLC it does not constitute our endorsement of the project. The AIMA's sole purpose is to provide a high level of protection to landowners and agricultural land that will be impacted by the construction of the Solar Farm.

If you have questions, feel free to contact Jeffrey Evers of my staff at 217-785-5594, the address listed above or agr.aima@illinois.gov.

Sincerely,

Brian Rennecker, Chief
Bureau of Land and Water Resources

Enclosure
BR:JE

cc: Jerry Costello II, IDOA Director
Clay Nordsiek, IDOA
Bill Bodine, Laura Harmon - IL Farm Bureau
Garrett W. Thalgott – IL Farm Bureau
Kane Co. Farm Bureau Manager
Kane Co. Soil and Water Conservation District (SWCD)
Regional Representatives

STANDARD AGRICULTURAL IMPACT MITIGATION AGREEMENT
between
Lorang Solar, LLC

and the
ILLINOIS DEPARTMENT OF AGRICULTURE
Pertaining to the Construction of a Commercial Solar Energy Facility
in
Kane 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).

Lorang Solar, LLC, hereafter referred to as Commercial Solar Energy Facility Owner, or simply as Facility Owner, plans to develop and/or operate a 5 MWac Commercial Solar Energy Facility in Kane County [GPS Coordinates: 41.820252, -88.48681], which will consist of up to 25 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 Lorang Solar, LLC 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 Kane 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 ~~Tess Faragane, General Counsel~~
Clay Nordsiek, Deputy General Counsel

801 E. Sangamon Avenue, 62702
State Fairgrounds, POB 19281 Springfield,
IL 62794-9281

2/1, 2024

Lorang Solar, LLC

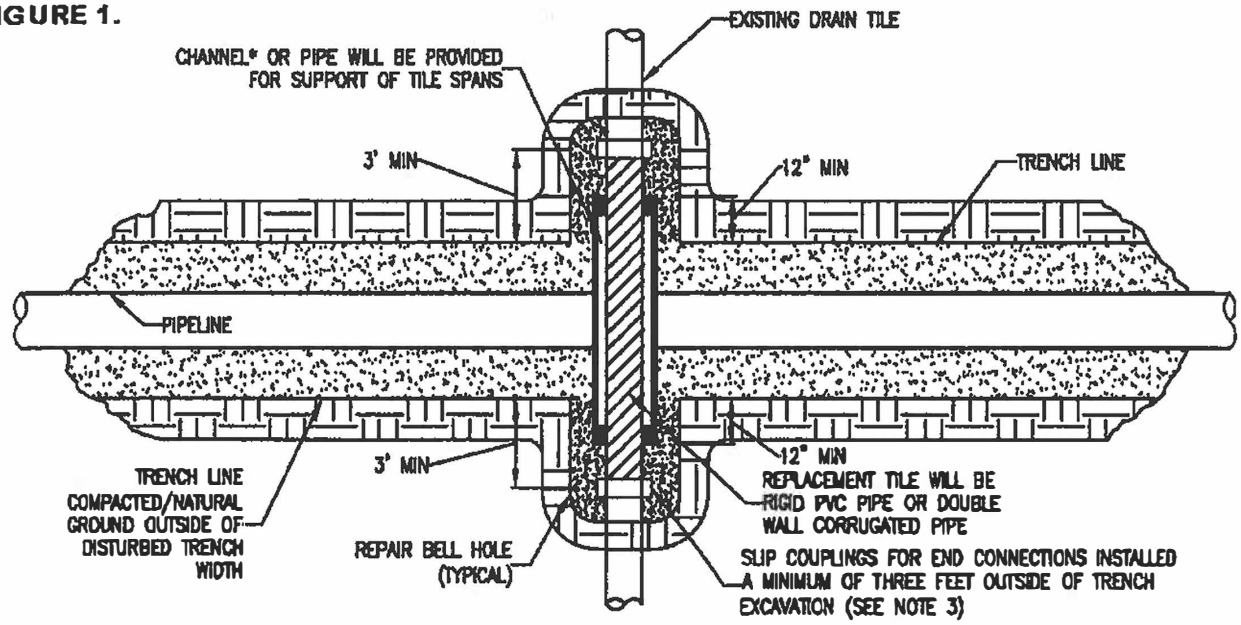
By Matthew R. Walsh, VP

101 N. Wacker Drive Suite 200
Chicago, IL 60606

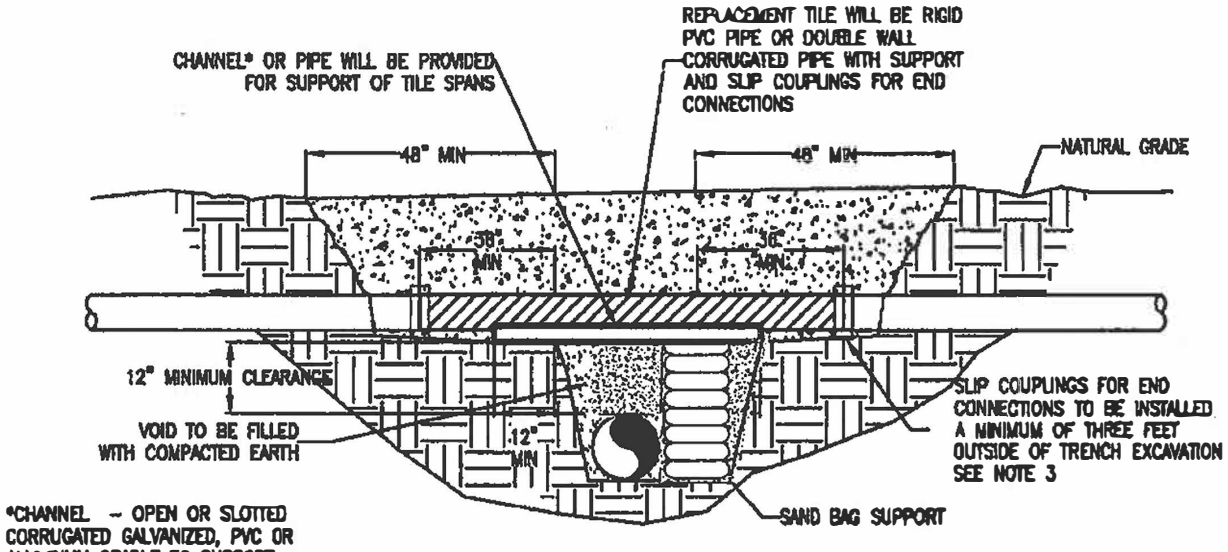
Address

January 10th, 2024

FIGURE 1.



PLAN
N.T.S.



*CHANNEL – OPEN OR SLOTTED CORRUGATED GALVANIZED, PVC OR ALUMINUM CRADLE TO SUPPORT DRAIN TILE.

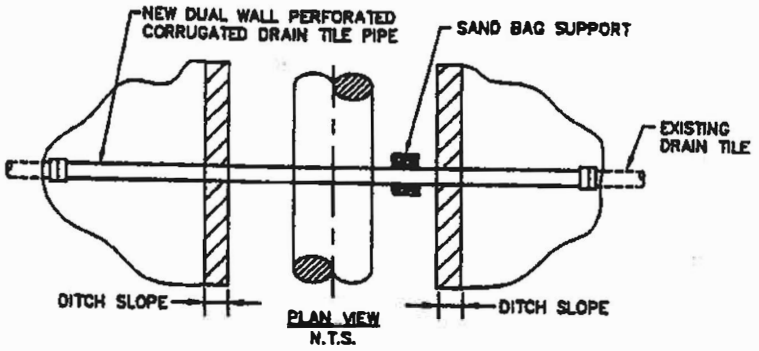
CROSS SECTION
N.T.S.

NOTE:

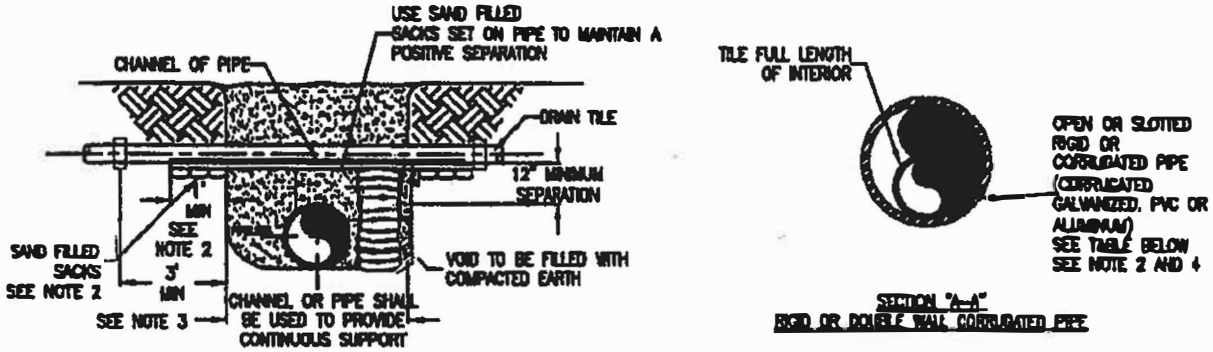
1. IMMEDIATELY REPAIR TILE IF WATER IS FLOWING THROUGH TILE AT TIME OF TRENCHING. IF NO WATER IS FLOWING AND TEMPORARY REPAIR IS DELAYED, OR NOT MADE BY THE END OF THE WORK DAY, A SCREEN OR APPROPRIATE 'NIGHT CAP' SHALL BE PLACED ON OPEN ENDS OF TILE TO PREVENT ENTRAPMENT OF ANIMALS ETC.
2. CHANNEL OR 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

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

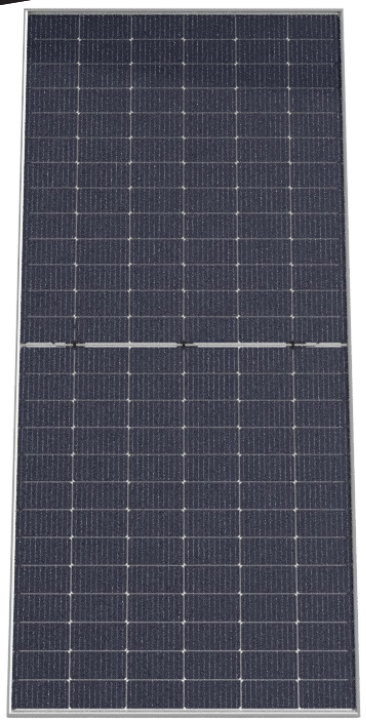
ATTACHMENT I

Manufacturer Specifications

HELIENE

156HC M10 SL Bifacial Module

156 Half-Cut Monocrystalline 565W – 585W



21%

Utilizes the latest M10 size super high efficiency Monocrystalline PERC cells. Half cut design further reduces cell to module (CTM) losses.

Stability & Looks

Enhanced frame design to withstand higher wind, snow, and other mechanical stresses. Framed Glass–Backsheet aesthetic is ideal for high visibility installation.

Anti-Reflective

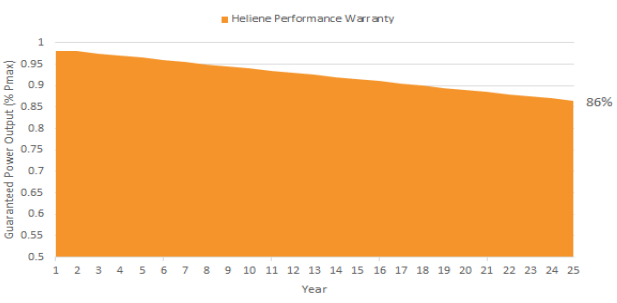
Premium solar glass with anti-reflective coating delivers more energy throughout the day

High Reliability

Proven resistance to PID and reliable in high temperature and humidity environments.

No Compromise Guarantee

15 Year Product Warranty
25 Year Linear Performance Guarantee



Intertek

ISO 9001:2015 Certified

Manufactured Using International Quality System Standards: ISO9001

Half-Cut Design with Split Junction Box Technology

Bifacial Technology Enabling Additional Energy Harvest from Rear Side

2% First Year Degradation & 0.50% Annual Power Degradation

World-class Quality

- Heliene's fully automated manufacturing facilities with state-of-the-art robotics and computer aided inspection systems ensure the highest level of product quality and consistency
- All manufacturing locations are compliant with international quality standards and are ISO 9001 certified
- Heliene modules have received Top Performer rankings in several categories from PV Evolution Labs (PV EL) independent quality evaluations

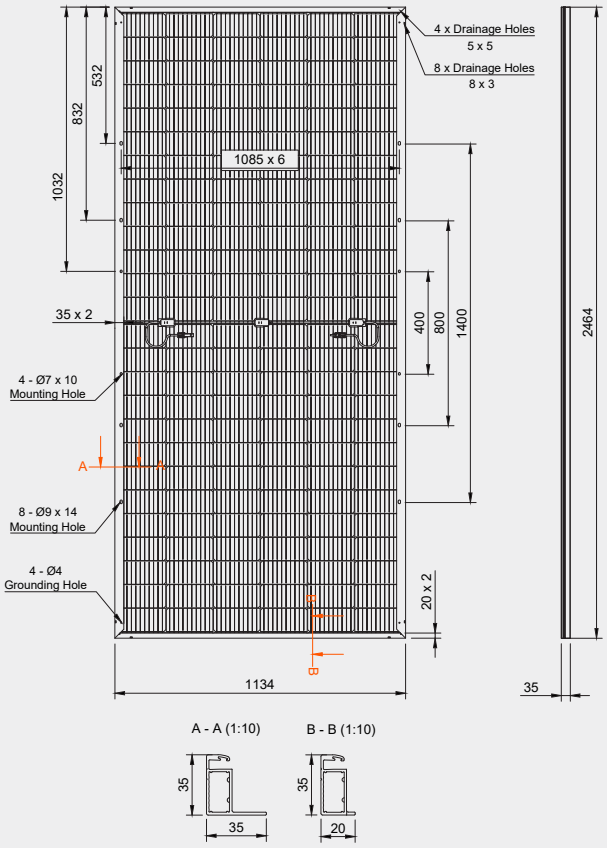
Bankable Reputation

- Established in 2010, Heliene is recognized as highly bankable Tier 1 manufacturer of solar modules and has been approved for use by the U.S. Department of Defense, U.S. Army Corps of Engineers and from numerous top tier utility scale project debt providers
- By investing heavily in research and development, Heliene has been able to stay on the cutting edge of advances in module technology and manufacturing efficiency

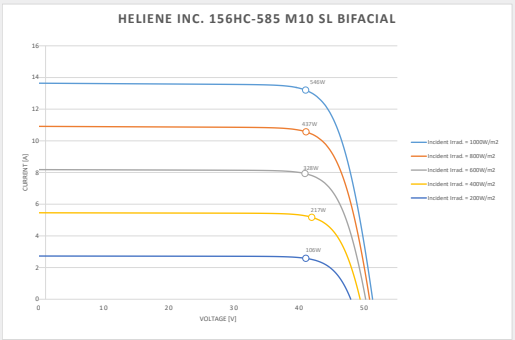
Local Sales, Service, and Support

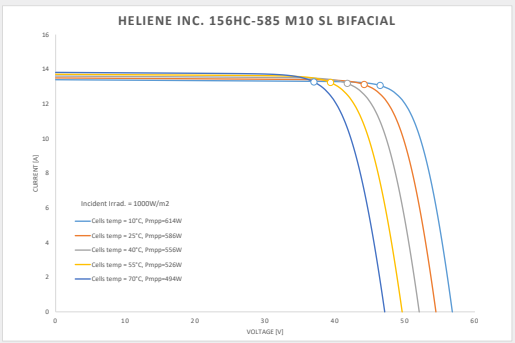
- With sales offices across the U.S. and Canada, Heliene prides itself on unsurpassed customer support for our clients. Heliene has become the brand of choice for many of the leading residential installers, developers and Independent Power Producers due to our innovative technology, product customization capability and just in time last-mile logistics support
- Local sales and customer support means answered phone calls and immediate answers to your technical and logistics questions. We understand your project schedules often change with little warning and endeavor to work with you to solve your project management challenges

Dimensions for 156HC M10 SL Bifacial Series Modules



I-V Curves for 156HC M10 SL Bifacial Series Modules





Electrical Data (STC)

Peak Rated Power*	P_{mpp} (W)	585	580	575	570	565
Maximum Power Voltage	V_{mpp} (V)	45.85	45.64	45.44	45.23	45.02
Maximum Power Current	I_{mpp} (A)	12.77	12.70	12.64	12.58	12.52
Open Circuit Voltage*	V_{oc} (V)	54.41	54.13	53.86	53.33	52.79
Short Circuit Current**	I_{sc} (A)	13.50	13.44	13.37	13.32	13.28
Module Efficiency	Eff (%)	20.9	20.8	20.6	20.4	20.2
Maximum Series Fuse Rating	MF (A)	30	30	30	30	30
Power Sorting Range			- 0/+3%			
Bifaciality Factor			70 ± 2%			

STC - Standard Test Conditions: Irradiation 1000 W/m² - Air mass AM 1.5 - Cell temperature 25 ºC,
*P_{mpp} Production Tolerance ± 3%, V_{oc} Production Tolerance ± 3%, **I_{sc} Production Tolerance ± 4%

Electrical Data (NMOT)

Maximum Power	P_{mpp} (W)	434	430	426	423	419
Maximum Power Voltage	V_{mpp} (V)	43.28	43.08	42.90	42.70	42.50
Maximum Power Current	I_{mpp} (A)	10.03	9.99	9.95	9.91	9.87
Open Circuit Voltage	V_{oc} (V)	51.36	51.10	50.84	50.34	49.83
Short Circuit Current	I_{sc} (A)	10.87	10.83	10.77	10.73	10.70

NMOT - Nominal Module Operating Temperature:
Irradiance at 800W/m², Ambient Temperature 20ºC, Wind speed 1m/s

Mechanical Data

Solar Cells	156 Half Cut, M10, 182mm, PERC Cells
Module Construction	Framed Glass–Backsheet
Dimensions (L x W x D)	2464 x 1134 x 35 mm (97.01 x 44.65 x 1.38 inch)
Weight	31 kg (68.34 lbs)
Frame	Double Webbed 15-Micron Anodized Aluminum Alloy
Glass	3.2mm Low-Iron Content, High-Transmission, PV Solar Glass with Anti Reflective Coating
Junction Box	IP-68 rated with 3 bypass diodes
Output Cables	1.6-meter Symmetrical Cables
Connectors	Multi-Contact/ Stäubli MC4

Certifications

UL Certification	UL61215, UL61730

Temperature Ratings

Nominal Operating Cell Temperature (NOCT)	+45°C (±2°C)
Temperature Coefficient of P_{max}	-0.34%/°C
Temperature Coefficient of V_{oc}	-0.25%/°C
Temperature Coefficient of I_{sc}	0.052%/°C

Maximum Ratings

Operational Temperature	-40°C to +85°C
Max System Voltage	1500V
Mech. Load Test (Front)	113 psf / 5400 Pa
Mech. Load Test (Back)	50 psf / 2400 Pa
Fire Type	Type 1
Hail Test	25mm at 23m/s

Packaging Configuration

Modules per Pallet 40' Container:	31 pieces
Modules per 40' Container:	620 pieces
Modules per Pallet 53' Trailer:	28 pieces
Modules per 53' trailer:	588 pieces

Warranty

15 Year Product Warranty
25 Year Linear Power Guarantee

SOLECTRIA® XGI 1500-250 SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

FEATURES

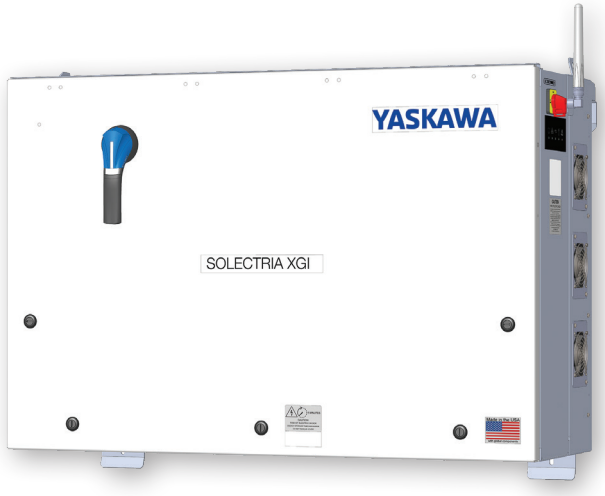
- NEW and MORE POWERFUL!
  - XGI 1500-250/250-600
  - XGI 1500-225-600 (Selectable: 225kW/225kVA or 225kW/250kVA)
  - XGI 1500-200/200-480
  - XGI 1500-175-480 (Selectable: 175kW/175kVA or 175kW/200kVA)
- Industry-leading maximum DC/AC Ratio of 2.0
- Accepts two input PV Output Circuits, with no overcurrent 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
- Tested compatible with the TESLA PowerPack Microgrid System

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

Yaskawa Solectria Solar 1-978-683-9700 | Email: sales@solectria.com | solectria.com
Document No. FL.XGI1500-04 | 02/15/2023 |

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	240.6 A	216.5 A	240.6 A	210.5 A
	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	< 5%			
	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			
	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			

ETL LISTED

IT'S PERSONAL

YASKAWA SOLECTRIA SOLAR

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Document No. FL.XGI1500-04 | 02/15/2023 |

ATTACHMENT J

Preliminary Decommissioning Plan

LORANG SOLAR, LLC - DECOMMISSIONING PLAN

Lorang Solar, LLC has prepared this Decommissioning Plan (the "Plan") for its proposed 5.00-Megawatt (AC) solar photovoltaic facility (the "Facility") to be constructed at the intersection of Lorang Road and Seavey Road just outside Blackberry Township, Kane County. The Plan describes the process for decommissioning the Facility in accordance with applicable federal, state, and local requirements. Decommissioning of the Facility shall be completed within six (6) months after operation of the solar facility stops being operational.

Facility Description

The Facility will consist of a 5.00-megawatt (AC) capacity solar power-generating array secured within a fixed knot fence surrounding the solar panels and equipment, accessed through a locked 12' wide swing gate on the access road. The access road enters the project area off South Lorang Road. The Facility will include the following site features:

- An approximate 42.6-acre parcel on which the Facility is located;
- An approximately 20-acre area of photovoltaic (PV) modules, mounting system and associated equipment inside the perimeter fence;
- Driven piles supporting the PV modules;
- Two (2) transformers (filled with biodegradable mineral oil) and several string inverters or central inverters;
- Up to eight (8)-foot fixed knot farm security fence with no barbed wire;
- Underground conduit and wires within the system area;
- Electrical interconnection equipment including several above ground poles to connect to the Commonwealth Edison (ComEd) distribution line;
- A gravel access drive; and
- A metal security gate at the entrance to the array area;

Decommissioning Plan

The Facility will be decommissioned by completing the following major steps: Dismantlement, Demolition, Disposal or Recycle; and Site Stabilization, as further described below.

Dismantlement, Demolition, and Disposal or Recycle

A significant portion of the components that comprise the Facility will include recyclable or re-saleable components, including copper, aluminum, galvanized steel, and modules. Due to their re-sale monetary value, these components will be dismantled, disassembled, and recycled rather than being demolished and disposed of.

Following coordination with ComEd regarding timing and required procedures for disconnecting the Facility from the utility distribution network, all electrical connections to the system will be disconnected and all connections will be tested locally to confirm that no electric current is running through them before proceeding. All electrical connections to the PV modules will be severed at each module, and the modules will then be removed from their framework by cutting or dismantling the connections to the supports. Modules will be removed and sold to a purchaser or recycler. In the event of a total fracture of any modules, the interior materials are silicon-based and are not hazardous. Disposal of these materials at a landfill will be permissible.

The PV mounting system framework will be dismantled and recycled. The metal piles will be removed from their approximated depth of four feet and recycled. All other associated structures will be demolished and removed from the site for recycling or disposal. This will include the site fence and gates, which will likely be reclaimed or recycled.

Grade slabs will be broken and removed to a depth of one foot below grade, and clean concrete will be crushed and disposed of off-site or recycled (reused either on- or off-site).

Aboveground utility poles owned by Nexamp Solar, LLC will be completely removed and disposed of off-site in accordance with utility best practices. Any overhead wires will be removed from the Facility and will terminate at the utility-owned connections. ComEd will be responsible for dismantling any overhead wires and poles under its ownership. Coordination with ComEd personnel will be conducted to facilitate ComEd's removal of any poles and overhead wires located on the site.

A final site walkthrough will be conducted to remove debris and/or trash generated during the decommissioning process and will include removal and proper disposal of any debris that may have been wind-blown to areas outside the immediate footprint of the facility being removed. Sanitary facilities will be provided on-site for the workers performing the decommissioning of the Facility.

Decommissioning Requirements

The following items shall be implemented during the decommissioning of the Facility:

- Items required to be removed include but are not limited to: 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 60 inches; transformers, inverters, energy storage facilities, or substations; overhead collection system components; operations/maintenance buildings, spare parts buildings and substations/switching gear buildings; access roads; operation/maintenance yard/staging area; debris and litter; underground cables, fencing, access roads and culverts.

- Provisions of the restoration of soil and vegetation:
    - A Kane County Stormwater Management permit is required prior to beginning any decommissioning work.
    - All affected areas shall be inspected, thoroughly cleaned and all construction related debris shall be removed.
    - All affected areas must be remediated pursuant to the terms of the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
    - Items required to be restored include but are not limited to: windbreaks, waterways, site grading, drainage tile systems and topsoil to former productive levels.
- In work areas involving decommission from widening access roads or any other work areas, the topsoil must be first removed, identified and stored separate from other excavated material for later replacement as applicable.
- The sixty (60)-inch below-surface excavation area shall be filled with clean sub-grade material of similar quality to that in the immediate surrounding area.
- All sub-grade material will be compacted to a density similar to surrounding grade material.
- All unexcavated areas compacted by equipment used in decommissioning shall be de-compacted in a manner that adequately restores the topsoil and sub-grade material to the proper density consistent and compatible with the surrounding area.
- Where possible, the topsoil shall be replaced at a minimum of the original depth and surface contours.
- Any topsoil deficiency and trench settling shall be mitigated with imported topsoil that is consistent with the quality of the effected site.
- Items required to be repaired after decommissioning include but are not limited to: roads, bridges and culverts.
- An independent drainage engineer shall be present to ensure drainage tiles, waterways, culverts, etc. are repaired as work progresses.
- A soil erosion control plan shall be approved by the County Soil and Water Conservation District.
- All applicable stormwater management, floodplain and other surface water rules, regulations and ordinances shall be followed including CHAPTER 9 STORMWATER MANAGEMENT, of the Kane County Code.
- Following the completion of Deconstruction, the disturbed area shall be restored, as closely as practical, to its original pre-construction elevation.
- Weed control shall be provided in a manner that prevents the spread of weeds onto agricultural land affected by Deconstruction. Spraying shall be done by an applicator that is appropriately licensed for doing such work in the State of Illinois.

Site Stabilization

The areas of the Facility that are disturbed during decommissioning will be re-graded to establish a uniform slope and stabilized via hydroseeding with a ground treatment approved by the Kane County Building and Zoning.

Permitting Requirements

Given the size and location of the Facility, several approvals will be obtained prior to initiation of the decommissioning process. Table 1 provides a summary of the expected approvals if the decommissioning were to take place at the time of the preparation of this Decommissioning Plan. Noting that the decommissioning is expected to occur at a much later date, the permitting requirements listed in the table below will be reviewed at that time and updated based on then current local, state, and federal regulations.

Table 1. Current Permitting Requirements for Decommissioning

Permit	Agency	Threshold/Trigger
Soil Erosion Control Plan	County Soil and Water Conservation District	Required before decommissioning
Kane County Stormwater Management Permit	Kane County	Required before beginning any decommissioning work and all applicable stormwater management, floodplain and other surface water rules, regulations and ordinances.
Agricultural Impact Mitigation Agreement	Illinois Department of Agriculture	All affected areas must be remediated pursuant to the terms of the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.

The AIMA requires decommissioning to commence once the Facility is out of service or not producing electrical energy for a period of twelve (12) months and be completed within sex (6) months from that time. The decommissioning process is estimated to take +/-3 months and is intended to occur outside of the winter season.

Decommissioning Cost Estimate and Surety Proposal

Lorang Solar, LLC proposes to provide a decommissioning surety fund to be held by the County and co-owned with Lorang Solar, LLC. The fund will provide the requisite capital for solar project decommissioning in the unlikely event that Lorang Solar, LLC is unable to meet its contractual obligations for solar project removal and restoration.

Further, Lorang Solar, LLC agrees to the following Agricultural Impact Mitigation Agreement decommissioning requirements:

Lorang Solar, LLC shall provide the County with Financial Assurance to cover the estimated costs of decommissioning the Facility. Provision of this Financial Assurance shall be phased in over the first 11 years of the Project's operation as follows:

- On or before the first anniversary of the Commercial Operation Date, Lorang Solar, LLC shall provide the County with Financial Assurance to cover ten (10) percent of the estimated cost to decommission the facility as determined in this Plan.
- On or before the sixth anniversary of the Commercial Operation Date, Lorang Solar, LLC shall provide the County with Financial Assurance to cover fifty (50) percent of the estimated cost to decommission the facility as determined in this Plan.
- On or before the eleventh anniversary of the Commercial Operation Date, Lorang Solar, LLC shall provide the County with Financial Assurance to cover one hundred (100) percent of the estimated cost to decommission the facility, as determined in the updated Plan provided during the tenth year of commercial operation.

Prior to the issuance of the Building Permit by Kane County, Lorang Solar, LLC will be submitting a Decommissioning Engineer's Opinion of Probable Cost that will be used to determine the amount of the Surety.

Once the decommissioning is complete, and after the County's inspection that the work has been done in accordance with the Decommissioning Plan, the portion of the surety not needed to remediate shall be returned to the applicant/lessee.

ATTACHMENT K

NRI Report

Kane-DuPage Soil & Water Conservation District

NATURAL RESOURCES INVENTORY

24-016

February 13, 2024

Prepared for:
Kane County Development Department

Petitioner:
Lorang Solar, LLC
101 N. Wacker Dr. Ste. 200
Chicago, IL 60606

PURPOSE AND INTENT

This Natural Resources Inventory is intended to present the most current natural resource information available for a parcel, lot, or tract of land in an understandable format. It contains a description of the present conditions and resources available and their potential impact on each other, especially regarding a proposed change to that parcel of land. This information comes from standardized data, investigations of the parcel, and other information furnished by the petitioner. **This report must be read in its entirety**, so that the relationship between natural resource factors and the proposed land use can be fully understood.

This report presents natural resource information to owners, land-managers, officials of local governing bodies, and other decision makers concerning the parcel. Decisions concerning variations, amendments, or relief of local zoning ordinances may reference this report. Also, decisions concerning the future of a proposed subdivision of vacant or agricultural lands, and the subsequent development of these lands may reference this report. This report is a requirement under the State of Illinois Soil and Water Conservation District Act contained in ILCS 70, 405/1 ET seq.

This report provides the best available natural resource information for the parcel and when used properly, will provide the basis for good land use change decisions and proper development while protecting the natural resource base of the county. However, because of the variability of nature, and because of the limitations of map scale and the precision of natural resource maps (which includes the property boundaries represented for the parcel), this report does not reflect precise natural resource information at specific locations within the parcel. On-site investigations, soil evaluations, and engineering studies should be conducted as necessary, for point-specific information.

This Natural Resources Inventory report is a review of the major natural resources of the site and a general estimate of the suitability of this site for the proposed use. Because of the small size of this parcel and because of the inherent probable errors in the precision of natural resource information at the scale of natural resource maps, the KDSWCD makes no opinion on the suitability of this site for the proposed use but may give general statements and an estimate of the possible effects of the land use change to the natural resources of this parcel. The information given in this report is based on the review of natural resource maps and literature by the Kane-DuPage Soil and Water Conservation District. The statements in this report are not meant as a recommendation for the success, nor the failure of, the proposed use of this parcel.

This report should alert the reader to the capabilities of the parcel and to the possible issues that may occur if the properties and characteristics of the land are ignored. Please direct technical questions about information supplied in this report to:

Kane-DuPage Soil & Water Conservation District
2315 Dean Street, Suite 100
St. Charles, IL 60175
Phone: (630) 584-7960 x3

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PARCEL LOCATION

Figure 1: Plat Map with aerial background and parcel boundary

This site is in **Blackberry** Township. The public land survey system identifies the site in **Section 31 in Township 39 North and Range 7 East.** The site is parcel #**11-31-100-009** located **on Lorang Rd. Sugar Grove, IL 60554**.

LAND COVER IN THE EARLY 1800'S

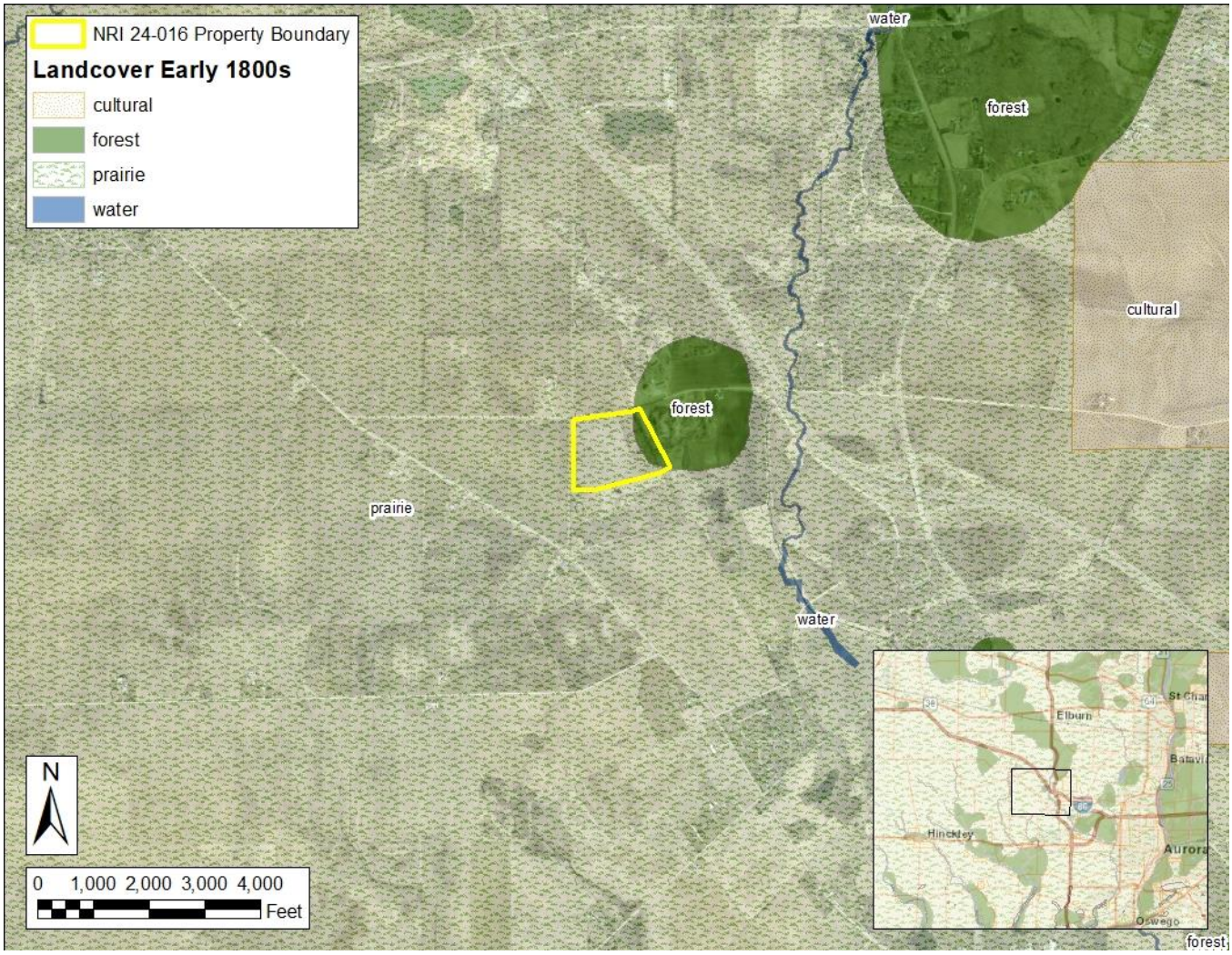

Figure 2: Land Cover of Illinois in the Early 1800's

The public land survey system represents one of the earliest detailed maps for Illinois. The surveys began in 1804 and were largely completed by 1843. The surveyors recorded the land cover and natural resource areas as they worked across the state. These plat maps and field notebooks contain a wealth of information about what the landscape was like before large numbers of settlers came into the state and began modifying the land.

Much of the landscape of Illinois in the early 1800's consisted of two different natural resource areas; prairie and forest. The forest category includes woodlands and savannas, typical of northeastern Illinois. Prairie and forest ecosystems are extremely valuable resources for many reasons. These areas:

- provide wildlife habitat and support biodiversity
- provide areas for recreational opportunities
- improve soil health and reduce soil loss
- improve air and water quality

The original 42 categories of natural resource areas were later simplified to 12 categories; barrens, bottomland, cultural (farms), forest, marsh, other wetlands, prairie, slough, swamp, special geographic features, wet prairie, and water. The maps do not represent exact site conditions, but represent the observations of individual surveyors as they crossed through the area.

This site is recorded as prairie and forest land cover on the early 1800's map. The Kane-DuPage Soil & Water Conservation District recommends preserving as much of the natural character of the site as possible, using native plants for landscaping, and removing and controlling invasive species.

GREEN INFRASTRUCTURE

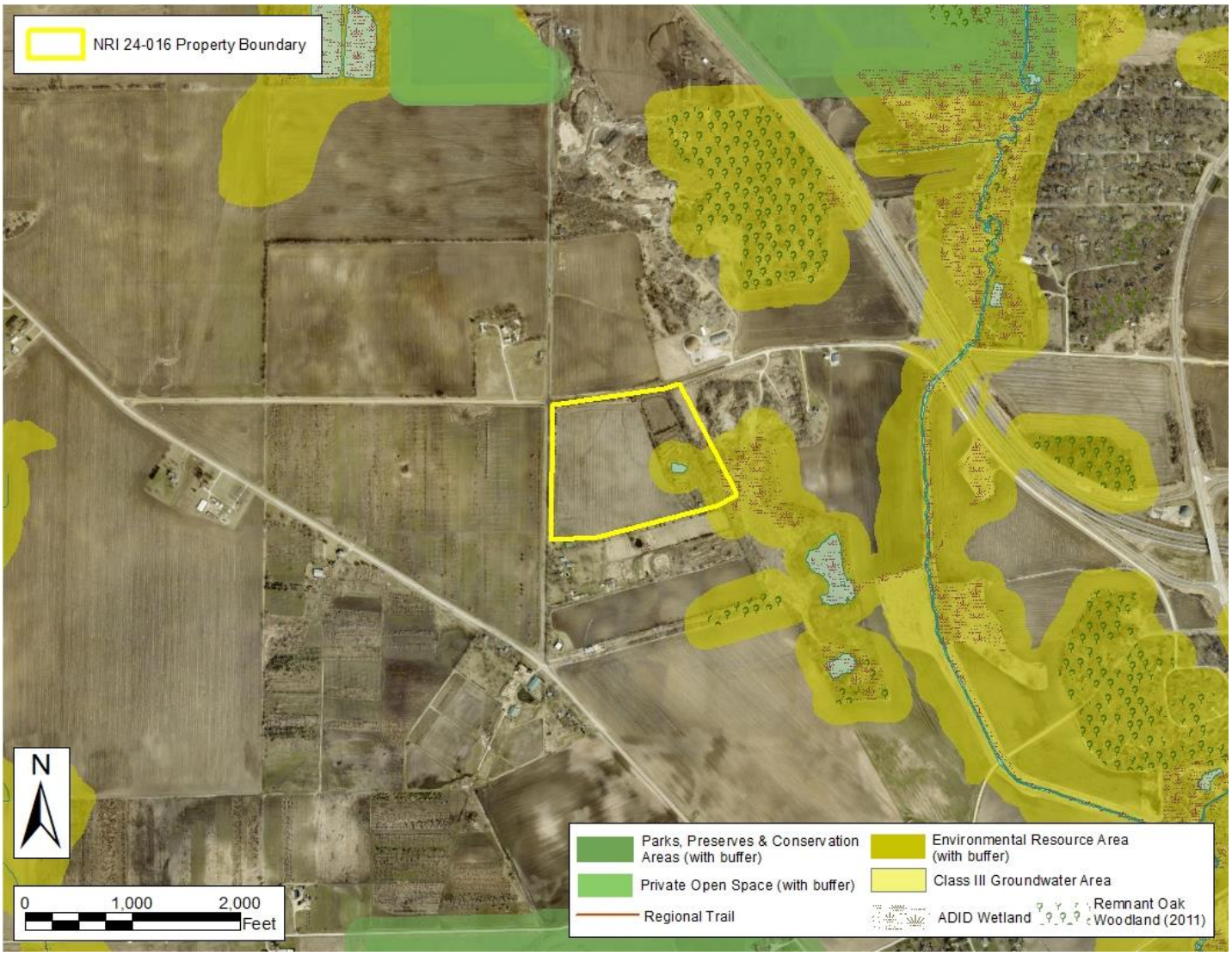

Figure 3: Kane County 2040 Green Infrastructure Plan site map

Green infrastructure is an interconnected system of natural areas and open spaces including woodlands, wetlands, trails, and parks, which are protected and managed for the ecological values and functions they provide to people and wildlife. The Kane County Green Infrastructure Plan includes analysis of existing natural resources in the county and recommend actions for green infrastructure priorities and approaches. The goal is to lay the groundwork for green infrastructure planning and projects at the regional, community, neighborhood, and site level, (from the "Kane County 2040 Green Infrastructure Plan").

The benefits of green infrastructure include:

- Preservation of habitat and diversity
- Water and soil conservation
- Flood storage and protection
- Improved public health
- Encourage local food production
- Economic benefits
- Mitigation and adaptation for climate change

This site includes one or more of the following priority areas in the "Kane County 2040 Green Infrastructure Plan": regional trails, creeks, Fox River, wetlands, remnant oak woodlands, forest preserves, park preserves and conservation area, private open space, environmental resource area.

NATIONAL WETLAND INVENTORY (NWI)

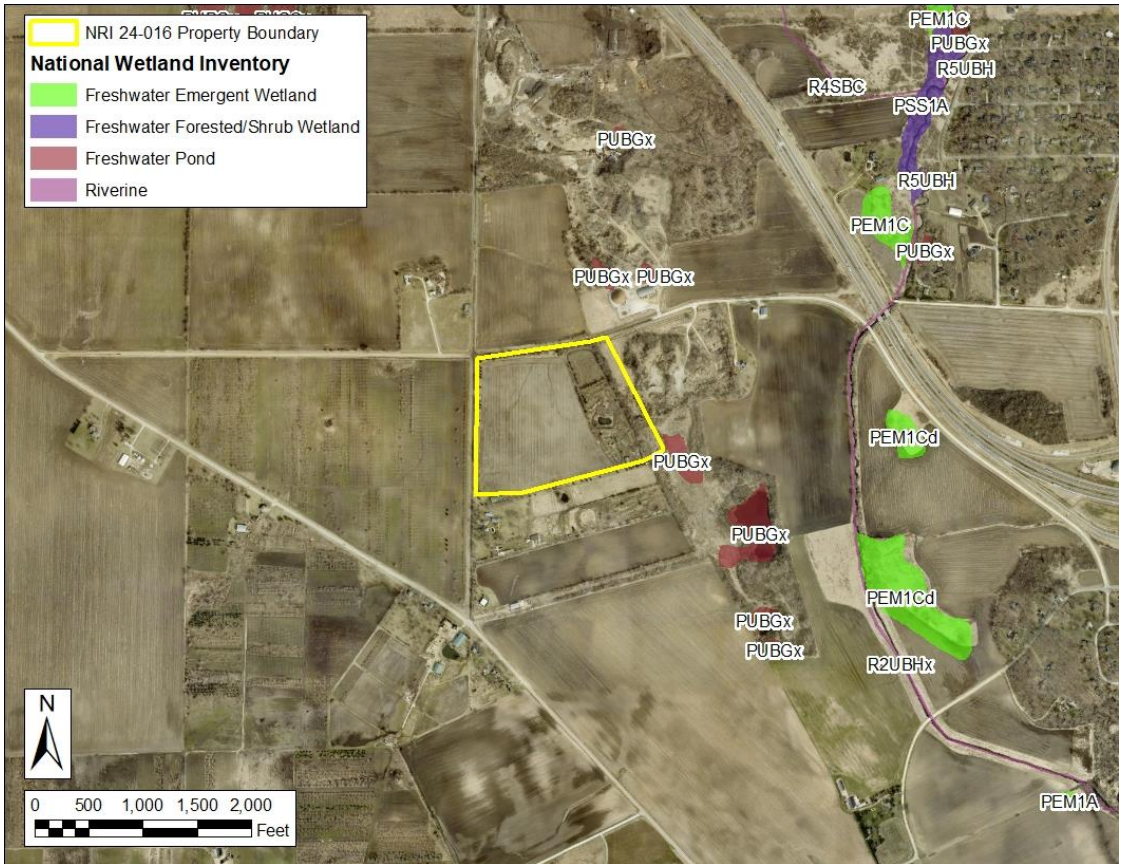

Figure 4: National Wetland Inventory (NWI) Map

The National Wetland Inventory (NWI), conducted by the U.S. Fish and Wildlife Service, identifies significant wetlands throughout the country. All U.S. federal agencies define wetlands as follows, "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." Other common wetlands located in this part of Illinois are fens, wet meadows, seasonally saturated soils, and farmed wetlands.

Wetlands are protected and regulated by federal, state, and local laws, without regard to size. Wetlands are valuable, productive, and diverse ecological systems and provide multiple benefits, including:

- controlling flooding by slowing the release of excess water downstream or through the soil,
- cleansing water by filtering out sediment and pollutants,
- functioning as recharge areas for groundwater,
- providing essential breeding, rearing, and feeding habitat for many species of wildlife.

The National Wetland Inventory identifies wetlands adjacent to this site. These wetlands include: Freshwater Pond with a wetlands classification code of PUBGx. This indicates that the PUBGx wetlands are Palustrine, Unconsolidated Bottom, Intermittently Exposed, and Excavated. Although the NWI is very thorough, it is not a complete inventory of all possible wetlands. Other regulated wetlands may also be present.

The KDSWCD recommends contacting the U.S. Army Corps of Engineers and the Kane County Division of Environmental and Water Resources before commencing any construction activities that may impact wet areas or floodplains. Please see the Regulatory Agencies page near the end of the report for wetland regulation information.

ADVANCED IDENTIFICATION OF WETLANDS (ADID)

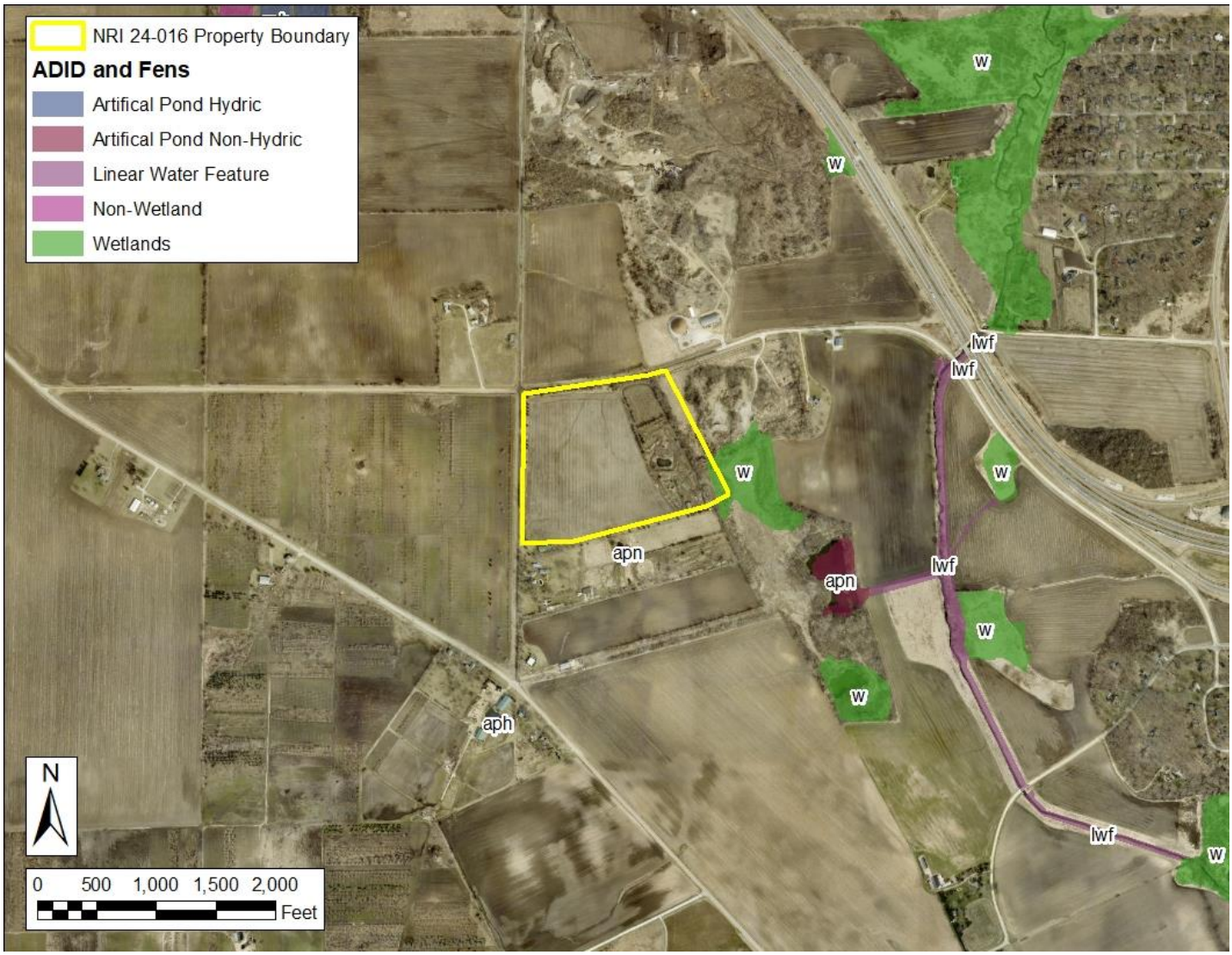

Figure 5: Advanced Identification of Wetlands (ADID), Kane County

Released in August of 2004, the Kane County Advanced Identification of Wetlands (ADID) study was a cooperative effort between federal, state, and local agencies to identify the location and quality of the wetlands of Kane County and to develop wetland protection strategies. ADID studies are a U.S. Environmental Protection Agency program to provide improved awareness of the locations, functions, and values of wetlands and other waters of the United States. This information can be used by federal, state, and local government to aid in zoning, permitting, and land acquisition decisions. In addition, the information can provide data to agencies, landowners, and private citizens interested in restoration or protection of aquatic sites and resources. For more detailed information regarding wetlands in Kane County, please refer to the Advanced Identification of Wetlands (ADID) study at:

http://dewprojects.countyofkane.org/adid/

A review of the Kane County ADID map revealed that ADID wetlands were identified on this site. This wetland has been designated as having a high habitat quality and high functional value.

WETLAND PHOTOS

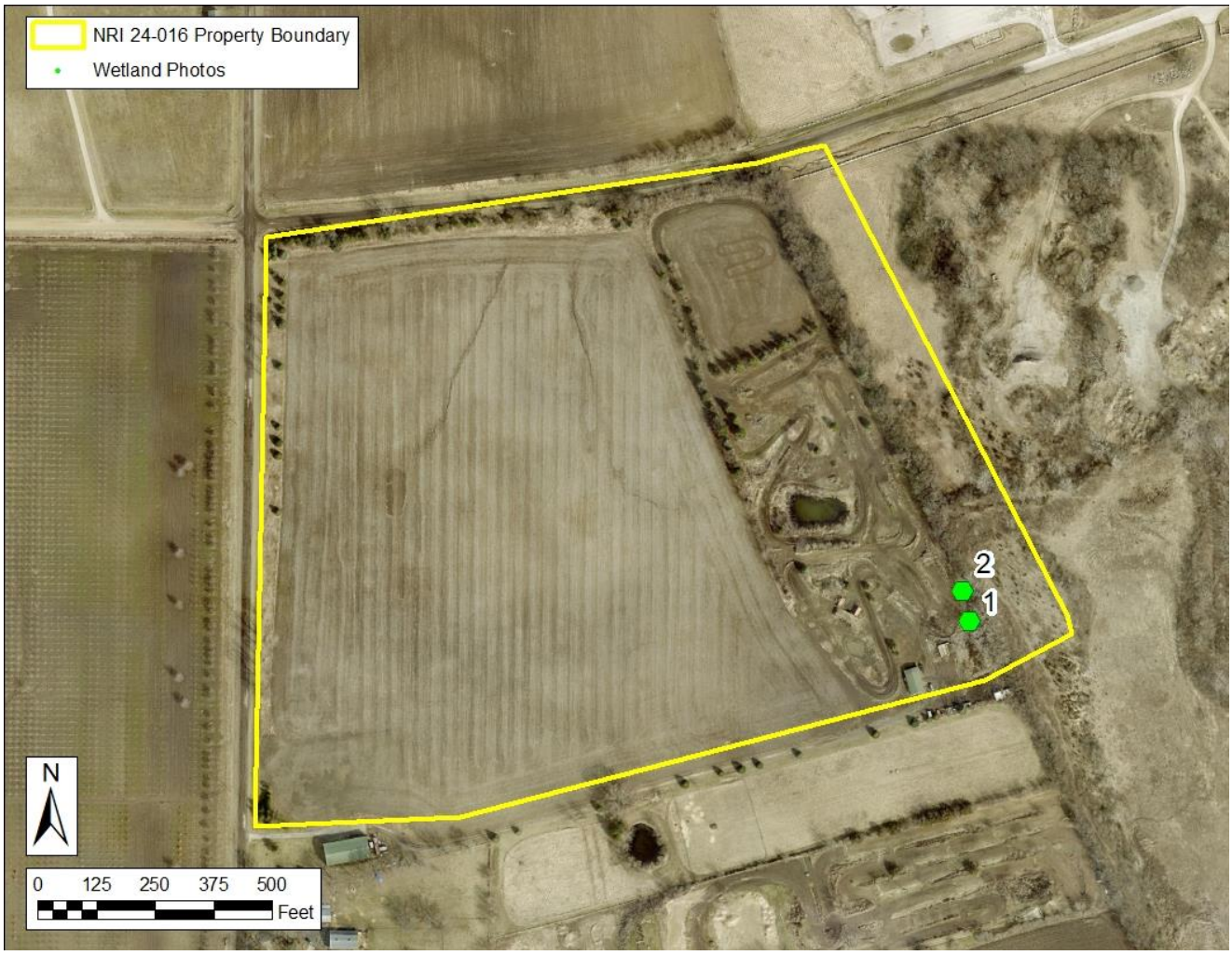

Figure 6: Wetland photos

Photo 1: Facing south

Photo 2: Facing southwest

FLOODPLAINS

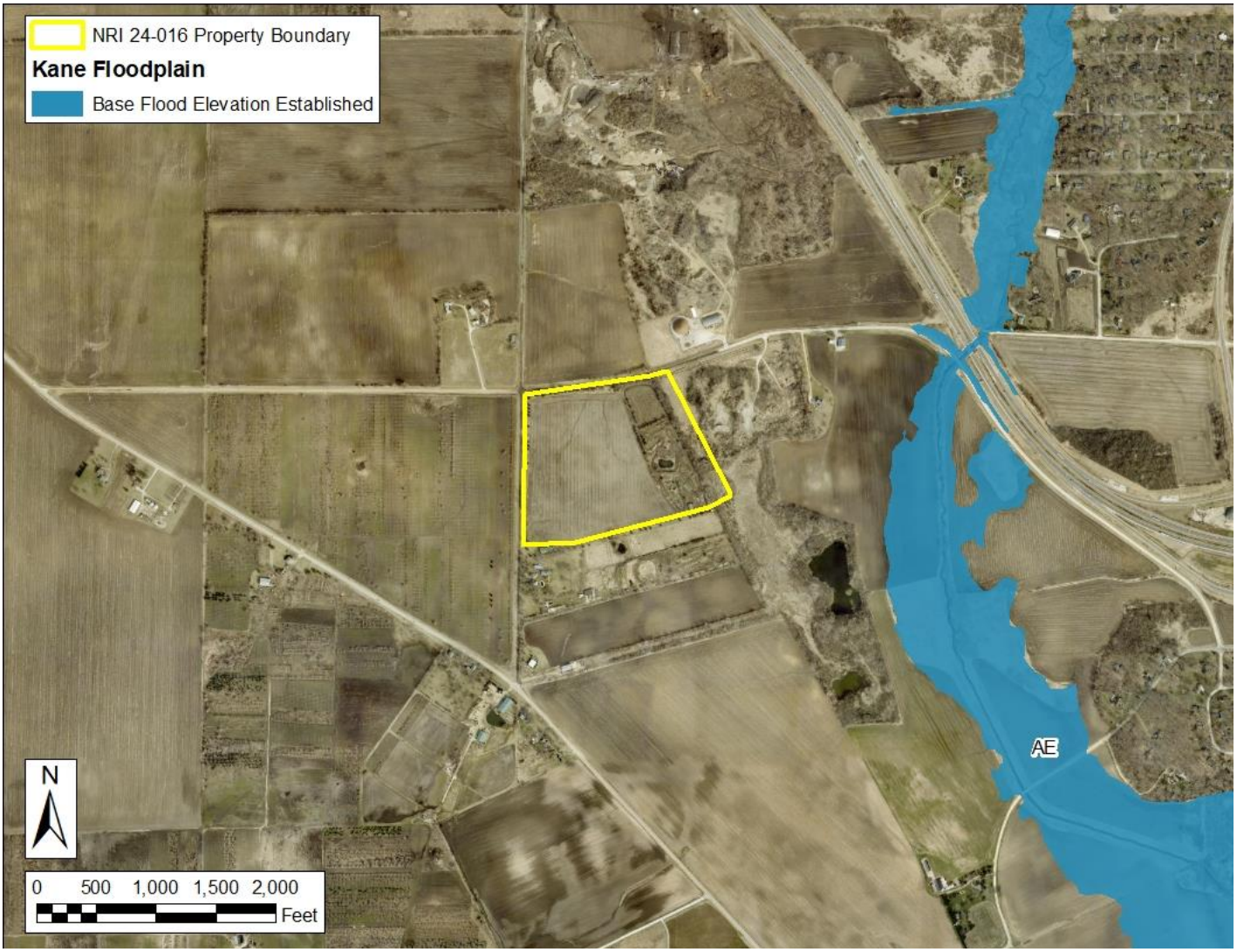

Figure 7: Floodplain map - Federal Emergency Management Agency (FEMA)

Undeveloped floodplains provide many natural resources and functions of considerable economic, social, and environmental value. Floodplains often contain wetlands and other important ecological areas as part of a total functioning system that impacts directly on the quality of the local environment.

Here are a few of the benefits and functions of floodplains:

- natural flood storage and erosion control,
- water quality maintenance,
- groundwater recharge,
- nutrient filtration,
- biological productivity/wildlife habitat,
- recreational opportunities/aesthetic value.

Also, development in a floodplain has a hazardous risk of damage by high flood waters and stream overflow. For this reason, floodplains are generally unsuited to most development and structures.

According to the FEMA Flood Insurance Rate Map, **none** of this site is within the boundaries of a 100-year floodplain. Any development in the floodplain, other than restoration efforts, is generally unsuited and hazardous and will impede the beneficial functions of the floodplain. See the Regulatory Agencies page near the end of this report for information regarding floodplain regulations.

WATERSHEDS AND STREAMS

Watersheds are areas of land that eventually drain into a river or stream. Everyone lives in a watershed, no matter if a river or stream is nearby. Watersheds may be named according to its major river or stream. Watersheds, such as the Mississippi River watershed, may be extremely large, encompassing multiple states. Watersheds may also be subdivided into smaller units, such as subwatersheds. Some very small watersheds may not contain a named stream. However, the water that drains from that watershed eventually reaches a stream or river.

Watersheds in the United States are delineated by the U.S. Geological Survey (USGS) using a nationwide system based on surface hydrologic features. Examples of these surface hydrologic features include discharge flow, substratum size, stream width, and depth. This USGS system divides the country into 22 regions (2-digit), 245 subregions (4-digit), 405 basins (6-digit), nearly 2,400 subbasins (8-digit), roughly 19,000 watersheds (10-digit), and approximately 105,000 subwatersheds (12-digit). The USGS uses this system to assign each hydrologic area with a hierarchical Hydrologic Unit code (HUC), which consists of 2 additional digits for each level within the hydrologic unit system.

A complete list of Hydrologic Unit codes, descriptions, names, and drainage areas can be found in the United States Geological Survey Water-Supply Paper 2294, entitled "Hydrologic Unit Maps".

Common Watershed Goals:

- Protect and restore natural resources
- Improve water quality
- Reduce flood damage
- Enhance and restore stream health
- Guide new development to benefit watershed goals
- Preserve and develop green infrastructure
- Enhance education and stewardship

For information on Watershed Planning and Protection in Kane County, visit:

Kane County Watershed Planning and Special Projects

Rivers and Streams are necessary components of successfully functioning ecosystems. It is important to protect the beneficial functions and integrity of our local streams and rivers. Development near stream systems has the potential to increase flooding, especially in urban areas where there is a lot of impervious surface and a greater amount of stormwater runoff. Pollution is also an issue for stream systems in urban and rural areas. It is rare for any surface waters to be impacted by only one source of pollution. With few exceptions, every land-use activity is a potential source of nonpoint source water pollution (IEPA Nonpoint Source Pollution).

The Illinois Environmental Protection Agency (IEPA) provides the following regarding nonpoint source pollution: “Nonpoint source pollution (NPS) occurs when runoff from rain and snowmelt carries pollutants into waterways such as rivers, streams, lakes, wetlands, and even groundwater. Examples of or sources of NPS pollution in Illinois include runoff from farm fields, livestock facilities, construction sites, lawns and gardens, city streets and parking lots, surface coal mines, and forestry. The major sources of NPS pollution in Illinois are agriculture, urban runoff, and habitat modification.”

Nutrient management is of vital importance to the health of our rivers and streams. Nutrient load in our local streams and rivers has contributed to the Gulf of Mexico hypoxia, or a “dead zone” located where the Mississippi River meets the Gulf of Mexico. This dead zone has little to no biological activity. Yearly averages indicate the dead zone to be greater than 5,000 square miles in size. Illinois was required and has introduced a plan to reduce nutrient loss from point source pollution sources, such as wastewater treatment plants and industrial wastewater, as well as nonpoint pollution sources. Read Illinois’s Plan for reducing nutrient loss here:

https://epa.illinois.gov/topics/water-quality/watershed-management/excess-nutrients/nutrient-loss-reduction-strategy.html

WATERSHEDS AND SUBWATERSHEDS

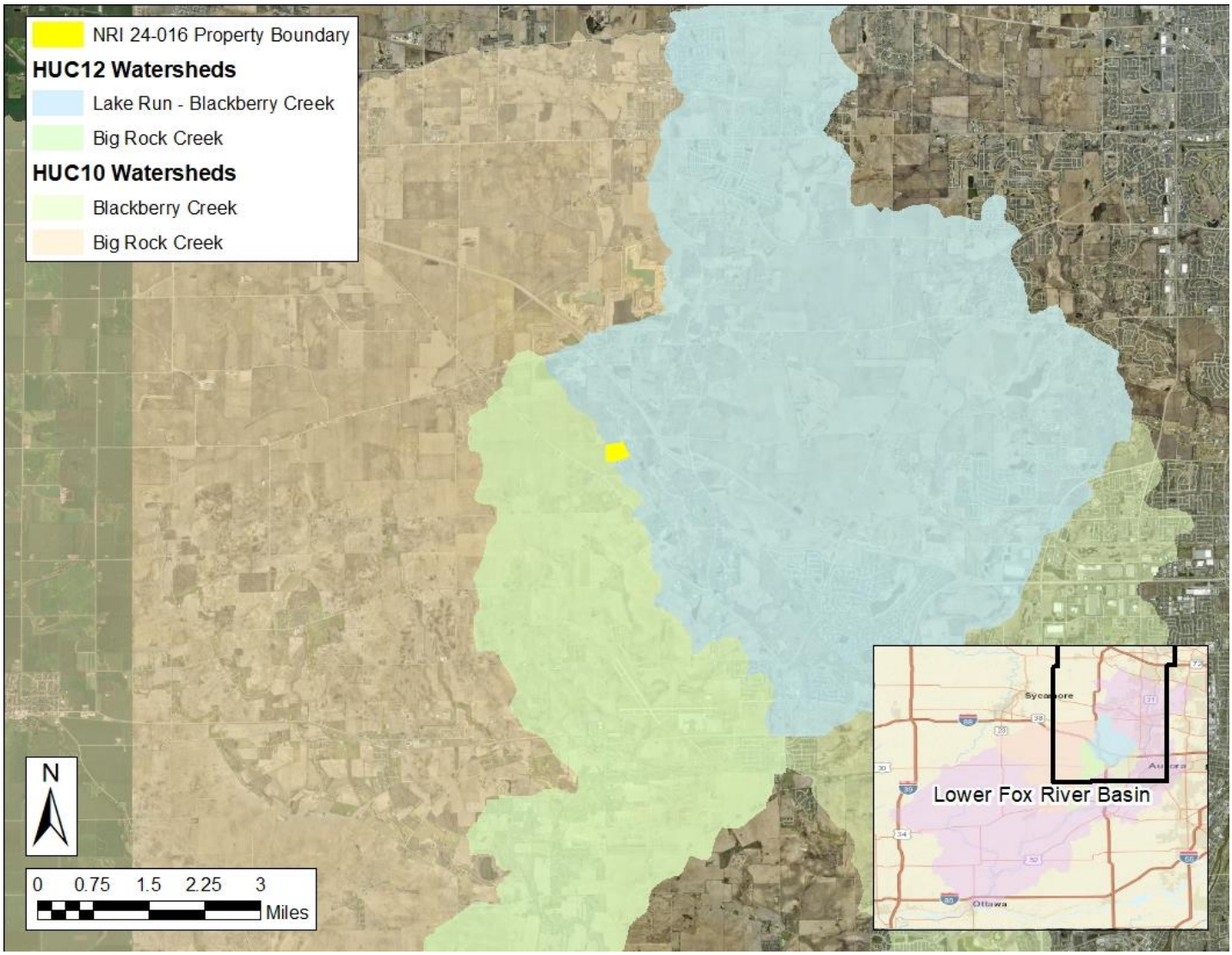

Figure 8: Watersheds and Subwatersheds

Kane County has been subdivided into four watersheds by federal and state agencies, based upon the drainage area of local rivers: the Kishwaukee River watershed in the northwest; a small portion of the Des Plaines River watershed, along the border with DuPage County; and the Upper and Lower Fox River watersheds, which occupies the central portion of the county. The Kishwaukee River watershed is part of the Rock River watershed, while the Des Plaines River watershed and both the Upper and Lower Fox River watersheds are part of the Illinois River watershed. Both the Rock River and Illinois River are part of the greater Mississippi River watershed. These watersheds have been subdivided into smaller local watersheds for planning.

Local watershed management planning is an important effort for the protection of local water resources and can involve watershed organizations, citizens, communities, municipalities, as well as state, local, tribal and/or federal environmental agencies. Water quality is a direct reflection of its watershed.

The map above indicates that 86 percent of this site is located within the boundaries of subwatershed HUC12-071200070201 Lake Run – Blackberry Creek of the HUC10-0712000702 Blackberry Creek watershed and 14 percent of this site is located within the boundaries of subwatershed HUC12-071200070307 Big Rock Creek of the HUC10-0712000703 Big Rock Creek watershed.

AQUIFER SENSITIVITY

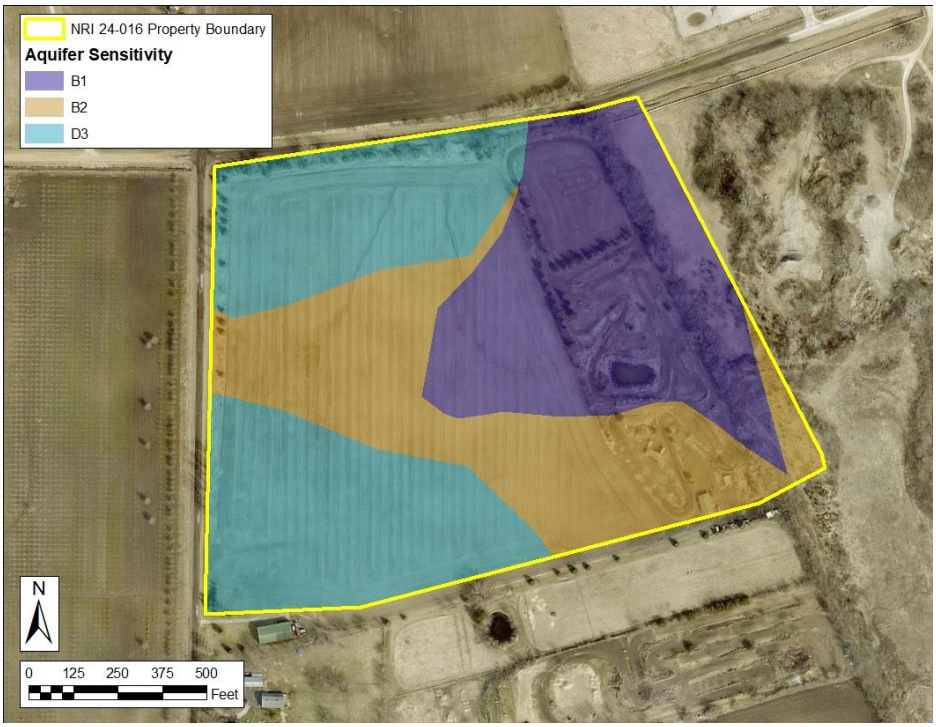

Figure 9: Aquifer Sensitivity to Contamination map

The map of Aquifer Sensitivity to Contamination is a representation of the potential vulnerability of aquifers (underground water sources) to contamination from pollutants at or near the surface of the ground. The U.S. Environmental Protection Agency (US EPA) defines aquifer sensitivity contamination potential as "a measure of the ease with which a contaminant applied on or near the land surface can migrate to an aquifer."

Aquifers function as a storage area for groundwater, which makes them a valuable source of fresh water. Groundwater accounts for a considerable percentage of the drinking water in Kane County. The chart below shows the aquifer sensitivity classifications. **This site is classified as having a moderately low to moderately high potential for contamination.**

A1	Aquifers are greater than 50ft thick and within 5ft of the surface	**C1**	Aquifers are greater than 50ft thick and between 20 and 50ft below the surface
A2	Aquifers are greater than 50ft thick and between 5 and 20ft below the surface	**C2**	Aquifers are between 20 and 50ft thick and between 20 and 50ft below the surface
A3	Aquifers are between 20 and 50ft thick and within 5ft of the surface	**C3**	Sand and gravel aquifers are between 5 and 20ft thick, or high- permeability bedrock aquifers are between 15 and 20ft thick, both between 20 and 50ft below the surface
A4	Aquifers are between 20 and 50ft thick and between 5 and 20 feet below the surface	**D1**	Aquifers are greater than 50ft thick and between 20 and 50 ft below the surface
B1	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both within 5ft of the surface	**D2**	Aquifers are between 20 and 50ft thick and between 50 and 100ft below the surface
B2	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 5 and 20ft below the surface	**D3**	Sand and gravel aquifers are between 5 and 20ft thick, or high- permeability bedrock aquifers are between 15 and 20ft thick, both between 50 and 100ft below the surface
E1	Sand and gravel or high-permeability bedrock aquifers are not present within 100 ft of the land surface		

A = High Potential, B = Moderately High Potential, C=Moderate Potential, D = Moderately Low Potential, E = Low Potential

TOPOGRAPHY AND OVERLAND FLOW

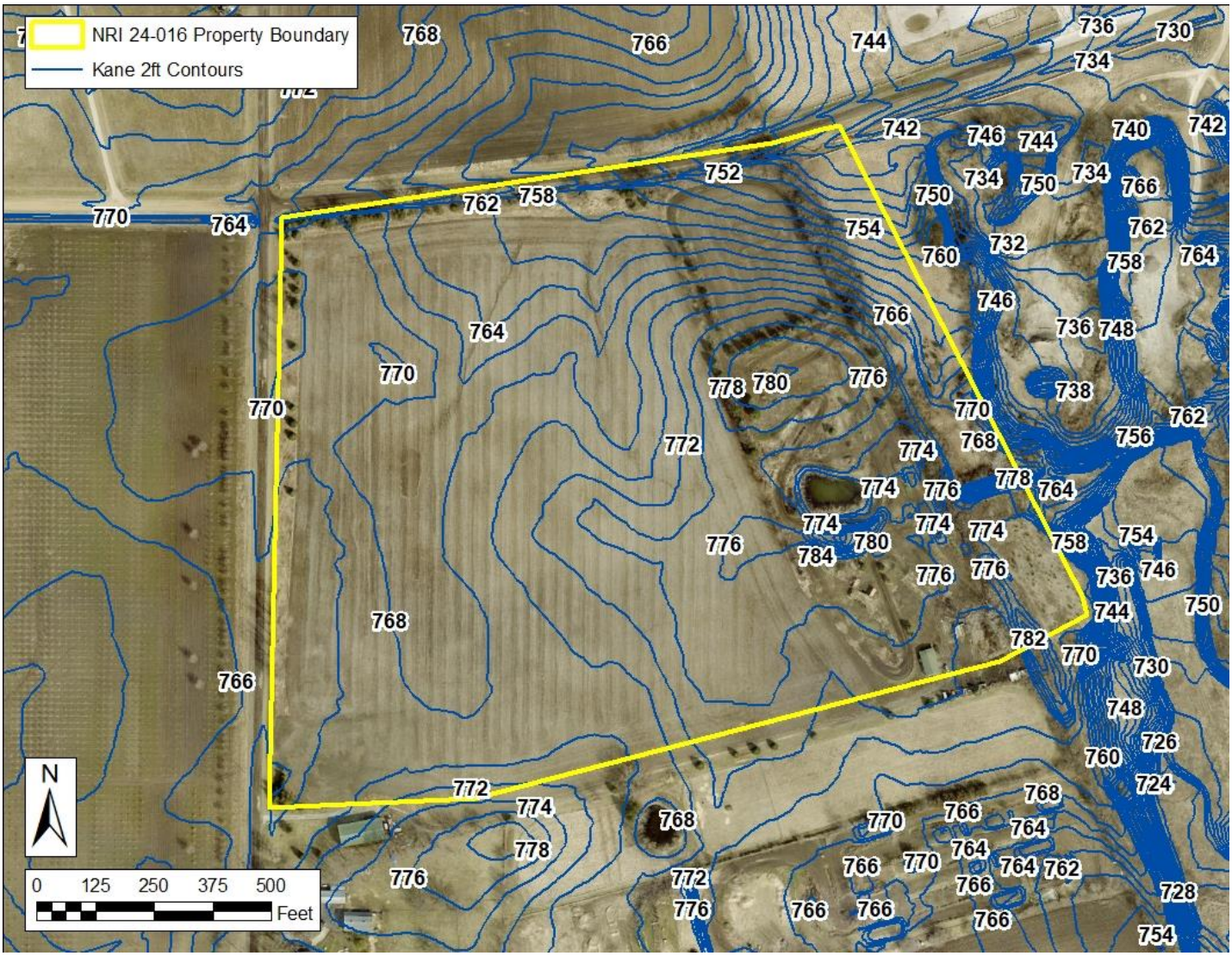

Figure 10: Topographic map showing contour lines

Topographic maps (contour maps) give information on the elevation of the land, which is important to determine slope steepness, natural water flow paths, and watershed information. The natural water flow path can determine where water leaves a property and where it may impact surrounding natural resources. Slope, along with soil erodibility factors, affect the potential of soil erosion on a site. Contour maps can also help determine the areas of potential flooding. It is important to consider the direction of water flow and erosion potential on all construction sites. Areas where water leaves the site should be monitored for sediment and other pollutants, which could contaminate downstream waters.

The map above shows contour lines with 2 feet elevation distance between each line. The high point of this property is in the southwestern portion of the site at an elevation of approximately 784 feet above sea level. The property generally drains to the north via overland flow. The lowest elevation on the property is approximately 752 feet above sea level.

Please Note: This site's actual topography does not match the map. The site has been materially altered after the topological map information was gathered and produced.

STORMWATER MANAGEMENT

Managing stormwater and stormwater runoff is critical for all development. Stormwater runoff from a site usually increases due to soil compaction, more impervious surfaces, loss of vegetation, and soil degradation during construction activities. Increased runoff causes downstream flooding, soil erosion, sedimentation, and pollution of surface waters. The KDSWCD recommends the use of onsite stormwater management strategies whenever possible. These strategies include stormwater retention and detention basins, bioswales, raingardens, the use of natural depressions and vegetated swales, deep-rooted native plants, permeable pavers or permeable asphalt. A combination of these and other practices may be able to retain stormwater onsite. The Illinois Environmental Protection Agency (IEPA) now recommends that stormwater pollution prevention plans include post-construction stormwater management to keep as much stormwater on the site, as possible.

Site assessment with soil testing should help to determine what stormwater management practices are best for your site. Insufficient stormwater management has the potential to cause or aggravate flooding conditions on surrounding properties, or elsewhere in the watershed. Please refer to the Kane County Stormwater Ordinance for stormwater requirements and minimum standards.

https://www.countyofkane.org/FDER/Pages/environmentalResources/waterResources.aspx

SOIL EROSION

Soil erosion is the degradation of soil, mostly caused by the force of rain and the movement of water detaching soil particles and carrying the soil off the site. Factors that affect soil erosion are the slope of the land, the inherent properties of the soil, and the cover (or lack of cover) on the soil surface. Extra care must be taken to prevent or reduce soil erosion on construction sites containing highly erodible soils.

The potential for soil erosion during and after construction activities could have major impacts, both onsite and offsite. The erosion and resulting sedimentation may become a primary nonpoint source of water pollution. Eroded soil during the construction phase can create unsafe conditions on roadways, degrade water quality, and destroy aquatic ecosystems lower in the watershed. Soil erosion also increases the risk of flooding due to choking culverts, ditches, and storm sewers, and reduces the capacity of natural and man-made detention facilities.

Construction and development activities should include a soil erosion and sedimentation control plan. Erosion and sedimentation control measures include:

- staging the construction to minimize the number of disturbed areas present at the same time,
- keeping the ground covered, either by mulch or vegetation, and
- keeping runoff velocities low.

Many construction sites are required to develop and follow a Stormwater Pollution Prevention Plan (SWPPP) in order to be in compliance with local, state, and federal laws regarding soil erosion and stormwater management. Soil erosion and sedimentation control plans, including maintenance responsibilities, should be clearly communicated to all contractors working on the site. Special care must be taken to protect any wetlands, streams, and other sensitive areas.

Please refer to the Illinois Urban Manual for erosion and sediment control information and technical guidance when creating erosion and sediment control plans. The practice standards and standard drawings from the Illinois Urban Manual represent the minimum standard in Illinois. Contact the KDSWCD for assistance in preparing a stormwater pollution prevention plan.

HIGHLY ERODIBLE LAND (HEL)

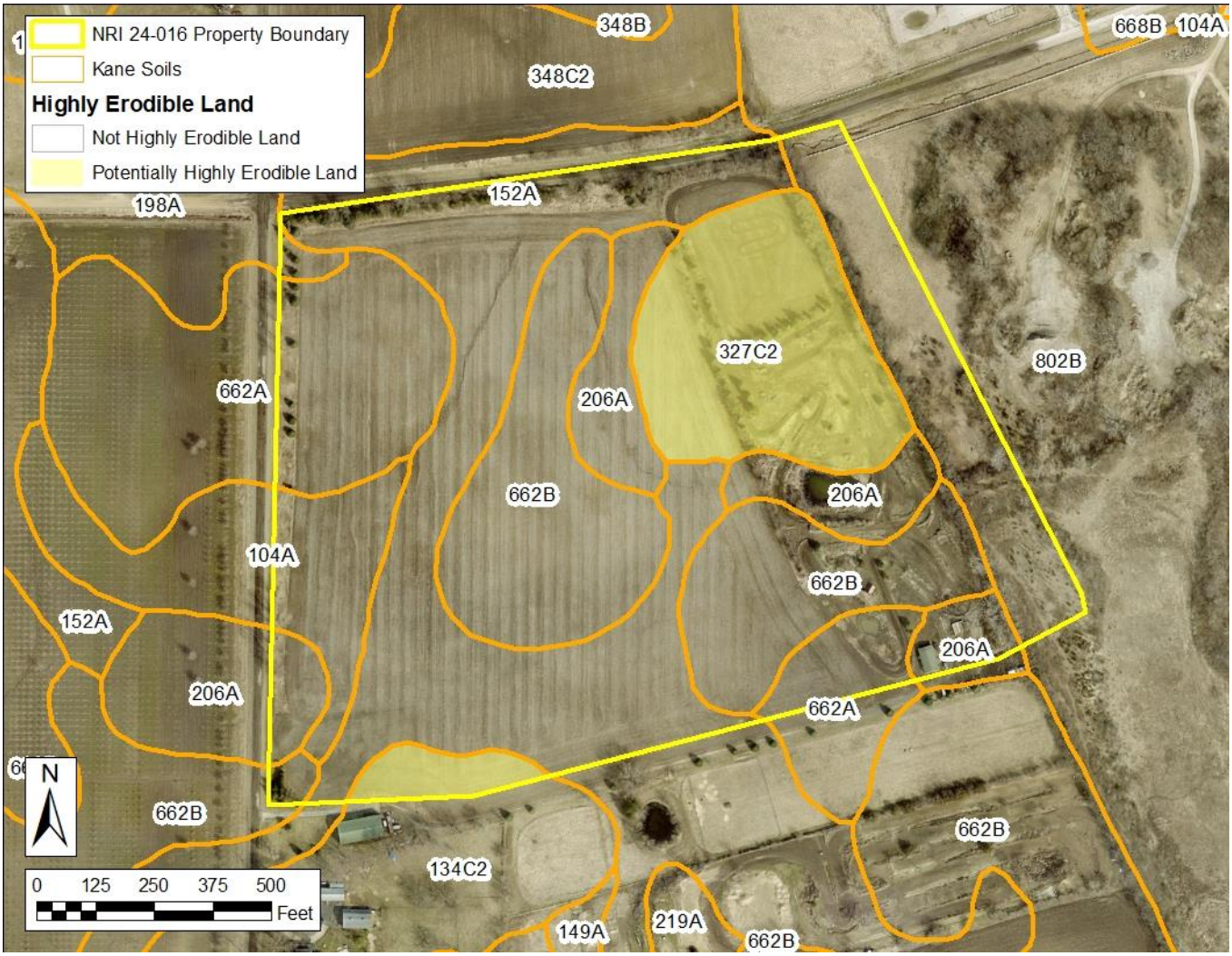

Figure 11: Highly Erodible Land map

Soils vary in their susceptibility to erosion. Highly erodible land (HEL) is land that can erode at excessive rates. Highly erodible land is generally sloping and contains soils that are susceptible to soil erosion by runoff and raindrop impact. The susceptibility to erosion and the highly erodible rating depends upon several factors and properties of the soil. Fine-textured soils high in clay have low erodibility values, because the soil particles are resistant to detachment. Coarse-textured soils, such as sandy soils also have low erodibility values because the water infiltrates and they have less runoff. Medium textured soils, such as loams, are moderately susceptible to detachment and they produce moderate runoff. Soils having a high silt content, like many soils in Kane County, are the most erodible of all soils. They are easily detached and tend to crust and produce large quantities and higher rates of runoff.

Other factors that affect the erodibility of soils include the force of the rainfall, the steepness and length of the slope of the land, and the amount of organic matter in the surface soil layer.

Highly Erodible Land (HEL) contains soils that have been determined by the USDA Natural Resources Conservation Service to be highly erodible. The HEL determination uses a formula involving the properties previously described, to determine the Soil Erodibility Index. Soils that have a Soil Erodibility Index above a certain value are considered highly erodible or potentially highly erodible. **Soils on this site are considered Potentially Highly Erodible Land (PHEL) by the NRCS.**

SOILS & SOIL INTERPRETATIONS

Soils are the foundation of life. Soil is a dynamic ecosystem comprised of living things: plants, animals, and microscopic organisms. Soil is also a substance composed of various minerals and organic matter, interfused with lots of pore spaces which help move and store air and water. Soils are formed over hundreds and thousands of years, taking about 500 years to form an inch of topsoil. Soil is formed by the influences of climate, organisms (plants and animals), topography, the material in which it is developing (parent material), and time. There are thousands of soil series in the world. In Illinois alone, there are over 600 different soil series. Each soil series is unique in its content and its behavior for a particular use.

The different soils across the U.S. have been mapped and identified by the USDA Natural Resources Conservation Service (NRCS) in a soil survey. The soil map of this area (Figure 12: Soil Survey) indicates different soil map units. Each soil map unit and corresponding symbol represent a phase of a soil series. Phases include slope, erosion, flooding frequency, etc. of each soil. Each soil and associated phase have strengths and limitations for a variety of land uses such as septic systems, buildings site development, local roads, and many other uses.

See the Soil Map Units Table in the Soil Survey section for the composition of soil map units of the site. See the Soil Interpretations section for the soil interpretations for the proposed use of the site.

How soil is managed as a resource can be either beneficial or detrimental for the environment, or for any other particular use. It is difficult to change the inherent properties of soil, such as the mineral composition or the amount of sand, silt, or clay within soil. However, it is easy to compact or erode soil to the extent that many soil functions, such as water storage, infiltration, rooting medium, carbon storage, and soil health could all become compromised or destroyed. Management techniques to protect the integrity and functions of soil include:

- limiting traffic on the site to reduce compaction of the soil surface
- keeping the soil covered as much as possible, with deep rooted grasses or with mulch or other erosion control practices
- disturbing only the areas necessary for the footprint of structures and reducing or eliminating mass grading of sites

Soils and Onsite Waste Disposal

Soils are often used for onsite waste disposal or underground septic systems to dispose of sewage, especially for individual homes that are not connected to a municipal sewage system. No interpretive rating is given in this report for on-site wastewater disposal (septic systems). The detail of the soil information in the soil survey is not precise enough to determine suitability for the small area required for a septic system. **A Certified Professional Soil Classifier, in cooperation with the county department of public health, must conduct a soil evaluation to determine the suitability of the parcel for on-site wastewater disposal (i.e. septic system), as required by the State of Illinois.**

Soil Interpretation Ratings

The soil interpretation (limitation) ratings are used mainly for engineering designs for proposed uses, such as dwellings with or without basements, local streets and roads, small commercial buildings, etc. The ratings given are based on NRCS national criteria and are defined and used as follows:

Not Limited – This limitation rating indicates that the soil properties are generally favorable for the specified use and that any limitations are minor and easily overcome.

Somewhat Limited - This rating indicates that the soil properties and site features are unfavorable for the specified use, but that the limitations are moderate and can be overcome or minimized with special planning and design.

Very Limited - This indicates that one or more soil properties have severe limitations and are very unfavorable and difficult to overcome. A major increase in construction effort, special designs, or intensive maintenance is required. These costly measures may not be feasible for some soils that are rated as Very Limited.

Contact the KDSWCD for questions concerning soil and refer to the **Illinois Urban Manual** for best management practices for protecting soil.

SOIL SURVEY

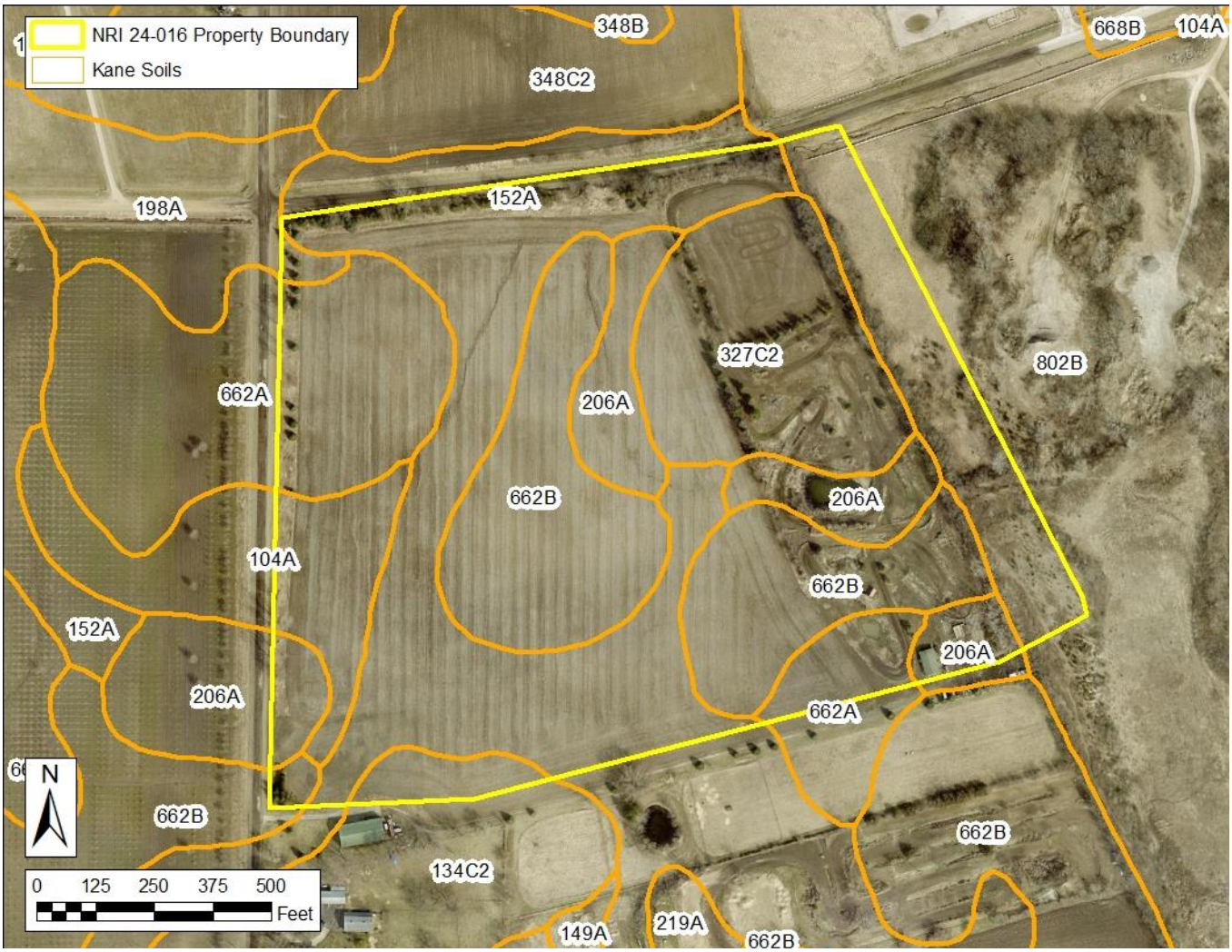

Figure 12: Soil Survey

The soil map unit symbol consists of a combination of numbers and letters which represent the interpretive phase of a soil series for an area of the landscape. Areas within the line of that symbol will have similar soil properties and interpretations.

The soil map in this report has been enlarged beyond the original scale. Enlargement of this map may cause misunderstanding of the accuracy and precision of the mapping. When enlarged, maps do not show the small areas of contrasting soil that could have been identified if the mapping was completed at a larger scale. The depicted soil boundaries and interpretations derived from the map units do not eliminate the need of onsite sampling, testing, and detailed study of specific sites for intensive uses. Thus, this map and its interpretations are intended for planning purposes only.

The KDSWCD suggests contacting a certified professional soil classifier to conduct an onsite investigation for point-specific soil information to determine the capabilities and the limitations of the soil for a specific use.

Table 1: Soil Map Units

SOIL MAP UNIT SYMBOL	PERCENT OF PARCEL	ACRES
152A – Drummer	26.9%	11.5
662B – Barony	21.9%	9.3
327C2 – Fox	13.7%	5.9
662A – Barony	11.0%	4.7
206A – Thorp	9.8%	4.2
802B – Orthents	9.3%	4.0
104A – Virgil	5.0%	2.1
134C2 – Camden	2.0%	0.8
198A – Elburn	0.5%	0.2
	Total	42.6

All percentages and acreages are approximate

SOIL MAP UNIT DESCRIPTIONS

The map units delineated on the detailed soil map in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in the report, along with the map, can be used to determine the composition and properties of a unit.

A map unit delineation of a soil map represents an area dominated by one or more major kinds of soil or miscellaneous area. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. The scale of the maps limits the detail that can be shown. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils. These minor components are inclusions within the named map unit.

LIST OF MAP UNITS

104A	Virgil silt loam, 0 to 2 percent slopes
134C2	Camden silt loam, 5 to 10 percent slopes, eroded
152A	Drummer silty clay loam, 0 to 2 percent slopes
198A	Elburn silt loam, 0 to 2 percent slopes
206A	Thorp silt loam, 0 to 2 percent slopes
327C2	Fox silt loam, 4 to 6 percent slopes, eroded
662A	Barony silt loam, 0 to 2 percent slopes
662B	Barony silt loam, 2 to 5 percent slopes
802B	Orthents, loamy, 1 to 6 percent slopes

SOIL INTERPRETATIONS – Shallow Excavations

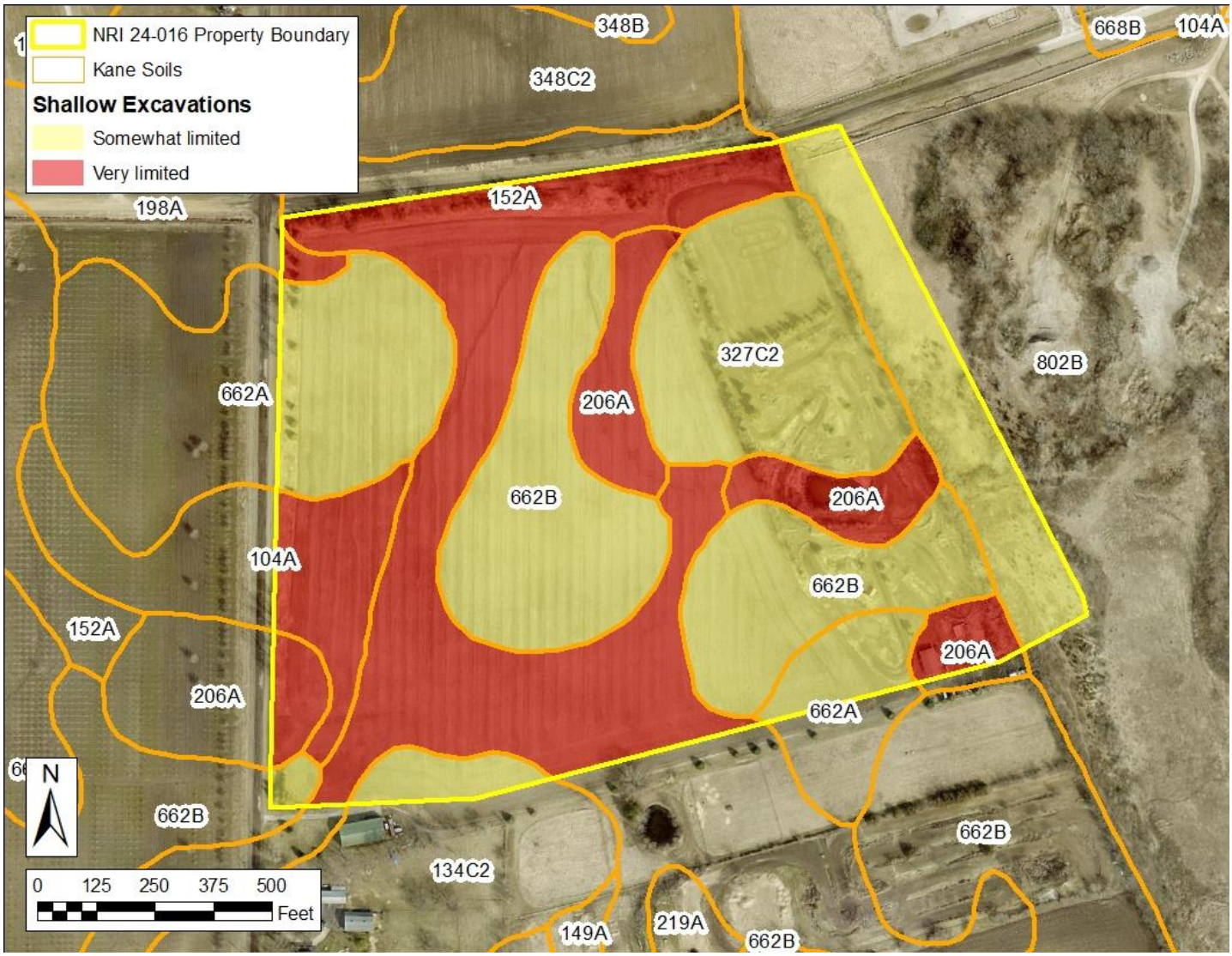

Figure 13: Soil Interpretations for Shallow Excavations

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock, hardness of bedrock, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high-water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing. **The high-water table is often a limiting factor in Kane County.**

Areas not shaded represent NOT LIMITED, and good performance and very low maintenance can be expected. Yellow represents SOMEWHAT LIMITED, and fair performance and moderate maintenance can be expected. Red represents VERY LIMITED, and poor performance and high maintenance are to be expected.

See the preceding **Soils Section** for more information concerning soil limitations.

SOIL INTERPRETATIONS – Local Roads and Streets

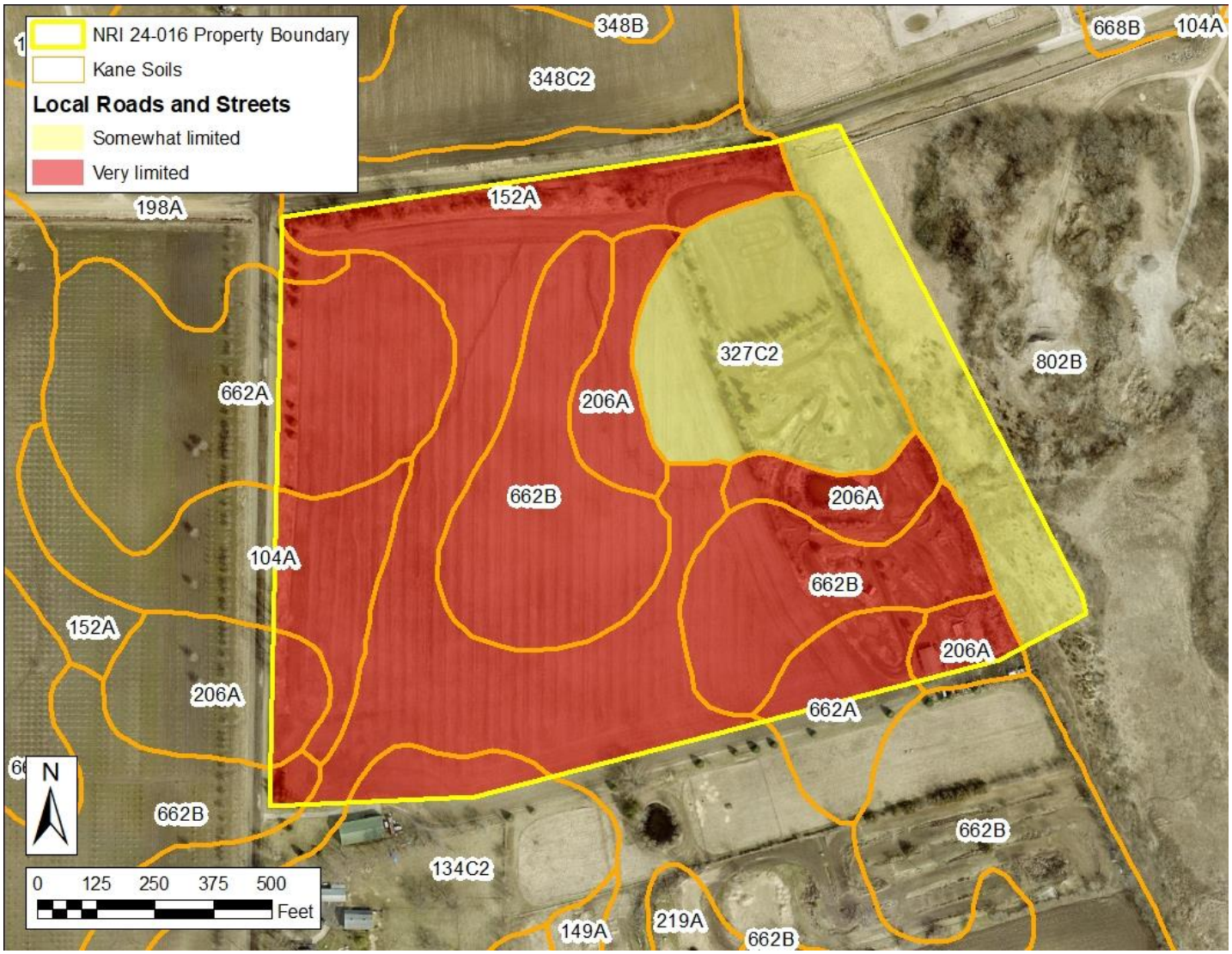

Figure 14: Soil Interpretations for Local Roads and Streets

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder.

The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding. **The high-water table is often a limiting factor in Kane County.**

Areas not shaded represent NOT LIMITED, and good performance and very low maintenance can be expected. Yellow represents SOMEWHAT LIMITED, and fair performance and moderate maintenance can be expected. Red represents VERY LIMITED, and poor performance and high maintenance are to be expected.

See the preceding **Soils Section** for more information concerning soil limitations.

SOIL INTERPRETATIONS – Lawns and Landscaping

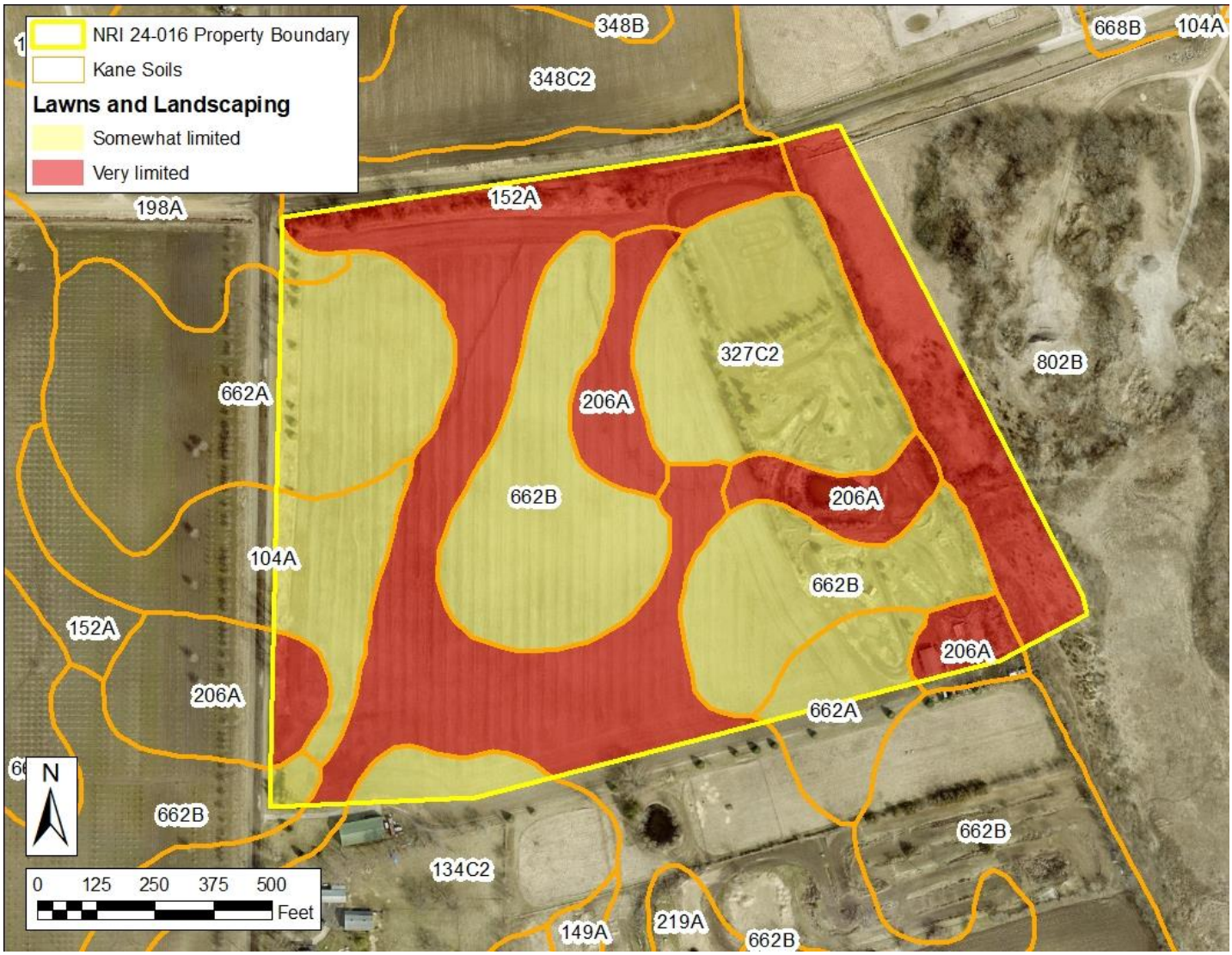

Figure 15: Soil Interpretations for Lawns and Landscaping

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are pH (acidic or alkaline conditions); depth to a water table; ponding; depth to bedrock; the available water capacity in the upper 40 inches; and the content of calcium carbonate. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. **The high-water table is often a limiting factor in Kane County.**

Areas not shaded represent NOT LIMITED, and good performance and very low maintenance can be expected. Yellow represents SOMEWHAT LIMITED, and fair performance and moderate maintenance can be expected. Red represents VERY LIMITED, and poor performance and high maintenance are to be expected.

See the preceding **Soils Section** for more information concerning soil limitations.

SOIL INTERPRETATIONS – Solar Array, Soil-based Anchoring Systems

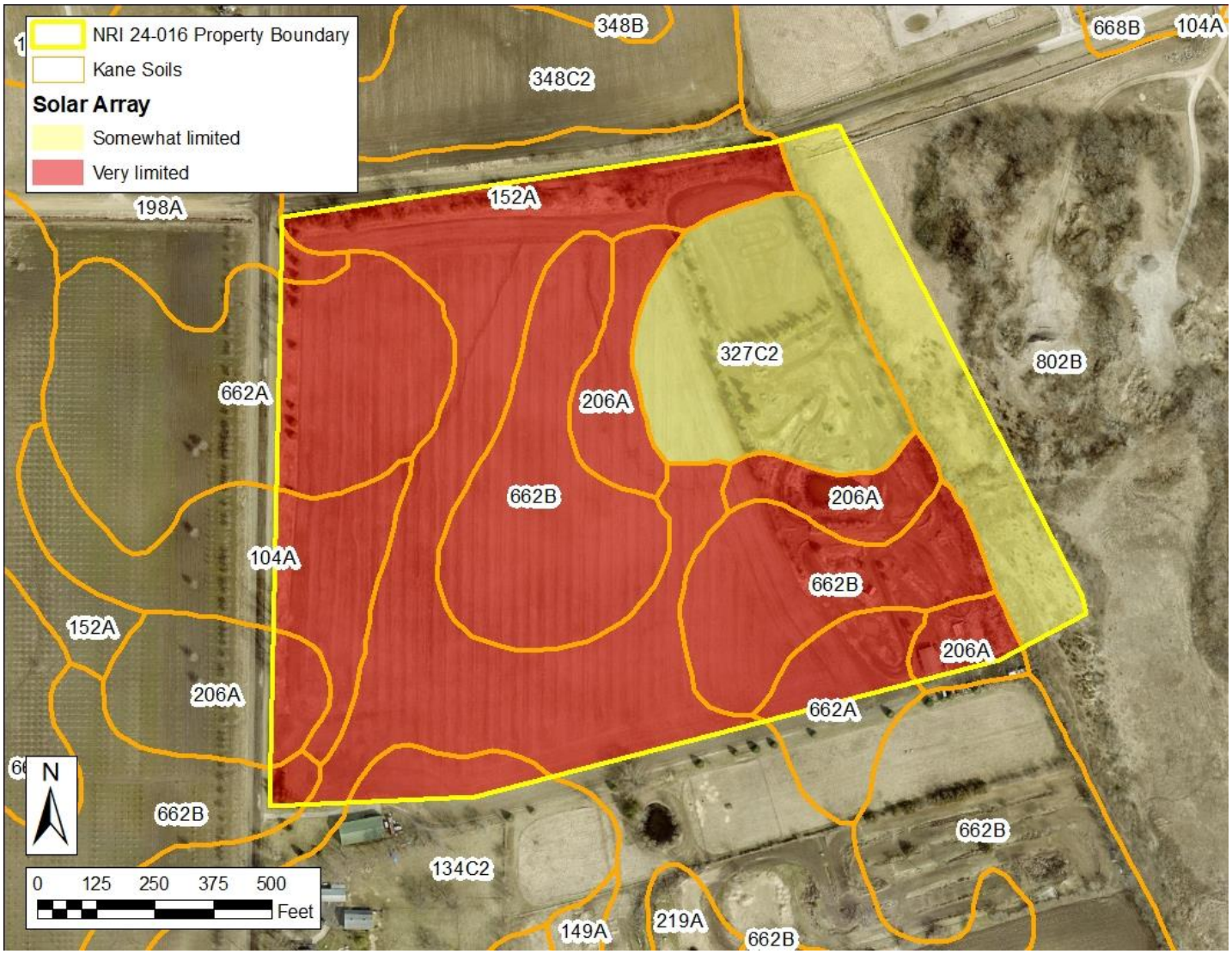

Figure 16: Soil Interpretations for Solar Arrays, Soil-based Anchoring Systems

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 the soil to provide a stable foundation. 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.

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.

The high-water table is often a limiting factor in Kane County.

Areas not shaded represent NOT LIMITED, and good performance and very low maintenance can be expected. Yellow represents SOMEWHAT LIMITED, and fair performance and moderate maintenance can be expected. Red represents VERY LIMITED, and poor performance and high maintenance are to be expected.

See the preceding **Soils Section** for more information concerning soil limitations.

WATER TABLE

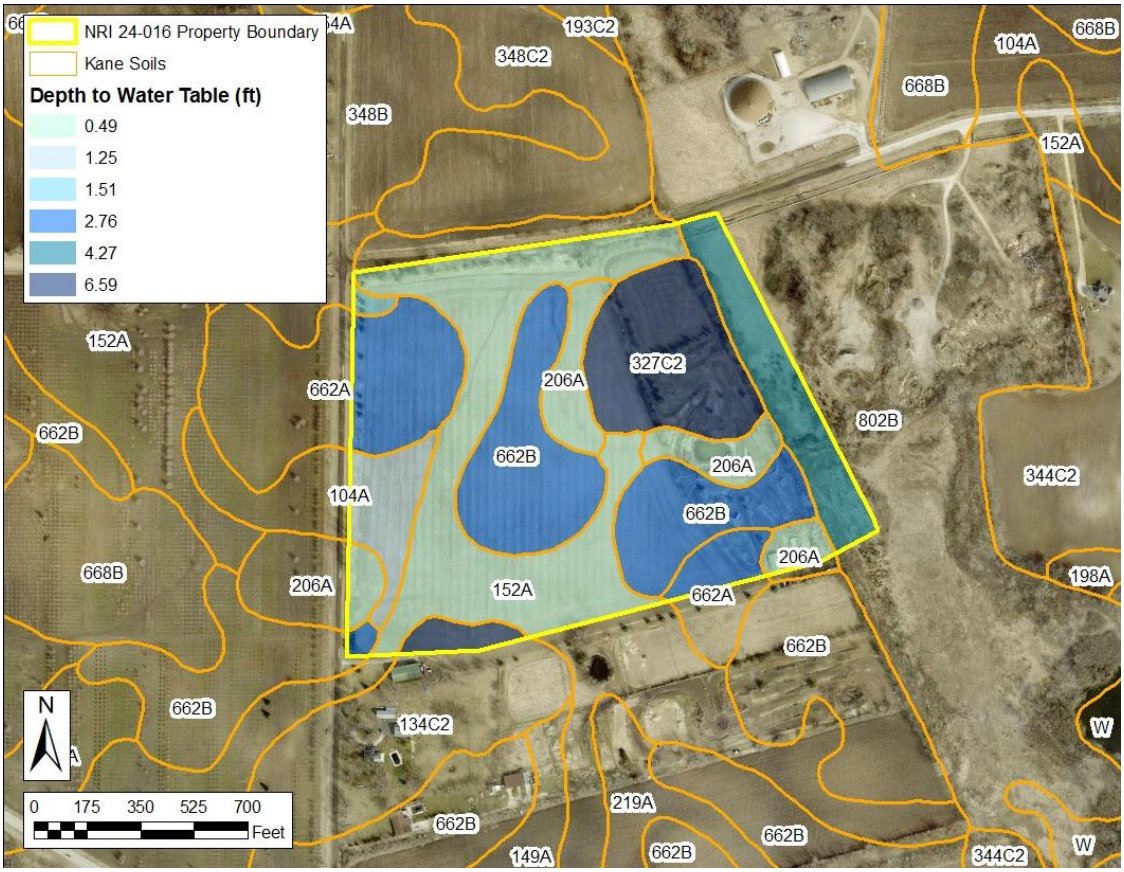

Figure 17: Map showing the depth to a seasonal high-water table

A seasonal high-water table, or the depth to a zone saturated with water in the soil during the wet season (typically spring through early summer), is present in most soils in Kane County, as it is in much of Illinois. The relatively low relief and flat landscape of the region slows the dissipation of water from the soil. This saturated zone fluctuates throughout the year and is closer to the surface in the spring and drops to deeper levels during summer and fall. Soils that are lower on the landscape are generally wetter than those soils higher on the landscape or on more sloping landscape positions. Some soils, especially those in landscape depressions and low-lying areas, have a water table above the soil surface. Water that occurs above the soil surface is considered "ponded" water. Ponding is different from flooding, as the water in ponded areas comes from water rising from below the soil surface or from runoff from adjacent areas. Flooding comes from the overflow of water from rivers and streams.

Artificial drainage systems may have altered the duration of the seasonal high-water table, especially those areas in cropland or former cropland. Even when soils are artificially drained, they will likely retain wet characteristics and the wetness will be difficult to eliminate entirely. However, artificial drainage may shorten the duration of the seasonal high-water table.

The wetness from the seasonal high-water table is a limiting property of the soil for many uses, especially homesites with or without basements, septic absorption fields, commercial buildings, and roads and streets. Most sites that are zoned for construction will require improved drainage, sump pumps, foundation drains, and other management practices to reduce the wetness. Any change to the natural drainage of the site has the potential to create flooding issues downstream from the site, so use caution in installing drainage systems.

The Soil Survey indicates a seasonal high-water table at a depth of 0.49 to 6.59 feet of the soil surface during the spring and early summer in most years, on the wettest soils of the site.

HYDRIC SOILS

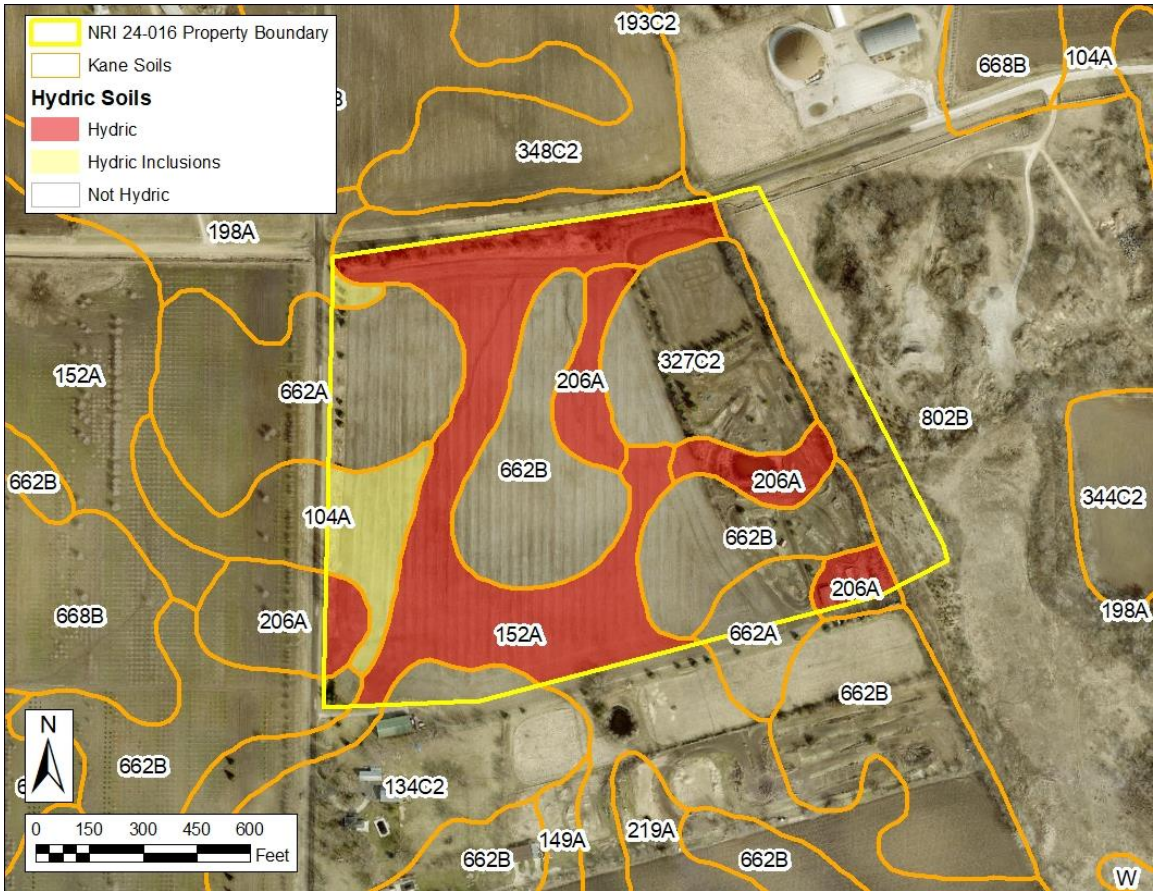

Figure 18: Hydric Soils map

Hydric Soils are wet soils that have a water table near the surface or above the surface, mostly in the spring and summer. The wetness is often a result of being on a lower position on the landscape. Many areas of hydric soils have been altered by artificial drainage systems. Even though they may have artificial drainage, they are still considered to meet the definition of a hydric soil. Although not all hydric soils are considered wetlands, hydric soils are a component of wetlands.

Even when hydric soils are artificially drained, they will likely retain wet characteristics and the wetness will be difficult to eliminate entirely. However, artificial drainage may shorten the duration of the seasonal high-water table. Most sites will require improved drainage, sump pumps, and other management practices to reduce the wetness. Any change to the natural drainage of the site has the potential to create flooding issues on and adjacent to the site, so use caution in installing drainage systems.

Some hydric soils are dominated by organic material (peat or muck) instead of mineral soil material and are not suitable construction sites, because of the low strength of the organic deposits. **Organic soils are extremely difficult to modify for other uses. Organic soils have been identified on this site.**

Hydric inclusions are small areas (inclusions) of hydric soils in the lower positions of a landscape dominated by higher, nonhydric soils and these inclusions are not identified on the soil map, given the map scale. However, hydric inclusions may still have a significant impact on your site.

The Soil Survey indicates that hydric soils or soils with hydric inclusions are on this site. A certified wetland determination may be needed prior to any earth disturbing activities. The KDSWCD recommends contacting the proper regulatory agencies shown near the end of this report.

PRIME FARMLAND – LAND EVALUATION & SITE ASSESSMENT

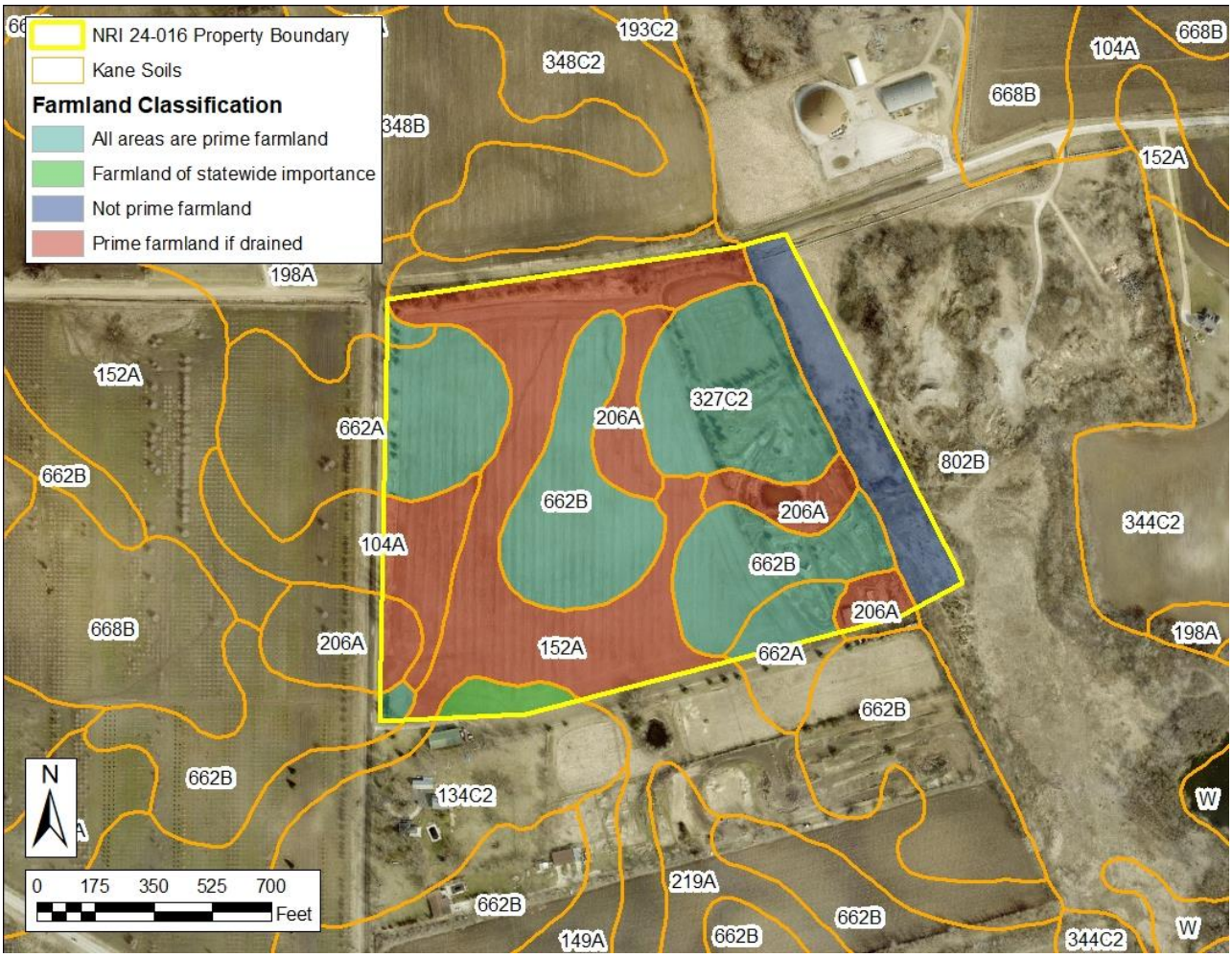

Figure 19: Prime Farmland map

Prime Farmland is a designation assigned by the U.S. Department of Agriculture defining land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses. The Prime Farmland designation is assigned to each soil map unit.

In addition to Prime Farmland, there is Farmland of Statewide Importance (Important Farmland). Important Farmland is designated for soils that are slightly outside the definition of Prime Farmland. Prime and Important Farmland are valuable for Kane County agriculture, ag industry, and county tax base.

In order to protect the best farmland, a Land Evaluation and Site Assessment (LESA) system was developed and adopted by Kane County in 2003.

LESA is designed to determine the quality of land for agricultural uses and to assess a site for long term agricultural economic viability. The LESA is a 100-point maximum numerical value based on two parts – Land Evaluation (LE) and Site Assessment (SA). The LE is based upon the inherent ability of the soils of a parcel to produce commonly grown crops. The LE counts as 1/3 of the total score. The SA is a value based on the proximity of the parcel to agricultural areas. Parcels further from developed areas rank higher for protection. The SA counts for 2/3 of the LESA score.

Of this parcel, 2 percent or 0.8 acres are considered Farmland of Statewide Importance.

The LE value for this site is 29 and the SA value is 28 for a total LESA score of 57. This score represents Low Protection effort warranted.

REGULATORY INFORMATION

Wetlands, Rivers, Streams, and Other Waters: The laws of the United States, the State of Illinois, and local governments assign certain agencies specific and different regulatory roles to protect the waters within their jurisdictional boundaries. These roles include protection of navigation channels and harbors, protection against floodway encroachment, maintenance and enhancement of water quality, protection of fish and wildlife habitat, and protection of recreational resources. Unregulated use of waters could permanently destroy or alter the character of these valuable resources and adversely impact the public. Contact the proper regulatory authorities when planning any work associated with floodplains, wetlands, or other waters so that proper consideration and approval can be obtained.

Wetland and/or Floodplain Permit: Anyone proposing to dredge, fill, riprap, or otherwise alter the banks or beds of a floodplain or floodway; or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility of a lake, stream, or river subject to federal, state, or local regulatory jurisdiction should apply for agency approvals.

Construction Permit: Anyone disturbing an acre or more of land during proposed construction activities should apply for the NPDES General Construction Permit ILR10. Building and stormwater permits should also be obtained locally from municipal government and/or Kane County.

REGULATORY AGENCIES

Wetlands, Floodplains, Streams, & Other Waters:

U.S. Army Corps of Engineers, Chicago District,
111 North Canal Street
Chicago, IL 60606-7206
(312) 353-6400
http://www.lrc.usace.army.mil/

Kane County Water Resources Division
719 Batavia Avenue
Geneva, IL 60134
(630)232-3400
https://www.countyofkane.org/FDER/Pages/environmentalResources/waterResources.aspx

Ilinois Department of Natural Resources, Office of Water Resources
2050 W. Stearns Road
Bartlett, IL 60103
(847)608-3100
https://dnr.illinois.gov/waterresources/programs.html

NPDES General Construction Permit ILR10

Illinois Environmental Protection Agency, Division of Water Pollution Control
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794
(217)782-0610
https://www2.illinois.gov/epa/topics/forms/water-forms/Pages/default.aspx

The KDSWCD recommends 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 stage. This could reduce the time required to process necessary approvals. Please be advised that failure to coordinate with regulatory agencies could result in project shut down, fines and/or imprisonment.

CONTACTS

STATE AGENCIES

Illinois Department of Natural Resources
1 Natural Resources Way
Springfield, Illinois 62702-1271
(217)782-6302
http://dnr.state.il.us/

Illinois Department of Transportation
2300 South Dirksen Parkway
Schaumburg, Illinois 62764-0001
(217)782-7820/(800)452-4368
http://www.idot.illinois.gov/

Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-3397
http://www.epa.state.il.us/

Illinois Natural History Survey
1816 South Oak Street MC652
Champaign, Illinois 61820
(217)333-6880
http://www.inhs.uiuc.edu/

COUNTY / LOCAL OFFICES

Kane County Government Center
719 South Batavia Ave.
Geneva, IL 60134
(630)232-3400
http://www.countyofkane.org/

Kane County Development Department
(630)232-3492

Kane County Dept. of Environmental Management
(630)208-5118

Kane County Forest Preserve District
1996 South Kirk Road, Suite 320
Geneva, IL 60134
(630)232-5980
forestpreserve.countyofkane.org

Kane County Health Department
1240 North Highland Avenue
Aurora, IL 60506
(630)208-3801

Kane-DuPage Soil and Water Conservation District
2315 Dean Street Suite 100
St. Charles, Illinois 60175
(630)584-7960 ext. 3

FEDERAL AGENCIES

U. S. Army Corps of Engineers
Regulatory Branch
231 S LaSalle Street, Suite 1500
Chicago, Illinois 60604
(312)846-5330
http://www.usace.army.mil

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604
(312)353-2000 or (800)621-8431
http://www.epa.gov/region5/

U.S. Fish & Wildlife Service
Chicago Illinois Field Office
230 South Dearborn Suite 2938
Chicago, IL 60604
(847)298-3250
http://www.fws.gov/

U.S.D.A. Natural Resources Conservation Service
2315 Dean Street Suite 100
St. Charles, Illinois 60175
(630)584-7960 ext. 3
http://www.il.nrcs.usda.gov/

REFERENCES

Berg, Richard C, Aquifer Sensitivity Classification for Illinois Using Depth to Uppermost Aquifer Material and Aquifer Thickness, Cir. 560, 2001, Illinois State Geological Survey https://isgs.illinois.edu/maps/county-maps/aquifer-sensitivity/kane Authors: William S. Dey, Alec M. Davis, B. Brandon Curry

County of Kane. Kane County 2040 Green Infrastructure Plan. Adopted December 10, 2013.

Dey, W.S., A.M. Davis, and B.B. Curry, 2007, Aquifer Sensitivity to Contamination, Kane County, Illinois: Illinois State Geological Survey, Illinois County Geologic Map, ICGM Kane-AS.

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Illinois Environmental Protection Agency, Nonpoint Source Pollution – What's it All About?, 2015

Kane County Development Dept., Kane-DuPage Soil & Water Conservation District, US Dept of Agriculture Natural Resources Conservation Service. Kane County Land Evaluation and Site Assessment, December 2003,

Kane County's Wetlands and Streams Advanced Identification (ADID) Study completed in 2004.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: https://websoilsurvey.sc.egov.usda.gov/. Accessed on the date of this report.

U.S. Dept. of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, 2011.

U.S. Dept of the Interior, Fish and Wildlife Service, National Wetlands Inventory, Photo Year 1983- 1984, Digitized 1985-1986.

U.S. Geological Survey, Illinois Digital Orthophoto Quadrangles, 2006 photos, Published: Champaign, Illinois State Geological Survey, 2006.

U.S. Geological Survey, Water Supply Paper 2294, Hydrologic Unit Maps. 1994

https://pubs.usgs.gov/wsp/wsp2294/

EXECUTIVE SUMMARY
APPLICATION 24-016
February 13, 2024

Petitioner: Lorang Solar, LLC, 101 N. Wacker Dr. Ste 200, Chicago, IL 60606

Contact Person: Matt Kwiatkowski, 317-760-3190

Unit of Government Responsible for Permits: Kane County

Acreage: 42.6

Area of Disturbance (acreage): 42.6

Location of Parcel: Section 31, Township 39N, Range 7E

Property Address/PIN#: #11-31-100-009, Lorang Rd. Sugar Grove, IL 60554

Existing Land Use: Cropland

Proposed Land Use: Community Solar Farm

NATURAL RESOURCE CONCERNS

Land Cover in the Early 1800's: This site is in an area previously identified as prairie and forest (**page 5**).

Kane County Green Infrastructure Plan: This site is in an area indicated as Environmental Resource Area (with buffer) and ADID Wetland (**page 6**).

Wetlands: The National Wetland Inventory map and the ADID wetland map identify wetland areas on this site. If there are any indications of unidentified wetlands on this site, noticed during the proposed land use change, contact the appropriate county and federal wetland regulatory agencies (**pages 7-8**).

Floodplain: There are no floodplain areas identified on this site (**page 10**).

Streams: There are no streams on this site (**page 11**).

Watersheds and Subwatersheds: The map above indicates that 86 percent of this site is located within the boundaries of subwatershed HUC12-071200070201 Lake Run – Blackberry Creek of the HUC10-0712000702 Blackberry Creek watershed and 14 percent of this site is located within the boundaries of subwatershed HUC12-071200070307 Big Rock Creek of the HUC10-0712000703 Big Rock Creek watershed (**page 12**).

Aquifer Sensitivity: This site is classified as having a moderately low potential to moderately high potential for aquifer contamination (**page 13**).

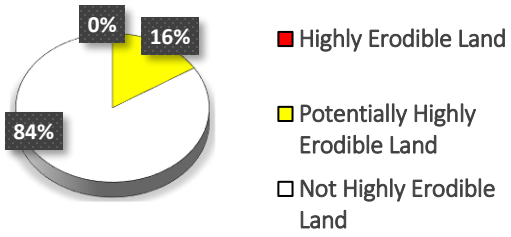
Topography and Overland Flow: The high point of this property is in the southwestern portion of the site at an elevation of approximately 784 feet above sea level. The property generally drains to the north via overland flow. The lowest elevation on the property is approximately 752 feet above sea level (**page 14**).
Please Note: This site's actual topography does not match the map. The site has been materially altered after the topological map information was gathered and produced.

Stormwater Management: This site may or may not need a Stormwater Pollution Prevention Plan (SWPPP). Contact the KDSWCD for questions or assistance in developing a SWPPP. (See **page 15**)

EXECUTIVE SUMMARY
APPLICATION 24-016
February 13, 2024

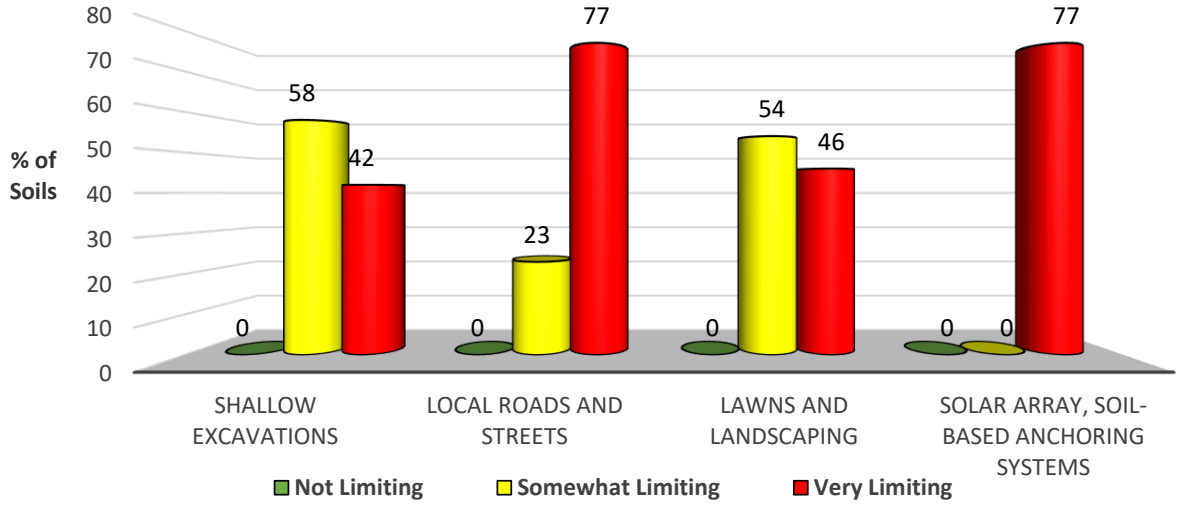
Soil Erosion: Many construction sites are required to develop and follow a Stormwater Pollution Prevention Plan (SWPPP) in order to be in compliance with local, state, and federal laws regarding soil erosion and stormwater management. Contact the KDSWCD for questions or assistance in developing a SWPPP (**page 15**).

Highly Erodible Land: There is Potentially Highly Erodible Land identified on this site (**page 16**).



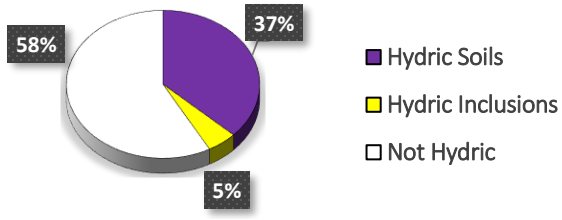
Regulations: Please note that additional permits are required for any development impacting wetlands, streams, or floodplain areas (**page 27**).

Soil Interpretations: Soils at this site may contain limitations for the proposed use. All information is from the Soil Survey of Kane County, Illinois. The limiting factors for this site are: **Depth to Saturated Zone, Ponding, Unstable Excavation Walls, Frost Action, Low Strength, Shrink-Swell, Too Dense, Droughty, Too Clayey, Large Stones Content, Organic Matter Content, Flooding** (**pages 17-23** and attached Soils Tables on **page 19**).

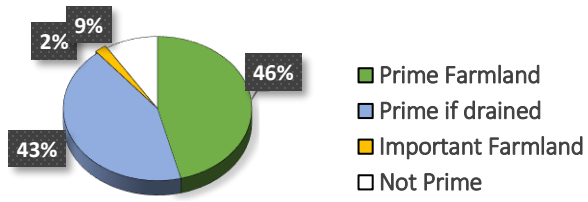


EXECUTIVE SUMMARY
APPLICATION 24-016
February 13, 2024

Hydric Soils: There are hydric soils and soils with hydric inclusions identified on this site (**page 25**).



Prime Farmland: Prime and Important Farmland occur on this tract (**page 26**).



LESA: Sites with a LESA score of 85 or greater are considered to warrant protection. This site has an LE score of **29,** and a SA score of **28,** with a total of **57,** placing it in the low protection category for farmland (**page 26**).

Land Planning and Development Concerns:

Based upon the LESA score and the Kane County Land Evaluation and Site Assessment, this tract warrants **Low** Protection effort from development.

SITE INSPECTION

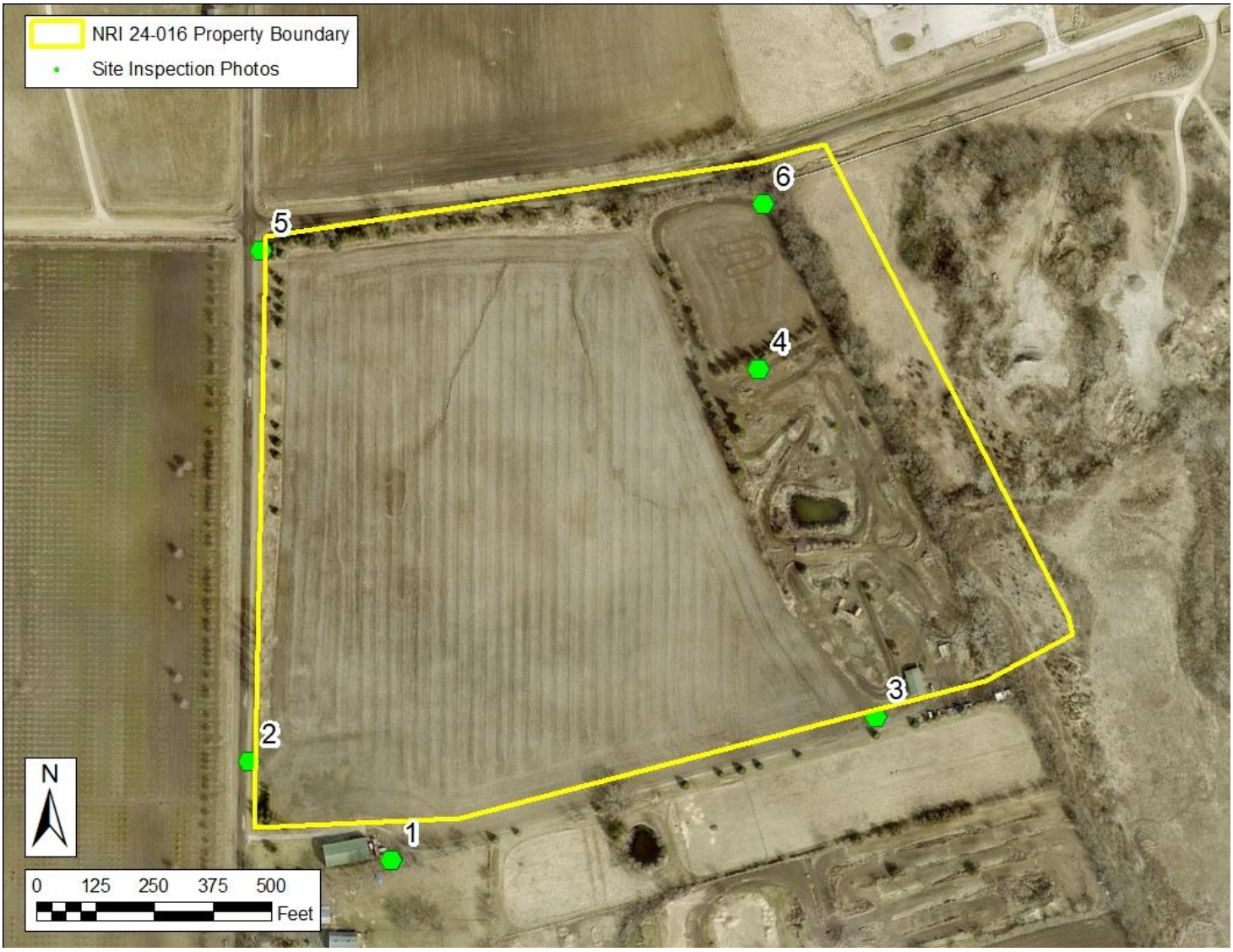


Figure 20: Location of site inspection photos

A site inspection was conducted by **Resource Assistant, Isabella Borzeka** on **February 13, 2024**. The following photos were taken during this inspection and reflect the site conditions at that time.

SITE INSPECTION PHOTOS

Photo 1 facing north

Photo 2 facing northeast

Photo 3 facing west

Photo 4 facing south

Photo 5 facing south

Photo 6 facing west

ATTACHMENT L

USFWS Results

Stantec

Memo

To:	Matt Kwiatkowski Lorang Solar LLC	From:	Abigail Medis Stantec Consulting Services Inc.
File:	141043 - Lorang Solar Project	Date:	January 5, 2024

Reference: 141043 - Lorang Solar Project – Federal and State Threatened and Endangered Resources Review

Dear Mr. Kwiatkowski,

Stantec Consulting Services Inc. (Stantec) completed a threatened and endangered resources review via the Illinois Department of Natural Resources (IDNR) Ecological Compliance Assessment Tool (EcoCAT) and obtained an Official Species List via the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool for the Lorang Solar Project (the "Project") in Kane County, IL.

The IPaC identified the federally-endangered northern long-eared bat (NLEB, *Myotis septentrionalis*); the federal-threatened eastern prairie fringed orchid (EPFO; *Platanthera leucophaea*), several migratory birds, as well as an experimental (non-essential) population of whooping crane (*Grus americana*) as potentially occurring within the Project area (Attachment A). The EcoCAT, which also tracks federally-listed species and is generated with a higher level of precision compared to the IPaC, identified one Illinois Natural Area Inventory (INAI) site, a nature preserve, Least Bittern (*Lxobrychus exilis*), Northern Harrier (*Circus cyaneus*), and Wilson's Phalarope (*Phalaropus tricolor*) in the Project vicinity (Attachment B). Based on the project description and proposed development footprint, IDNR issued a letter terminating consultation in response to the findings, and stated impacts to protected resources are unlikely (Attachment C).

Based on a field review completed in November 2023, the Project is entirely comprised of an agricultural field bordered by a grassland to the west, and a stream corridor with a forested wetland fringe along the northern boundary. No suitable habitat for bats is present within the Project footprint, and therefore no tree-clearing is anticipated. As such, impacts to the listed bats resulting from Project activities would not be expected and coordination with USFWS is considered complete unless there are changes to the Project scope or updates for listed species.

EPFO is found in high quality wet prairies, sedge meadows and fens, which are not present within the Project. Therefore, impacts to this species are unlikely.

The least bittern is found in shallow marsh communities with dense vegetation. Wilson's phalarope nests in wet prairies and marshes near foraging areas, including mudflats and shorelines. Northern harriers are ground-nesters that have been known to nest in cropland, however typical nest sites are in large, undisturbed open wetlands and grasslands. No suitable habitat for any of these species is present within the Project, and therefore impacts to the least bittern, Wilson's phalarope or northern harrier would not be expected. Furthermore, the IDNR concluded in the termination letter that impacts to this species are unlikely.

An experimental population of whooping cranes was established in the species' former range in Wisconsin and may stop over in Illinois during spring and fall migrations. Whooping cranes use a wide variety of wetland habitats for feeding and roosting, and cropland, pastures and hayfields can also be suitable for foraging. The emergent wetland and cropland portions of the Project Area may provide suitable foraging habitat and the whooping crane may only be present as a transitory migrant. This population is considered non-essential for the continued existence of the species and, for consultation purposes on private lands, is treated as proposed for listing and therefore does not require consultation under section 7 of the ESA. If a whooping crane is

Reference: **Lorang Solar Project – Federal and State Endangered Resources Review**

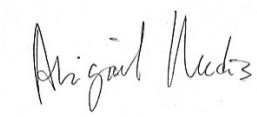
observed during construction, suspending ground-disturbing activities (e.g., grading, trenching) within a quarter mile of the whooping crane until the bird leaves the area is recommended.

The Migratory Bird Treaty Act (MBTA) implements a series of international treaties that provide for migratory bird protection. No migratory bird species are identified in the IPaC as potentially nesting within the Project. However, limiting clearing or grading activities to outside of the breeding season (late fall to early spring) would limit impacts to any breeding migratory birds that may be present and therefore maintain compliance with MBTA.

The Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668) prohibits take and disturbance of individual eagles and their nests. Based on the field review and the EcoCAT, suitable nesting habitat was not observed, and no eagle nests are documented within or near the Project area. Therefore, impacts to nesting bald eagles from the Project are not anticipated.

In conclusion, the Project would not likely impact state or federally-protected species and would therefore be in compliance with the Endangered Species Act of 1973, the state endangered species act, the MBTA, and the BGEPA. This review of threatened and endangered resources was completed based on current regulations, the Project site conditions and the proposed Project plans. The conclusions and guidance provided demonstrate compliance of the above-referenced endangered species regulations at both the state and federal level. Changes in the scope of the project or a species regulatory status would require supplemental review and consultation.

Stantec Consulting Services,



Abigail Medis
Senior Environmental Scientist
Email: Abigail.Medis@Stantec.com
Phone: (608) 509-5312

Attachments:

A – IPac Species List
B – IDNR EcoCAT Report
C – IDNR Consultation Termination Letter

ATTACHMENT A

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chicago Ecological Service Field Office
U.s. Fish And Wildlife Service Chicago Ecological Services Office
230 South Dearborn St., Suite 2938
Chicago, IL 60604-1507
Phone: (312) 485-9337

In Reply Refer To:
Project Code: 2024-0012286
Project Name: Lorang Solar

November 02, 2023

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
U.s. Fish And Wildlife Service Chicago Ecological Services Office
230 South Dearborn St., Suite 2938
Chicago, IL 60604-1507
(312) 485-9337

PROJECT SUMMARY

Project Code: 2024-0012286
Project Name: Lorang Solar
Project Type: Power Gen - Solar
Project Description: Community-scale solar development
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.820116299999995,-88.48726717459436,14z

Counties: Kane County, Illinois

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Eastern Prairie Fringed Orchid *Platanthera leucophaea*	Threatened

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

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: Stantec Consulting Services
Name: Abigail Medis
Address: 209 Commerce Parkway
City: Cottage Grove
State: WI
Zip: 53527
Email abigail.medis@stantec.com
Phone: 6085095312

ATTACHMENT B

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: Abigail Medis
Contact: Abigail Medis
Address: 209 Commerce Parkway
Cottage Grove, WI 53527

Project: Lorang Solar
Address: Lorang Rd, Willow Creek

IDNR Project Number: 2406453
Date: 11/02/2023

Description: Community-scale solar development.

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:

Lakin Hill Prairie INAI Site
Almon Underwood Prairie Nature Preserve
Least Bittern *(Ixobrychus exilis)*
Northern Harrier *(Circus cyaneus)*
Wilson's Phalarope *(Phalaropus tricolor)*

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

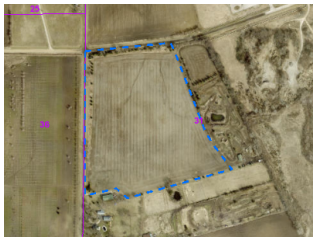
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

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

County: Kane

Township, Range, Section:
39N, 6E, 36
39N, 7E, 31



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Storm water
1021 North Grand Ave. East
P.O. Box 19276
Springfield, Illinois 62794

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.

ATTACHMENT C

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor

Natalie Phelps Finnie, Director

November 03, 2023

Abigail Medis
Abigail Medis
209 Commerce Parkway
Cottage Grove, WI 53527

RE: Lorang Solar
Project Number(s): 2406453
County: Kane

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

However, the Department recommends the following conservation measures:

If tree clearing is necessary, the Department recommends removing trees between November 1st and March 31st to avoid impacts to bats and birds.

Good housekeeping practices should be implemented and maintained during and after construction to prevent trash and other debris from inadvertently blowing or washing into nearby natural areas.

Soil erosion and sediment control BMPs should be implemented and properly maintained. Wildlife-friendly plastic-free blanket should be used to prevent the entanglement of native wildlife.

A long-term invasive species management program should be implemented to avoid the spread of invasive species

The project proponent should consider native plantings in the landscape design, when feasible.

Any required night lighting should follow International Dark-Sky Association (IDA) guidance to minimize the effect of light pollution on wildlife.

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor

Natalie Phelps Finnie, Director

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project 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 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, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Bradley Hayes
Division of Ecosystems and Environment
217-785-5500

ATTACHMENT M

IDNR SHPO Review and Sign Off Letter

Stantec Consulting Services Inc.
350 North Orleans Street, Suite 8000N
Chicago IL 60654-1610

November 3, 2023

Project/File: 193806625

Rita Baker
State Historic Preservation Office- IDNR
One Natural Resources Way
Springfield, Illinois 62702

Dear Rita Baker,

Reference: Preliminary Project Review for the Proposed Lorang Solar Project, Kane County, Illinois.

On behalf of Nexamp, Stantec Consulting Services Inc. (Stantec) is requesting preliminary project review of the proposed Lorang Solar Project (Project) located near the village of Kaneville, Kane County, Illinois (Figure 1). More specifically, the Project is located on approximately 42.4 acres of privately owned land (the Project area) within Township 39 North, Range 7 East, Section 31. Land use within the Project area consists of agricultural cultivation. Predominant soil complexes are Flanagan-Drummer-Catlin (Figure 2).

While engineering designs and specifications for the Project are still in the initial stages, the Project proposes the development of a solar project at this location and will require a permit from the Illinois Environmental Protection Agency which will trigger review by your office under Section 707 of the Illinois State Agency Historic Resources Preservation Act (Public Act 86-707; 20 ILCS 3420). At this point, the need for federal permitting has not been determined. If the Project becomes a federal undertaking, consultation with your office under Section 106 of the National Historic Preservation Act will be conducted by the lead federal agency at that time.

To support review of the Project, Stantec conducted a review of the Illinois Historic Resources Geographic Information System (HARGIS) and the Illinois Inventory of Archaeological Sites (IAS) to identify cultural resources recorded within the Project area and a 1-mile buffer surrounding the Project area (Figure 3). The review of HARGIS identified no historical structures recorded within the Project area, or within the 1-mile buffer.

The IAS review found no archaeological sites or cemeteries within the Project area, and four archaeological sites within the 1-mile buffer of the Project area. The IAS review found no cemeteries within the 1-mile buffer. Archaeological sites K700 and K965 have been determined as *Not Eligible* for listing in the National Register of Historic Places (NRHP). Archaeological sites K1175 and K1176 are undetermined for listing in the NRHP. There has been one previous archaeological survey conducted within the Project area (11887), and six previous surveys (13475, 15026, 15242, 21726, 23933, 91174) conducted within 1-mile of the Project area. Survey 11887 was performed in advance of fiber optic cable alignment project in 2001 by American Resources Group Ltd. (ARG). Survey 11887 did not identify any archaeological sites within the Project area.

Reference: **Preliminary Project Review for the Proposed Lorang Solar Project, Kane Count, Illinois.**

The Illinois Resource Potential layer (Figure 3) available in the IAS indicates that the Project area is outside of areas considered by Illinois state law (20 ILCS 3420) as having a high archaeological potential. Additionally, the Illinois Archaeological Probability Model (IAPM) depicts the Project area as having a low to medium-low potential for archeological sites (Figure 4).

The database review resulted in the recommendation that the Project area is outside of areas considered by Illinois state law (20 ILCS 3420) as having a high archaeological potential. Additionally, archaeological sites, historic structures, or cemeteries are not present within the Project area. Therefore, Stantec requests your concurrence with our recommendation that additional cultural resources investigations would not be necessary for the Project and that the Project be allowed to proceed as planned.

Best regards,

STANTEC CONSULTING SERVICES INC.

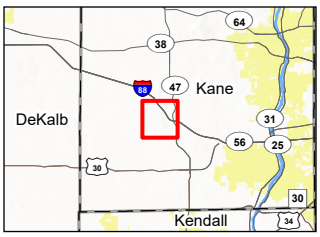
William Pridden M.A RPA
Archaeologist
Phone: (312) 831-3021
william.pridden@stantec.com

Attachment: Table 1: Archaeological Sites
Figure 1: Project Location and Topography
Figure 2: NRCS Soil Survey Data
Figure 3: Cultural Resources
Figure 4: IAPM Probability

Reference: **Preliminary Project Review for the Proposed Lorang Solar Project, Kane Count, Illinois.**

Table 1- Archaeological Sites

Site Name	Period	Relationship to Project area	NRHP Eligibility
K700	Prehistoric	1-mile buffer	Not Eligible
K965	Historic	1-mile buffer	Not Eligible
K1175	Prehistoric	1-mile buffer	Not Reviewed
K1176	Prehistoric	1-mile buffer	Undetermined



Legend

- Approximate Project Boundary
- 1-Mile Buffer

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Stantec

Notes

1. Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
2. Data Sources: Stantec, Nexamp, ESRI, NADS, USGS
3. Background: USGS 7.5' Topographic Quadrangles

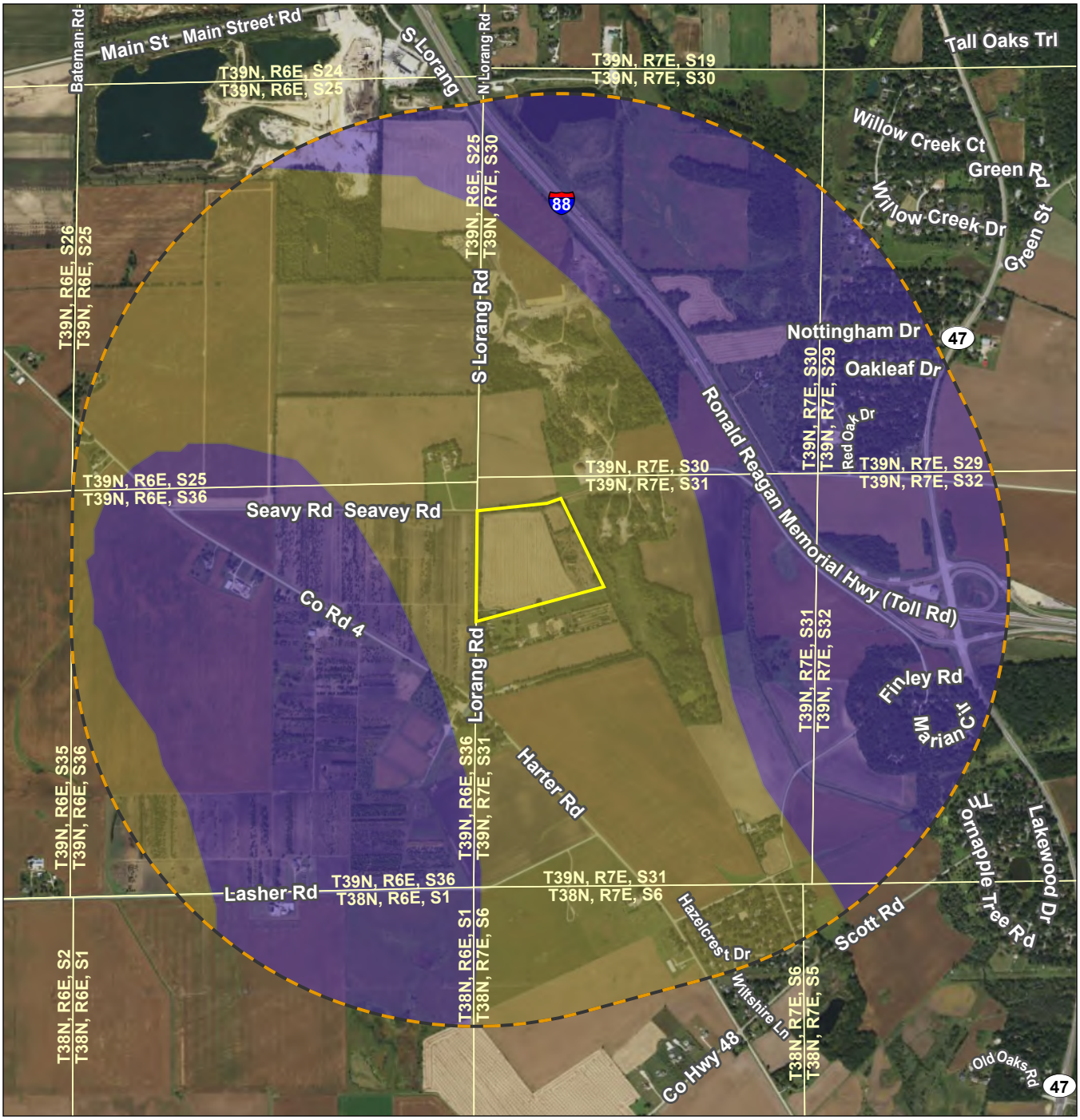
Project Location
T39N, R7E, S31
Kane Co., IL

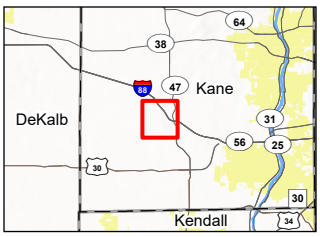
Prepared by DP on 2023-10-20
TR by SP on 2023-10-23
IR by WP on 2023-11-02

Client/Project
193806625
Nexamp
Lorang Solar
Cultural Report

Figure No.
1

Title
Project Location and Topography





Legend

- Approximate Project Boundary
- 1-Mile Buffer

Generalized Soil Survey

- Flanagan-Drummer-Catlin (s2245)
- Plano-Elburn-Drummer (s2247)

0 1,000 2,000 Feet

(At original document size of 8.5x11)
1:24,000

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Notes

1. Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
2. Data Sources: Stantec, Nexamp, ESRI, NADS, USGS, NRCS
3. Background: NAIP 2021

Stantec

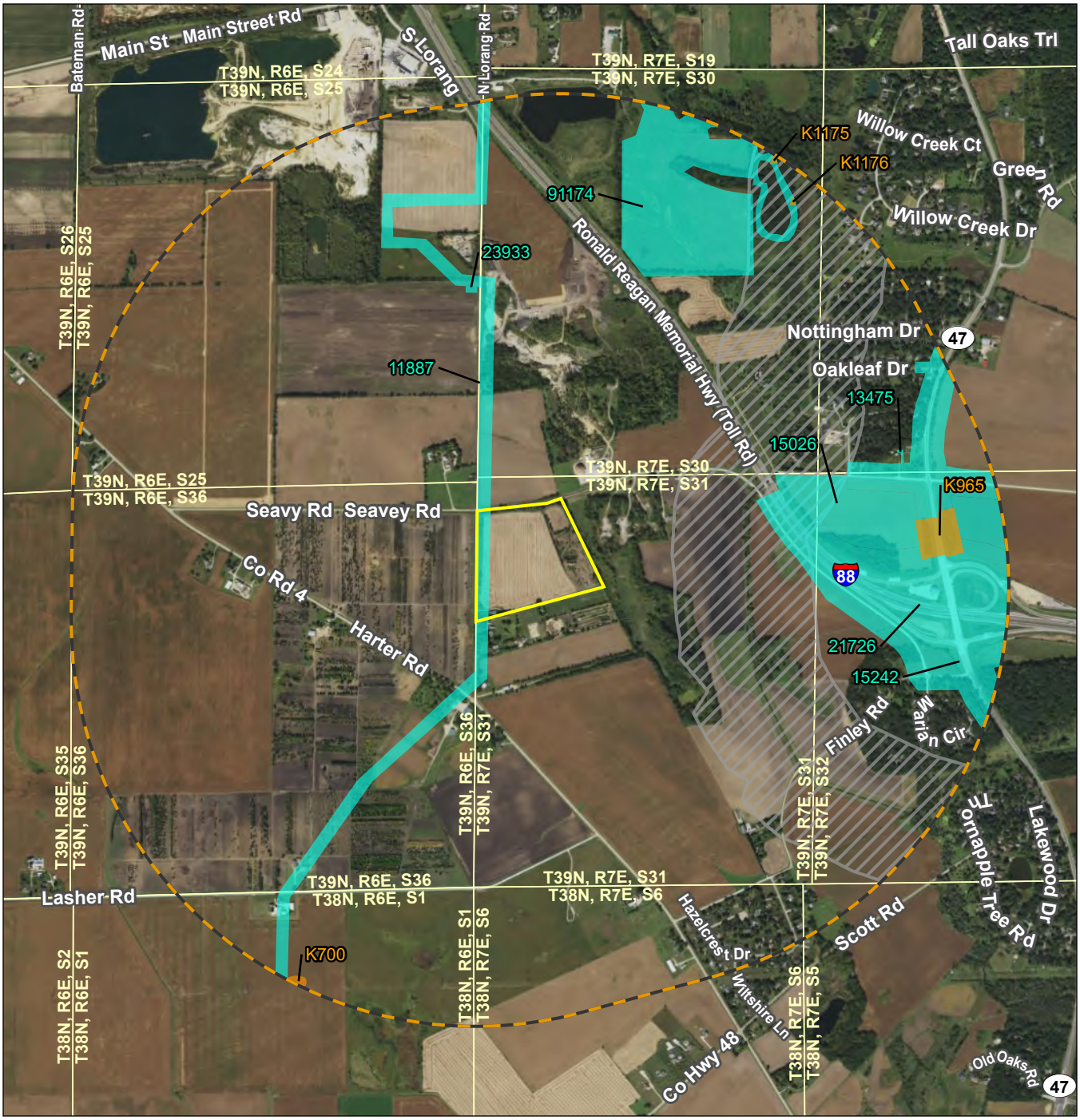
Project Location
T39N, R7E, S31
Kane Co., IL

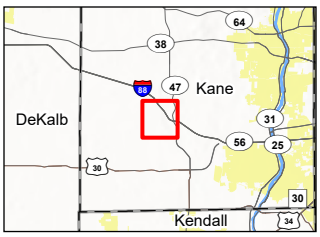
Prepared by DP on 2023-10-20
TR by SP on 2023-10-23
IR by WP on 2023-11-02

Client/Project
193806625
Nexamp
Lorang Solar
Cultural Report

Figure No.
2

Title
NRCS Soil Survey Data





Legend

- Approximate Project Boundary
- 1-Mile Buffer
- IAS Site
- Previous Survey
- Archaeological Resource Potential

0 1,000 2,000 Feet

(At original document size of 8.5x11)
1:24,000

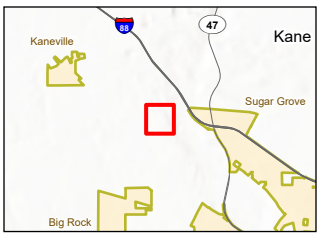
N

Notes

1. Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
2. Data Sources: Stantec, Nexamp, ESRI, NADS, USGS, IAS, IHPA
3. Background: NAIP 2021

Stantec

Project Location	Prepared by DP on 2023-10-20
T39N, R7E, S31	TR by SP on 2023-10-23
Kane Co., IL	IR by WP on 2023-11-02
Client/Project	193806625
Nexamp	
Lorang Solar	
Cultural Report	
Figure No.	
3	
Title	
Cultural Resources	



Legend

- Approximate Project Boundary

IAPM Probability

- High (> 0.75)*
- Med-High (0.5-0.75)*
- Med-Low (0.25-0.5)
- Low (< 0.25)

0 200 400 Feet

(At original document size of 8.5x11)
1:4,800

N

Notes

1. Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
2. Data Sources: Stantec, Nexamp, ESRI, NADS, USGS, IAS
3. Background: NAIP 2021

*No Features Within Data Frame

Stantec

Project Location
T39N, R7E, S31
Kane Co., IL

Prepared by DP on 2023-10-20
TR by SP on 2023-10-23
IR by WP on 2023-11-02

Client/Project
193806625
Nexamp
Lorang Solar
Cultural Report

Figure No.
4

Title
Illinois Archaeological Predictive Model (IAPM)

U:\193819380662S\03_data\gis_cad\gisVArcPro\193806625_Lorang_Cultural\193806625_Lorang_Cultural.aprx Revised: 2023-10-23 By: dpoinsette

Illinois Department of Natural Resources
JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Kane County
Kaneville
New Construction, Lorang Solar Project
SE Corner Lorang Road and Seavey Road
SHPO Log #039110723

February 20, 2024

William Pridden
Stantec Consulting Services, Inc.
350 North Orleans Street, Suite 1301
Chicago, IL 60654-1983

This letter is to inform you that we have reviewed the information provided concerning the referenced project.

Our review of the records indicates that no historic, architectural or archaeological sites exist within the project area.

Please retain this letter in your files as evidence of compliance with Section 4 of the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et. seq.). This clearance remains in effect for two years from date of issuance. It 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 you have any further questions, please contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at Rita.E.Baker@illinois.gov.

Sincerely,

Carey L. Mayer

Carey L. Mayer, AIA
Deputy State Historic Preservation Officer

ATTACHMENT N

Proof of Compliance with Noise Regulations

March 12, 2024

Mark Van Kerkhoff
Director
Kane County Development Department
Zoning Division, Kane County Government Center
Geneva, IL 60134

Re: Lorang Solar – Noise Narrative
Proposed 5.00-MW(AC) Commercial Solar Energy Facility

Applicant: Lorang Solar, LLC
Location: Lorang Road, Kane County, IL

Dear Ms. Nusbaum, Members of the Zoning Board of Appeals, and County Board:

We have provided the following assessment, which evaluates the Project's compliance with the Illinois Pollution Control Board (IPCB) noise standards. Based on our review, the project is expected to operate in compliance with the IPCB noise limits, as demonstrated below.

The Solectria XGI Transformerless inverter at the proposed equipment pad is rated to produce 67 decibels (dB) of noise at three meters (10 feet) with a frequency of 60 hertz (Hz). In general, noise dissipates approximately six dB with every doubling of distance.

Noise Assessment:

Sound Level (dB)	**Distance (feet)**
67	9.8
61	19.6
55	39.2
49	78.4
43	156.8
37	313.6
31	**627.2**
25	1,254.4

Part 901 Sound Emission Standard and Limitations for Property Line Noise Sources of the IPCB generally has an allowable sound pressure of 61dB at a residential or Class A Land property line. The nearest lot limit is located along Lorang Road, south of the proposed project parcel, approximately 620-horizontal-foot distance from the equipment pad. The transformerless inverter sound levels are expected to be less than 31dB at this nearest lot boundary. Therefore, the proposed equipment meets the regulations outlined by the IPCB. A copy of the inverter specification sheets are enclosed for reference.

Sincerely,

Matt Kwiatkowski
Business Development Manager
P: 317-760-3190
E: MKwiatkowski@nexamp.com