

INKBERRY SOLAR, LLC

2 MWac Community Solar Project

Village of Poplar Grove Petition for Special Use

Submitted May 30th, 2025



## **EXECUTIVE SUMMARY**

Inkberry Solar, LLC (the "Applicant") proposes to develop a 2MWac community solar project on approximately 20 +/- acres currently used for agriculture located along Illinois Route 76 in Poplar Grove, Boone County, Illinois. The Inkberry Solar, LLC community solar project (the "Solar Project") will be located on parcels 03-23-200-014 and 03-23-200-017 (the "Project Parcels") owned by Tahoe Trading Company, LLC (the "Landowner"). Applicant is submitting this Petition for Special Use pursuant to and in compliance with the requirements set forth under Sections 8-5-7 and 8-7-9 of the Village of Poplar Grove Zoning Ordinance (the "Zoning Ordinance").

The figures and information contained in this application are based on the best available information from desktop and field analyses performed to date, and may be subject to change (within the bounds of applicable laws and permit conditions) based on the final siting of the solar arrays and associated facilities and the ultimate procurement of the Solar Project's equipment.

## **ABOUT TRAJECTORY ENERGY PARTNERS**

Inkberry Solar, LLC is a limited liability company indirectly owned by Trajectory Energy Partners, LLC ("Trajectory"). Trajectory brings together communities, organizations, and landowners to develop clean energy projects with strong local support. Trajectory team members have built their careers in clean energy and community engagement. They are focused on building quality clean energy projects that are integrated into the local landscape and welcomed in the community.



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# I. SUMMARY OF APPLICATION

Applicant is submitting this application for a Special Use Permit for a ground-mounted community solar farm on an approximately 20 +/- acre area on the Project Parcels pursuant to and in compliance with the requirements set forth under Sections 8-5-7 and 8-7-9 of the Village of Poplar Grove Zoning Ordinance (the "Zoning Ordinance"). See <u>Attachment 2</u>: Zoning Ordinance.

Applicant is requesting a Special Use Permit for a Commercial Solar Energy Facility on land leased on the Project Parcels, which is located in the Village of Poplar Grove Light Industrial Zoning District. A legal description of the Project Parcels are attached as <u>Attachment 3</u> and a redacted lease agreement is attached as <u>Attachment 4</u>.

<u>Duration</u>: Applicant is requesting that the Village of Poplar Grove issue the Special Use Permit for a period of two years to allow Applicant sufficient time to continue development of the Solar Project and submit a building permit application.

# II. APPLICANT INFORMATION

The Applicant is a limited liability company, a wholly owned indirect subsidiary of Trajectory Energy Partners, LLC. Jonathan Carson is an Authorized Representative of the Applicant.

## Applicant:

Inkberry Solar, LLC % Trajectory Energy Partners, LLC P.O. Box 310 Highland Park, IL 60035 (312) 882-3713 legal@trajectoryenergy.com

#### <u>Landowner:</u>

Tahoe Trading Company, LLC % Daniel Kelly 1610 Candlewick Dr. SW Poplar Grove, IL 61065 (815) 985-0879 landlorddan@hotmail.com

# III. SOLAR PROJECT DESCRIPTION

The Solar Project will consist of equipment to generate electricity from solar energy, including rows of photovoltaic cell panels mounted on posts driven into the ground. The components of the Solar Project will comply with the current edition of the National Electric Code and be UL listed or meet a comparable safety standard. The panels will be designed with an anti-reflective coating to minimize glare from the Solar Project. A fence will enclose all panels and electrical equipment on site. Access is via a locked gate.

The Solar Project is intended to be a community solar project under the Clean Energy Jobs Act,



which allows residential and commercial customers to subscribe to the Solar Project. The Solar Project will support CEJA's goals of increasing the adoption and availability of renewable energy to Illinois residents and businesses.

The Solar Project will provide economic and environmental benefits to the community. Village of Poplar Grove and Boone County residents and businesses will have an opportunity to subscribe to the Solar Project. These subscribers will support clean energy in their community while benefiting from electricity bill savings. In addition, the Solar Project will create new tax revenues in the Village, provide steady income to the Landowner, and generate economic activity through local construction, materials, and services.

The Solar Project will be designed to integrate into the local landscape. Where possible, Applicant will prioritize pollinator-friendly landscaping, vegetation maintenance that limits runoff, and other management practices that are in keeping with the community, adjacent uses, and the local ecosystem.

The Solar Project is intended to operate for a period of at least 35 years, and will be constructed with solar panels with long-term warranties and very low expected rates of replacement. In the event the Solar Project is required to be removed in the future, the Solar Project will be decommissioned in compliance with an Agricultural Impact Mitigation Agreement ("AIMA").

## IV. SOLAR PROJECT CONSTRUCTION AND OPERATION

The active construction period for the Solar Project is expected to be between nine and twelve months. Construction will require trucks no larger than a typical 18-wheeler to deliver materials to the site, and onsite equipment will be used to drive pilings into the ground and install the panels, supports, and tracking equipment. Concrete pads may be used to support certain electrical equipment.

Once installed and commissioned, the Solar Project will require periodic maintenance. The Solar Project's performance will be continuously monitored, and engineers and maintenance technicians will visit the Solar Project a few times a year for routine maintenance and any required repairs.

# V. SPECIAL USE PERMIT APPLICATION REQUIREMENTS

Special Use Permit Application Requirements (Section 8-5-7 & Village Application Form)

#### 1. Plat of Survey

A plat of survey is included as Exhibit C.

#### 2. Site Plan

A Site Plan is included as <u>Exhibit B</u>. As depicted on the attached Site Plan, the Solar Project shall be in compliance with the applicable Zoning District requirements related to setbacks, landscaping/buffer yards, screening, fencing and lighting.

*Setbacks:* The Solar Project shall comply with the setbacks applicable to the light industrial zoning district. See the attached <u>Exhibit B</u>.

## Primary Structure Minimum Setbacks (Light Industrial):

Front Lot Line	30 feet
Side Lot Line	20 feet
Total of Both Side Lot Lines	50 feet
Rear Lot Line	30 feet

Fencing: Applicant is proposing an 8' farm-style fence to surround the entirety of the Solar Project. See Exhibit B. Applicant requests confirmation that this fence style and height is excluded from fencing height regulations for fencing in an industrial district in Chapter 10 of the Zoning Ordinance. This exclusion would be in alignment with the provision that allows certain uses, including public utilities and "similar uses", to provide an up to 10' high fence. See Section 8-10-3(B)(3)(c)) of the Zoning Ordinance. The Solar Project is a similar use to a public utility and requires the additional height to maintain compliance with the National Electric Code.

*Project Access:* The Solar Project will be accessed from IL Route 76 along a dedicated gravel access road. See the Site Plan attached as <u>Exhibit B</u>. No permanent parking is proposed. The Solar Project will be secured with a locked gate. Knox boxes will be provided for emergency personnel access.

Landscaping/Buffer Yards: Vegetation under and around the Solar Project will be maintained by periodic mowing, inspections, and weed management as appropriate. The Solar Project will plant pollinator-friendly vegetation within the fenced area. A Weed/Grass Control Plan is attached as Exhibit, as well as the Illinois Department of Natural Resources ("IDNR") Guidelines for establishment and maintenance of pollinator-friendly ground cover. A final landscape plan will be provided prior to building permit. No buffer yard is proposed as the Solar Project's Site Area does not directly abut a residential lot line.

*Screening*: Landscape screening is currently proposed along the Project fence in the front yard where the Solar Project abuts IL Route 76, and partially along the southern side of the Solar Project. See the attached <u>Exhibit B</u> depicting the locations of the screening.

- 3. Floor Plan (N/A)
- 4. Legal Description

See Attachment 3.

5. Adjacent Property Owners

See Exhibit E.



#### 6. Application Fee

The application fee will be transmitted along with the final application.

#### 7. NRI Application

Proof of submission of the NRI application is attached as Exhibit F.

#### 8. IDNR EcoCAT

Consultation with the Illinois Department of Natural Resources is attached as Exhibit D.

## 9. Equipment Specifications

While final equipment selections are to be determined with final engineering and design, the product sheets for equipment as the project is currently designed are attached as <u>Exhibit H</u>.

#### 10. Topography Map

A topographical map is attached as Exhibit I.

# **Special Use Permit Findings of Fact – Section 8-5-7(D)**

1. 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;

The proposed use of the Project Parcels as a solar farm will not be detrimental to or endanger public health, safety, morals, comfort, or general welfare. The Solar Project will operate to convert sunlight to electrical power with occasional ongoing maintenance. The clean energy generated by the Solar Project will avoid pollution associated with other forms of power generation. The Solar Project will comply with state and local laws, and be designed and installed using current best practices, including the current National Electric Code and the use of UL (or equivalent) equipment. The Solar Project will be surrounded by a UL compliant fence and a locked gate with emergency personnel access provided via a knox box.

 The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, not substantially diminish and impair property values within the neighborhood;

The Solar Project will not affect the existing use and enjoyment of property in the vicinity for those uses permitted by the Zoning Ordinance. The Solar Project will be designed to enclose the solar panels and associated electrical equipment with fencing, to comply with applicable state and local laws and ordinances designed to maintain the use and enjoyment of adjacent property, and to maintain property values.

3. The establishment of the special use will not impede the normal or orderly development and improvement of the surrounding property for uses permitted in the district;

The Solar Project will not impede the normal and orderly development and improvement of surrounding properties for the uses contemplated in the current Zoning Ordinance.



4. Adequate utilities, access roads, drainage and/or necessary facilities have been, are being, or will be provided;

The Solar Project will include adequate provisions for buffers, landscaping, fencing, lighting, building materials, and open space, as required, and other improvements such as utilities, equipment, access roads, drainage and other necessary facilities as described on the Site Plan attached as <a href="Exhibit B.">Exhibit B.</a>. The Solar Project will have no permanent buildings or employees on site, and therefore does not require water, waste, or sewage facilities.

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

The Solar Project will have minimal impact on public street congestion. During the construction phase, standard construction vehicles will come on and off site to deliver material and construction equipment. Once installed and commissioned, the Solar Project only requires periodic maintenance. The Solar Project's performance will be continuously monitored, and traffic will consist of engineers and maintenance technicians visiting the Solar Project typically only a few times a year for any inspections, routine maintenance, and any required repairs.

6. The special use shall, in all other respects, conform to the applicable regulations of the districts in which it is located.

The Solar Project will conform to the Zoning Ordinance, all applicable laws and regulations, and the Special Use Permit. Applicant will continue to work with regulatory authorities to ensure compliance with relevant regulatory and permitting requirements.



INKBERRY SOLAR, LLC

2 MWac Community Solar Project

Village of Poplar Grove Petition for Special Use

APPENDIX A

Submitted May 30th, 2025



# Attachment 1

**Application Form** 

[Attached]



# VILLAGE OF POPLAR GROVE

"A Great Place to Call Home"

200 Hill Street, Poplar Grove, IL 61065

Phone: (815) 765-3201 - Fax: (815) 765-3571

www.poplargrove-il.gov

# **Special Use Application**

# **PART 1: INTRODUCTION**

Please complete this Zoning Special Use Permit Application and return it to the Village of Poplar Grove along with the following documentation:

- Written Narrative of the Proposed Request
- Plat of Survey of the Property
- Site Plan of property if changes to the property are proposed
- o Floor Plan
- Legal description of the Property
- Any other information required by staff such as hours of operation, number of employees, traffic report, landscape plan, lighting plan, elevation plan.
- List of Adjacent Property Owners within 250 feet, excluding public right-of-way. This may be obtained from the Supervisor of Assessments Office, 1208 Logan Ave. The accuracy of the information is the applicant's responsibility.
- Application Fee
- Natural Resource Information (NRI) State law requires applicants to request a natural Resource Information Report (NRI) from Boone county Soil and Water Conservation District at 211 North Appleton Road, Belvidere, IL 61008-1983, 815-544-2677, ext 3. This report must be received by the Village of Poplar Grove prior to the Plan Commission public hearing.
- Proof of submittal to IDNR regarding the Endangered Species Act. The applicant shall contact
  the Illinois Department of Natural Resources (IDNR) via the EcoCat website at
  <a href="https://dnr@Illinois.gov/EcoPublic/">https://dnr@Illinois.gov/EcoPublic/</a>
- Proof of submittal to the Illinois Historic Preservation Agency at 217-782-4836 if the proposal involves State or Federal Funding.

# **PART 2: APPLICANT INFORMATION**

Applicant Name: Inkberry Solar, LLC

Email: jcarson@trajectoryenergy.com; legal@trajectoryenergy.com

P.O. Box 310

Address/City: <u>Highland Park, IL 60035</u>

Phone Number(s): (312) 882-3713

Owner of Name: Tahoe Trading Company, LLC

Record Email: landlorddan@hotmail.com

Address/City: 1610 Candlewick Dr. SW, Poplar Grove, IL 61065

Phone Number(s): (815) 985-0879

Attorney Name: Molly Snittjer

Email: msnittjer@trajectoryenergy.com

Address/City: P.O. Box 310, Highland Park, IL 60035

Phone Number(s): (847) 732-0968

# **PART 3: PROPERTY INFORMATION**

Street Address: Agricultural land along IL Route 76

03-23-200-014 and 03-23-200-017

Tax Parcel Number (PIN):

Legal Description: See attached application

(May be on separate sheet)

\_\_\_\_\_

Current Use of the Property Agriculture

Current Zoning of the property LI Light Industrial District

Surrounding Zoning and Land Use

North LI Light Industrial

South R2 Single Family Residential

East R1 Single Family Residential

West GB General Business

## **PART 5: PROPOSED SPECIAL USE**

Describe the proposed special use (Attach additional sheets as needed to thoroughly describe the proposed use and/or business)

Commercial Solar Energy Facility (See attached application)

PART	6: STANDARDS FOR SPECIAL USE PERMITS
n com	n Commission will make its recommendation to approve or deny the proposed special use based pliance with the facts listed below. Describe how the proposed use will comply with the m standards set forth in the Village of Poplar Grove Zoning Ordinance:
1.	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;
	See attached application
2.	The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, not substantially diminish and impair property values within the neighborhood;
	See attached application
3.	The establishment of the special use will not impede the normal or orderly development and improvement of the surrounding property for uses permitted in the district;
	See attached application
4.	Adequate utilities, access roads, drainage and/or necessary facilities have been, are being, or will be provided;
	See attached application
5.	Adequate measures have been, or will be taken, to provide ingress or egress so designed as to minimize traffic congestion in the public streets; and
	See attached application
6.	The special use shall, in all other respects, conform to the applicable regulations of the districts in which it is located.

Once a special use application is submitted with all required documentation it will be reviewed by Village Staff. It is recommended that the proposed use be described in as much detail as possible to avoid delays in processing. Staff may request additional information to complete its review.

When the review is complete, a public hearing before the Plan Commission will be scheduled. The public hearing will be conducted no less than 15 days or more than 30 days after public notice is sent to adjacent property owners within 250 feet by certified mail. The notice form will be provided to the applicant by Village staff, but the applicant shall send the notices and provide proof of service to the Village prior to the hearing. The Village will place a legal notice in a newspaper of general circulation. The cost of the newspaper notification shall be paid by the applicant.

The Plan Commission may make a recommendation after the public hearing, or continue the case to a future date for additional information.

The Plan Commission will forward its recommendation, along with its Findings of Fact to the Village Board, which will make the final determination on the proposed special use.

## PART 8: ACKNOWLEDGEMENT

Payment of Fees. Fees shall be payable at the time applications are filed with the Village Clerk and are not refundable.

Reimbursable Costs. The Village may expend time in the investigation and processing of zoning procedures and site plan review. In addition to Village involvement, the Village may retain the services of professional consultants including, but not limited to engineers, landscape architects, architects, attorneys, environmental specialists, and recreation specialists in the administration, investigation and processing of such matters. Any person, firm or corporation requesting action by the Village on zoning procedures shall reimburse the Village for staff time expended in the administration, investigation and processing of applications for such permits or amendments and the cost to the Village charged by any professional consultant retained by the Village on any such matter. Notice shall be sent to the property owner or representative of the property owner informing them of the Village policy on reimbursement costs prior to the costs being incurred.

Fees for Public Hearing Notification. Applicants for all zoning matters (special uses, variations, map amendments, etc.) shall pay all expenses incurred for notification of all public hearings and other notices; including, but not limited to, publication, first class mail, certified mail, etc.

Any person who shall knowingly make or cause to be made, conspire, combine, aid, assist in, agree to, arrange for, or in any way procure the making of a false or fraudulent application affidavit, certificate or statement, shall be guilty of a misdemeanor as provided by statute by the State of Illinois. I hereby acknowledge that the information provided in this application is true and correct and that I understand that I am responsible for costs incurred.

Name of applicant: _	Jonathan K. Carson	_ Signature:	forthe loson	Date: <u>5.29.20</u> 25
Name of property ow	ner:	Signature	:	Date:

Once a special use application is submitted with all required documentation it will be reviewed by Village Staff. It is recommended that the proposed use be described in as much detail as possible to avoid delays in processing. Staff may request additional information to complete its review.

When the review is complete, a public hearing before the Plan Commission will be scheduled. The public hearing will be conducted no less than 15 days or more than 30 days after public notice is sent to adjacent property owners within 250 feet by certified mail. The notice form will be provided to the applicant by Village staff, but the applicant shall send the notices and provide proof of service to the Village prior to the hearing. The Village will place a legal notice in a newspaper of general circulation. The cost of the newspaper notification shall be paid by the applicant.

The Plan Commission may make a recommendation after the public hearing, or continue the case to a future date for additional information.

The Plan Commission will forward its recommendation, along with its Findings of Fact to the Village Board, which will make the final determination on the proposed special use.

#### PART 8: ACKNOWLEDGEMENT

Payment of Fees. Fees shall be payable at the time applications are filed with the Village Clerk and are not refundable.

Reimbursable Costs. The Village may expend time in the investigation and processing of zoning procedures and site plan review. In addition to Village involvement, the Village may retain the services of professional consultants including, but not limited to engineers, landscape architects, architects, attorneys, environmental specialists, and recreation specialists in the administration, investigation and processing of such matters. Any person, firm or corporation requesting action by the Village on zoning procedures shall reimburse the Village for staff time expended in the administration, investigation and processing of applications for such permits or amendments and the cost to the Village charged by any professional consultant retained by the Village on any such matter. Notice shall be sent to the property owner or representative of the property owner informing them of the Village policy on reimbursement costs prior to the costs being incurred.

Fees for Public Hearing Notification. Applicants for all zoning matters (special uses, variations, map amendments, etc.) shall pay all expenses incurred for notification of all public hearings and other notices; including, but not limited to, publication, first class mail, certified mail, etc.

Any person who shall knowingly make or cause to be made, conspire, combine, aid, assist in, agree to, arrange for, or in any way procure the making of a false or fraudulent application affidavit, certificate or statement, shall be guilty of a misdemeanor as provided by statute by the State of Illinois. I hereby acknowledge that the information provided in this application is true and correct and that I understand that I am responsible for costs incurred.

Name of applicant:	Signature:	Date:
Name of property owner: TRHOC TRADIL	Signature: My My TK	_ Date: 5,29,2023



# Attachment 2

Zoning Ordinance

[Attached]

## 8-5-7. SPECIAL USE.

- A. Purpose. The purpose of this chapter is to establish regulations, which govern the procedures for review and approval or denial of special use permits. In some instances as indicated in the specific use table, certain land uses in certain districts are not permitted by right, but rather as special uses. In these cases, special requirements or characteristics require review by the Commission and the possible imposition of such conditions as necessary to ensure that the use is compatible with adjacent properties. Modification, alteration or expansion of any special use in violation as approved (if approved), without approval of the Village Board shall be grounds for revocation of said special use approval.
- B. Required Information. A completed application for a special use, the required fee and any supporting documentation shall be submitted to the Village Clerk for referral to the Commission. If the application is deemed incomplete then the Commission shall postpone any public hearing until all adequate information is submitted.
- C. Public Hearing Notice. Refer to Section 8-5-3.
- D. Planning and Zoning Commission Hearing and Recommendation. The Commission shall hold a public hearing on the proposed special use, after which a recommendation will be made to grant or deny the special use application to the Village Board based on the findings of facts made by the Commission. The Commission may make the recommendation at the same meeting, or choose to continue the proceedings at a later date. The Commission may request additional information as needed. Once a recommendation is made, the Commission shall record its conclusion as part of the meeting minutes, written findings of fact and recommended conditions of approval (if recommended for approval). The Commission's failure to act or submit a report within 65 days of the public hearing shall constitute a recommendation of approval for the request. In order to make a recommendation and adoption of findings of fact, the Commission shall consider the following facts:
  - 1. 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;
  - 2. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, not substantially diminish and impair property values within the neighborhood;
  - 3. The establishment of the special use will not impede the normal or orderly development and improvement of the surrounding property for uses permitted in the district;
  - 4. Adequate utilities, access roads, drainage and/or necessary facilities have been, are being, or will be provided;
  - 5. Adequate measures have been, or will be taken, to provide ingress or egress so designed as to minimize traffic congestion in the public streets; and
  - 6. The special use shall, in all other respects, conform to the applicable regulations of the districts in which it is located.
- E. Village Board Decision. Within 65 days of receipt of the Commission's recommendation, the Village Board shall act by ordinance to approve or deny the special use as originally proposed or approve the special use with modifications. The Village Board may also remand the request back to the Commission for further hearings and/or discussion. The Village Board's approval or denial of the requested special use shall be considered the approval or denial of a unique request, and shall not be construed as precedent for any other proposed special use.

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- F. Conditions of Approval. In permitting a new special use or in modifying an existing special use, the Village Board may impose additional conditions and requirements, either solely or based on the recommendation of the Commission beyond those expressly stated in this chapter, which are deemed necessary to ensure that the above review criteria are met.
- G. Effect of Denial. If an application for a special use is denied by the Village Board (either wholly or in part), no application may be filed with the Village for the same special use within one year of denial unless new evidence or proof of change of factors is found to be valid by the Village Board.
- H. Termination of an Approved Special Use. The applicant must demonstrate that the proposed special use meets all general and specific special use requirements in the site plan required for the initiation of development activity on the subject property. Once a special use is granted, no erosion control permit, site plan approval, occupancy permit, or building permit shall be issued for any development which does not comply with all requirements of this chapter. Any special use found not to be in compliance with the terms of this chapter shall be considered in violation of this chapter and shall be subject to all applicable procedures and penalties. In such circumstances, the Commission, following a properly noticed public hearing as described in subsection 8-5-3F.1, may recommend revocation of the special use permit. Such recommendation shall be forwarded to the Village Board for final action. The Village Board may affirm, reverse or modify the decision of the Commission to revoke the special use permit.
- I. Time Limits on the Development of Special Use. The start of construction of any and all special uses shall be initiated within 365 days of their approval by the Village Board and the use shall be operational within 730 days of said approval, unless stated otherwise in the conditions of approval. Failure to initiate development within this period shall automatically constitute a revocation of the special use. For the purposes of this section, "operational" shall be defined as the granting of an occupancy permit for the special use. Prior to such a revocation, the applicant may request an extension of this period. Said request shall require formal approval by the Village Board and shall be based upon showing of acceptable justification, as determined by the Village Board.
- J. Discontinued Special Use. Any and all special uses that have been discontinued for a period of one year shall have their special use permit invalidated automatically. The burden of proof shall be on the property owner to demonstrate that the special use was in operation during this period.
- K. Changes to Special Use. All requirements of the approved special use shall be continued regardless of ownership of the subject property. Modification, alteration, or expansion of any special use without approval by the Village Board, shall be considered in violation of the Zoning Ordinance and shall be, in addition to any other remedies or penalties, grounds for revocation of said special use approval per subsection H. above.
- L. Fee. A fee is required for this procedure. Refer to Section 8-5-12.

(Ord. 2012-012, 3-13-2012)

## 8-7-9. SOLAR ENERGY.

- A. Purpose. As energy demands increase the need for alternate sources rises. It is the purpose of this section to provide opportunity for residents to utilize alternate energy sources in a safe and effective manner.
- B. Minimum Requirements:
  - Any solar collectors shall be installed either on the roof of the principal structure or accessory structure
    or shall be otherwise incorporated into and made an integral part of the main building. The maximum
    height and setback regulations of the zoning district in which it is proposed shall be observed.
  - 2. No solar collector, solar engine or accessories, pipes or ducts for any solar collector or shall be installed on any roof having a slope of less than one percent (one-eighth (1/8) of an inch per foot or one centimeter per meter).
  - 3. Installations on low sloped roofs shall comply with the following requirements:
    - a. Clearances. All collectors, reflectors, engines, pipes, ducts and other components shall have sufficient clearance between the roof and the installation to permit roof repairs to be made and to permit circulation of air to avoid constant dampness. A space of two feet or 61 centimeters shall be adequate clearance in all instances, provided that a smaller space shall be permitted if it can be demonstrated that all normal repairs and resurfacings of the roof may be made under the proposed clearances. The clearances required herein shall not apply to vertical pipes installed through the roof surface or installed outside of the outside walls to provide access to solar components.
    - b. Load capacity. No solar component shall be installed on any roof unless the roof has sufficient capacity to hold the weight of the roof, the weight of the solar components and the anticipated snow load. Load requirements must meet the Village of Poplar Grove's adopted building code. The weight of fluid to be used in any panels, pipes or other components will be included in the calculations of load. In determining the anticipated snow load, the effect of the solar components on causing drifting shall be considered. All solar collectors shall meeting building code requirements.
    - c. Protection from drifting or sliding snow. On any installation where solar collectors, solar engines and reflectors may cause snow to drift on a roof, provisions shall be made by snow fences, chutes or other barriers to prevent snowdrifts from accumulating on the roof. Wherever a solar collector or other solar component may cause snow to slide, the part of the roof where the snow may accumulate as a result of sliding shall have sufficient capacity to hold the weight of the snow anticipated to accumulate because of sliding. Wherever the location and slope of a solar collector or other solar component may cause snow to slide onto any doorway, sidewalk or other place used by pedestrian traffic, protection in the form of chutes, awnings or other devices shall be provided to prevent any snow from sliding onto any such doorway, sidewalk or other place.
    - d. Roof penetration. Wherever any pipe, duct or other solar component penetrates the surface of a roof, the roof shall be protected from leaks in the manner provided for any stack, pipe, or conduit penetrating the roof surface.
    - e. Roof preparation. Before any solar component is installed, the roof shall be inspected and any repairs and maintenance work needed shall be done to put the roof in leak proof condition.
  - 4. All of the requirements for installations on low sloped roofs shall apply to installations on roofs other than low sloped roofs, except that in lieu of clearance from the roof, a solar panel may be attached flush to the roof. Such solar panel may be an integral part of the roof, providing a waterproof cover, with a waterproof seal between the panel and the rest of the roof. If such panel is not made an integral

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- part of the roof but is attached flush with the roof, the top and sides of the panel shall be sealed where they meet the roof surface or shingles, to prevent water from getting under the panel.
- 5. Any roof over three stories above the ground shall be provided with a means of access other than an outside ladder against an outside wall. No solar components shall be installed in a location so as to interfere with walkways on any roof.
- 6. Each solar component which may contain any liquid or gas shall be designed and constructed to prevent the leakage of any liquid or gas under any combination of temperature and pressure possible either during use or when the system is not in use.
- 7. Each solar collector, solar panel and solar engine shall be securely anchored to withstand the maximum wind pressure anticipated, considering the effects, if any, of the solar components in channeling wind, and without considering the weight of any liquid in the components.
- 8. Each solar collector, reflector, solar engine and all solar components shall be inspected at least once every two years. Such inspections shall be at the owner's expense and may be made by any qualified person selected by the owner. The inspection shall include looking for any evidence of dampness on the roof due to shading, lack of air circulation or leaks, and shall include examining the structural parts securing all components. The Zoning Officer may request a certified report of such inspection to be provided by the owner/applicant. If such request is required by the Zoning Officer it shall be in writing and provided by the owner/applicant within 30 days.
- 9. Nothing in this section shall be interpreted as prohibiting any innovative design. Any design not specifically permitted by this chapter may be installed, upon a showing that the proposed system of solar components will achieve the safety objectives and structural objectives of the provisions of this title.
- 10. Nothing herein contained nor any permit issued hereunder, shall be constructed to restrict or limit the use and development of any adjoining or other premises.

(Ord. 2012-012, 3-13-2012)



# Attachment 3

Legal Description

[Attached]

# **Legal Description**

#### PARCEL 1:

PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 45 NORTH, RANGE 3 EAST OF THE THIRD PRINCIPAL MERIDIAN

**DESCRIBED AS FOLLOWS:** 

COMMENCING AT THE SOUTHEAST CORNER OF SAID NORTHEAST QUARTER OF SAID SECTION 23; THENCE NORTH 00 DEGREES 19 MINUTES 24 SECONDS EAST ALONG SAID EAST LINE, 165.28 FEET TO A POINT ON THE EASTERLY EXTENSION OF THE NORTH LINE OF WEST GROVE SUBDIVISION NO. 2 PER DOCUMENT NO. 2005R09773, SAID POINT BEING THE POINT OF BEGINNING; THENCE SOUTH 89 DEGREES 44 MINUTES 05 SECONDS WEST ALONG SAID EASTERLY EXTENSION AND NORTH LINE THEREOF, 2,592.15 FEET TO THE EAST RIGHT OF WAY LINE OF ILLINOIS ROUTE 76 PER DOCUMENT NUMBER 93-11289; THENCE NORTH 00 DEGREES 03 MINUTES 55 SECONDS EAST ALONG SAID EAST RIGHT OF WAY LINE, 515.66 FEET; THENCE NORTH 04 DEGREES 49 MINUTES 44 SECONDS EAST ALONG SAID EAST RIGHT OF WAY LINE, 301.04 FEET; THENCE NORTH 04 DEGREES 41 MINUTES 54 SECONDS WEST ALONG SAID EAST RIGHT OF WAY LINE, 48.92 FEET TO THE SOUTH LINE OF AN INGRESS/EGRESS EASEMENT PER DOCUMENT NO. 86-4746, SAID SOUTH LINE BEING THE WESTERLY EXTENSION OF THE SOUTH LINE OF A TRACT OF LAND PER DOCUMENT 2017R04091; THENCE SOUTH 89 DEGREES 34 MINUTES 54 SECONDS EAST ALONG SAID WESTERLY EXTENSION AND SOUTH LINE THEREOF, 1,308.30 FEET; THENCE NORTH 00 DEGREES 14 MINUTES 30 SECONDS EAST ALONG SAID SOUTH LINE, 54.02 FEET; THENCE SOUTH 89 DEGREES 34 MINUTES 54 SECONDS EAST ALONG SAID SOUTH LINE AND THE SOUTHERLY LINE OF A TRACT OF LAND PER DOCUMENT NO. 200701917, 573.31 FEET TO THE SOUTHWEST LINE OF SAID TRACT; THENCE SOUTH 28 DEGREES 44 MINUTES 12 SECONDS EAST ALONG SAID SOUTHWEST LINE, 460.00 FEET TO THE SOUTHERLY LINE OF SAID TRACT; THENCE SOUTH 89 DEGREES 40 MINUTES 36 SECONDS EAST ALONG SAID SOUTHERLY LINE, 345.00 FEET TO THE WESTERLY LINE OF SAID TRACT, SAID WESTERLY LINE BEING PARALLEL WITH THE AFOREMENTIONED EAST LINE OF SAID NORTHEAST QUARTER; THENCE SOUTH 00 DEGREES 19 MINUTES 24 SECONDS WEST ALONG SAID PARALLEL LINE, 300.00 FEET TO THE SOUTHERLY MOST LINE OF SAID TRACT; THENCE SOUTH 89 DEGREES 40 MINUTES 36 SECONDS EAST ALONG SAID SOUTHERLY MOST LINE, 125.00 FEET TO SAID EAST LINE; THENCE SOUTH 00 DEGREES 19 MINUTES 24 SECONDS WEST ALONG SAID EAST LINE, 186.68 FEET TO THE POINT OF BEGINNING, IN BOONE COUNTY, ILLINOIS.

#### PARCEL 2:

PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 45 NORTH, RANGE 3 EAST OF THE THIRD PRINCIPAL MERIDIAN

#### **DESCRIBED AS FOLLOWS:**

COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 23; THENCE NORTH 00 DEGREES 19 MINUTES 24 SECONDS EAST ALONG SAID EAST LINE, 165.28 FEET TO THE EASTERLY EXTENSION OF THE NORTH LINE OF WEST GROVE SUBDIVISION NO. 2 PER DOCUMENT NO. 2005R09773; THENCE SOUTH 89 DEGREES 44 MINUTES 05 SECONDS WEST ALONG SAID EASTERLY EXTENSION AND NORTH LINE THEREOF, 2,592.15 FEET TO THE EAST RIGHT OF WAY LINE OF ILLINOIS ROUTE 76 PER DOCUMENT NUMBER 93-11289; THENCE NORTH 00 DEGREES 03 MINUTES 55 SECONDS EAST ALONG SAID EAST RIGHT OF WAY LINE, 515.66 FEET; THENCE NORTH 04 DEGREES 49 MINUTES 44 SECONDS EAST ALONG SAID EAST RIGHT OF WAY LINE, 301.04 FEET; THENCE NORTH 04 DEGREES 41 MINUTES 54 SECONDS WEST ALONG SAID EAST RIGHT OF WAY LINE, 48.92 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING NORTH 04 DEGREES 41 MINUTES 54 SECONDS WEST ALONG SAID EAST RIGHT OF WAY LINE, 50.20 FEET TO THE NORTH LINE OF A INGRESS/EGRESS EASEMENT PER DOCUMENT NO. 86- 4746; THENCE SOUTH 89 DEGREES 34 MINUTES 54 SECONDS EAST ALONG SAID NORTH LINE, 1,095.18 FEET TO THE EAST

LINE OF SAID INGRESS/EGRESS EASEMENT, SAID EAST LINE BEING COINCIDENT WITH THE WEST LINE OF A TRACT OF LAND PER DOCUMENT NO. 2017R04091; THENCE SOUTH 02 DEGREES 09 MINUTES 44 SECONDS EAST ALONG SAID EAST LINE, 50.05 FEET TO THE SOUTH LINE OF SAID INGRESS/EGRESS EASEMENT; THENCE NORTH 89 DEGREES 34 MINUTES 54 SECONDS WEST ALONG SAID SOUTH LINE, 1,092.93 FEET TO THE POINT OF BEGINNING, IN BOONE COUNTY, ILLINOIS.



# Attachment 4

Lease Agreement (Redacted)

[Attached]

# **GROUND LEASE AGREEMENT**

# BASIC LEASE TERMS SUMMARY

Effective Date	May 9, 2024
Landlord	Tahoe Trading Company, LLC, an Illinois limited liability company ("Landlord").
Tenant	Inkberry Solar, LLC, a Delaware limited liability company.
Land	That certain real property located in Boone County, Illinois (the "County") as further described on Exhibit A attached hereto. The portion of the Land to be leased hereunder will be determined in accordance with Section 2 of this Lease.
Initial Due Diligence Period (Section 3)	Twelve (12) calendar months from the Effective Date.
Initial Due Diligence Fee (Section 3)	
Extended Due Diligence Periods (Section 3)	Up to five (5) additional 12-month periods commencing upon expiration of the Initial Due Diligence Period (collectively, the "Extended Due Diligence Periods").
Extended Diligence Period Fees (Section 3)	
Term (Section 4)	The "Construction Term" shall commence upon the earlier to occur of (i) the expiration of the Due Diligence Period (as may be extended pursuant to Section 3(b)), and (ii) the Construction Commencement Date (as defined below) and run through the earlier of (a) the Construction Term Outside Date (as defined below) and (b) the date on which Tenant begins to produce and sell electric power from the System on a regular basis (not including test power produced in connection with preliminary testing and final completion of the System) and the System has been interconnected to the local utility and achieved "commercial operations" (or similar term) under the applicable power purchase agreement(s) (the "Commercial Operation Date").
	The " <b>Initial Term</b> " of this Lease will run for a period of four hundred and twenty (420) consecutive calendar months.

	The " <b>Term</b> " of this Lease will include the Construction Term, the Initial Term and, if applicable, any Renewal Terms.
Renewal Terms (Section 4)	Two (2) successive renewal terms of sixty (60) consecutive calendar months each.
Rent (Section 7)	
Rent Escalation Date (Section 7)	The first (1st) anniversary of the Rent Commencement Date (as defined in Section 6(a)), and every year thereafter.
Rent Escalation Percentage (Section 7)	
Intended Use (Section 11)	The development, construction, installation, operation, maintenance, repair, replacement, removal, and financing of one or more solar energy and/or energy storage systems for the generation, conversion, storage and distribution of electric power (the "System") and related monitoring, interconnection, transmission, distribution and communication facilities.
Landlord's Notice Address (Section 19)	
Tenant's Notice Address (Section 19)	Inkberry Solar, LLC P.O. Box 310 Highland Park, IL 60035 (312) 882-3713 legal@trajectoryenergy.com



TENANT:	Inkberry Solar, LLC
	By: Inal Cr Name: Jonathan K. Carson
	Title: Authorized Representative
LANDLORD:	Tahoe Trading Company, LLC
	By:
	Name: Daniel Kelly
	Title: Manager

IN WITNESS WHEREOF, the parties hereto have duly executed this Lease as of the Effective

Date.

IN WITNESS WHEREOF, the parties hereto have duly executed this Lease as of the Effective Date.

TENANT:	Inkberry Solar, LLC	
	Ву:	
	Name: Jonathan K. Carson	
	Title: Authorized Representative	

LANDLORD:

**Tahoe Trading Company, LLC** 

Name: Daniel Kelly

Title: Manager

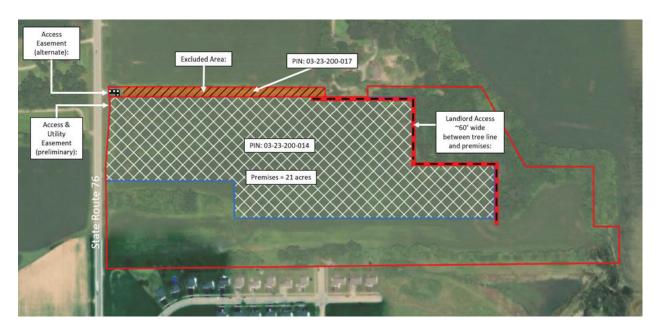
# Exhibit A

# **Lease Boundary Line**

Land: parcel nos. 03-23-200-014 and 03-23-200-017 in Boone County, Illinois.

Acreage: Tenant proposes to lease up to the entire portion of the Land as outlined below, or approximately 21 acres in total, including the following easements.

Easements: Tenant expects to run across any setback between the System and (a) IL Route 76 (which runs north to south immediately west of the Land) access road(s) for ingress/egress to/from the System and (b) the utility distribution lines that run along IL Route 76 wire(s) that would connect the System to such utility distribution lines, in order to interconnect the System to the distribution grid.



# Exhibit B

# **Permitted Liens**

That certain written farm lease agreement (Illinois Cash Farm Lease) dated as of February 1, 2022 between Landlord and Matthew Bullard, as farm tenant, as amended by the first amendment to Illinois Cash Farm Lease dated as of May 1, 2024.



INKBERRY SOLAR, LLC

2 MWac Community Solar Project

Village of Poplar Grove Petition for Special Use

APPENDIX B

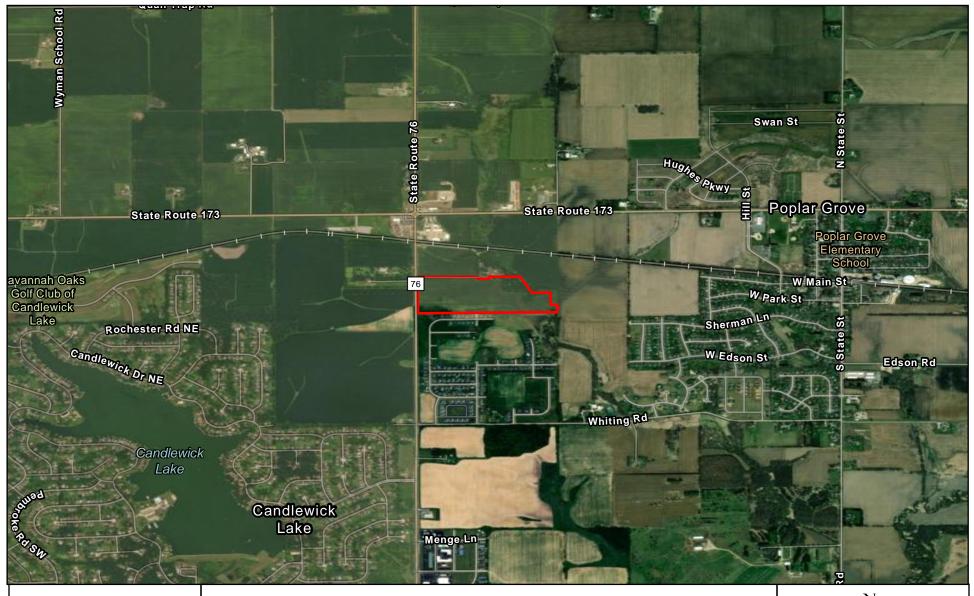
Submitted May 30th, 2025



# Exhibit A

**Project Location** 

[Attached]

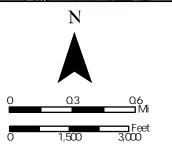




# **Inkberry Solar, LLC**

**General Location** 

Date: 5/13/2025

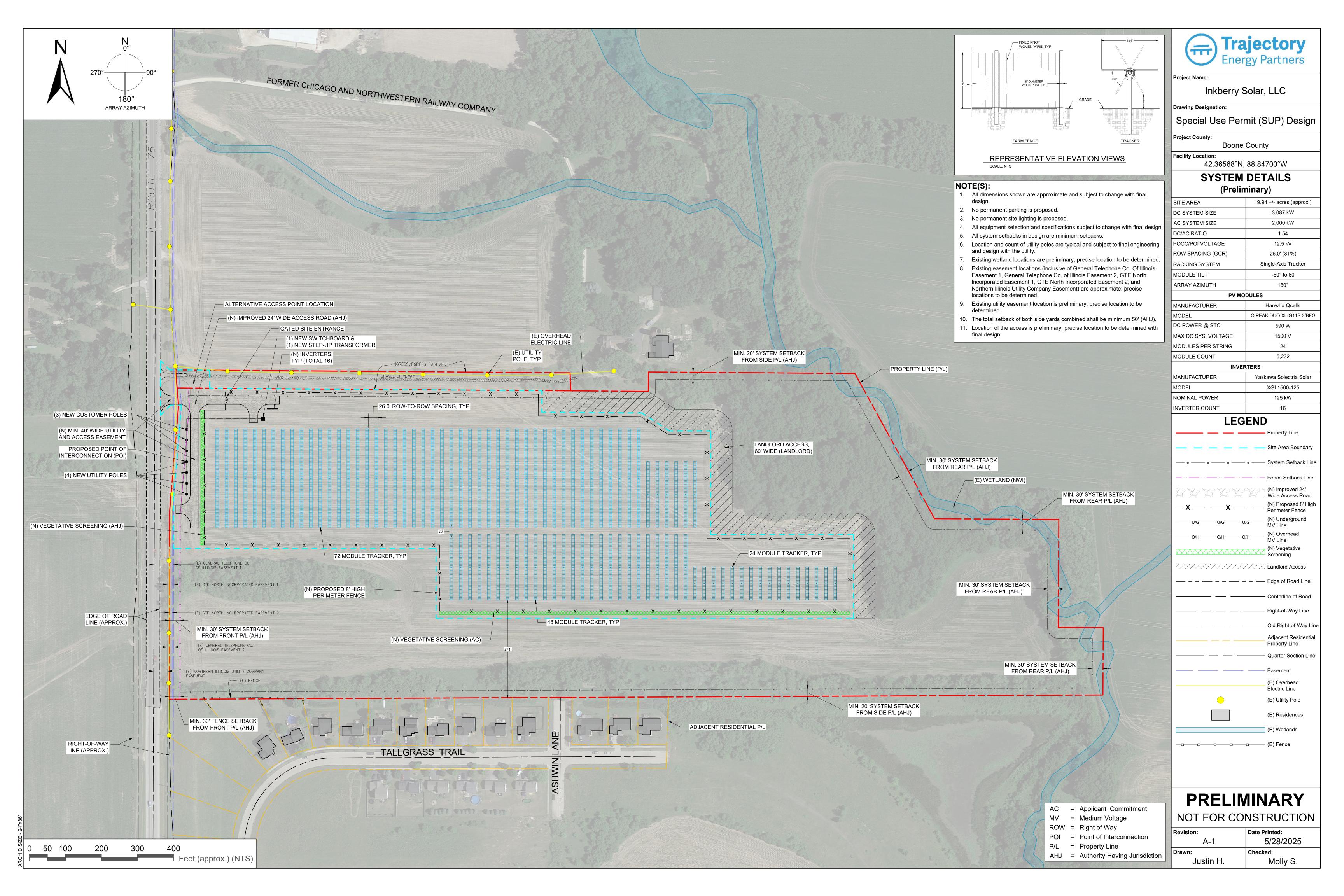




# Exhibit B

Preliminary Site Plan

[Attached]





## Exhibit C

Plat of Survey



LOCATION MAP

1. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION REGARDING DEEDS, EASEMENTS, RIGHTS, COVENANTS, CONDITIONS, RESTRICTIONS, ADJOINERS AND/OR OTHER DOCUMENTS THAT MIGHT EFFECT TITLE TO THE PROPERTY DEPICTED HEREON WAS APPLIED FROM CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NO. 5245-2301549, REVISION 7, DATED DECEMBER 16, 2024 PROVIDED TO THE SURVEYOR

3. SCHEDULE B ITEM 8: PERMANENT TAX NUMBER 03-23-200-014 AS LISTED IN TITLE COMMITMENT.

5. SCHEDULE B ITEM 10: PERMANENT TAX NUMBER 03-23-200-017 AS LISTED IN TITLE COMMITMENT.

7. SCHEDULE B ITEM 21: INGRESS AND EGRESS EASEMENT FOR THE PURPOSE OF MOVEMENT OF FARM MACHINERY PER DOCUMENT NO. 86-4746 RECORDED NOVEMBER 7, 1986. AFFECTS SUBJECT PARCEL. SHOWN ON SAID SURVEY.

8. SCHEDULE B ITEM 22: EASEMENT GRANTED TO ILLINOIS NORTHERN UTILITIES COMPANY FOR THE PURPOSE OF ELECTRIC TRANSMISSION LINES RECORDED IN BOOK 85, PAGE 69 AND DATED OCTOBER 17, 1928. FALLS WITHIN ROAD

9. SCHEDULE B ITEM 23: EASEMENT GRANTED TO GENERAL TELEPHONE COMPANY OF ILLINOIS FOR THE PURPOSE OF COMMUNICATION LINES PER DOCUMENT NO. 16881 RECORDED JULY 1, 1970. AFFECTS SUBJECT PARCEL. SHOWN ON

10. SCHEDULE B ITEM 24: EASEMENT GRANTED TO GENERAL TELEPHONE COMPANY OF ILLINOIS FOR THE PURPOSE OF COMMUNICATION LINES PER DOCUMENT NO. 75-2526 RECORDED OCTOBER 14, 1975. AFFECTS SUBJECT PARCEL.

11. SCHEDULE B ITEM 25: EASEMENT GRANTED TO GENERAL TELEPHONE COMPANY OF ILLINOIS FOR THE PURPOSE OF COMMUNICATION LINES PER DOCUMENT NO. 80-2106 RECORDED AUGUST 5, 1980. AFFECTS SUBJECT PARCEL.

12. SCHEDULE B ITEM 26: EASEMENT GRANTED TO GTE NORTH INCORPORATED FOR THE PURPOSE OF

13. SCHEDULE B ITEM 27: EASEMENT GRANTED TO GTE NORTH INCORPORATED FOR THE PURPOSE OF COMMUNICATION LINES PER DOCUMENT NO. 93-8922 RECORDED OCTOBER 12, 1993. AFFECTS SUBJECT PARCEL.

15. SCHEDULE B ITEM 32: A LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH NOTE: PARTIAL RELEASE OF MEMORANDUM OF LEASE RECORDED APRIL 2, AS DOCUMENT NO. 2025R01199. AMENDED AND RESTATED MEMORANDUM OF LEASE MADE BY AND BETWEEN TAHOE TRADING COMPANY, LLC AN ILLINOIS LIMITED LIABILITY COMPANY AND INKBERRY SOLAR, LLC RECORDED APRIL 2, 2025 AS DOCUMENT NO.

1. THE LEASE PREMISES HAS DIRECT ACCESS TO IL ROUTE 76. A PUBLIC ROAD. FOR PUBLIC USE.

2. THE PROPERTY DESCRIBED HEREON IS THE SAME PROPERTY DESCRIBED IN THAT CERTAIN TITLE COMMITMENT ISSUED BY CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NUMBER

4. LOCATION OF ALL UTILITIES AND SUBSTRUCTURES ARE APPROXIMATELY BASED ON SURFACE

ENCROACHMENTS WERE OBSERVED AT THE TIME OF THE SURVEY.

B. WOOD BRIDGE LOCATED NEAR LOT 95 IN WEST GROVE SUBDIVISION.

C. WOOD BRIDGE AND PLANTER BOX NEAR LOT 96 IN WEST GROVE SUBDIVISION. D. CONCRETE SIDEWALK AT ASHWIN LANE IN WEST GROVE SUBDIVISION.

🕉 RUDY P. DIXON 🤊 035-003832 ROCHELLE ILLINOIS CHICAGO 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, 4, 6(a), 6(b), 7(a), 7(b)(1), 7(b)(2), 8, 9, 11(a), 13, 14, 16, 17, 18 AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON SEPTEMBER 20, 2024. DATE

05/07/2025

PROFESSIONAL DESIGN FIRM NUMBER 007858-0010

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-003832 LICENSE EXPIRES NOVEMBER 30, 2026

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. OJECT NUMBER: 240231 TE: 05/07/2025 1 OF 1 AWING NUMBER:

AR

**RR** 3

INKBE



## Exhibit D

**EcoCAT Consultation** 





05/20/2024

IDNR Project Number: 2415190

Date:

Applicant: Trajectory Energy Partners, LLC

Contact: Tyler Morris
Address: PO Box 310

Highland Park, IL 60035

Project: Inkberry Solar, LLC

Address: Land along Illinois Route 76 Street in Boone County, IL, Poplar Grove

Description: Inkberry Solar is a 2MWac community solar system on approximately 21 acres.

#### **Natural Resource Review Results**

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

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

**Consultation is terminated.** 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. Termination does not imply IDNR's authorization or endorsement.

#### Location

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

County: Boone

Township, Range, Section:

45N, 3E, 23

IL Department of Natural Resources Contact Bradley Hayes

217-785-5500

Division of Ecosystems & Environment



**Government Jurisdiction** 

Zoning Office Jessica Roberts 1212 Logan Ave.

Suite 102

Belvidere, Illinois 61008

#### 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.





## **EcoCAT Receipt**

Project Code 2415190

DATE

Trajectory Energy Partners, LLC Tyler Morris PO Box 310 Highland Park, IL 60035 5/20/2024

DESCRIPTION	FEE	CONVENIENCE FEE	TOTAL PAID
EcoCAT Consultation	\$ 125.00	\$ 2.81	\$ 127.81

TOTAL PAID \$ 127.81

Illinois Department of Natural Resources One Natural Resources Way Springfield, IL 62702 217-785-5500 dnr.ecocat@illinois.gov



## Exhibit E

Adjacent Landowner Map



#	PIN	Landowner	Landowner Owner Address	
		Name		
1	03-23-100-006	CATHOLIC	OFFICE OF FINANCE PO BOX	09004 - TCA CODE
		DIOCESE OF	7044 ROCKFORD, IL, 61125	09004
		ROCKFORD		
2	03-23-200-018	SHELEY, JUSTIN M	14837 IL ROUTE 76	09004 - TCA CODE
		& HALLIE M	CALEDONIA, IL 61011	09004
3	03-23-200-015	PRAIRIE TRAIL	3271 NEWBURG ROAD	09004 - TCA CODE
		DEVELOPMENT	BELVIDERE, IL, 61008	09004
		LLC		
4	03-24-100-006	GALLANO FARMS	3271 NEWBURG RD	09004 - TCA CODE
		LTD	BELVIDERE, IL, 61008	09004
5	03-23-429-007	POPLAR GROVE	200 N HILL ST POPLAR GROVE,	09004 - TCA CODE
		VILLAGE OF	IL, 61065	09004
6	03-23-200-012	POPLAR GROVE	6801 SPRING CREEK RD	09004 - TCA CODE
		DEVELOPMENT	ROCKFORD, IL, 61114	09004
		LLC		

7	03-23-252-003	LEWIS, JUSTIN M	14081 TALLGRASS TRL	09004 - TCA CODE
		& MIRANDA L	POPLAR GROVE, IL 61065	09004
8	03-23-252-002	COSIO, LUIS	14083 TALLGRASS TRL	09004 - TCA CODE
			POPLAR GROVE, IL 61065	09004
9	03-23-252-001	WINGO, TYLER D	14085 TALLGRASS TRL	09004 - TCA CODE
			POPLAR GROVE, IL 61065	09004
10	03-23-251-011	HERNANDEZ,	14108 TALLGRASS TRL	09004 - TCA CODE
		CESAR	POPLAR GROVE, IL 61065	09004
11	03-23-251-010	MORLAND,	14106 TALLGRASS TRL	09004 - TCA CODE
		JOSHUA R	POPLAR GROVE, IL 61065	09004
12	03-23-251-009	GANDEE, JEFFREY	14104 TALLGRASS TRL	09004 - TCA CODE
		A & CARMEN L	POPLAR GROVE, IL 61065	09004
13	03-23-251-008	BRISENO-	14102 TALLGRASS TRL	09004 - TCA CODE
		AGUILAR,	POPLAR GROVE, IL 61065	09004
		LEOPOLDO &		
		BRISENO		
		ANGELINA		
		YVETTE		
14	03-23-251-007	ACOSTA, MARIA	14100 TALLGRASS TRL	09004 - TCA CODE
		D	POPLAR GROVE, IL 61065	09004
15	03-23-251-006	DIAZ, VERONICA	14098 TALLGRASS TRL	09004 - TCA CODE
		MORALES	POPLAR GROVE, IL 61065	09004
16	03-23-251-005	CALDERON,	14096 TALLGRASS TRL	09004 - TCA CODE
		EDGARDO &	POPLAR GROVE, IL 61065	09004
		BAUTISTA		
		BERTHA V		
17	03-23-251-004	BIRD, GLENN &	14094 TALLGRASS TRL	09004 - TCA CODE
		MARY	POPLAR GROVE, IL 61065	09004
18	03-23-251-003	ANDERSON,	14092 TALLGRASS TRL	09004 - TCA CODE
		ZACHARY D	POPLAR GROVE, IL 61065	09004
19	03-23-251-002	WILCOX, ADAM &	14090 TALLGRASS TRL	09004 - TCA CODE
		ALEXANDRIA,	POPLAR GROVE, IL 61065	09004
		LEANN		
20	03-23-251-001	DMD	923 LOGAN AVE BELVIDERE,	09004 - TCA CODE
		INVESTMENT INC	IL, 61008	09004

21	03-23-100-009	HARRIS, DANN A	13537 ROUTE 76 POPLAR	09004 - TCA CODE
		& HARRIS	GROVE, IL, 61065	09004
		RICHARD E		
22	03-23-100-008	SUNFLOWER	14718 IL ROUTE 76	09003 - TCA CODE
		DECLARATION OF	CALEDONIA, IL, 61011	09003
		LIVING TRUST		
		14718		
23	03-23-100-007	MILLER, TODD D	14730 IL ROUTE 76	09003 - TCA CODE
			CALEDONIA, IL 61011	09003
24	03-23-200-016	TAHOE TRADING	1610 CANDLEWICK DR SW	09004 - TCA CODE
		COMPANY LLC	POPLAR GROVE, IL, 61065	09004



## Exhibit F

NRI Application - Confirmation of Submission
[Attached]



#### **Inkberry Solar NRI Application**

Patrick Holzman <patrick@trajectoryenergy.com>

Tue, May 13, 2025 at 2:41 PM

To: boonecountyswcd@gmail.com

Cc: Molly Snittjer <msnittjer@trajectoryenergy.com>, Leah Jorn ljorn@trajectoryenergy.com>

Hello,

Please see attached the NRI application for Inkberry Solar, LLC. The check for this application is in the mail.

Please let us know if any other information is needed.

Thank you and have a great afternoon.

--

#### **Patrick Holzman**

**Permitting Analyst**, Trajectory Energy Partners (773) 562-5323 | patrick@trajectoryenergy.com



NRI application - Inkberry Solar, LLC.pdf 8209K

## **Natural Resource Information Report Application**

Boone County Soil and Water Conservation District 211 North Appleton Road, Belvidere, Illinois 61008 815-544-2677 Ext. 3

Owner's Name: Tahoe Trading Company, LLC	C
Address: 1610 Candlewick Dr. SW, Poplar Grove	e, IL 61065
Petitioner's Name: Inkberry Solar, LLC	
Address: P.O Box 310, Highland Park, IL 60035	
Contact Information:	
Phone Number: <u>773-562-5323</u>	
E-Mail Address: patrick@trajectoryene	rgy.com; msnittjer@trajectoryenergy.com
Please indicate how you would like to receive	e your copy: 🔲 Mail 😾 Email
Type of Request:	
Change in Zoning from	to
Subdivision – Attach proposed plat, if avail	able
Variance (Explain Type)	
Other (Describe) Special Use Permit in the Village	e of Poplar Grove for a Commercial Solar Energy Facility
Location of the Property:	
Agricultural land along Illinois Route 76 (42.36	6568, -88.84700)
(Street	Address)
Parcel Identification Number(s): 03-23-200-014	and 03-23-200-017
Total Acres: 21 +/- acres	
Please Include the Following if Available:	
✓ Plat of survey w/ Legal Description	Zoning or Land Use Petition
Site Plan/ Concept Plan	Fee and Completed Application
✓ Location Map (if not on above map)	

#### **Natural Resource Information Fee Schedule**

Full Report: 0-5 Acres \$400.00

Full Report: 5+ Acres \$400.00 plus \$20.00/acre for each acre over five

Resource Concern Letter \$100.00

No Impact Letter \$50.00

EcoCat Information Only Report \$35.00

Soil Information with Map Only Report \$35.00

Note: We accept cash, check, or card. Card payments through our website. (*Illinois E-Pay through the SWCD website at www.boonecountyswcd.org*) Before the report or letter can be started a payment must be made in full. Please allow 30 days for your application to be processed.

Checks payable to:

Boone County SWCD 211 N. Appleton Road Belvidere, IL 61008

I (We) understand the filling of this application allows an authorized representative of the Boone County Soil & Water Conservation District to visit and conduct any necessary onsite investigations on the site described above. Completion of this report may require 30 days as allowed by State Law.

Jonathan K. Carson

Petitioner's Name Printed

Petitioner's Name Signed

Date of Request

Approved by the Soil & Water Conservation District Board Date of Approval

This report is issued as a guide in making land use decisions and does not preclude further refinement of soil type boundary lines during more detailed on-site investigations. Interpretations are based on criteria established by the National Soils Handbook (USDA-Natural Resources Conservation Service) and are subject to change by this office

and appropriate agencies.



## Exhibit G

Weed/Grass Control Plan & IDNR Pollinator Guidelines
[Attached]

#### INKBERRY SOLAR: PRELIMINARY PROJECT SITE WEED AND GRASS MANAGEMENT PLAN

#### 1.0 INTRODUCTION

In accordance with the Village of Poplar Grove Zoning Ordinance, Inkberry Solar, LLC ("Inkberry Solar") shall manage all vegetation within the project area and outside the immediate fenced area during the operations of the facility.

Inkberry Solar will maintain native and/or typical pasture grasses on the site during its lifespan unless otherwise approved by the Village of Poplar Grove. Such species are purposefully used so that vegetation will not encroach upon structures which could limit access or effective generation of power. Such plants and grasses shall be mowed/cut and otherwise maintained as needed throughout the year to ensure the site is operated in a clean and neat condition at all times. All vegetation, including beneath solar panels, within and beyond the fenced area shall be maintained by trimming, cutting, and other forms of vegetation maintenance.

Noxious and exotic weeds shall be minimized in order to control these species in general.

#### 2.0 NOXIOUS AND EXOTIC WEEDS

The State of Illinois identifies nine species of plants in its Designated Noxious Weeds list. These include:

- common ragweed (Ambrosia artemisiifolia)
- giant ragweed (Ambrosia trifida)
- marijuana (Cannabis sativa)
- musk thistle (Carduus nutans)
- Canada thistle (Cirsium arvense)
- kudzu-vine (Pueraria lobate)
- perennial sowthistle (Sonchus arvensis)
- Johnson grass (Sorghum halepense)
- sorghum-almum (Sorghum x almum)

Additionally, Illinois maintains a Designated Exotic Weeds list. This includes:

- Japanese honeysuckle (Lonicera japonica)
- multiflora rose (Rosa multiflora)
- purple loosestrife (Lythrum salicaria)
- common buckthorn (Rhamnus cathartica)
- glossy buckthorn (Rhamnus frangula)
- saw-toothed buckthorn (Rhamnus arguta)
- dahurian buckthorn (Rhamnus davurica)
- Japanese buckthorn (Rhamnus japonica)
- Chinese buckthorn (Rhamnus utilis)
- kudzu-vine (Pueraria lobata)

- exotic bush honeysuckles (Lonicera maackii, Lonicera tatarica, Lonicera morrowii, and Lonicera fragrantissima)
- exotic olives (Elaeagnus umbellata, Elaeagnus pungens, Elaeagnus angustifolia)
- salt cedar (all members of the Tamarix genus)
- poison hemlock (Conium maculatum)
- giant hogweed (Heracleum mantegazzianum)
- Oriental bittersweet (Celastrus orbiculatus)
- lesser celandine (Ficaria vema)
- teasel (all members of the Dipsacus genus)
- Japanese, giant, and Bohemian knotweed (Fallopia japonica, syn. Polygonum cuspidatum; Fallopia sachalinensis; and Fallopia x bohemica, resp.)

Inkberry Solar will manage the project site to control or minimize the spread of the above listed noxious and exotic species. Control and minimization of weeds will not require eradication. The intent is for the facility to establish effective site vegetation for erosion and sediment control and minimize weed and exotic species issues.

#### 3.0 WEED PREVENTION

It is important to reduce or eliminate any new weed species from being introduced into or spreading from the project disturbance areas.

General measures to prevent the spread of weeds include the following:

- Clean equipment (e.g., air compressors [high pressure] or washing station or offsite cleaning with certification) prior to personnel, vehicles, and equipment entering site (each time a vehicle enters the site).
- Ensure that all equipment and materials brought onto the site are weed-seed free.
- Limit disturbance areas during construction to the minimum required to perform work.
- Limit ingress and egress to defined routes.
- Vegetate temporarily disturbed areas with appropriate native species as soon as possible after construction is complete to prevent weed establishment
- Use certified weed-free products for erosion control.
- Employ manual, mechanical, and chemical control methods as appropriate to target species.

#### 4.0 WEED CONTROL

Weed control activities could include mechanical, manual, and chemical control methods. Mechanical control activities, such as chaining, disking, grubbing, and mowing using tractors or other heavy equipment will be a part of the vegetation management program where applicable. Manual means of vegetation management would be limited to the use of hand-operated powertools and hand tools to cut, clear, or prune herbaceous and woody species.

Hand-operated tools such as hoes, shovels, and hand saws could be used under the program, as well as hand-pulling of plants. Manual means will only be used where necessary.

Chemical control will involve the use of approved herbicides to control weed populations when other methods are not successful in managing the spread of these listed species. All weed control using herbicides and adjuvants would be conducted by a state certified herbicide applicator and will conform to the manufacturer's label recommendations.



# Solar Site Pollinator Establishment and Management Guidelines

Many species of pollinating insects, including bees and butterflies, have experienced population declines in recent years. This document is designed to provide guidelines for establishment of pollinator habitat that meets the criteria of the Pollinator Friendly Solar Site Scorecard for Illinois (525 ILCS 55). Although these guidelines include best practices, they are not all inclusive, nor do they guarantee the successful establishment of pollinator habitat. Soil types, weather and rain patterns, and other factors may impact the success of a new planting.

All methods used or planned for should be outlined in a Vegetation Management Plan (VMP). More details on what is required in a VMP can be found in the "Vegetation Management Plan Guidelines for Pollinator Friendly Solar Sites" on the IDNR's Solar Site Pollinator Scorecard website.

## Site Preparation

Good site preparation is critical and perhaps the most important step to successful establishment of pollinator habitat.

#### Weed control

- In many cases weeds may be present and must be terminated before planting
- A broad-spectrum systemic herbicide such as glyphosate works in most cases
- In some cases, such as with the presence of Sericea Lespedeza, other herbicides may need to be used as well.
- Multiple applications may be required. This is especially true if tall fescue is present.
- Weed seeds can be stimulated by tillage. If tillage is used, wait until weeds reach appropriate height after tillage to spray.
- ALWAYS READ AND FOLLOW ALL HERBICIDE LABELS

#### Seedbed

- Bare ground is the ideal seedbed
- If using a no-till drill, minimal seedbed preparation is needed. Any eroded gullied or washes should be worked and smoothed.
- If broadcast seeding, work the ground fine then firm the seedbed with a cultipacker or similar. Ground should be firm not hard.

#### Seeding

Native prairie species are preferred and should be the only thing planted to the perimeter and buffer areas. However, some prairie plants can grow tall. Setting solar panels at taller heights and choosing shorter plants for between and under rows can prevent shading. If this is not an option, mixing some clover (not sweet clover) in with some shorter native species is a less desirable but an acceptable practice.

- Species should be native to the area and adapted to the site (For example: little bluestem grass on a dry site or monkey flower on a wetter site).
- It is very important that seed not be planted too deep. 1/8"-1/4" is the target depth. Some seed sitting on top is ok.
- If broadcast seeding the area should be rolled with cultipacker, harrow or similar after seeding.
- Seeding should generally be done between November 15 and June 15.
- Seeding rates should be calculated by seeds/ ft<sup>2</sup> (not by weight) of Pure Live Seed (PLS).
  - PLS = % Purity X % Total Germination/100
- For pollinators, the more flowers the better. A ratio of 25% Native Grass to 75% Native Forbs (wildflowers) is preferred.
- The goal is to provide food for pollinators throughout the year. Having a minimum of three species blooming in the Spring (April-May), Summer (June-August), and Fall (September-October) can accomplish this.
- Slope 5% or less Minimum seeding rate of 20 seeds/ ft<sup>2</sup> PLS. (5 Grass Seeds and 15 Forb seeds)
- Slope > 5% Minimum seeding rate of 40 seeds/ ft<sup>2</sup> PLS. (10 Grass Seeds and 30 Forb seeds)
- An oat companion crop should be used if slopes are >5% and in areas with erosion potential.
- If the site was previously an agricultural field, the farm may have used an herbicide with residual control. Contact the farmer to get this information and application dates. Then wait until after herbicide effects have expired. A temporary cover of oats, wheat or rye can be used to prevent erosion during this time.
- Planting plugs can be a way to increase diversity without waiting for seeds to germinate. Be sure to keep plugs moist before planting.

#### Maintenance

Lack of maintenance can cause newly established plantings to fail. Without proper maintenance, pollinator habitat can quickly be over taken by undesirable species such as woody plants or invasive species. Sites should be checked for these undesirable species at least annually. The easiest and most cost-effective management technique is to catch and treat an invasion early. Any equipment (tractors, mowers, hay rakes, etc.) used to manage the site should be cleaned free of weed seed before entering the site.

#### Short-Term Management

Guidance for short-term or the establishment phase of pollinator friendly vegetation.

- During the first year, mow at a height of 10" or greater 1-3 times during the growing season if undesirable weeds are overtopping the newly established seedlings.
- Use spot mowing and/or spot herbicide treatment to control noxious and undesirable weeds.

- After the first year, avoid mowing (other than spot mowing) between April 15<sup>th</sup> and October 1<sup>st</sup>
- Interseeding or plug planting may need to be done during the establishment phase to ensure the requirement of the "Established Pollinator Habitat on Solar Sites Scorecard."

#### Long-Term Management

- Broadcast mowing or herbicide application should not be used in long-term management.
- Use spot mowing and/or spot herbicide treatment to control noxious and undesirable weeds.
- Mowing can temporarily control invasion by trees, invasive species, and other undesirable species. However, it is not effective in the long run. Instead, spot treat with herbicide being careful not to damage the grasses and forbs.
- Prescribed fire every 1-3 years is the ideal maintenance method and can be used on perimeter and buffer areas to the solar panels.
- Fire is not an option between and immediately adjacent to solar panels. In place of fire, haying can be used every 1-3 years to remove thatch buildup.
  - Haying should only be done once a season at a height of 6" or greater.
  - o No more than half the site should be hayed each year.
- Livestock grazing can be used to help manage solar site vegetation.
  - o A separate grazing plan should be created if this method is used.
  - A grazing plan should include goals of grazing, type and number of animals, plans for fencing, time and duration of grazing, and details to ensure vegetation is not overgrazed.
  - O No more than half the site should be grazed each year.
- Interseeding or plug planting may need to be done during the life of the solar site to meet the "Established Pollinator Habitat on Solar Sites Scorecard" requirements.

For question, please email DNR.PollinatorSolar@illinois.gov



## Exhibit H

**Equipment Specifications** 

# Q.PEAK DUO XL-G11S SERIES



590-605 Wp | 156 Cells 21.7% Maximum Module Efficiency

MODEL Q.PEAK DUO XL-G11S.3/BFG





#### Bifacial energy yield gain of up to 21%

Bifacial Q.ANTUM solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.



#### Low electricity generation costs

Q.ANTUM DUO technology with optimized module layout to boost module power and improve LCOE.



#### A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty<sup>1</sup>.



#### **Enduring high performance**

Long-term yield security with Anti LID and Anti PID Technology<sup>2</sup>, Hot-Spot Protect.



#### Frame for versatile mounting options

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (3750 Pa)<sup>3</sup>.



#### Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behavior.

- <sup>1</sup> See data sheet on rear for further information.
- <sup>2</sup> APT test conditions according to IEC/TS 62804-1:2015 method B (-1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)
- <sup>3</sup> See Installation Manual for instructions





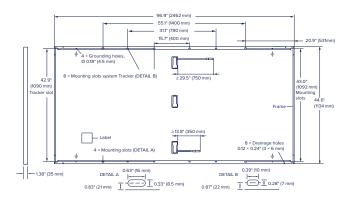






#### ■ Mechanical Specification

	-
Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	76.9 lbs (34.9kg)
Front Cover	0.08 in (2.0 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2.0 mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction box	2.09-3.98 $\times$ 1.26-2.36 $\times$ 0.59-0.71 in (53-101 mm $\times$ 32-60 mm $\times$ 15-18 mm), Protection class IP67, with bypass diodes
Cable	$4 \text{ mm}^2 \text{ Solar cable; (+)} \ge 29.5 \text{ in (750 mm), (-)} \ge 13.8 \text{ in (350 mm)}$
Connector	Stäubli MC4; Stäubli MC4-Evo2; - IP68



#### **■ Electrical Characteristics**

PC	OWER CLASS			590		595		600		605	
MII	MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5W/-0W)										
					BSTC*		BSTC*		BSTC*		BSTC*
	Power at MPP <sup>1</sup>	$P_{MPP}$	[W]	590	645.4	595	650.8	600	656.3	605	661.8
_	Short Circuit Current <sup>1</sup>	Isc	[A]	13.74	15.04	13.77	15.07	13.80	15.10	13.82	15.13
Ē	Open Circuit Voltage <sup>1</sup>	Voc	[V]	53.60	53.79	53.63	53.82	53.66	53.85	53.68	53.87
i i	Current at MPP	$I_{MPP}$	[A]	13.12	14.36	13.17	14.41	13.22	14.46	13.27	14.52
_	Voltage at MPP	$V_{MPP}$	[V]	44.96	44.95	45.18	45.17	45.39	45.38	45.60	45.59
	Efficiency <sup>1</sup>	η	[%]	≥21.1		≥21.3		≥21.5		≥21.7	

Bifaciality of  $P_{MPP}$  and  $I_{SC}$  70 %  $\pm$ 5%  $\star$  Bifaciality given for rear side irradiation on top of STC (front side)  $\star$  According to IEC 60904-1-2

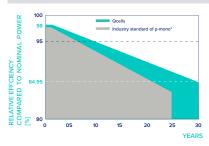
 $^{1}\text{Measurement tolerances P}_{\text{MPP}} \pm 3\,\%; I_{\text{SC}}, V_{\text{OC}} \pm 5\,\% \text{ at STC: } 1000\,\text{W/m}^{2}; \\ ^{*}\text{at BSTC: } 1000\,\text{W/m}^{2} + \phi \times 135\,\text{W/m}^{2}, \\ \phi = 70\,\%, 25 \pm 2\,^{\circ}\text{C}, \\ \text{AM 1.5 according to IEC 60904-3} \\ \text$ 

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT2W

<u> </u>	Power at MPP	P <sub>MPP</sub>	[W]	444.2	448.0	451.8	455.5	
	Short Circuit Current	Isc	[A]	11.07	11.09	11.11	11.13	
Ē	Open Circuit Voltage	Voc	[V]	50.69	50.72	50.75	50.77	
Ē	Current at MPP	I <sub>MPP</sub>	[A]	10.34	10.38	10.42	10.47	
	Voltage at MPP	V <sub>MPP</sub>	[V]	42.97	43.15	43.34	43.52	

 $^{1}\text{Measurement tolerances P}_{\text{MPP}} \pm 3\,\%; I_{\text{SC}}; V_{\text{OC}} \pm 5\,\% \text{ at STC: } 1000\,\text{W/m}^{2}, 25 \pm 2\,^{\circ}\text{C}, \text{AM 1.5 according to IEC 60904-3} \bullet ^{2}\text{800 W/m}^{2}, \text{NMOT, spectrum AM 1.5}$ 

#### **Qcells PERFORMANCE WARRANTY**

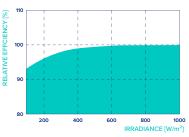


At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective

\*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

#### PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25  $^{\circ}$ C, 1000 W/m<sup>2</sup>).

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I <sub>sc</sub>	α	[%/K]	+0.04	Temperature Coefficient of V <sub>oc</sub>	β	[%/K]	-0.27
Temperature Coefficient of P <sub>MPP</sub>	γ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	108±5.4 (42+3°C)

#### ■ Properties for System Design

Maximum System Voltage	$\mathbf{V}_{SYS}$	[V]	1500
Maximum Series Fuse Rating		[A DC]	30
Max. Push Load <sup>3</sup> , Test/Design		[lbs/ft²]	113 (5400 Pa) / 75 (3600 Pa)
Max Pull Load <sup>3</sup> Test/Design		[lbs/ft²]	78 (3750 Pa) /52 (2500 Pa)

<sup>3</sup> See Installation Manual for instructions

PV module classification	Class II
Fire Rating based on ANSI/UL 61730	TYPE 29⁴
Permitted Module Temperature	−40°F up to +185°F
on Continuous Duty	(-40°C up to +85°C)

<sup>4</sup> New Type is similar to Type 3 but with metallic frame

#### ■ Qualifications and Certificates

UL61730-1 & UL61730-2, CE-complian IEC 61215:2016. IEC 61730:2016, U.S. Patent No. 9,893,215 (solar cells)











## SOLECTRIA® XGI 1500-166 SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

#### **FEATURES**

- Made in the USA with global components
- · Buy American Act (BAA) compliant
- · Four models:
  - 125kW/125kVA,
  - · 125kW/150kVA,
  - · 150kW/166kVA,
  - · 166kW/166kVA
- Additional models available certified to UL1699b, Photovoltaic DC Arc-Fault Circuit Protection
- 99.0% peak efficiency
- Flexible solution for distributed and centralized system architecture
- Advanced grid-support functionality Rule 21/UL1741SB
- Robust, dependable, & 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 app for system visibility

#### **OPTIONS**

- String combiners for distributed and centralized systems
- Web-based monitoring
- Extended warranty





Yaskawa Solectria Solar's XGI 1500 utility-scale string inverters are designed for high reliability and built of the highest quality components that were selected, tested and proven to last beyond their warranty.

XGI 1500 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL1741SB standards for safety. They are the most powerful 1500 VDC string inverters in the PV market and have been engineered for both distributed and centralized system architecture.

Designed and engineered in Lawrence, MA, XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL. They are Made in the USA with global components and are compliant with the Buy American Act.



### SOLECTRIA® XGI 1500-166 SERIES TECHNICAL DATA

#### **SPECIFICATIONS**

SOLECTRIA XGI 1500 Model		XGI 1500-125/125-UL XGI 1500-125/125-UL-A	XGI 1500-125/150-UL XGI 1500-125/150-UL-A	XGI 1500-150/166-UL XGI 1500-150/166-UL-A	XGI 1500-166/166-UL XGI 1500-166/166-UL-A
DC Input	Absolute Max Input Voltage	1500 VDC	1500 VDC	1500 VDC	1500 VDC
	Max Power Input Voltage Range (MPPT)	860-1250 VDC	860-1250 VDC	860-1250 VDC	860-1250 VDC
	Operating Voltage Range (MPPT)	860-1450 VDC	860-1450 VDC	860-1450 VDC	860-1450 VDC
	Number of MPP Trackers	1 MPPT	1 MPPT	1 MPPT	1 MPPT
	Max Operating Input Current	148.3 A	148.3 A	178.0 A	197.7 A
	Max Operating PV Power	128 kW	128 kW	153 kW	170 kW
	Max DC/AC Ratio   Max Rated PV Power	2.6   332 kW	2.6   332 kW	2.2   332 kW	2.0   332 kW
	Max Rated PV Short-Circuit Current (ΣIsc x 1.25)	500 A	500 A	500 A	500 A
	Nominal Output Voltage	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph
AC Output	AC Voltage Range	-12% to +10%	-12% to +10%	-12% to +10%	-12% to +10%
	Continuous Real Output Power	125 kW	125 kW	150 kW	166 kW
	Continuous Apparent Output Power	125 kVA	150 kVA	166 kVA	166 kVA
	Max Output Current	120 A	144 A	160 A	160 A
	Nominal Output Frequency	60 Hz	60 Hz	60 Hz	60 Hz
	Power Factor (Unity default)	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable
	Total Harmonic Distortion (THD) @ Rated Load	<3%	<3%	<3%	<3%
	Grid Connection Type	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND
	Fault Current Contribution (1 cycle RMS)	144 A	173 A	192 A	192 A
Efficiency	Peak Efficiency	98.9%	98.9%	99.0%	99.0%
	CEC Average Efficiency	98.5%	98.5%	98.5%	98.5%
	Tare Loss	2.75 W	2.75 W	2.75 W	2.75 W
Temperature	Ambient Temp Range	-40°F to 140°F (-40C to 60C) -40°F to 140°F (-40C to 60C)			(-40C to 60C)
	De-Rating Temperature	122°F (50C) 113°F (45C)		(45C)	
	Storage Temperature Range	-40°F to 167°F (-40C to 75C) -40°F to 167°F (-40C to 75C)		(-40C to 75C)	
	Relative Humidity (non-condensing)	0 - 95% O - 95%		95%	
	Operating Altitude	Full Power up to 9,840 ft (3.0 km); De-Rate to 70% of Full Power at 13,123 ft (4.0 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	UL1741SB, IEEE 1547, UL 1998 (All models) UL 1699b Photovoltaic Arc-Fault Circuit Protection Certified (-A models)			
	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 250 A DC Disconnect			
	Mounting Angle	Vertical only			
	Dimensions	Height: 29.5 in. (750 mm)   Width: 39.4 in. (1000 mm)   Depth: 15.1 in. (380 mm)			
	Weight	270 lbs (122 kg)			
	Enclosure Rating and Finish	Type 4X, Polyester Powder-Coated Aluminum			



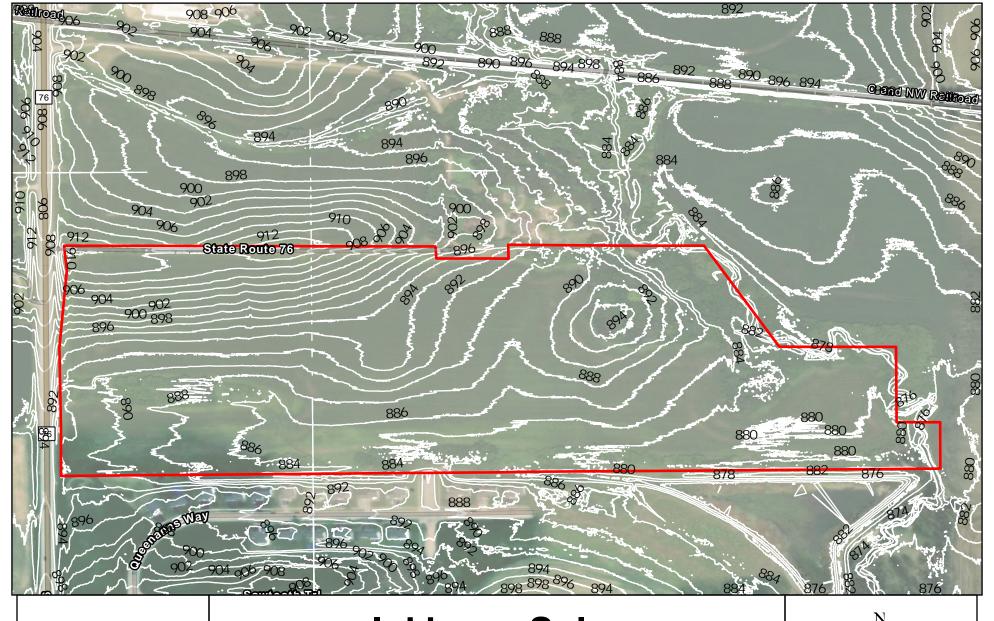






## <u>Exhibit I</u>

Topography Map





# **Inkberry Solar**

Topography (2' Contour Intervals)

Date: 5/21/2025

