

CASES 099-S-23 and 100-S-23

*PRELIMINARY MEMORANDUM
JULY 5, 2023*

Petitioner: Champaign Solar 1 LLC and Champaign Solar 1b LLC, subsidiaries of Pivot Energy Development LLC, with CEO Tom Hunt; via agent Merrill Read, and participating landowner JHBLT LLC

Request: Case 099-S-23

Authorize a Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 Agriculture Zoning District, and including the following waivers of standard conditions:

Part A: A waiver for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, per Section 6.1.5 B.(2)a.

Part B: A waiver for a fence that is less than 10 feet from the side property line in lieu of the minimum required 10 feet, per Section 6.1.5 D.(3)b.

Part C: A waiver for a separation distance of 42 feet between the solar inverters and the perimeter fence in lieu of the minimum required 275 feet, per Section 6.1.5 D.(6).

Part D: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.
Other waivers may be necessary.

Case 100-S-23

Authorize a second Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 Agriculture Zoning District, and including the following waivers of standard conditions:

Part A: A waiver for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, per Section 6.1.5 B.(2)a.

Part B: A waiver for a separation distance of 10 feet between the solar inverters and the perimeter fence in lieu of the minimum required 275 feet, per Section 6.1.5 D.(6).

Part C: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.

Other waivers may be necessary.

**Brookens Administrative
Center**
1776 E. Washington Street
Urbana, Illinois 61802

(217) 384-3708
zoningdept@co.champaign.il.us
www.co.champaign.il.us/zoning

Location: A 90-acre tract of land west of the Canadian National Railroad in the Southeast Quarter of Section 34, Township 17 North, Range 8 East of the Third Principal Meridian in Pesotum Township, and commonly known as farmland owned by JHBLT LLC on the north side of CR 0N.

Site Area: site 1: 35.2 acres, site 1b: 26.7 acres = 61.9 acres of 90-acre tract

Time Schedule for Development: As soon as possible

Prepared by: **Susan Burgstrom**, Senior Planner
John Hall, Zoning Administrator

BACKGROUND

The petitioners would like to construct two 5-megawatt Community PV Solar Farms on a 90-acre tract on the southern Champaign County line. Case 099-S-23 is for Champaign Solar 1, which is the southern proposed solar farm, and Case 100-S-23 is for Champaign Solar 1b, which is the northern proposed solar farm. The petitioners request waivers from standard conditions for the Special Use Permits. A PV Solar Farm requires approval by the County Board after recommendations are made by the ZBA and Environment and Land Use Committee.

EXTRATERRITORIAL JURISDICTION

The subject property is located 1.1 miles from the Village of Pesotum, a municipality with zoning. Municipalities with zoning are notified of Special Use Permit cases, but do not have protest rights in these cases. The Village of Pesotum does not have a one and one-half mile extra-territorial jurisdiction because it does not have a Comprehensive Plan.

The subject property is located within Pesotum Township, which does not have a Planning Commission. Townships with Planning Commissions are notified of Special Use Permit cases, but do not have protest rights in these cases.

EXISTING LAND USE AND ZONING

Table 1. Land Use and Zoning Summary

Direction	Land Use	Zoning
Onsite	Agriculture	AG-1 Agriculture
North	Agriculture	AG-1 Agriculture
West	Agriculture	AG-1 Agriculture
East	Agriculture	AG-1 Agriculture
South	Agriculture	Douglas County (no zoning)

PROPOSED SPECIAL CONDITIONS

A. **The approved site plan consists of the following documents:**

- **Site Plan received April 14, 2023.**

The special condition stated above is required to ensure the following:

The constructed PV SOLAR FARM is consistent with the special use permit approval.

B. **The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

The special condition stated above is required to ensure the following:

That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.

C. **The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.**

The special condition stated above is required to ensure the following:

That the proposed Special Use meets applicable state requirements for accessibility.

D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**

The special condition stated above is required to ensure the following:

That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.

E. **A signed Decommissioning and Site Reclamation Plan that has been approved by the Environment and Land Use Committee is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**

The special condition stated above is required to ensure the following:

The Special Use Permit complies with Ordinance requirements and as authorized by waiver.

F. *(Note: not needed if a waiver is received)* **A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by Pesotum Township and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**

The special condition stated above is required to ensure the following:

To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.

- G. **The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
1. **Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
 2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
 3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution with a minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of "A" by S&P or a rating of "A2" by Moody's or a rating of "A-" by Kroll's within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
 4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
 5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
 6. *(Note: not needed if a waiver is received)* **A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
 7. **The telephone number for the complaint hotline required by 6.1.5 S.**
 8. **Any updates to the approved Site Plan from Case 099-S-23 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.

- H. **A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from**

the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.

2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.

- I. **The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
 1. **Maintain the pollinator plantings in perpetuity.**
 2. **Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
 3. **Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
 4. **Maintain a current general liability policy as required by 6.1.5 O.**
 5. **Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
 6. **Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
 7. **Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The special condition stated above is required to ensure the following:

Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.

- J. **The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed in compliance with the Ordinance requirements.

- K. The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

The special condition stated above is required to ensure the following:

Conformance with Policy 4.2.3 of the Land Resource Management Plan.

- L. A 5 feet deep open trench shall extend for 30 feet on either side of any drainageway that is crossed with underground wiring and the relevant drainage district shall be provided 48 hours in which to inspect for tile and the positions of any tile lines that are discovered shall be recorded using Global Positioning System (GPS) technology.**

The special condition stated above is required to ensure the following:

That drainage district tiles are protected.

- M. The terms of approval are the requirements of the current Section 6.1.5 of the Zoning Ordinance as amended August 18, 2022.**

The special condition stated above is required to ensure the following:

That the current version of the Zoning Ordinance has been referenced.

ATTACHMENTS

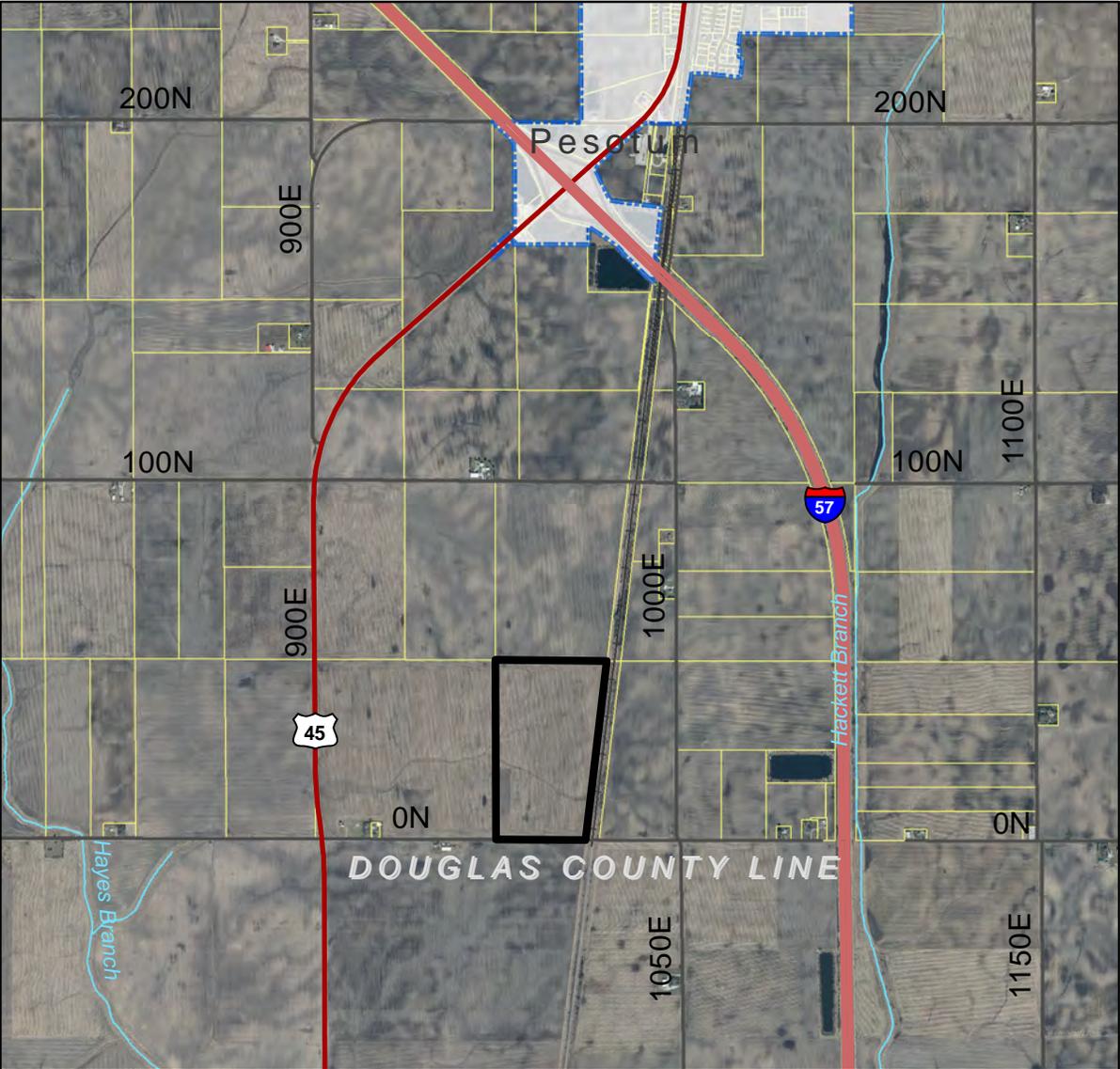
- A Case Maps (Location Map, Land Use, and Zoning)
- B Site Plan received April 14, 2023
- C Project Narrative received April 14, 2023
- D Landscaping Plan received April 14, 2023
- E Inverters spec sheet downloaded April 20, 2023
- F Solar Module spec sheet downloaded April 20, 2023
- G Interconnection application received April 14, 2023
- H Complaint resolution received April 14, 2023
- I1 Decommissioning and Site Reclamation Plan for Site 1 received April 28, 2023
- I1b Decommissioning and Site Reclamation Plan for Site 1b received April 28, 2023
- J Letter waiving screening requirement received April 14, 2023
- K1 Natural Resource Report by the Champaign County Soil and Water Conservation District for Site 1 received January 24, 2023 *(on ZBA website)*
- K1b Natural Resource Report by the Champaign County Soil and Water Conservation District for Site 1b received January 24, 2023 *(on ZBA website)*
- L Site visit images taken April 12, 2023
- M Summary of Evidence, Summary Finding of Fact and Final Determination dated July 13, 2023

Location Map

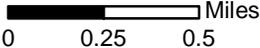
Cases 099-S-23 & 100-S-23

July 13, 2023

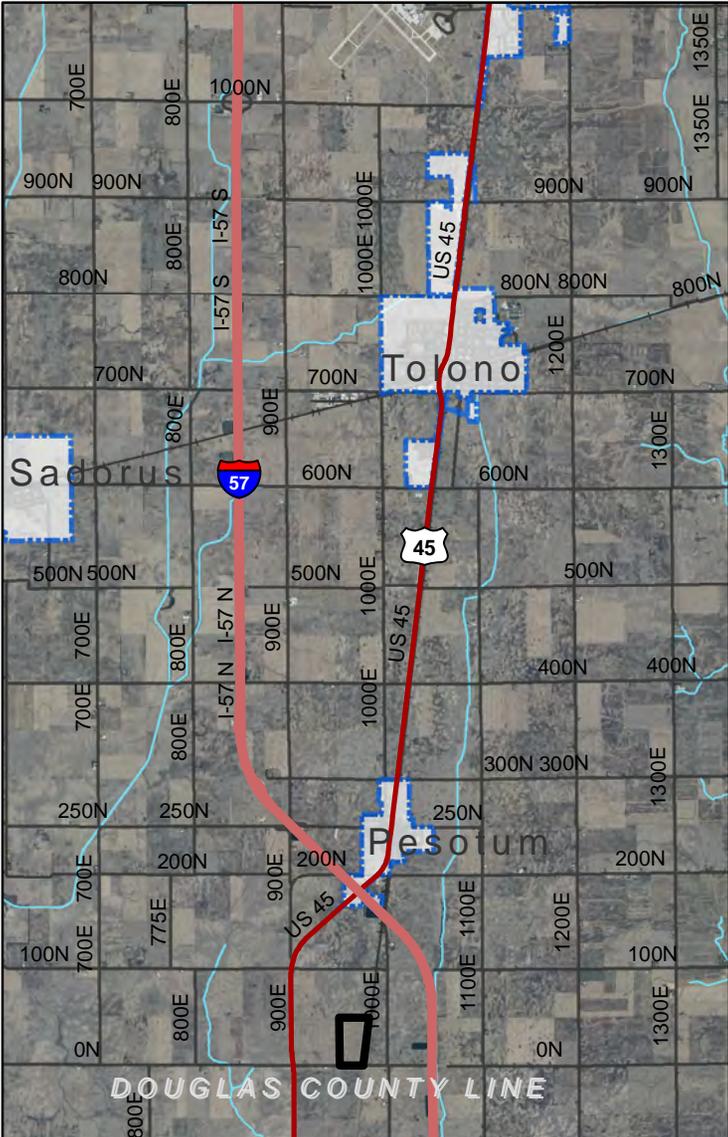
Subject Property



- Subject Property
- Parcels



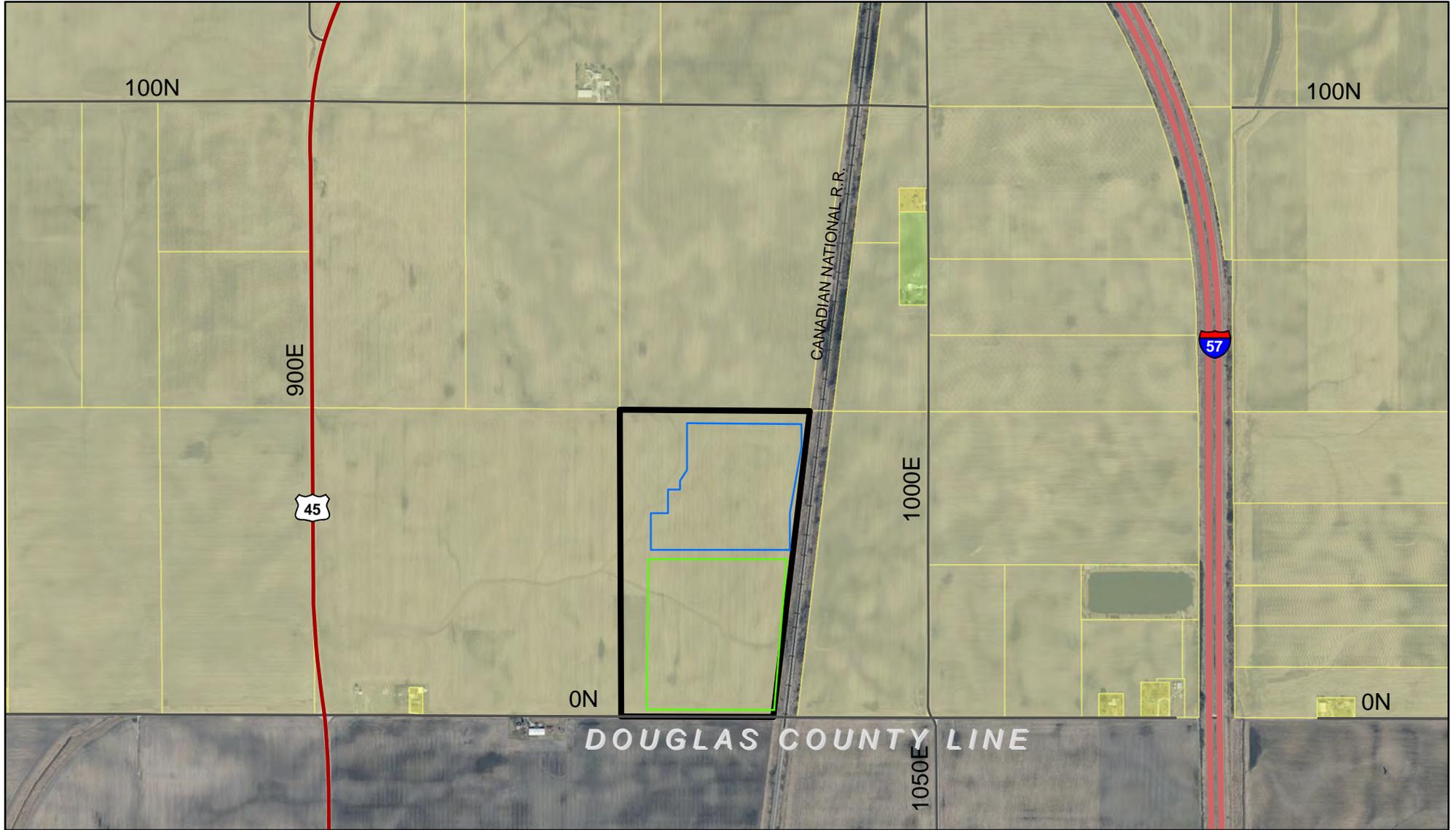
Property location in Champaign County



Champaign County
Department of
PLANNING &
ZONING

Land Use Map

Cases 099-S-23 & 100-S-23
July 13, 2023



- Fenced area 1b
- Fenced area 1
- Subject Property
- Parcels
- Agriculture
- Ag/Residential
- Residential

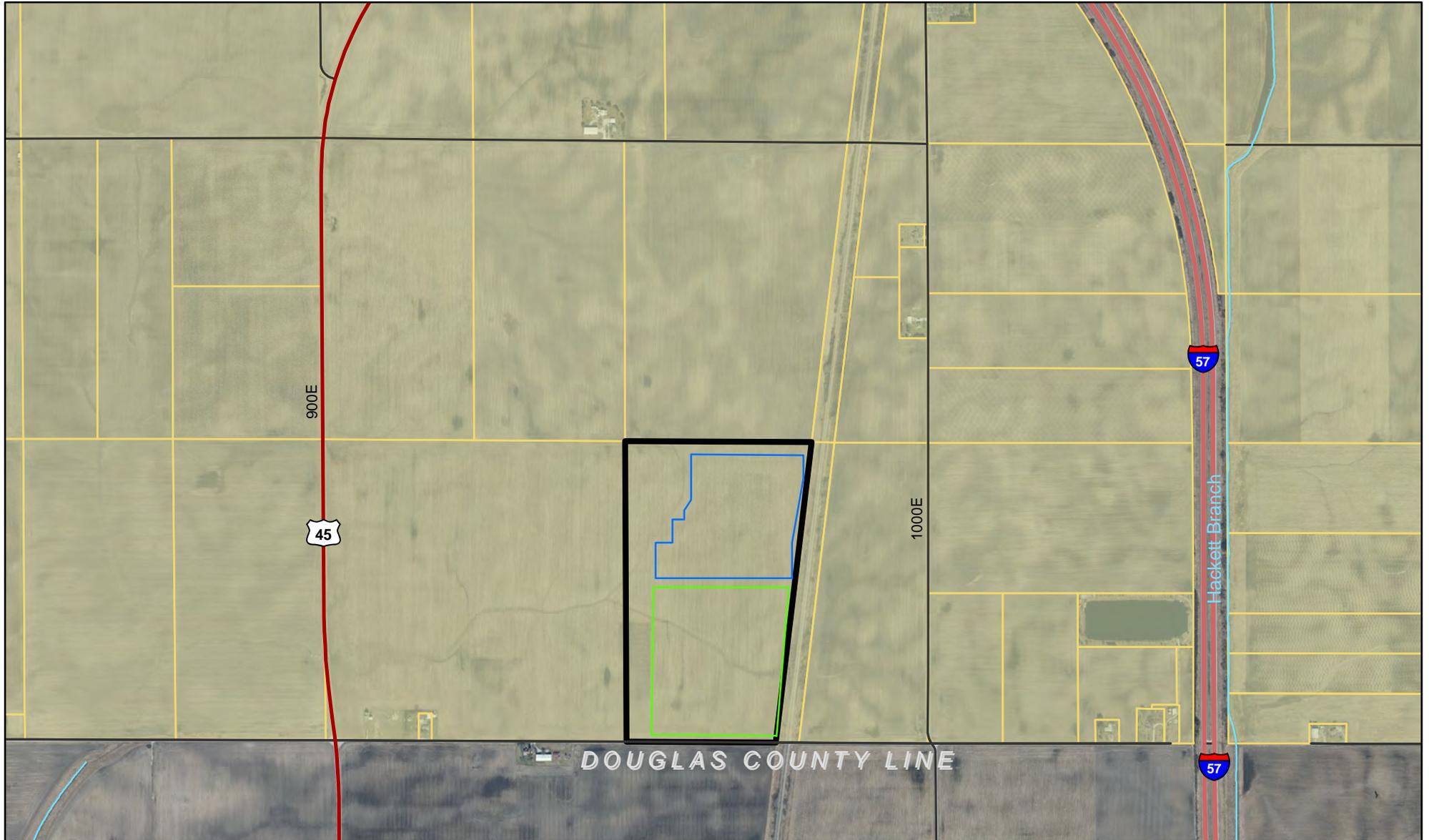
0 300 600 1,200 Feet



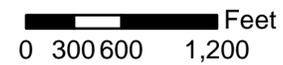
Champaign County
Department of
PLANNING &
ZONING

Zoning Map

Cases 099-S-23 & 100-S-23
July 13, 2023

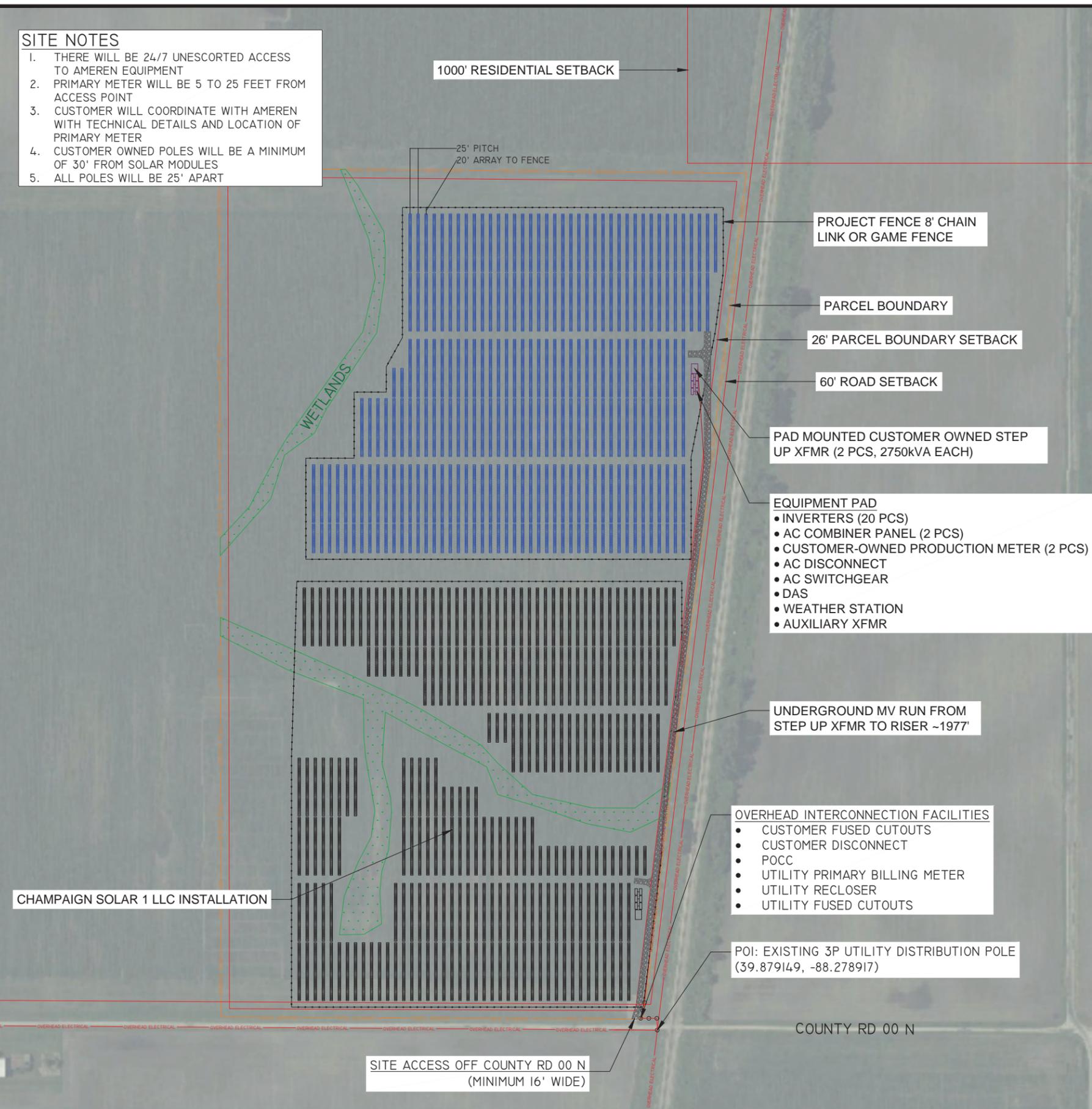


-  Fenced area 1b
-  Parcels
-  Fenced area 1
-  AG-1 Agriculture
-  Subject Property

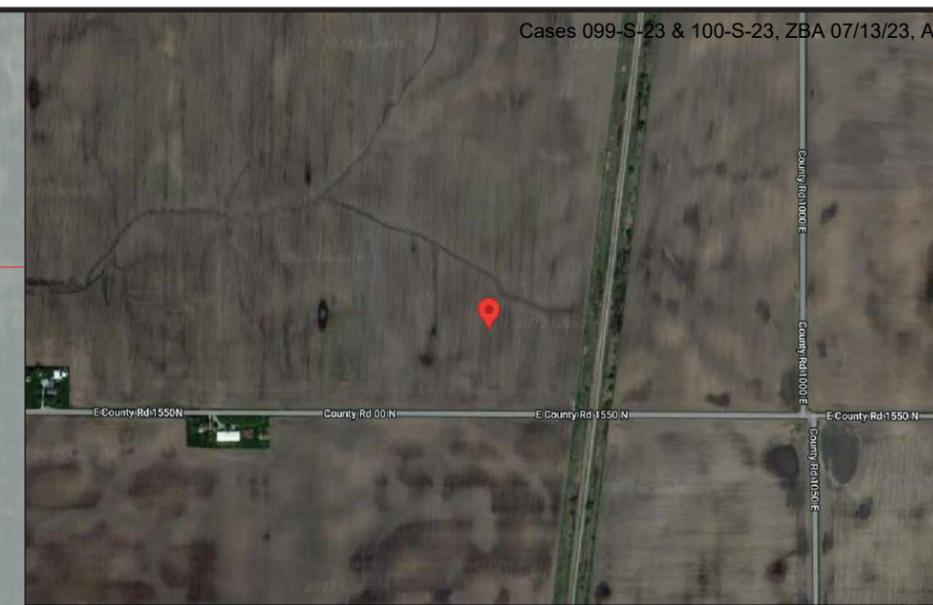


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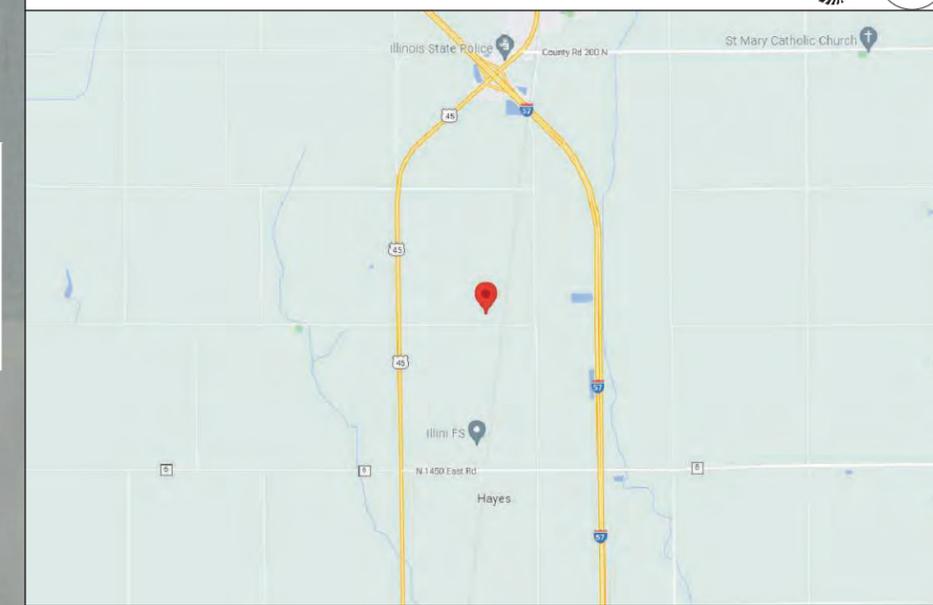
- SITE NOTES**
1. THERE WILL BE 24/7 UNESCORTED ACCESS TO AMEREN EQUIPMENT
 2. PRIMARY METER WILL BE 5 TO 25 FEET FROM ACCESS POINT
 3. CUSTOMER WILL COORDINATE WITH AMEREN WITH TECHNICAL DETAILS AND LOCATION OF PRIMARY METER
 4. CUSTOMER OWNED POLES WILL BE A MINIMUM OF 30' FROM SOLAR MODULES
 5. ALL POLES WILL BE 25' APART



SITE PLAN



SATellite VIEW



VICINITY MAP



SYSTEM SPECIFICATIONS

SOLAR MODULE
10776 - HANWHA Q.PEAK DUO XL-GII.3/BFG 580W

INVERTER
20 - CPS SCH275KTL-DO/US-800 250kW

MOUNTING SYSTEM
6 - ATI DURATRACK SINGLE-AXIS TRACKER

SYSTEM SIZE
6250.08kW_{DC}
5000kW_{AC}

FENCED AREA
26.7 ACRES

RECEIVED
APR 14, 2023
CHAMPAIGN COUNTY
PLANNING & ZONING

NOTES & SPECIFICATIONS



REV	DRWN	DATE	DESCRIPTION
1	NJC	2023.04.11	60' ROAD, 26' PARCEL BOUNDARY, & 1000' RESIDENTIAL SETBACKS
0	NJC	2022.10.10	PRELIM DESIGN

Pivot Energy
1750 15TH ST, SUITE 200
DENVER, CO 80202
WWW.PIVOTENERGY.NET

CHAMPAIGN SOLAR IB LLC
(39.880524, -88.280323)
PESOTUM IL 61863
PARCEL ID: 1832344-0001
PROJECT NO: TBD
6250.08kW_{DC} & 5000kW_{AC} SOLAR PV PROJECT PLAN
DATE: 2023.04.11

E.2
SITE PLAN

Narrative

Project Description

Champaign Solar 1 LLC (Project and Applicant), an entity wholly owned by Pivot Energy (Pivot), is proposing the development and operation of a community PV solar farm in Champaign County. The proposed Project will be a 6.25 Megawatts DC (MW DC) / 5.00 Megawatts AC (MW AC) single axis tracker ground mount solar photovoltaic array. The estimated amount of electricity generated from the system will contribute to Illinois' renewable energy goals and will benefit local energy consumers. The estimated generating capacity of the system will be approximately 10,590 megawatt hours per year (MWh/year), which would be equivalent to powering 1,460 residential homes.

A community solar garden is an off-site solar project which generates electricity to be sent to metered accounts through a participating electric utility. For those utility customers that cannot meet their own energy needs by installing a solar energy system on-site, a subscription to a community solar garden provides utility customers with an ability to utilize renewable energy. Pivot Energy intends on subscribing residential, small businesses, government entities, school districts, and/or commercial and industrial electricity users to this proposed garden.

Pivot is a national solar provider that develops, finances, builds, and manages solar energy and energy storage projects that help decarbonize our nation's electricity, increase equitable access to clean energy for local communities, and provide real cost-savings to American businesses and families. With more than 1,284 solar projects nationally, Pivot has advanced experience in creating reliable renewable energy projects. More detailed information on Pivot is included as **Exhibit E**.

The proposed Project is located east of the intersection between State Route 45 and County Road 2050 North on County Road 00 N (also referred to as E County Road 1550 N) on a parcel known as 18-32-34-400-001. The parcel is currently zoned as Agriculture and used as farm land. A community PV solar farm is allowed as a special use in this zoning district. The solar array Project boundary will be setback at least 60 feet from the county road and at least 26 feet from all other property boundaries. The solar array fencing components will begin at those setback distances, and will encompass all Project infrastructure including the solar array, equipment pad, transformer, and switchgear. The solar farm components will occupy 35.2-acre portion (within the Project fence) of the 90-acre parcel. In addition, all of the adjacent lots are more than 10 acres in size, and all non-participating homes are further than 1,000 feet from the Project. Access to the Site will be off of County Road 00 North with a minimum 16' gravel access road. The Project proposes underground electrical lines that will be buried to the furthest extent reasonable, in order to avoid drain tiles, at a minimum depth of at least 5 feet below grade and will interconnect into the existing and proposed Ameren Illinois utility poles located off County Road 00 North. The electrical substation, owned by Ameren, of which we are currently under study with, is located south of the property in the City of Tuscola. A site plan of the proposed Project is depicted below in Photo 1, and is included as **Exhibit B**.

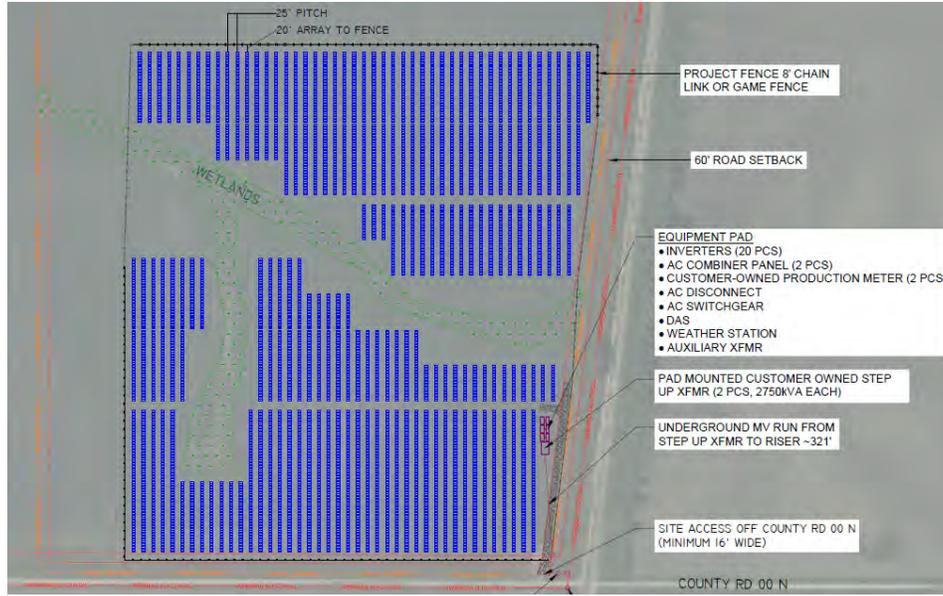


Photo 1. Champaign Solar 1 LLC Site Plan.

Our proposed special use permit will not require utilities. The Project does not require sewage, waste, irrigation, lighting, or potable water services. It will not require trash or recycling services, or natural gas. The Project will require electrical service from Ameren Illinois, and Pivot Energy is in the process of completing our interconnection agreement with the utility. The interconnection queue is included as **Exhibit F**. The Project does not propose any buildings.

A 8' chain link fence, or game fence, will be installed to surround the perimeter of the solar equipment components, as depicted in Photo 2, and will include warning signs of the high voltage associated with solar PV technology. Additionally, signage with emergency contact information will be affixed to the Project fence during construction and throughout the operational term of the Project. It is the Applicant's request the Zoning Board recommend which type of fencing they would prefer.



Photo 2. Fencing Options including agricultural style fencing (left) or chain link (right).

The solar array will operate every day during daylight hours. The equipment moves imperceptibly slowly throughout the day, silently following the sun across the sky to maximize energy yield. There is no sound, smell, noise, pollution, emission, or other negative external impact attributable to the solar array’s operation. There will be 10,776 solar panels affixed to the single-axis tracker racking system. Throughout the array, at the end of the racking rows, will be 20 string inverters to convert the electricity generated from the panels to the transformer. The design and construction of the solar farm will meet standards and guidelines as provided by the nationally accepted electric code and will comply with Federal Communications Commission (FCC) requirements.

The modules atop the single-axis tracking racking, at full tilt, wouldn’t exceed 12’ in height (at its highest point). At noon, when parallel with grade, the modules atop the racking will be at approximately 5-6’ in height. The driven pile foundation will be determined upon further geotechnical review and soil boring testing. Other electrical equipment, such as the utility meter, transformer, and switchgear, will not exceed 9’ in height, and will be placed upon a concrete equipment pad next to the access road, inside the Project fencing. All electrical wires and lines will be housed underground to the greatest extent possible, until requiring overhead poles to connect to the utility’s electric pole. The system is designed according to National Electric Code and Ameren Illinois’ utility standard. The Project will also comply with all requirements of the Champaign County Zoning Ordinance.

Landscaping

For landscaping, disturbed areas will be replanted with a native grass mix including pollinator-friendly wildflowers to help keep weeds at bay and minimize erosion for the life of the Project, as depicted in Photo 3. Farm soil will be kept intact beneath the PV panels, and a grazing consultant could provide guidance following the initial system design to ensure a grazing friendly project. Sheep-friendly, pollinator supportive habitat and infrastructure that promotes sheep grazing as a vegetation management option will be practicable within the fenced array. Throughout the operations term of the system, Pivot will be conducting maintenance visits to the Site, approximately 2-4 times per year. As part of those visits, mowing will take place throughout the solar array rows, to ensure the height and placement of approved seed mix is maintained. See **Exhibit H** for a detailed Landscaping Plan.



Photo 3. Pollinator-friendly seeding proposed beneath solar panels.

Agency Consultation

In addition to submitting our application to Champaign County, the Applicant has also sought consultation from other authorized agencies and all correspondence is included as **Exhibit C**. On September 29, 2022, the Applicant submitted Project information to the Federal Aviation Administration (FAA). The FAA responded on October 17, 2022 with a “determination of no hazard to air navigation” regarding the Project. The Project is more than 500 feet from all airports, restricted landing area, or residential airports. The closest airport to the Project is Willard Airport, which is approximately 10 miles north.

The Illinois Department of Natural Resources (IDNR) was consulted through their Ecological Compliance Assessment Tool (EcoCAT) regarding any state-listed threatened or endangered species that may be located within the Project. On November 17, 2022, the EcoCAT results terminated consultation as there were no threatened or endangered species within the Project vicinity. The Project was designed and sited to mitigate impacts to wildlife; there will be no tree removal on Site or drastic change in land configuration.

The State Historic Preservation Office (SHPO) was contacted on October 12, 2022 to review the Site for any significant historic, architectural, or archeological resources. In the SHPO’s November 18, 2022 response, they determined that there was no significant resources documented within the Site.

The proposed Project is located approximately 1 mile from the Village of Pesotum, thus this application was sent to the Village Clerk, Gwendolyn McDuffy. Proof of the sent application is included as **Exhibit K**.

Erosion and Sedimentation Control Plan

Many of our projects across the state and country exist in agricultural communities. We are considered a harmonious use and a low-impact neighbor since we don’t create any traffic, noise, or pollution, and will provide pollinator friendly seed mixes when we reseed the Site. In addition, our sites are kept clean and neat. Much of the Project will be non-impervious materials, to allow for adequate drainage of the Site. The existing surface water drainage and subsurface drainage system will retain existing drainage patterns. Any conservation practices damaged by construction will be restored by the Applicant to their pre-construction condition and care will be taken to maintain the existing practices to preserve erosion control, flood control, and water quality. Should any open trenching be required, the Project will do so in accordance with the trenching requirements listed in the Champaign County Zoning Ordinance. Soil compaction and rutting will be mitigated and shall be consistent with the Agricultural Impact Mitigation Agreement. An Erosion and Sedimentation Control Plan will be designed prior to our application for a building permit and as-build documentation will be provided to the zoning administrator.

Prior to construction, mechanical means to control runoff will be used, such as straw bales, anchored netting, silt fences or berms (if necessary). Typically, we propose silt fences be installed within areas of the parcel perimeter to manage drainage and erosion that may occur during construction. The natural vegetation will remain intact in between and underneath the solar equipment. Upon construction completion, Pivot Energy will seed the Site with native grass seed mix approved by the County and/or the local jurisdiction. The use of native vegetation and/or pollinator-friendly seed mixes supports the habitat of bees, butterflies, wasps, flies, beetles, and other pollinator species needed for agriculture. The seed mix chosen will be native and local to the Illinois environment, which naturally allows the Site to be resilient to droughts and intense downpours. Native grasses and deep roots are more efficient than turf grass at absorbing run-off and are designed to not

increase storm water runoff. Additionally, planting diverse mixes of native plants will prevent soil and nutrients from washing away, and improves water quality and prevents soil loss.

Should the Project damage any drain tiles on the Project parcel during construction or operation, then the Applicant shall promptly repair or replace those drain tiles. In cooperation with the landowner, Pivot will identify existing drainage infrastructure to avoid during the installation and ongoing operation of the Project. If any drainage district tile lines are located, they will be flagged and protected by a 30-foot-wide, no-construction buffer on either side of the drain tile. There are no gas or hazardous liquid pipelines on the Site. The Project will comply with the standards set for in the Agricultural Impact Mitigation Agreement that will be finalized prior to applying for a construction permit.

On January 24, 2023, the Champaign County Soil and Water Conservation District (SWCD) provided a Natural Resources Inventory (NRI) Report for the Project. Within this report, the SWCD stated that the Site is comprised of prime farmland and prime farmland if drained. They also mention that the Site is not suitable for commercial buildings or dwellings. Solar panels are low impact and are designed to disrupt as little soil as possible. The Project will minimize disturbance to prime farmland and will be consistent with good engineering practices. As mentioned in the landscaping section, the vegetative ground cover will be comprised of native plant species suitable for the conditions of the Site. This native seeding will be oriented towards fostering an environment that is beneficial to pollinators. A Landscape Plan that includes details on weed control is included as **Exhibit H**.

Parking, Loading, Traffic, Access

The Project proposes an access road off County Road 00 North to access the Site. The access road is at minimum 16 feet wide within a 40 foot wide access easement agreed upon by the landowner and Applicant. To prevent unauthorized vehicular access, the Project will be secured by a locked gate along the gravel access road. This gate will have a “knox box” for emergency access. There will be enough area between the entrance to the access road and the gate for multiple trucks to fully pull off of County Road 00 North and onto the access road to unlock the gate. At the terminus of the access road there is a turn around area proposed that would be adequate for a maintenance truck to park in. No public parking areas are proposed.

County Road 00 North is under the jurisdiction of the Tuscola Township Highway Commissioner, despite the Site being located in Pesotum Township. Josh Eisenmenger, the Pesotum Township Highway Commissioner, put the Applicant in contact with the Tuscola Township Highway Commissioner, Danny Cleland. While working with Danny Cleland and the Douglas County Engineer, Jim Crane, we have discussed the potential need for a Roadway Upgrade and Maintenance Agreement and Jim Crane and their attorney are currently working on an updated template for that process. This Roadway Upgrade and Maintenance Agreement would be completed prior to submitting for a building permit, unless this agreement is waived by said authority. Should any irrevocable Letter of Credits be required to cover the cost of repairs, the Applicant will provide them. During construction, construction personnel will take adequate measures to minimize traffic congestion such as construction signage and will park within the Project footprint and staging area to reduce road obstruction. During operation, there will be no notable change to traffic volume on the surrounding county roads. Maintenance personnel may visit the Site to perform routine maintenance (2-4 times per year) and will be able to park at the turnarounds along the access road.

Emergency and Safety Plan

The Applicant has shared the proposed Site plan to the local Pesotum Fire Department and has offered to provide training and necessary equipment to the local emergency response authorities to prepare for proper emergency response during construction of the Project. In addition, the Applicant will create an emergency response plan and solicit input from the Pesotum Fire Department. The Applicant will submit a final site plan and Safety & Emergency Management Plan upon completion of the Project. In addition, the Project proposes a “knox box” on the Project gate for emergency personnel to gain access to the Site. Warning signs concerning voltage will be placed at the base of all pad-mounted transformers.

Noise

The noise level related to the Project will be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations. The proposed single axis tracker ground mount solar photovoltaic has motors for each racking row that moves the panels imperceptible throughout the day. At three meters from the racking motor, the ambient noise level is 43 decibels and the motor running level is 53 decibels. The motor only turns on to move the array periodically as the sun makes its arc, and in between movements it does not run. 43 decibels would be the equivalent of quiet library sounds, and 50 decibels would be the equivalent of your typical residential fridge. The ATI DuraTrack V3 tracker motor operates for a total of 17.91 minutes per day. The transformer that will be used on Site has an average ambient noise level of 53 decibels. From the fence line, the Project will not be audible, and all abovementioned decibel levels are below the allowable octave band listed in Subtitle H: Noise, Parts 901 of the IPCB Administrative Code.

Complaint Resolution

The Applicant understands that there will be concerns and/or complaints that may arise during the construction and operation of a Community PV Solar Farm. During construction, if nearby residents would like to contact the Construction Supervisor, contact information will be provided on the Project fence to resolve complaints or concerns. Complaints received because of the construction will be responded to within 24 hours of notification of said complaint.

Upon energization of the system, the Applicant will continue to monitor the Project and will remotely monitor the Site 24 hours a day, deploying maintenance crews to the Site in the event repairs are needed or damage occurs to the system components. To properly maintain the safety and operation of the facility, sophisticated onsite monitoring equipment is used to monitor voltage, current, frequency, and overall kWh production in real time. Consistent, 24/7 video surveillance is also used to monitor weather, theft, and vandalism. In the event there are concerns surrounding the facility and its operation, contact information will be displayed at the Project fence. All calls or emails will be logged and the name, address, and reason for calling will be identified and saved for a minimum of two years. This log will be provided to the administrator on a monthly basis. Please see the enclosed Complaint Resolution document in the **Exhibit G**.

Screening and Fencing

A 8' chain link fence, or game fence, will be installed to surround the perimeter of the solar equipment components, and will include warning signs of the high voltage associated with solar PV technology.

Additionally, signage with emergency contact information will be affixed to the Project fence during construction and throughout the operational term of the Project. It is the Applicant's request the Planning Commission recommend which type of fencing they would prefer. A Knox box with keys will be provided at the entrance gate for emergency vehicle access. Noxious weeds and other vegetation between the fencing and the lot line will be controlled in accordance with Illinois Noxious Weed Law (505 ILCS 100/1 et. Seq.). This area will be controlled mechanically by either mowing or through grazing. Pesticides or other chemicals will not be used on Site. Throughout the operations term of the system, Pivot Energy will be conducting maintenance visits to the Site, approximately 2-4 times per year. As part of those visits, mowing will take place throughout the solar array rows, to ensure the height and placement of approved seed mix is maintained. Please see **Exhibit H** for the Landscaping Plan.

The Project does not propose screening as there are no dwellings unrelated to the Project within 1,000 feet of the Site. The one dwelling that is approximately 945 feet from the Project is the Project parcel landowner's (JHBLT LLC) adjacent property and dwelling. The authorized signatory Janet Boyer, a trustee of JHBLT LLC, has signed a waiver for screening attached as **Exhibit I**.

Glare

The design of the Project is for the solar array to absorb the sunlight, rather than reflect it. The Project will not produce glare, and the array will face the sun for the entirety of the day. Upon review by the Federal Aviation Agency (FAA), a "no determination of hazard" letter was issued. Should any complaints arise due to the Project, the Applicant will work to resolve said complaint submitted through the complaint hotline.

Construction and Operational Standards

Project construction is expected to begin in April 2024 and last approximately six months. Mechanical means, such as straw bales, anchored netting, silt fences or berms (if necessary) will be used to control runoff. Silt fences are proposed to be installed within areas of the parcel perimeter to manage drainage and erosion that may occur during construction. Construction will include the installation of fencing, concrete equipment pads, utility lines, interconnection infrastructure, solar arrays, and a gravel access road. The solar arrays will be mounted on ground screws or driven posts, instead of ballasted foundations. This method will minimize disturbance to native soil, thus lowering the risk of erosion during and after construction. Construction will employ all applicable best management practices throughout construction and after completion. During construction, the Site will have a staging area in which construction personnel can park so there are no vehicles parked on the adjacent roads. The first three to four months of construction are typically the most active portions of construction. During this time, delivery trucks will arrive on Site to drop off equipment and there will generally be no more than 50 people on Site.

The Project will comply with all county/state/township road requirements for access to the Site will also abide by all local, state, and federal guidelines when disposing of construction waste, such as module packaging or equipment. Any hazardous materials related to construction or operation and maintenance will be handled, stored, and transported in accordance with all federal, state, and local laws. Once construction is completed, there is a negligible impact on the local community and traffic because the array only requires 2-4 annual visits from maintenance technicians completing routine tasks such as vegetation management and basic equipment maintenance.

Due to the climate in Illinois and the relatively short duration of construction (six months), the need for dust control is unlikely. However, the Applicant is prepared to implement dust control measures. During the early phases of construction, when the entire Site is open, it can be sprayed with non-potable water to control dust if weather conditions warrant. Once the Site access road is constructed, the road can be sprayed with a dust control solution, similar to what is used on local unpaved roads to mitigate the amount of dust caused by construction traffic. Upon completion of the Site, and seeding of approved seed mix, the Site will no longer need dust control measures.

Below in Table 1 is a Gantt chart of our anticipated construction and Project milestone timeline.

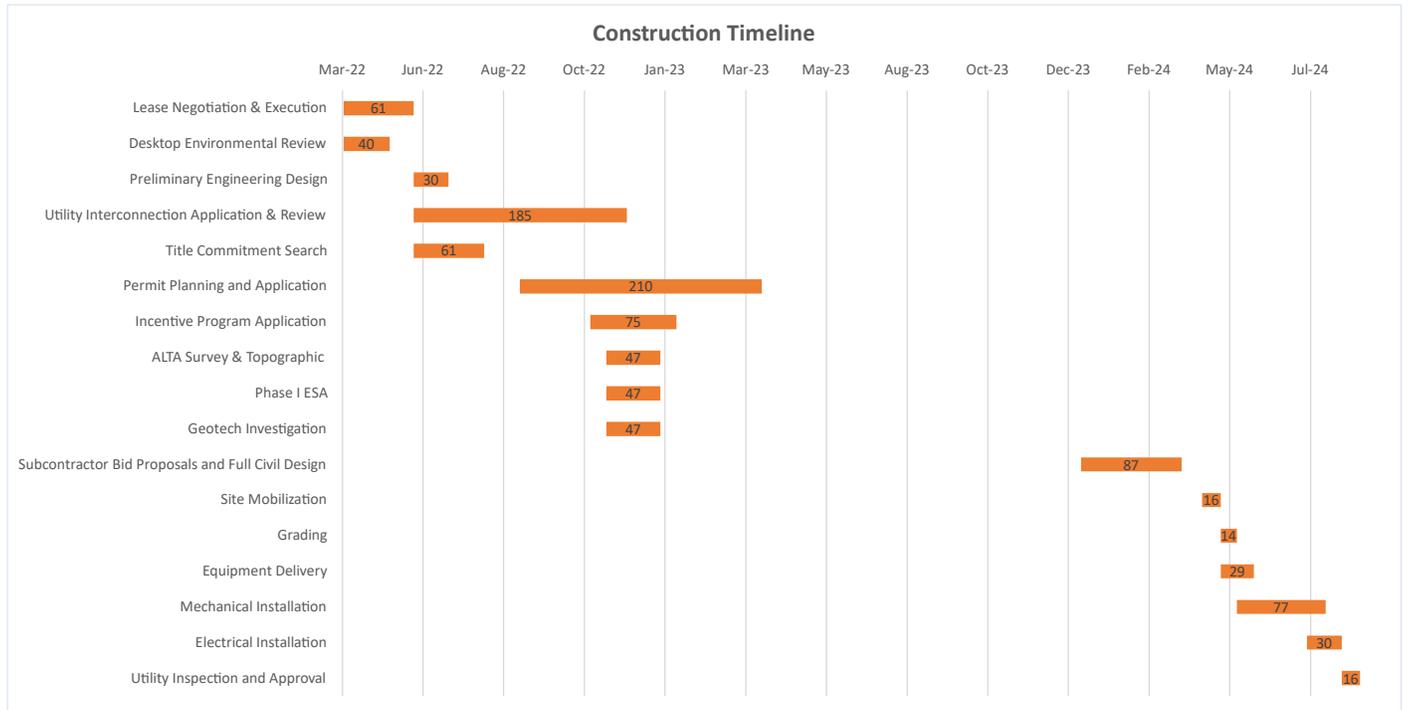


Table 1. Gantt chart depicted the stages and timeline of construction.

The Applicant will maintain a general liability insurance policy covering bodily injurt and property damage with minimum limits of at least \$5 million per occurance and \$5 million in the aggregate. This policy shall identify landowners as additional insured.

During maintenance of the Project, the Project will be visited 2-4 times per year to check on equipment, preform a site inspection, and address Site vegetation. On an annual basis, the Applicant will submit a summary of operation and maintenance reports to the Environmental and Land Use Committee. The Applicant does not assume any annual cleaning frequency as the Illinois climate is more humid and has frequent rain events. In Illinios, snow and rainfall help to naturally “clean” the panels, so manual cleaning would be unlikely. However, should there be an abnormally dry year where the Applicant notices production loss due to dust accumulation, then the Applicant would dispatch for cleaning in that instance. When module cleaning is necessary (fairly rare in Illinois), the cleaning service is responsible for trucking in the water required for the cleaning. No on-site well or local utilities would be used as the water source. General data indicates about 6,400 gallons of water used per MW AC per cleaning. This estimate of water usage may vary depending on the provider and cleaning equipment available.

As for water runoff, the cleaning of a ground mount array does not assume water runoff collection. So, the water would runoff naturally per the grading of the Site. Because a module clean would likely occur in the driest part of the season, water runoff would be minimal as most water falling to the ground from the leading edge of the panels would be absorbed into the dirt locally.

After construction, disturbed areas will be replanted with a native grass mix including pollinator-friendly wildflowers to help keep weeds at bay and minimize erosion for the life of the Project. Farm soils will be kept intact beneath the PV panels, and a grazing consultant could provide guidance following the initial system design to ensure a grazing friendly project. Sheep-friendly, pollinator supportive habitat and infrastructure that promotes sheep grazing as a vegetation management option will be practicable within the fenced array. Throughout the operations term of the system, the Applicant will visit the Site approximately 2-4 times per year to conduct maintenance visits. As part of those visits, mowing will take place throughout the solar array rows, to ensure the height and placement of approved seed mix is maintained, and on the outside of the fence to control weeds. Between grazing and manual mowing, the entire Project Site and outside of the Project fence will control weeds in accordance with the Illinois Noxious Weed Law (55 ILCS 100/1 et. Seq.).

Decommissioning and Site Reclamation Plan

After the operational life of the facility is over, the Applicant will decommission the facility and restore the land to its original condition. Pivot is bound by the lease and its termination provisions, which require all improvements and personal property from the Project to be removed and to restore the property to the same condition existing at the time of the lease effective date. This will involve the safe removal of all structural steel and aluminum, conductors, modules, inverters, transformers, concrete and fencing. Any future uses would be able to proceed in the same manner they would if the solar array had never been built. The signed Decommissioning and Site Reclamation Plan created by TRC, a third-party Illinois Licensed Professional Engineer, is included as **Exhibit J**. The cost estimate for decommissioning the Project, not including salvage value, is \$330,964.81. In accordance with Champaign County's Zoning Ordinance (Section 6.1.1A.5.), the Applicant will provide 125% of the decommissioning cost noted above which equals a total cost of 413,706.01. The Applicant will adhere to the financial assurance policy required in the Champaign County Zoning Ordinance. The Applicant will also be entering into an Agricultural Impact Mitigation Agreement (AIMA) with the Illinois Department of Agriculture.

The Project's initial interconnect agreements and other agreements with the utility is for 20 years. After the 20 years of the contract, we will then begin to plan to decommission the Project, in the event that no extensions are applied for.

Prior to decommissioning, proper erosion and sediment controls will be put in place. The solar modules will be removed, placed on palettes, and sold on a second-hand market. The solar panels are simple and will have useful life beyond 30 years. That said, the solar industry plans to repurpose older solar modules for charitable solar projects, projects in developing countries, or other projects what can benefit from these useful products.

The racking systems used to attach the solar modules and the perimeter are comprised of steel and aluminum. There are also copper and aluminum conductors throughout the Site that also have generic salvage value. These raw materials will be removed and recycled. These raw materials have inherent salvage value which serves as a financial benefit to the decommissioning process.

We plan to remove all above grade and below grade equipment including, but not limited to, solar modules, inverters, combiner boxes, wire, conductor, conduit, racking, concrete, fence, and other miscellaneous components. All equipment will be removed at least to a depth of five feet. Solar modules and valuable raw material will have inherent salvage value and will be recycled and/or sold accordingly. The remaining equipment will be removed from Site and disposed of per applicable disposal standards of the respective material and authority having jurisdiction in the area.

The Site will be smoothed out and reseeded with a locally approved seed mix after the equipment removal has occurred. In some cases, the landowner requests the Site is not be reseeded, but rather left open, so they may plant a desired agricultural use at that time (ex: farmer may prefer plant corn instead of native seed mix). Removal of all equipment and revegetation of the Site will be completed within 12 months of the end of the Project life or facility abandonment.

Environmental Impact

Renewable energy, by definition, does not draw upon finite resources and is not harmful to the environment. The technology is not loud and does not emit smell or pollution. In our design, and throughout the development due diligence process, the Project will comply with all local, state, and federal environmental regulations. The Project is not located within a flood plain and follows the Champaign County Flood Plain Ordinance. The Applicant will enter into an Agricultural Impact Mitigation Agreement (AIMA) with the State of Illinois Department of Agriculture and will provide a signed copy of said agreement to the Champaign County Director of Planning and Zoning prior to the issuance of a building permit. The Project will abide by all conditions within the AIMA.



Landscaping Plan

The proposed Community PV Solar Farm, Champaign Solar 1 LLC (Project), is approximately 35.2 acres of an approximately 90-acre agricultural parcel located east of the intersection between State Route 45 and County Road 2050 North and County Road 00 N in Champaign County (Site). The finished Project will consist of a solar garden with solar panels, equipment pads, access drives, and fences. To control noxious weeds and erosion in the area of the Project, disturbed areas of the Site will be seeded with a native grass mix that will include native wildflowers that are pollinator friendly.

Current Use

The property is currently cropland. Pivot Energy will replant disturbed areas with a native grass mix, likely including pollinator-friendly wild flowers to help keep weeds at bay and minimize erosion for the life of the Project.

Management Goals and Control Methods

Pivot will consult with a local weed mitigation consultant to identify all invasive species. Invasive species will be either removed by hand or by grazing. Pivot Energy will plant an approved native-seed mix once the finished grade is complete. In areas that are disturbed or where the seed does not germinate following planting, the Applicant will reseed with an approved seed mix. Pivot Energy conducts regular vegetation management at the Site several times per year, as needed during the growing season. This mitigates shade on solar modules and maintains a clean and orderly Site. On previous solar jobsites, the Applicant has used a combination of seed mix, straw mats, mowing, and other landscaping measures to maintain a clean, orderly, and noxious-weed-free Site.

Pivot Energy will take the following actions to manage weeds and keep a tidy project site.

1) Weed Management

- I. Eradicate invasive species before any ground disturbing activity begins with the assistance of the County and a local weed mitigation consultant. Eradication will take place before construction begins.
- II. Ensure that all equipment and persons leaving the parcel are free of weed seeds or other plant seeds. Applicant will clean seeds from tires, tracks and all other parts of machinery and persons.
- III. Hydroseed or hydromulch a drought tolerant native grass and pollinator friendly seed mix in the early spring or early fall. Final seed mix will be determined by an approved professional knowledgeable with re-vegetation means and methods.
- IV. Mow or graze Project area a minimum of once per year, at a cut height of no less than six inches. It is likely that mowing or grazing may need to take place twice or more during the growing season to manage vegetation.
- V. Since weed seeds remain viable in the soil for number years, site and weed management is a long-term process. Treated areas will be monitored annually and re-treated if necessary, using typical weed management practices and procedures.

2) Planting Method

Preferred method will be hydroseed and hydromulching. If required, nutrient supplementation will take place to ensure the successful establishment of permanent ground cover. Permanent seeding shall occur between December 1 and May 1 or between August 1 and September 1, or as recommended by a vegetation specialist.



3) Temporary Seed Mix

Temporary seeding areas, which will be ready for stabilization after May 1 and before August 1, shall be seeded with Millet or Sorghum at the rate of 40 pounds per acre, with the amount of fertilizer as specified by a vegetation specialist. The requirement to plant temporary seeding does not eliminate the requirement to plant permanent seeding. Straw mulch is not required for temporary seeding.

4) Permanent Seed Mix

To consist of native, drought-tolerant, low growth grasses and flowering plants. Preference will be given to a seed mix that can support pollinators and grazing animals such as sheep. Final mix will be determined before planting by a qualified vegetation specialist.

5) Site Maintenance Checklist

- I. Mow or graze project area once per year at a minimum to a cut height of approximately 6 inches.
- II. Walk the site and remove any accumulated debris on either side of the fence line and properly dispose. No burning of trash will be allowed.
- III. Inspect and re-seed any bare ground with permanent seeding.
- IV. Inspect fence and repair as needed.
- V. Inspect all-weather access road and repair as needed.
- VI. Inspect Site for any visible erosion. Remove transported sediment and implement necessary erosion control measures to minimize future maintenance issues.
- VII. Inspect solar photovoltaic modules, racking, and balance of system; repair or replace as needed.
- VIII. Inspect drainage and water management systems (e.g., culverts, ditches, etc.); repair as needed.2. Control the spread of invasive species in all areas of the property. Make every attempt to keep any noxious weeds from leaving the sites by employing proper contain and control procedures. This can include mowing, trimming, removing, and spraying on an as-needed basis.

250kW/275kVA, 1500Vdc String Inverters for North America



CPS SCH275KTL-DO/US-800

The 250kW/275kVA high power CPS three-phase string inverters are designed for ground-mount applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiencies, wide operating voltages, broad temperature ranges and NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications.

The SCH275KTL inverters are rated for 250kW. A maximum of 275kVA is available to support fixed power factor operation at rated power. Each inverter include 12 MPPTs and is available with either 36 fused PV string inputs or 24 unfused PV string inputs. The CPS FlexOM solution enables communication, controls and remote product upgrades.

Key Features

- NFPA 70, NEC 2017/2020 compliant
- Touch-safe DC fuse holders adds convenience and safety
- CPS FlexOM Gateway enables remote firmware upgrades
- Integrated DC disconnect switches
- Protection functions for enhanced reliability and safety
- UL 1741-SA certified to CA Rule 21, including SA14-SA18
- UL 1741-SB and IEEE 1547-2018 certified
- 12 MPPTs with 36 fused inputs or 24 unfused inputs
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Full power capacity up to 42°C
- Standard 5-year warranty with extensions to 20 years
- Supported comm protocols (Modbus RTU, TCP/IP, PLC)

Model Name	CPS SCH275KTL-DO/US-800-36	CPS SCH275KTL-DO/US-800-24
DC Input		
Max. DC input voltage		1500 V
Operating DC input voltage range		500-1450 Vdc
Start-up DC input voltage / power		550 Vdc / 500 W
MPPT voltage range @ PF>0.99 ¹		900-1300 Vdc
Number of MPP trackers	12	12
Max. PV input current (clipping point)	26 A per MPPT	26 A per MPPT
Max. PV short-circuit current	600 A, 50 A per MPPT	600 A, 50 A per MPPT
Number of DC inputs	36 fused inputs, 3 per MPPT	24 non-fused inputs, 2 per MPPT
DC disconnection type		Load-rated DC switches
DC surge protection		Type II
AC Output		
Max AC output power (selectable) @ PF>0.99		250 kW
Max. AC apparent power		275 kVA
Rated output voltage		800 Vac
Output voltage range ²		704-880 Vac
Grid connection type		3-phase / PE
Max. AC output current @ 800 Vac		198.5 A
Rated output frequency		60 Hz
Output frequency range ²		57 - 63 Hz
Power factor		>0.99 (±0.8 adjustable)
Current THD @ rated load		<3%
Max. fault current contribution (1 cycle RMS)		215.2 A
Max. OCPD rating		300 A
AC surge protection		Type II
System and Performance		
Max. efficiency		99.0%
CEC efficiency		98.5%
Stand-by / night consumption		5 W
Environment		
Enclosure protection degree		NEMA Type 4X
Cooling method		Variable speed cooling fans
Operating temperature range ³	-22°F to +140°F / -30°C to +60°C (derating from +107°F / +42°C)	
Non-operating temperature range ³		-40°F to +140°F / -40°C to +60°C
Operating humidity		0-100%
Operating altitude		8202 ft / 2500 m (no derating)
Audible noise		<80 dBA @ 1 m and 25°C
Display and Communication		
User interface and display		LED indicators, WiFi + App
Inverter monitoring		Modbus RS485 / Ethernet TCP/ IP ⁴ / PLC ⁵
Site-level monitoring		CPS FlexOM (1 per 32 inverters)
Modbus data mapping		SunSpec / CPS
Remote diagnostics / firmware upgrade functions		Standard / (with FlexOM Gateway)
Mechanical		
Dimensions (H x W x D)		27.2 x 41.3 x 15.7 in (690 x 1050 x 400 mm)
Weight		Approx. 262 lbs (119 kg)
Mounting / installation angle		Vertical installation
AC termination		Stud type terminal (wire range: 3/0 AWG – 750 kcmil AL/CU, lugs not supplied)
DC termination		36 fused input: screw clamp fuse holder (wire range: #14 - #8 AWG CU) 24 non-fused input: screw clamp terminal (wire range: #14 - #8 and #6 - #4 AWG CU) ⁶
Fused string inputs (3 per MPPT) ⁷		20 A fuses provided (fuse values up to 30 A acceptable)
Safety		
Certifications and standards		UL 1741-SA/SB Ed. 3, CSA-22.2 NO.107.1-16, IEEE 1547a-2014, IEEE 1547-2018, FCC PART 15
Selectable grid standard		IEEE 1547a-2014, IEEE 1547-2018, CA Rule 21, ISO-NE
Smart-grid features		Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt
Protection Functions		
IV curve tracing ⁸		Yes
Insulation resistance monitoring		Yes
Onboard fault oscillography		Yes
PV MPPT current monitoring		Yes
Residual current monitoring		Yes
Input reverse polarity protection		Yes
Output overcurrent protection		Yes
Output short-circuit protection		Yes
Output overvoltage protection		Yes
Warranty		
Standard		5 years
Extended terms		10, 15 and 20 years

1) See user manual for information regarding MPPT voltage range when operating at non-unity PF.

2) The output voltage and frequency ranges may differ according to the specific grid standard.

3) See user manual for further requirements regarding non-operating conditions.

4) CPS FlexOM Gateway required for Ethernet Modbus TCP/IP communication.

5) CPS AC-PLC Kit required for AC PLC communication.

6) One threaded hole per MPPT for connecting #6 - #4 AWG CU.

7) Fused string inputs only applicable to the SCH275KTL 36-input model.

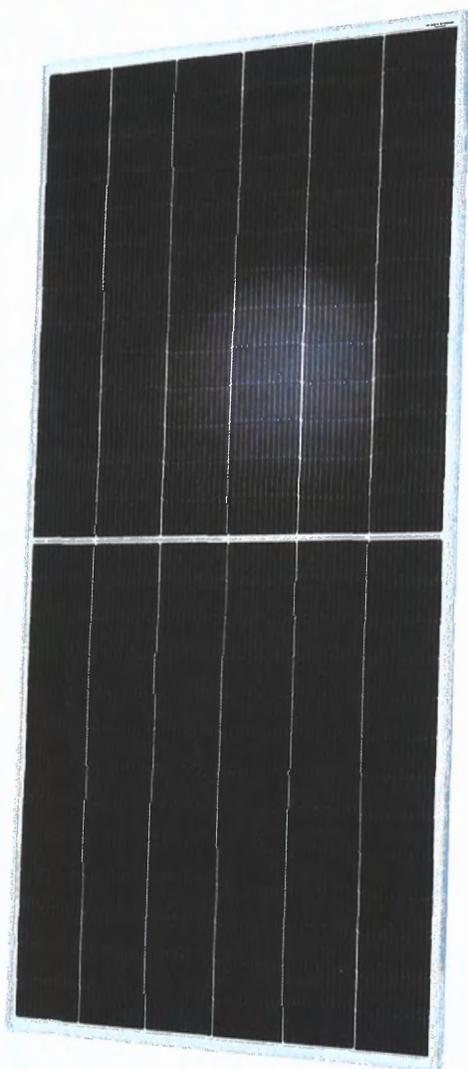
8) CPS FlexOM Gateway and Portal access required for IV curve tracing.

Q.PEAK DUO XL-G11 SERIES



570 - 585 Wp | 156 Cells
21.4% Maximum Module Efficiency

MODEL Q.PEAK DUO XL-G11.3/BFG



Bifacial energy yield gain of up to 20%

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 Z combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 21.4%.



A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty¹.



Enduring high performance

Long term yield security with Anti LeTID and Anti PID Technology², 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 (2400 Pa).



Innovative all-weather technology

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

¹ See data sheet on rear for further information

² APT test conditions according to IEC/TS 62804-1 2015 in UL 1681 B (1500V, 168h) including post treatment according to IEC 61215 1-1 Ed. 2.0 (CD)

The ideal solution for:



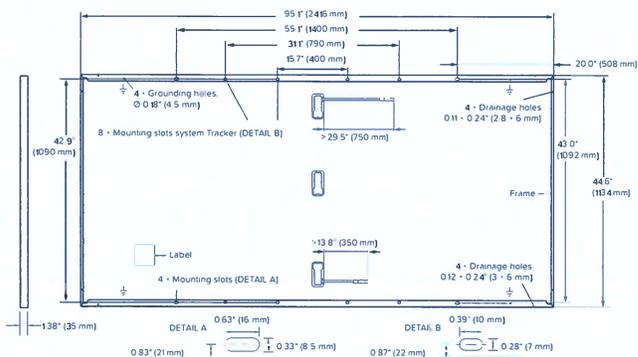
Ground mounted solar panels



Q.PEAK DUO XL-G11 SERIES

Mechanical Specification

Format	95.1in × 44.7in × 1.38in (including frame) (2416mm × 1134mm × 35mm)
Weight	75.8lbs (34.4kg)
Front Cover	0.08in (2mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08in (2mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction box	2.09-3.98 × 1.26-2.36 × 0.59-0.71in (53-101mm × 32-60mm × 15-18mm), Protection class IP67, with bypass diodes
Cable	4mm ² Solar cable, (+) ≥ 29.5in (750mm), (-) ≥ 13.8in (350mm)
Connector	Stäubli MC4; Stäubli MC4-Evo2; - IP68



Electrical Characteristics

POWER CLASS	570	575	580	585
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MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W/-0W)

			570		575		580		585	
			Power at MPP ¹	BSTC [*]						
Minimum	Power at MPP ¹	P _{MPP} [W]	570	623.5	575	629.0	580	634.4	585	639.9
	Short Circuit Current ¹	I _{SC} [A]	13.50	14.77	13.52	14.80	13.55	14.83	13.57	14.86
	Open Circuit Voltage ¹	V _{OC} [V]	53.50	53.69	53.53	53.72	53.56	53.75	53.59	53.78
	Current at MPP	I _{MPP} [A]	12.83	14.03	12.87	14.09	12.92	14.14	12.97	14.19
	Voltage at MPP	V _{MPP} [V]	44.44	44.43	44.66	44.65	44.88	44.87	45.10	45.09
	Efficiency ¹	η [%]	≥ 20.8		≥ 21.0		≥ 21.2		≥ 21.4	

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

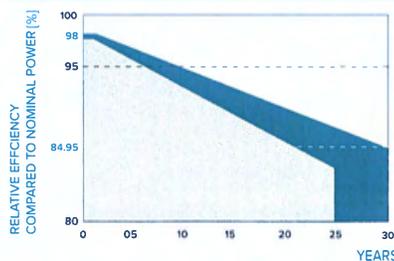
¹Measurement tolerances P_{MPP} +3%; I_{SC}, V_{OC} +5% at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 70% ± 5%, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

			570	575	580	585
Minimum	Power at MPP	P _{MPP} [W]	429.1	432.9	436.6	440.4
	Short Circuit Current	I _{SC} [A]	10.87	10.89	10.91	10.93
	Open Circuit Voltage	V _{OC} [V]	50.60	50.63	50.66	50.68
	Current at MPP	I _{MPP} [A]	10.09	10.14	10.18	10.22
	Voltage at MPP	V _{MPP} [V]	42.51	42.71	42.89	43.08

²800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

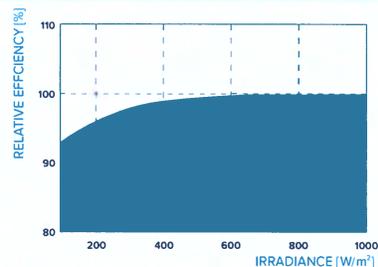


At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

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

¹Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²)

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{SC}	α	[%/K]	+0.04	Temperature Coefficient of V _{OC}	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3 °C)

Properties for System Design

Maximum System Voltage	V _{sys}	[V]	1500	PV module classification	Class II
Maximum Series Fuse Rating		[A DC]	25	Fire Rating based on ANSI/UL 61730	TYPE 29 ⁴
Max. Design Load, Push/Pull ³		[lbs/ft ²]	75 (3600 Pa)/33 (1600 Pa)	Permitted Module Temperature on Continuous Duty	-40°F up to +185°F (-40 °C up to +85 °C)
Max. Test Load, Push/Pull ³		[lbs/ft ²]	113 (5400 Pa)/50 (2400 Pa)		

³ See Installation Manual

⁴ New Type is similar to Type 3 but with metallic frame

Qualifications and Certificates

UL 61730, CE-compliant,
IEC 61215:2016,
IEC 61730:2016,
U.S. Patent No. 9,893,215
(solar cells)



Printout of Interconnection Application by Lucas Murphy (Installer) at 5:05 PM on Monday, April 10, 2023

Project Number: DER-13306

Interconnection Application

1. Applicant Information

Ameren Illinois - Interconnection Request Application Form

IMPORTANT INFORMATION!

- All Information indicated with a red * (asterisk) is REQUIRED!
- Click on each of the blue (?) dots to reveal helpful tips for guiding you through the application.
- Your information is automatically saved.

PowerClerk Warranties and Disclaimers

Generate Document

By clicking here, you indicate that you have read and agree to the Terms and Conditions outlined in the "PowerClerk Warranties and Disclaimers" document above. *

APPLICATION INFORMATION

Level 1:

- Lab-Certified Inverter-Based Distribution Generation Facilities 25kW and smaller

Level 2:

- All interconnection equipment for the Distributed Generation is Lab-Certified
 - Inverter-Based Distribution Generation Facilities greater than 25kW but less than 10 MVA
 - Synchronous and induction machines less than 2 MW

Level 3:

- Distributed Generation using reverse power relays or other production functions that prevent power flow onto the electric distribution system
- Distributed Generation uses Lab-Certified Inverter-Based equipment package
 - Less than or equal to 50 kW for area network
 - Less than or equal to 10 MW for radial distribution feeder

Level 4:

- Distributed Generation that does not qualify for levels 1,2, or 3 or has failed Level 1,2, or 3 reviews
 - Distributed Generation less than or equal to 10 MVA

Over 10 MVA:

- Distributed Generation exceeding 10 MVA

Do you seek to install an Energy Storage System (ESS), or batteries as part of this interconnection application to the Ameren Illinois distribution system? *

- Yes
- No

Is the proposed DER system capable of providing backup power to the premise during a utility grid outage? *

- Yes
- No

Application Type *

New Customer (No Ameren Account) ▼

Customer Type

Non-Residential ▼

Have you submitted a Pre-Application for this project site? If so, please provide the DER number for the Pre-Application.

- Yes
- No

Please select whether this system is a Community Solar or a Behind the Meter request: *

Community Solar ▼

Application Level * 

Level 2 ▼

Would you like to skip expedited review and receive a supplemental review report for an additional \$1500? (Recommended for installations over 250kW) *

- Yes
- No

Account Validation Zip Code *

61953

Customer Contact Information

Name *

Liz Reddington

Company

Pivot Energy

Address *

1750 15th St

Denver

CO ▼

80202

Email *

epcm@pivotenergy.net

Phone *

8887343033

Customer Title (If Applicable)

Project Manager

Alternative Contact Information

New Contact

Name

Company

Address

Email

Phone

Distributed Generation Facility Address (if different from above) *

New Contact

(39.880524, -88.280323)

Tuscola IL 61953

Project Name

Champaign Solar 1A LLC

Who is installing the system? *

3rd Party Install

2. Contractor/Installer Information

CONTRACTOR INFORMATION

Installer/Equipment Contractor ?

Customer Contact Information ▼

Name *

Liz

Reddington

Company *

Pivot Energy

Address *

1750 15th St

Denver

CO ▼

80202

Email *

epcm@pivotenergy.net

Phone *

8887343033

Electrical Contractor (if different from Installer/Equipment Contractor) ?

Customer Contact Information ▼

Name *

Liz

Reddington

Company *

Pivot Energy

Address *

1750 15th St

Denver

CO ▼

80202

Email *

epcm@pivotenergy.net

Phone *

8887343033

Intent of Generation * ?

Net Meter (Unit will operate in parallel and ▼

Electrical License Number

Active License?

Yes

No

Docket Number *

0

****Note: Please enter numerical information only. For example, if your docket number is 16-0001, enter 160001. If you do not remove the dash, it will not take your information.****

3. Service Information

SERVICE INFORMATION

Is the Interconnection Customer requesting Net Metering in accordance with 83 Ill. Adm. Code 466? *

- Yes
- No

Electric Distribution Company (EDC) serving Facility site:

Ameren Illinois

Electric Supplier (if different from EDC):

Meter Number

****Note: Please enter numerical information only. For example, if your Meter number is 12345-67890, enter 1234567890. If you do not remove the dash, it will not take your information.****

Please specify the size of the facility address' breaker panel: (A) *

2500

Service Capacity (Amps) *

5000

Service Voltage (Volts) *

800

Type of Service: *

Three Phase

If 3 Phase Transformer, Indicate Type:

Primary Winding

- Wye
- Delta

Secondary Winding

- Wye
- Delta

Transformer Size (kVA)

2750

Transformer Impedence

5.75

4. Generator Information

NEW DISTRIBUTED GENERATION INFORMATION

Energy Source: *

Solar

Energy Converter Type: *

Photovoltaic

Energy Production Equipment *

Inverter

DC SOURCE/PRIME MOVER NAMEPLATE RATINGS

Total DC Source Nameplate Rating (kW) *

6250.08

Total DC Source Nameplate Rating (kVA) *

6250.08

DC Source Rating (Volts) *

1500

DC Source Open Circuit Voltage (if applicable)

53.56

DC Source Rating (Amps) *

12.92

DC Source Short Circuit Current (if applicable)

13.55

INVERTER INFORMATION AND NAMEPLATE RATINGS

Is this proposed generation to be connected on the line or load side of the main service disconnect? *

- Line Side
- Load Side
- Line and Load Side

Please attach manufacturer's technical specifications and label information for the specified Inverter from a nationally recognized testing laboratory. *

CPS-SCH250-275KTL-DO-US-800-Datasheet-March-14- [View](#) [Remove](#)

Uploaded by Lucas Murphy on 9/29/2022 3:25:01 PM

If your proposed generation will require a second inverter that will be a different model than the one attached above, please attach the second inverter specifications below:

[Browse](#)

Allowed file types: .docx, .xlsx, .csv, .pdf

Inverter Manufacturer *

Chint Power Systems

Inverter Model *

CPS SCH275KTL-DO/US-800 250kW

Number of Generator/Inverter Units *

20

Generator/Inverter Unit Output Rating (kW) AC: *

250

Calculated Total Generator/Inverter Output Rating (kW)

5,000.00 kW

[Show Details](#)

Inverter Rated Voltage (Volts): *

800

Inverter Current Rating (Amps): *

198.5

Inverter % Efficiency: *

98.5

Inverter % Power Factor: *

100

Is the inverter UL 1741 listed? *

Yes

No

Note: The inverter must be UL1741 listed

Inverter Type: *

Forced Commutated

Line Commutated

System Type Tested? *

Yes

No

Lab-Certified Equipment

List interconnection components/systems to be used in the distributed generation facility that are lab-certified.

1.

2.

3.

4.

5.

Picture of 5 x 7 signage, knife blade disconnect, and smart inverter

 Browse

Allowed file types: .docx, .xlsx, .csv, .pdf, .jpg, .png, .gif, .bmp

Volt Var Settings Picture

 Browse

Allowed file types: .docx, .xlsx, .csv, .pdf, .jpg, .png, .gif, .bmp

Additional Attachment Field

 Browse

Allowed file types: .docx, .xlsx, .csv, .pdf, .jpg, .png, .gif, .bmp

AC Safety Disconnect - there are certain requirements for this disconnect which are described below:

1. Location

A. Physically, the **outdoor** rated switch needs to be located next to the electric meter and **accessible to Ameren Illinois**. If the circumstances of your installation indicate that good engineering practice would locate the switch at any other location, you **MUST** receive permission for this from the Ameren Illinois Company DER Coordinator or other Ameren Illinois representative before proceeding. If you do not receive permission from Ameren Illinois, you may be required to relocate the switch at your expense.

B. Electrically, the switch should be located between output of the inverter and the Ameren Illinois system. Typically, the switch will be located between the inverter and a circuit breaker or fuse located in the main distribution panel.

C. The top of the AC Disconnect should have the Ameren Illinois power and the bottom of the disconnect should have the power coming from the solar array.

2.The switch must have a visibly open gap between the switch contacts, knife-blade type. Circuit breakers are **NOT** suitable for this purpose.

3.The switch must be able to be locked in the open position.

Meter Socket – Per the Ameren Service Manual sect 200.01.A.8, any work or wiring changes at the service will prompt the need to upgrade to the latest service requirements, including but not limited to having a lever bypass socket.

Signage – plaque must be either attached to the AC Safety disconnect or located next to the disconnect.

1.If the plaque cannot, for some reason, be attached directly to the AC Safety disconnect, you **MUST** discuss possible alternative locations with the Ameren Illinois Net Metering Coordinator or other Ameren Illinois representative.

2.The plaque must be two-ply or three-ply, non-conductive, plastic engraved plates that are weatherproof and UV resistant.

3.The plaque must be attached to its location with permanent adhesive.

4.The plaque must be a minimum of 5" x 7" in size.

5.Wording for the plaque at the disconnect must say, "**CAUTION: MULTIPLE SOURCES OF POWER - Lockable AC Generation Source Disconnect**". If the disconnect is within 10' and within sight of the meter, only that 1 sign at the disconnect is required. If the Lockable AC Generation Source Safety Disconnect is located more than 10', you must have permission by the Ameren Illinois DER Coordinator or another Ameren Illinois representative and a second sign would be required at the meter. That signage must say, "**CAUTION: MULTIPLE SOURCES OF POWER - Lockable AC Generation Source Disconnect Available for Isolation from Utility**" and additional verbiage to explain the exact location of the disconnect. Other requirements for the plaque(s) remain the same as outlined above.

For DC coupled systems - if the application is to be DC coupled with with an ESS system, the disconnect should be on the DC side of the system.

UL 1741 SA says that SMART inverters connected to the company's system shall pass UL 1741 SA as grid support utility interactive inverter

Should you choose to apply for the Ameren Illinois Smart Inverter Rebate please send in the following UL1741 / IEEE 1547 compliant specifications:

IEEE 1547-2003 & IEEE 1547a says, "SMART inverters connected to the company's system shall be rated as IEEE 1547 compliant with the allowance of smart capabilities extended by IEEE 1547a, and when applicable shall comply with the upcoming IEEE 1547 full revision and with final conformance test procedures contained in IEEE standard 1547.1, which is not expected to be published until Q3 or Q4 of 2019.

UL 1741 says that SMART inverters connected to the company's system shall be rated as UL 1741 safety compliant

UL 1741 and UL 1741SA certification should be from a Nationally Recognized Testing Laboratory (NRTL) whose OSHA Scope of Recognition includes UL 1741

California Rule 21 says SMART inverters connected to the Company's system shall be compliant with California Rule 21 Phase 1 functions (Section Hh. of Rule 21)

Verify that minimum requirement for communication and interface are met:

Protocol IEEE 1815 (DNP3) / SunSpec Modbus / IEEE 2030.5 (Sep 2.0)

Transport is TCP / IP

Physical Interface / Layer is Ethernet / RS 485.

Commissioning Date *

9/29/2022

5. Energy Storage System Information

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6. Documents

DOCUMENTATION

One Line Diagram *

SLD_Champaign Solar 1A LLC_Rev0_20220928.pdf

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Site Plan *

SP_Champaign Solar 1A LLC_Rev0_20220928.pdf

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Additional Documents

Browse

Allowed file types: .docx, .xlsx, .csv, .pdf

Documents for Completion (Not Required At This Time)

****Note:** If you do not wish to fill out all forms at this time, please select the No button, so you can continue forward.**

Attach Installation Invoice

Browse

Allowed file types: .docx, .xlsx, .csv, .pdf

Does the customer wish to fill out a Rider QF - Qualifying Facilities Electric Service Agreement? Please refer to the help link for additional information. ?

Yes

No

Signatures

****To E-Sign, click Yes, then click Preview. After you have done this, scroll to the bottom and click Request Signatures. You will get an email from Docusign. In that email, click on Review Documents in order to E-sign.****

Enter email where you want Docusign notification sent ?

Level 2 Application * (Sign and Upload)

IX Application_Champaign Solar 1A LLC_Rev0_20220928.pdf

View

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****Note: Refresh the page after you have completed your eSignature to update the signature status.****

Attach Signed Electric Inspection Form

Browse

Allowed file types: .docx, .xlsx, .csv, .pdf

Attach Meter/Signage Pictures

Browse

Allowed file types: .docx, .xlsx, .csv, .pdf

Attach As Built Documents

 Browse

Allowed file types: .docx, .xlsx, .csv, .pdf

Attach Proof of Insurance

 Browse

Allowed file types: .docx, .xlsx, .csv, .pdf

7. Payment

⚠ ATTENTION: PLEASE TAKE NOTE ⚠

NOTICE: Per the Administrative Code, Ameren Illinois has **30 BUSINESS DAYS** to receive, approve and complete our review before the project status changes. Please allow a minimum of **15 BUSINESS DAYS** from the date the application has been submitted to view your project's current status and the applicable due date for each status.

Application Fee

\$ 6,600.00

Payment is required before your application can move forward for review. We are now offering online payments. You have 15 business days from the date your invoice is created to submit your payment.

Please wait to receive an invoice, in the mail, before sending in your payment. IF YOU DO NOT RECEIVE AN INVOICE WITHIN 7 BUSINESS DAYS, please send an email to RenewablesIllinois@ameren.com with your Project Number to obtain your account number and payment options.



Complaint Resolution Process

Pivot Energy is excited to bring renewable energy to your community! Solar energy is an innovative technology in which solar panels capture the sun's rays by absorbing sunlight. The panels are affixed to racking, that will track the sun's rays from east to west throughout the day. We understand that there may be questions and concerns, and we are here to help!

During Construction

The construction of this solar PV array will last approximately three months. A representative from the construction team, or main office of Pivot Energy, will respond to calls &/or emails within 24 hours of notification. A Supervisor will be onsite during construction during normal business hours and will hold in-person meetings when necessary.

If you have an issue or complaint during the construction process, please read the following options:

How do I contact Pivot Energy during construction?

- Contact the Construction Manager/Supervisor located at the construction site. Direct contact information (phone & email) will be posted at the entrance of the construction fence.
- Pivot Energy's direct phone number is 888.734.3033, or email operationsandmaintenance@pivotenergy.net
- **In the event of a fire &/or emergency notify the local Fire Department immediately and evacuate the area.**

During Operation

Upon system operation, there will be no onsite personnel. Pivot Energy will remotely monitor the site 24 hours a day and will deploy maintenance crews to site in the event repairs are needed or damage occurs to system components. To properly maintain the safety and operation of the facility, we use sophisticated onsite monitoring equipment. We monitor voltage, current, frequency, and overall kWh production in real time. We also have 24/7 video surveillance to monitor weather, theft, and vandalism.

A representative of Pivot Energy will respond to calls &/or emails within 24 hours of notification. If you have an issue or complaint about the community solar garden, please read the following options:

How do I contact Pivot Energy now that the system is operational?

- Pivot Energy's direct phone number is 888.734.3033, or email operationsandmaintenance@pivotenergy.net
- Do not attempt to gain access inside the facility
- **In the event of a fire &/or emergency notify the local Fire Department immediately and evacuate the area**

The local fire department and emergency response team know how to protect the facility and surrounding areas in the event of a fire or emergency.

CHAMPAIGN SOLAR 1 LLC PROJECT 5 MW (AC) SOLAR FACILITY DECOMMISSIONING AND SITE RECLAMATION PLAN

RECEIVED

APR 28, 2023

CHAMPAIGN COUNTY
PLANNING & ZONING

**E County Rd 1550 N,
Tuscola, IL 61953**



Prepared For:

Pivot Energy
1601 Wewatta St,
Suite 700,
Denver, CO 80202

Prepared By:

TRC
230 West Monroe Street
Suite 1840
Chicago, IL 60606

P/N: 540189.0000

April 2023



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Champaign Solar 1 LLC

BACKGROUND

On behalf of Pivot Energy (Developer) and Champaign Solar 1 LLC (Operator/Owner), TRC has prepared this decommissioning plan and cost estimate (the Plan) for the Champaign Solar 1 facility (Facility), a photovoltaic (PV) facility, Solar Energy System (SES) or PV Solar Farm (Solar Farm) located on E County Rd 1550 N in Tuscola township in Champaign County, Illinois. The project site is located north of N 1450 E Rd and east of County Rd 950 E. The facility will consist of a 5-megawatt (MW) alternating current (AC) solar electrical array covering a total area of approximately 35 acres of an 89-acre parcel of agricultural land. The Facility will include ground-mounted, solar arrays, perimeter security fencing, concrete pads for transformers and switch gears, and a gravel access road. The Solar Farm will produce power using PV panels, mounted on ground support galvanized piles.

The purpose of this Plan is to provide the general scope of decommissioning work as well as a construction cost estimate for a decommissioning assurance mechanism of the Facility as described herein and subject to the Champaign County Zoning Ordinance, amended 08/18/2022 (Ordinance). This document outlines the decommissioning activities required to remove above-ground structures, debris, underground foundations, and cables and restore soil and vegetation after termination of operations of the solar farm. This decommissioning plan and cost estimate has been prepared in accordance with the Champaign County Zoning Ordinance for approval of the solar farm.

An attached estimate of decommissioning cost estimate was prepared under the supervision of a professional engineer licensed in Illinois. The opinion of probable costs is based on estimated quantities of site features, panels, racking, and electrical equipment from the conceptual layout and experience in the design and construction of energy facilities and are subject to final engineering. Costs generally include contractor fees, sitework removal & restoration, racking & module removal, power conditioning equipment removal, and corresponding salvage, which reflect the overall decommissioning process. The reported costs include labor, materials, taxes, insurance, transport costs, disposal fees, equipment rental, contractor's overhead, and contractor's profit; the labor costs have been estimated using regional labor rates and labor efficiencies from the Bureau of Labor statistics along with previous decommission plan estimates completed for other similar projects.

Owner/Operator

Champaign Solar 1 LLC will be responsible for the ensuring completion of final civil and electrical engineering plans. TRC is the consultant responsible for the preparation of this independent decommissioning plan and cost estimate.

Facility Description

The Facility will consist of a 5 MW AC solar electricity generating facility with associated equipment which covers a total area of approximately 35 acres of an 89-acre parcel of agricultural land. The Facility will be secured within a security fence surrounding the solar panels and electrical equipment. The site can be accessed via lock-controlled gates located on the proposed gravel access road. The Facility will include the following site features:

Champaign Solar 1 LLC

- Total site development area with solar panels, associated electrical equipment, racking, and gravel access road of approximately 35 acres (fenced area with approximately 10,776 solar panels);
- One (1) - concrete electrical pad with a transformer, mounted inverter boxes, and switchgears;
- 20-foot wide gravel access road and turnaround;
- Seven (7)-foot chain-link Security fencing (encasing entire project area);
- Above-ground electrical wire conduits; and
- Underground electrical wire conduits.

DECOMMISSIONING ACTIVITIES

The Facility will be decommissioned by completing the following major steps:

1. Removal of modules, racking, and piles;
2. Removal of cabling, trays, and electrical equipment;
3. Removal of concrete pads, foundations, and debris;
4. Removal of the gravel access roads (if required by the landowner);
5. Site stabilization by placing soil and reseeding; and
6. Removal and Disposal or Recycling of materials

The procedures for decommissioning of the project will involve restoring soils and vegetation to agricultural productivity.

Decommissioning Requirements

Champaign Solar 1 LLC shall notify Champaign County by certified mail of the commencement of voluntary or involuntary bankruptcy proceeding, naming the applicant as debtor, within ten days of commencement of proceeding.

Champaign Solar 1 LLC agrees that the transfer of the applicant's financial interest in the Champaign Solar 1 facility shall in no way affect or change Champaign Solar 1 LLC's obligation to continue to comply with the terms of this plan. Any successor in interest, assignee, and all parties to the decommissioning and site reclamation plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the Champaign Solar 1 facility.

Champaign County and its authorized representatives have the right of entry onto the Champaign Solar 1 facility premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.

At the time decommissioning takes place, all parties of the decommissioning and site reclamation plan are required to enter into a Roadway Use and Repair Agreement with the relevant highway authority

Champaign Solar 1 LLC

All parties of the decommissioning and site reclamation plan shall provide evidence of any new, additional, or substitute financing or security agreement to the Zoning Administrator throughout the operating lifetime of the project.

All parties of the decommissioning and site reclamation plan shall be obliged to perform the work in the decommissioning and site reclamation plan before abandoning the Champaign Solar 1 facility or prior to ceasing production of electricity from the Champaign Solar 1, after it has begun, other than in the ordinary course of business. This obligation shall be independent of the obligation to pay financial assurance and shall not be limited by the amount of financial assurance. The obligation to perform the reclamation work shall constitute a covenant running with the land.

Champaign Solar 1 LLC shall provide financial assurance in the form of an irrevocable letter of credit in accordance with the Ordinance Section 6.1.5.Q.4

Schedule

The decommissioning process is estimated to take approximately two (2) months but may change depending on weather and soil moisture conditions and is intended to occur outside of the winter season. All of the activities will be conducted simultaneously when possible. It is expected that final seeding will require 2 to 4 months to establish adequate coverage and erosion control.

Decommissioning During Construction (Abandonment of Project)

If construction or operation activities cease prior to facility completion, with no expectation to restart for more than six (6) months, the project would be decommissioned as follows in this plan. Any installed components will be removed and managed, as per the following sections, and the site will be restored to a vegetated condition.

Decommissioning After Ceasing Operation

Properly maintained photovoltaic (PV) panels have an expected lifespan of thirty-five (35) years or more. At this time or if the facility has not been in operation and stops producing energy for a period of six (6) consecutive months, it shall be considered a “cessation or abandonment of operations.” Installed components will be removed and reused/recycled where possible, and the site restored in accordance with the activities discussed below. Champaign County shall have access to the project and to the funds to effect or complete decommissioning in the event an applicant, owner, or operator fails to complete decommissioning activities as directed by the Ordinance, which may result in the referral to the Champaign County’s Zoning Administration. Champaign County shall also have the right to draw on the funds in accordance with Ordinance Section 6.1.1.A.9 and Section 6.1.5.Q.5. Champaign County shall have the right to transfer applicable solar development material, if abandoned by the owner, to a salvage firm.

Offsite Impacts During Decommissioning

As with the project’s construction, noise levels during the decommission work will increase. Proper steps will be followed to minimize the disturbance, such as using proper equipment for removing the support piles. Work hours are assumed to be eight (8) hours a day, during daylight. Also, as with the project’s construction, road traffic in the area may increase temporarily due to crews and equipment movements. Further details of the on-site restoration are included in subsequent sections.

Champaign Solar 1 LLC

Dismantlement and Demolition

All decommissioning and Site Reclamation activities shall be done in accordance with the Ordinance Section 6.1.5.Q.3

Decommissioning shall include removal of all solar electric systems, buildings, ballasts, cabling, electrical components, roads, foundations, pilings, and any other associated facilities. This will include removal of all items identified in the decommissioning activities above.

A significant amount of the components of the PV system at the Facility will include recyclable or re-saleable components, including copper, aluminum, galvanized steel, and panels. Due to their resale monetary value, these components will be dismantled and disassembled rather than being demolished and disposed of.

The owner or operator shall notify the Champaign County Board of the proposed date of discontinued operations and plans for removal at least six (6) months prior to beginning decommissioning activities. The owner shall complete decommissioning activities within six (6) months.

Following coordination with the local utility company regarding timing and required procedures for disconnecting the Facility from the utility, 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 panels will be cut at the panel and then removed from their framework by cutting or dismantling the connections to the supports. Then panels, inverters, transformers, meters, fans, lighting fixtures, and other electrical structures will be removed. Disposal of these materials at a landfill will be governed by state and local laws, including the Code of Illinois Regulations governing waste disposal at local area landfills, which may be amended from time to time. Any materials deemed to be hazardous at the time of disposal will be handled and disposed according to applicable laws and regulations.

The PV mounting system framework will be dismantled and recycled. The galvanized support piles will be completely removed and recycled.

Finally, all associated structures will be demolished and removed from the site for recycling or disposal. This will include the site fence, gates, access roads, equipment foundations, and underground cables; which will likely be removed or recycled.

Consultation with the landowner will determine if the access roads should be left in place for their continued use. If the access road is deemed unnecessary, the contractor will remove the access roads and all non-adaptable parts of the project to a minimum depth of 60" and restore this area with native soils and seeding. All concrete associated with the Facility on-site will be broken and removed in its entirety, and clean concrete will be crushed and disposed of or recycled off-site. Final stabilization thresholds on the entire site shall be met prior to approval of site decommissioning. Underground conduits and raceways are to be removed. Above ground lines and poles that are not owned by the utility will be removed, along with associated equipment (isolation switches, fuses, metering) and holes will be filled with clean topsoil. Temporary sanitary facilities will be provided on-site for the workers conducting the decommissioning of the Facility.

Champaign Solar 1 LLC

Erosion and sediment control measures are required during the decommissioning process. These measures include construction access, silt fence, concrete washout stations, and land stabilization. The owner/operator will restore the project location to a vegetated condition consistent with pre-construction conditions.

Disposal or Recycle

During the decommissioning phase, a variety of excess materials can be salvaged. A significant amount of the materials used in a solar facility are reusable, including copper, aluminum, galvanized steel, and the PV panels. Due to their resale monetary value, these components will be dismantled and disassembled rather than being demolished and disposed. Any remaining materials will be removed and disposed of off-site at an appropriate facility. The project general contractor will maximize recycling and reuse and will work with manufacturers, local subcontractors and waste firms to segregate material to be recycled, reused and/or disposed of properly.

The project developer will be responsible for arranging the collection or recycling of fence, racking piles, PV panels, panel tracker equipment, AC and DC wiring, inverters, and miscellaneous equipment for salvage value.

Gravel may be reused as general fill on site with landowner approval. Remaining gravel, geotextile fabric, concrete, and debris need to be separated and transported off-site by truck to the appropriate facilities for recycling and disposal in accordance with federal, state, and local waste management regulations.

A final site walkthrough with the appropriate local authorities will be conducted to verify removal of debris and/or trash generated within the site 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.

Removal of Landscape Materials and Site Stabilization

The areas of the Facility that are disturbed (during decommissioning) will be subject to minor re-grading (no imported soil is anticipated), to establish a uniform slope and stabilization, including application of a selected grass seed mix to surfaces disturbed (estimated to be less than 50% of the site) during the decommissioning process. The seed mix is expected to be a blend of various fescue and/or rye grass seeds. The actual seed blend will depend on factors including availability and time of year that planting would occur.

The excavation resulting from the removal of foundation concrete shall only be backfilled with subsoil and topsoil in similar depths and similar types as existed at the time of the original Champaign Solar 1 construction except that a lesser quality topsoil or a combination of a lesser quality topsoil and a subsoil that is similar to the native subsoil may be used at depths corresponding to the native subsoil but not less than 12 inches below grade. A qualified soil scientist or Illinois Licensed Professional Engineer shall certify that the actual soils used to backfill any concrete foundation excavations are of equal or greater quality than the native soils, unless excavated native soils are stored for backfill.

Champaign Solar 1 LLC

An Illinois Licensed Professional Engineer shall certify in writing that the concrete foundation excavations have been backfilled with soil to such a depth and with a minimum of compaction that is consistent with the restoration of productive agricultural use such that the depth of soil is expected to be no less than 54 inches within one year after backfilling.

It is expected that soil and vegetation will be restored to pre-decommissioning conditions. Details will be discussed with the property owner, the Champaign Board, and the Champaign County Soil and Water Conservation District. Planting trees, shrubs, and other woody vegetation (re-forestation) or other beautification are not expected to be required and are not included in the costs. It is assumed that major site grading activities are not proposed as part of the project. Imported fill will be provided, if necessary, to restore to original conditions. Only minor grading is anticipated with regards to site restoration (from construction, demolition, and traffic damage) and access drives removal. All site stabilization activities will be completed in accordance with regulatory requirements and the approved Storm Water Pollution Prevention Plan (SWPPP) and NPDES Construction General Permit.

PERMITTING REQUIREMENTS FOR DECOMMISSIONING

Approvals are currently required prior to initiation of ground-disturbing activity. This cost estimate assumes the same approvals are required when decommissioning occurs in the future. The permitting requirements listed below will be reviewed and might be subject to revisions based on local, state, and federal regulations at the time of decommissioning.

National Pollutant Discharge Elimination System (NPDES) Construction General Permit

U.S. Environmental Protection Agency - Ground disturbance of greater than 1 acre requires preparation of a Storm Water Pollution Prevention Plan, including erosion and sedimentation controls.

Building Permit

A building permit is required to construct the facility. A building permit must also be obtained for any construction, alteration, repair, demolition, or change to the use or occupancy of a building.

Permit Requirement Assumptions

No significant ground disturbance or grading associated with decommissioning, including temporary laydown areas, are required within areas subject to additional local, state, or federal permitting.

SOLAR DECOMMISSIONING ESTIMATE

The following items can be salvaged and recycled: fence material, racking piles, PV panels, miscellaneous tracker equipment, AC and DC wiring, combiner boxes, inverters, transformers, medium voltage equipment, electrical equipment posts, and customer owned utility poles.

The decommissioning cost estimate is based on 2023 Champaign County prevailing labor rates equipment rates and credits for salvaging project material using an average material price index over the last 5 years. The salvage value and equipment rates have been estimated using publicly available data from FEMA published Schedule of Equipment Rates. The salvage value rates have

Champaign Solar 1 LLC

been estimated using publicly available data (e.g., <http://fred.stlouisfed.org>), as well as industry provided actual salvage values and previous experience with similar projects. Five-year average salvage values were calculated based on price index interpolation.

The estimated costs utilize hourly and monthly rates listed below:

2023 Wages

- Labor at \$33.37/hr;
- Operating engineer at \$46.85/hr;
- Truck driver at \$45.27/hr;
- Electrician at \$50.66/hr;
- Skid steer rental at \$2,350.00/month;
- Excavator rental at \$4,925.00/month; and
- Dump truck rental at \$52.96/hr

2023 Salvage Values

- Steel (e.g., fence, racking, posts) at \$0.14/lb.;
- PV panels at \$5/panel;
- Electrical components (e.g., combiner boxes, inverters, transformer) at \$0.28/lb.;
- DC wiring (copper) at \$1.3/lb.; and
- AC wiring (copper and aluminum) at \$1.14/lb.

The estimated cost of construction activities associated with decommissioning using current wages is \$380,610. The material salvage value is \$126,720, 70% of which (\$88,704) is available as a decommissioning cost credit. The net decommissioning cost, accounting for 70% salvage value is estimated to be \$291,906. The detailed costs are attached.

Champaign Solar 1 LLC

The attached preliminary decommissioning cost estimate is based on the construction development set created by Pivot Energy on September 27, 2022. Changes to the plans and construction may affect the scope and costs of Facility decommissioning. If required by the county, final decommissioning costs should be revised based on "As-Built" plans. The attached decommissioning cost estimate was prepared under the supervision of a registered professional engineer in the state of Illinois. The opinion of probable costs is based on experience in the design and construction of energy facilities and are subject to final engineering/construction.

If at any time in the future, the prevailing professionally accepted standards of economic feasibility of recycling and or environmental implications of hazardous waste changes to increase the costs associated with decommissioning, the cost estimate will be revised, and the bonds will need to be modified accordingly to cover said cost.

This opinion assumes a third-party contractor, experienced in the construction and decommissioning of photovoltaic facilities will lead the effort. The reported costs include labor materials, taxes, insurance, transport costs, equipment rental, contractor's overhead, and contractor's profit; the labor costs have been estimated using regional labor rates and labor efficiencies from the United States Department of Agriculture (USDA) /the US Bureau of labor statistics for construction workers in 2023 along with previous decommissioning plan estimates completed for other similar projects.

Champaign Solar 1 LLC, by its duly authorized representative's signature below, hereby acknowledges that it has reviewed this Decommissioning and Site Reclamation Plan, and approves of the same, and agrees to be bound by the terms and conditions contained therein.

Authorized Representative: _____

Print Name: _____

Title: _____

Date: _____

Champaign Solar 1

Decommissioning Cost Estimate

Task	Unit	Estimated Quantity	Cost per Unit 2023	Total Gross Cost 2023	Salvage Value 2023	Net Costs 2023
Engineering & Permitting	LS	1	\$ 11,250.00	\$ 11,250.00		\$ 11,250.00
Mobilization	LS	1	\$ 28,294.00	\$ 28,294.00		\$ 28,294.00
Silt Fence	LF	4,940	\$ 2.70	\$ 13,338.00		\$ 13,338.00
Access Road Removal & Restoration	SF	8,960	\$ 3.50	\$ 31,360.00		\$ 31,360.00
Equipment Pad & Restoration	EA	1	\$ 900.00	\$ 900.00		\$ 900.00
Seed Disturbed Areas (50% disturbed)	AC	18.5	\$ 949.00	\$ 17,556.50		\$ 17,556.50
Fence Removal	LF	4,940	\$ 2.30	\$ 11,362.00	\$ (3,430.34)	\$ 7,931.66
Site Clean Up	AC	37	\$ 260.00	\$ 9,620.00		\$ 9,620.00
Rack and Post Removal	EA	1,800	\$ 70.00	\$ 126,000.00	\$ (63,000.00)	\$ 63,000.00
Remove Panels	EA	10,776	\$ 2.80	\$ 30,172.80	\$ (51,186.00)	\$ (21,013.20)
AC Wiring-Direct Burial and Overhead	LF	3,500	\$ 0.26	\$ 901.51	\$ (359.10)	\$ 542.41
DC Wire Removal	LF	104,600	\$ 0.40	\$ 41,840.00	\$ (5,439.20)	\$ 36,400.80
Electrical Disconnect	EA	1	\$ 210.00	\$ 210.00		\$ 210.00
Combiner Box	EA	17	\$ 180.00	\$ 3,060.00	\$ (209.44)	\$ 2,850.56
Inverter	EA	20	\$ 180.00	\$ 3,600.00	\$ (542.08)	\$ 3,057.92
Transformer	EA	3	\$ 500.00	\$ 1,500.00	\$ (2,553.60)	\$ (1,053.60)
SUBTOTAL				\$ 330,964.81	\$ (126,719.76)	\$ 204,245.05
Other Costs						
Contractor Profit	%	8%		\$ 26,477.18		\$ 26,477.18
Contractor Overhead & Management	%	5%		\$ 16,548.24		\$ 16,548.24
Contractor Insurance	%	2%		\$ 6,619.30		\$ 6,619.30
SUBTOTAL				\$ 49,644.72		\$ 49,644.72
DECOMMISSIONING TOTAL				\$ 380,609.53		\$ 253,889.78

*Salvage values determined linearly interpolating relative material values over a five year span, and averaging the value

**Material labor cost estimated utilizing labor rates using the posted March, 1, 2023 Champaign County prevailing wage (Foreman Hourly Rate) and FEMA 2019 schedule.

CHAMPAIGN SOLAR 1B LLC PROJECT 5 MW (AC) SOLAR FACILITY DECOMMISSIONING AND SITE RECLAMATION PLAN

RECEIVED

APR 28, 2023

CHAMPAIGN COUNTY
PLANNING & ZONING

**E County Rd 1550 N,
Tuscola, IL 61953**



Prepared For:

Pivot Energy
1601 Wewatta St,
Suite 700,
Denver, CO 80202

Prepared By:

TRC
230 West Monroe Street
Suite 1840
Chicago, IL 60606

P/N: 540189.0000

April 2023



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Champaign Solar 1B LLC

BACKGROUND

On behalf of Pivot Energy (Developer) and Champaign Solar 1B LLC (Operator/Owner), TRC has prepared this decommissioning plan and cost estimate (the Plan) for the Champaign Solar 1B facility (Facility), a photovoltaic (PV) facility, Solar Energy System (SES) or PV Solar Farm (Solar Farm) located on E County Rd 1550 N in Tuscola township in Champaign County, Illinois. The project site is located north of N 1450 E Rd and east of County Rd 950 E. The facility will consist of a 5-megawatt (MW) alternating current (AC) solar electrical array covering a total area of approximately 27 acres of an 89-acre parcel of agricultural land. The Facility will include ground-mounted, solar arrays, perimeter security fencing, concrete pads for transformers and switch gears, and a gravel access road. The Solar Farm will produce power using PV panels, mounted on ground support galvanized piles.

The purpose of this Plan is to provide the general scope of decommissioning work as well as a construction cost estimate for a decommissioning assurance mechanism of the Facility as described herein and subject to the Champaign County Zoning Ordinance, amended 08/18/2022 (Ordinance). This document outlines the decommissioning activities required to remove above-ground structures, debris, underground foundations, and cables and restore soil and vegetation after termination of operations of the solar farm. This decommissioning plan and cost estimate has been prepared in accordance with the Champaign County Zoning Ordinance for approval of the solar farm.

An attached estimate of decommissioning cost estimate was prepared under the supervision of a professional engineer licensed in Illinois. The opinion of probable costs is based on estimated quantities of site features, panels, racking, and electrical equipment from the conceptual layout and experience in the design and construction of energy facilities and are subject to final engineering. Costs generally include contractor fees, sitework removal & restoration, racking & module removal, power conditioning equipment removal, and corresponding salvage, which reflect the overall decommissioning process. The reported costs include labor, materials, taxes, insurance, transport costs, disposal fees, equipment rental, contractor's overhead, and contractor's profit; the labor costs have been estimated using regional labor rates and labor efficiencies from the Bureau of Labor statistics along with previous decommission plan estimates completed for other similar projects.

Owner/Operator

Champaign Solar 1B LLC will be responsible for the ensuring completion of final civil and electrical engineering plans. TRC is the consultant responsible for the preparation of this independent decommissioning plan and cost estimate.

Facility Description

The Facility will consist of a 5 MW AC solar electricity generating facility with associated equipment which covers a total area of approximately 27 acres of an 89-acre parcel of agricultural land. The Facility will be secured within a security fence surrounding the solar panels and electrical equipment. The site can be accessed via lock-controlled gates located on the proposed gravel access road. The Facility will include the following site features:

Champaign Solar 1B LLC

- Total site development area with solar panels, associated electrical equipment, racking, and gravel access road of approximately 27 acres (fenced area with approximately 10,776 solar panels);
- One (1) - concrete electrical pad with a transformer, mounted inverter boxes, and switchgears;
- 20-foot wide gravel access road and turnaround;
- Seven (7)-foot chain-link Security fencing (encasing entire project area);
- Above-ground electrical wire conduits; and
- Underground electrical wire conduits.

DECOMMISSIONING ACTIVITIES

The Facility will be decommissioned by completing the following major steps:

1. Removal of modules, racking, and piles;
2. Removal of cabling, trays, and electrical equipment;
3. Removal of concrete pads, foundations, and debris;
4. Removal of the gravel access roads (if required by the landowner);
5. Site stabilization by placing soil and reseeding; and
6. Removal and Disposal or Recycling of materials

The procedures for decommissioning of the project will involve restoring soils and vegetation to agricultural productivity.

Decommissioning Requirements

Champaign Solar 1B LLC shall notify Champaign County by certified mail of the commencement of voluntary or involuntary bankruptcy proceeding, naming the applicant as debtor, within ten days of commencement of proceeding.

Champaign Solar 1B LLC agrees that the transfer of the applicant's financial interest in the Champaign Solar 1B facility shall in no way affect or change Champaign Solar 1B LLC's obligation to continue to comply with the terms of this plan. Any successor in interest, assignee, and all parties to the decommissioning and site reclamation plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the Champaign Solar 1B facility.

Champaign County and its authorized representatives have the right of entry onto the Champaign Solar 1B facility premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.

At the time decommissioning takes place, all parties of the decommissioning and site reclamation plan are required to enter into a Roadway Use and Repair Agreement with the relevant highway authority.

Champaign Solar 1B LLC

All parties of the decommissioning and site reclamation plan shall provide evidence of any new, additional, or substitute financing or security agreement to the Zoning Administrator throughout the operating lifetime of the project.

All parties of the decommissioning and site reclamation plan shall be obliged to perform the work in the decommissioning and site reclamation plan before abandoning the Champaign Solar 1B facility or prior to ceasing production of electricity from the Champaign Solar 1B, after it has begun, other than in the ordinary course of business. This obligation shall be independent of the obligation to pay financial assurance and shall not be limited by the amount of financial assurance. The obligation to perform the reclamation work shall constitute a covenant running with the land.

Champaign Solar 1B LLC shall provide financial assurance in the form of an irrevocable letter of credit in accordance with the Ordinance Section 6.1.5.Q.4

Schedule

The decommissioning process is estimated to take approximately two (2) months but may change depending on weather and soil moisture conditions and is intended to occur outside of the winter season. All of the activities will be conducted simultaneously when possible. It is expected that final seeding will require 2 to 4 months to establish adequate coverage and erosion control.

Decommissioning During Construction (Abandonment of Project)

If construction or operation activities cease prior to facility completion, with no expectation to restart for more than six (6) months, the project would be decommissioned as follows in this plan. Any installed components will be removed and managed, as per the following sections, and the site will be restored to a vegetated condition.

Decommissioning After Ceasing Operation

Properly maintained photovoltaic (PV) panels have an expected lifespan of thirty-five (35) years or more. At this time or if the facility has not been in operation and stops producing energy for a period of six (6) consecutive months, it shall be considered a “cessation or abandonment of operations.” Installed components will be removed and reused/recycled where possible, and the site restored in accordance with the activities discussed below. Champaign County shall have access to the project and to the funds to effect or complete decommissioning in the event an applicant, owner, or operator fails to complete decommissioning activities as directed by the Ordinance which may result in the referral to the Champaign County’s Zoning Administration. Champaign County shall also have the right to draw on the funds in accordance with Ordinance Section 6.1.1.A.9 and Section 6.1.5.Q.5. Champaign County shall have the right to transfer applicable solar development material, if abandoned by the owner, to a salvage firm.

Offsite Impacts During Decommissioning

As with the project’s construction, noise levels during the decommission work will increase. Proper steps will be followed to minimize the disturbance, such as using proper equipment for removing the support piles. Work hours are assumed to be eight (8) hours a day, during daylight. Also, as with the project’s construction, road traffic in the area may increase temporarily due to crews and equipment movements. Further details of the on-site restoration are included in subsequent sections.

Champaign Solar 1B LLC

Dismantlement and Demolition

All decommissioning and Site Reclamation activities shall be done in accordance with the Ordinance Section 6.1.5.Q.3

Decommissioning shall include removal of all solar electric systems, buildings, ballasts, cabling, electrical components, roads, foundations, pilings, and any other associated facilities. This will include removal of all items identified in the decommissioning activities above.

A significant amount of the components of the PV system at the Facility will include recyclable or re-saleable components, including copper, aluminum, galvanized steel, and panels. Due to their resale monetary value, these components will be dismantled and disassembled rather than being demolished and disposed of.

The owner or operator shall notify the Champaign County Board of the proposed date of discontinued operations and plans for removal at least six (6) months prior to beginning decommissioning activities. The owner shall complete decommissioning activities within six (6) months.

Following coordination with the local utility company regarding timing and required procedures for disconnecting the Facility from the utility, 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 panels will be cut at the panel and then removed from their framework by cutting or dismantling the connections to the supports. Then panels, inverters, transformers, meters, fans, lighting fixtures, and other electrical structures will be removed. Disposal of these materials at a landfill will be governed by state and local laws, including the Code of Illinois Regulations governing waste disposal at local area landfills, which may be amended from time to time. Any materials deemed to be hazardous at the time of disposal will be handled and disposed according to applicable laws and regulations.

The PV mounting system framework will be dismantled and recycled. The galvanized support piles will be completely removed and recycled.

Finally, all associated structures will be demolished and removed from the site for recycling or disposal. This will include the site fence, gates, access roads, equipment foundations, and underground cables; which will likely be removed or recycled.

Consultation with the landowner will determine if the access roads should be left in place for their continued use. If the access road is deemed unnecessary, the contractor will remove the access roads and all non-adaptable parts of the project to a minimum depth of 60" and restore this area with native soils and seeding. All concrete associated with the Facility on-site will be broken and removed in its entirety, and clean concrete will be crushed and disposed of or recycled off-site. Final stabilization thresholds on the entire site shall be met prior to approval of site decommissioning. Underground conduits and raceways are to be removed. Above ground lines and poles that are not owned by the utility will be removed, along with associated equipment (isolation switches, fuses, metering) and holes will be filled with clean topsoil. Temporary sanitary facilities will be provided on-site for the workers conducting the decommissioning of the Facility.

Champaign Solar 1B LLC

Erosion and sediment control measures are required during the decommissioning process. These measures include construction access, silt fence, concrete washout stations, and land stabilization. The owner/operator will restore the project location to a vegetated condition consistent with pre-construction conditions.

Disposal or Recycle

During the decommissioning phase, a variety of excess materials can be salvaged. A significant amount of the materials used in a solar facility are reusable, including copper, aluminum, galvanized steel, and the PV panels. Due to their resale monetary value, these components will be dismantled and disassembled rather than being demolished and disposed. Any remaining materials will be removed and disposed of off-site at an appropriate facility. The project general contractor will maximize recycling and reuse and will work with manufacturers, local subcontractors and waste firms to segregate material to be recycled, reused and/or disposed of properly.

The project developer will be responsible for arranging the collection or recycling of fence, racking piles, PV panels, panel tracker equipment, AC and DC wiring, inverters, and miscellaneous equipment for salvage value.

Gravel may be reused as general fill on site with landowner approval. Remaining gravel, geotextile fabric, concrete, and debris need to be separated and transported off-site by truck to the appropriate facilities for recycling and disposal in accordance with federal, state, and local waste management regulations.

A final site walkthrough with the appropriate local authorities will be conducted to verify removal of debris and/or trash generated within the site 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.

Removal of Landscape Materials and Site Stabilization:

The areas of the Facility that are disturbed (during decommissioning) will be subject to minor re-grading (no imported soil is anticipated), to establish a uniform slope and stabilization, including application of a selected grass seed mix to surfaces disturbed (estimated to be less than 50% of the site) during the decommissioning process. The seed mix is expected to be a blend of various fescue and/or rye grass seeds. The actual seed blend will depend on factors including availability and time of year that planting would occur.

The excavation resulting from the removal of foundation concrete shall only be backfilled with subsoil and topsoil in similar depths and similar types as existed at the time of the original Champaign Solar 1B construction except that a lesser quality topsoil or a combination of a lesser quality topsoil and a subsoil that is similar to the native subsoil may be used at depths corresponding to the native subsoil but not less than 12 inches below grade. A qualified soil scientist or Illinois Licensed Professional Engineer shall certify that the actual soils used to backfill any concrete foundation excavations are of equal or greater quality than the native soils, unless excavated native soils are stored for backfill.

Champaign Solar 1B LLC

An Illinois Licensed Professional Engineer shall certify in writing that the concrete foundation excavations have been backfilled with soil to such a depth and with a minimum of compaction that is consistent with the restoration of productive agricultural use such that the depth of soil is expected to be no less than 54 inches within one year after backfilling.

It is expected that soil and vegetation will be restored to pre-decommissioning conditions. Details will be discussed with the property owner, the Champaign Board, and the Champaign County Soil and Water Conservation District. Planting trees, shrubs, and other woody vegetation (re-forestation) or other beautification are not expected to be required and are not included in the costs. It is assumed that major site grading activities are not proposed as part of the project. Imported fill will be provided, if necessary, to restore to original conditions. Only minor grading is anticipated with regards to site restoration (from construction, demolition, and traffic damage) and access drives removal. All site stabilization activities will be completed in accordance with regulatory requirements and the approved Storm Water Pollution Prevention Plan (SWPPP) and NPDES Construction General Permit.

PERMITTING REQUIREMENTS FOR DECOMMISSIONING

Approvals are currently required prior to initiation of ground-disturbing activity. This cost estimate assumes the same approvals are required when decommissioning occurs in the future. The permitting requirements listed below will be reviewed and might be subject to revisions based on local, state, and federal regulations at the time of decommissioning.

National Pollutant Discharge Elimination System (NPDES) Construction General Permit

U.S. Environmental Protection Agency - Ground disturbance of greater than 1 acre requires preparation of a Storm Water Pollution Prevention Plan, including erosion and sedimentation controls.

Building Permit

A building permit is required to construct the facility. A building permit must also be obtained for any construction, alteration, repair, demolition, or change to the use or occupancy of a building.

Permit Requirement Assumptions

No significant ground disturbance or grading associated with decommissioning, including temporary laydown areas, are required within areas subject to additional local, state, or federal permitting.

SOLAR DECOMMISSIONING ESTIMATE

The following items can be salvaged and recycled: fence material, racking piles, PV panels, miscellaneous tracker equipment, AC and DC wiring, combiner boxes, inverters, transformers, medium voltage equipment, electrical equipment posts, and customer owned utility poles.

The decommissioning cost estimate is based on 2023 Champaign County prevailing labor rates equipment rates and credits for salvaging project material using an average material price index over the last 5 years. The salvage value and equipment rates have been estimated using publicly available data from FEMA published Schedule of Equipment Rates. The salvage value rates have

Champaign Solar 1B LLC

been estimated using publicly available data (e.g., <https://fred.stlouisfed.org>), as well as industry provided actual salvage values and previous experience with similar projects. Five-year average salvage values were calculated based on price index interpolation.

The estimated costs utilize hourly and monthly rates listed below:

2023 Wages

- Labor at \$33.37/hr;
- Operating engineer at \$46.85/hr;
- Truck driver at \$45.27/hr;
- Electrician at \$50.66/hr;
- Skid steer rental at \$2,350.00/month;
- Excavator rental at \$4,925.00/month; and
- Dump truck rental at \$52.96/hr

Salvage Values

- Steel (e.g., fence, racking, posts) at \$0.14/lb.;
- PV panels at \$5/panel;
- Electrical components (e.g., combiner boxes, inverters, transformer) at \$0.28/lb.;
- DC wiring (copper) at \$1.3/lb.; and
- AC wiring (copper and aluminum) at \$1.14/lb.

The estimated cost of construction activities associated with decommissioning using current wages is \$456,108. The material salvage value is \$125,743, 70% of which (\$88,020) is available as a decommissioning cost credit. The net decommissioning cost, accounting for 70% salvage value is estimated to be \$368,088. The detailed costs are attached.

The attached preliminary decommissioning cost estimate is based on the construction development set created by Pivot Energy on October 10, 2022. Changes to the plans and construction may affect the scope and costs of Facility decommissioning. If required by the county, final decommissioning costs should be revised based on "As-Built" plans. The attached decommissioning cost estimate was prepared under the supervision of a registered professional engineer in the state of Illinois. The opinion of probable costs is based on experience in the design and construction of energy facilities and are subject to final engineering/construction.

If at any time in the future, the prevailing professionally accepted standards of economic feasibility of recycling and or environmental implications of hazardous waste changes to increase the costs associated with decommissioning, the cost estimate will be revised, and the bonds will need to be modified accordingly to cover said cost.

Champaign Solar 1B LLC

This opinion assumes a third-party contractor, experienced in the construction and decommissioning of photovoltaic facilities will lead the effort. The reported costs include labor materials, taxes, insurance, transport costs, equipment rental, contractor’s overhead, and contractor’s profit; the labor costs have been estimated using regional labor rates and labor efficiencies from the United States Department of Agriculture (USDA) /the US Bureau of labor statistics for construction workers in 2023 along with previous decommissioning plan estimates completed for other similar projects.

Champaign Solar 1B LLC, by its duly authorized representative’s signature below, hereby acknowledges that it has reviewed this Decommissioning and Site Reclamation Plan, and approves of the same, and agrees to be bound by the terms and conditions contained therein.

Authorized Representative: _____

Print Name: _____

Title: _____

Date: _____

Champaign Solar 1B
Decommissioning Cost Estimate

Task	Unit	Estimated Quantity	Cost per Unit 2023	Total Gross Cost 2023	Salvage Value 2023	Net Costs 2023
Engineering & Permitting	LS	1	\$ 11,250.00	\$ 11,250.00		\$ 11,250.00
Mobilization	LS	1	\$ 28,857.70	\$ 28,857.70		\$ 28,857.70
Silt Fence	LF	4,650	\$ 2.70	\$ 12,555.00		\$ 12,555.00
Access Road Removal & Restoration	SF	31,690	\$ 3.50	\$ 110,915.00		\$ 110,915.00
Equipment Pad & Restoration	EA	1	\$ 900.00	\$ 900.00		\$ 900.00
Seed Disturbed Areas (50% disturbed)	AC	14	\$ 938.00	\$ 13,132.00		\$ 13,132.00
Fence Removal	LF	4,650	\$ 2.30	\$ 10,695.00	\$ (3,228.96)	\$ 7,466.04
Site Clean Up	AC	28	\$ 260.00	\$ 7,280.00		\$ 7,280.00
Rack and Post Removal	EA	1,800	\$ 70.00	\$ 126,000.00	\$ (63,000.00)	\$ 63,000.00
Remove Panels	EA	10,776	\$ 2.80	\$ 30,172.80	\$ (51,186.00)	\$ (21,013.20)
AC Wiring-Direct Burial and Overhead	LF	4,600	\$ 0.21	\$ 968.25	\$ (471.96)	\$ 496.29
DC Wire Removal	LF	88,800	\$ 0.40	\$ 35,520.00	\$ (4,617.60)	\$ 30,902.40
Electrical Disconnect	EA	1	\$ 210.00	\$ 210.00		\$ 210.00
Combiner Box	EA	17	\$ 180.00	\$ 3,060.00	\$ (209.44)	\$ 2,850.56
Inverter	EA	20	\$ 180.00	\$ 3,600.00	\$ (542.08)	\$ 3,057.92
Transformer	EA	3	\$ 500.00	\$ 1,500.00	\$ (2,553.60)	\$ (1,053.60)
SUBTOTAL				\$ 396,615.75	\$ (125,809.64)	\$ 270,806.11
Other Costs						
Contractor Profit	%	8%		\$ 31,729.26		\$ 31,729.26
Contractor Overhead & Management	%	5%		\$ 19,830.79		\$ 19,830.79
Contractor Insurance	%	2%		\$ 7,932.32		\$ 7,932.32
SUBTOTAL				\$ 59,492.36		\$ 59,492.36
DECOMMISSIONING TOTAL				\$ 456,108.11		\$ 330,298.47

*Salvage values determined linearly interpolating relative material values over a five year span, and averaging the value

**Material labor cost estimated utilizing labor rates using the posted March, 1, 2023 Champaign County prevailing wage (Foreman Hourly Rate) and FEMA 2019 schedule.

April 12, 2023

Liz Reddington
625 W Adams St, Floor 17
Chicago, IL 60661

Re: Champaign Solar 1 LLC & Champaign Solar 1b LLC Screening Waiver Request

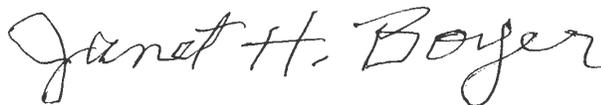
Dear Liz,

We understand that, as a requirement of the Champaign County Zoning Ordinance, it is required to provide screening for your proposed solar Projects, Champaign Solar 1 LLC and Champaign Solar 1b LLC, if the projects are located within 1,000 feet of an existing dwelling. We also understand that our home is approximately 945 feet from the nearest point of the Project.

As the owner of the property on which the Project is proposed (PIN 18-32-34-400-001), and as the owner of the nearest dwelling to the project, we agree to waive the visual screening requirement for both Champaign Solar 1 LLC and Champaign Solar 1b LLC.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Janet H. Boyer". The signature is written in a cursive, flowing style.

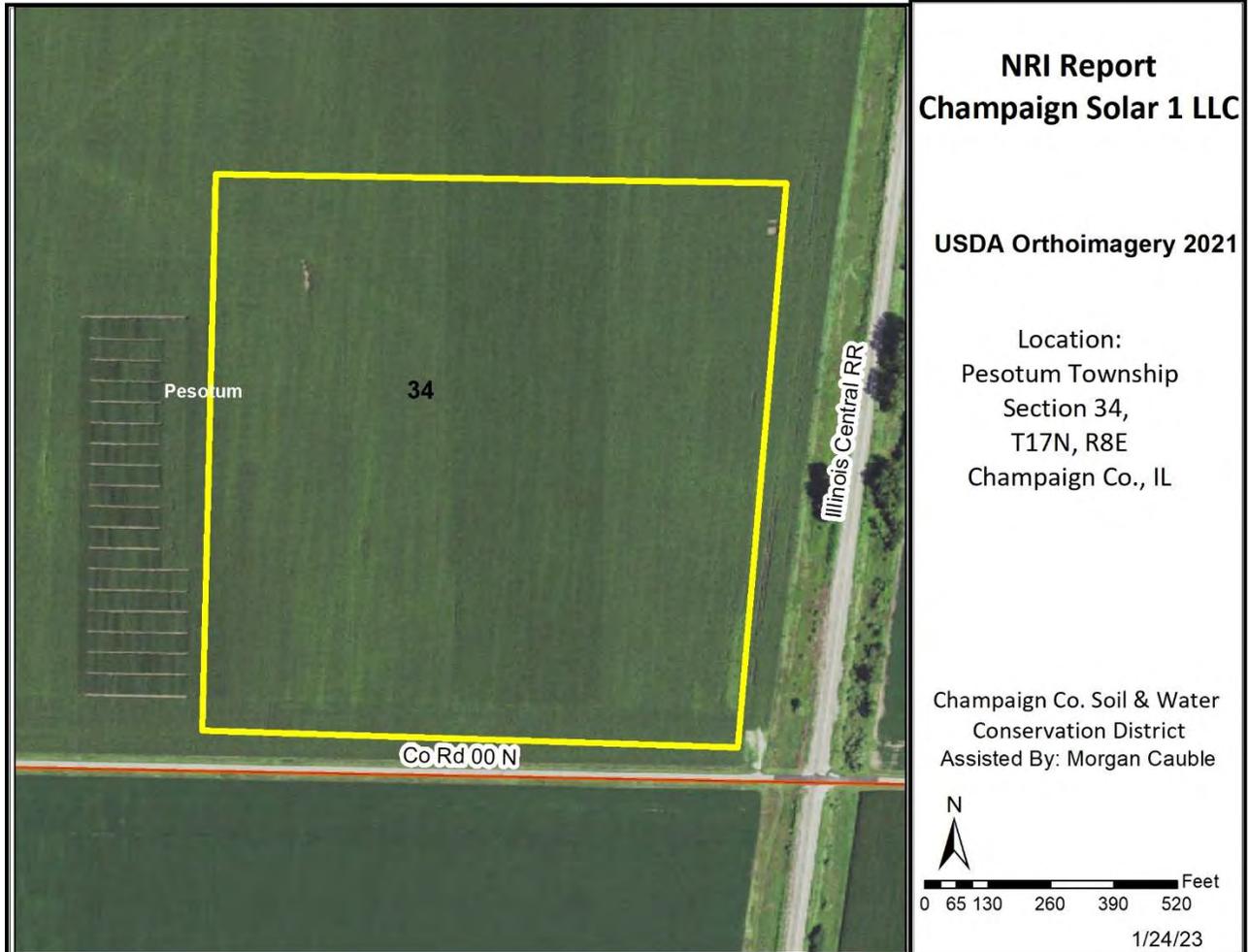
Janet H. Boyer
JHBLT LLC Trustee
305 E Sale Street,
Tuscola, IL 61953

RECEIVED

JAN 24, 2023

**CHAMPAIGN COUNTY
PLANNING & ZONING**

JANUARY 24, 2023



**PREPARED BY: CHAMPAIGN COUNTY SOIL & WATER
CONSERVATION DISTRICT**

2110 W PARK CT, STE C, CHAMPAIGN, IL 61821
(217) 352-3536 EXT 3 | WWW.CCSWCD.COM

Champaign County Soil and Water Conservation District Natural Resource Information Report (NRI)
--

Date District Board Reviewed Application	January 24, 2023
Applicant's Name	Champaign Solar 1 LLC
Contact Person	Elizabeth Reddington
Size of Subject Property	30.2
Present Zoning	-
Proposed Zoning	-
Present Land Use	Agricultural
Proposed Land Use	Solar Development

<i>Copies of this report or notification of the proposed land-use change were provided to:</i>	<i>Yes</i>	<i>No</i>
The Applicant	x	
The Contact Person	x	
The Local/Township Planning Commission	n/a	n/a
The Village/City/County Planning & Zoning Department	x	
The Champaign County Soil & Water Conservation District Files	x	

Report Prepared By: Morgan Cauble, Conservation Coordinator

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Forward

Soil and Water Conservation Districts are required to prepare Natural Resource Information (NRI) Reports under the Illinois Soil and Water Conservation Act of 1977, Illinois Revised Statutes, Chapter Five.

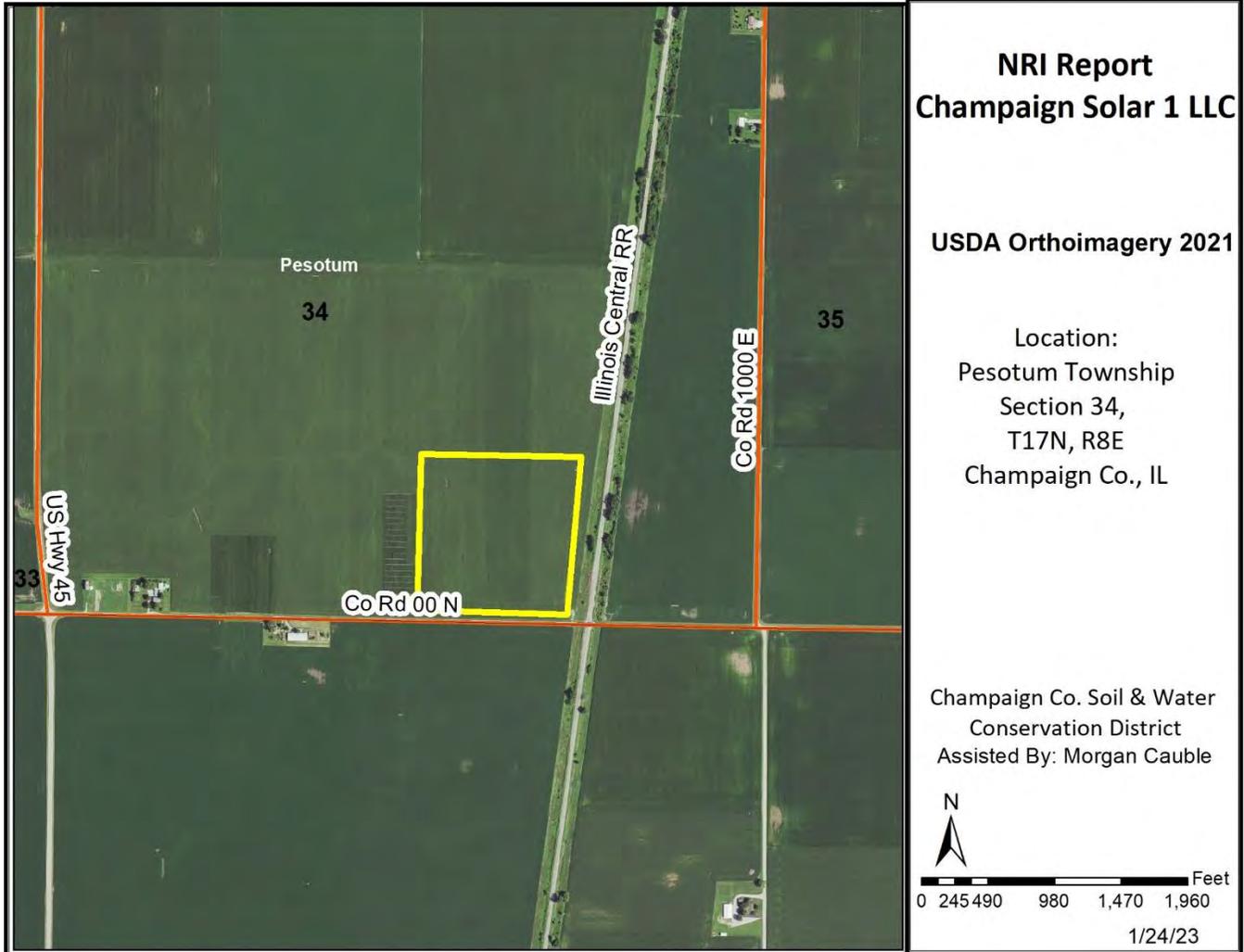
Section 22.02a The Soil and Water Conservation District shall make all natural resource information available to the appropriate county agency or municipality in the promulgation of zoning, ordinances or variances. Any person who petitions any municipality or county agency in the district for variation, amendment, or other relief from municipality's or county's zoning ordinance or who proposes to sub-divide vacant or agricultural lands therein shall furnish a copy of such petition or proposal to the Soil and Water Conservation District. The Soil and Water Conservation District shall be given not more than thirty days from the time of receipt of the petition or proposal to issue its written opinion concerning the petition or proposal and submit the same to the appropriate county agency or municipality for further action. Added by Act approved December 3, 1971.

This report provides technical data necessary to evaluate the natural resources of a specific area and the impacts or limitations associated with the proposed land use change. The report is limited to information researched by the Champaign County Soil and Water Conservation District staff. (Technical information is obtained from several different sources and may be subject to modification based on detailed site investigations or new technical information.) The information gathered in this report comes from several key reference materials and are cited throughout this report and listed in the Reference section. Any questions on the information contained in this report can be directed to:

Champaign County Soil and Water Conservation District
2110 W. Park Court, Suite C
Champaign, IL 61821
Phone 217-352-3536 ext. 3

Subject Property Location

Location Map for Natural Resources Information Report for the Champaign Solar 1 LLC near Pesotum. The property is located in the southeast quarter of Section 34, Township 17N, Range 8E in Champaign County, Illinois.



Summary and Concerns of the Board

The Champaign County Soil and Water Conservation District has reviewed the proposed land use change and has the following concerns relevant to the impact on the area's natural resources.

1. All soils on the subject property are not suitable sanitary facilities or dwellings. It is advised to perform onsite investigations with a professional to determine construction strategy before moving forward. See pages 7-9.
2. All soils on the subject property are not suitable for dwellings or small commercial buildings. It is advised to consult with a professional to determine safety and quality of current and future construction projects. See pages 7-9.
3. The subject property is located in the *Pesotum Consolidated Main* drainage district. Please contact drainage district officials for questions or concerns regarding drainage management.
4. The average Land Evaluation (LE) score for this site is: 100. See pages 13-14.
5. Wetlands are present near the subject property. It is recommended to take precautions to protect wetland and water quality and health during project lifespan. See pages 17-18.

Soil Information

The soil information comes from the United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) Soil Survey of Champaign County. This information is important to all parties involved in determining the suitability of the proposed land use change. Each polygon is given a number with letters, which represents its soil type, slope, flooding, etc., and is then called a map unit. Each soil map unit has limitations for a variety of land uses, which are explained using interpretations.

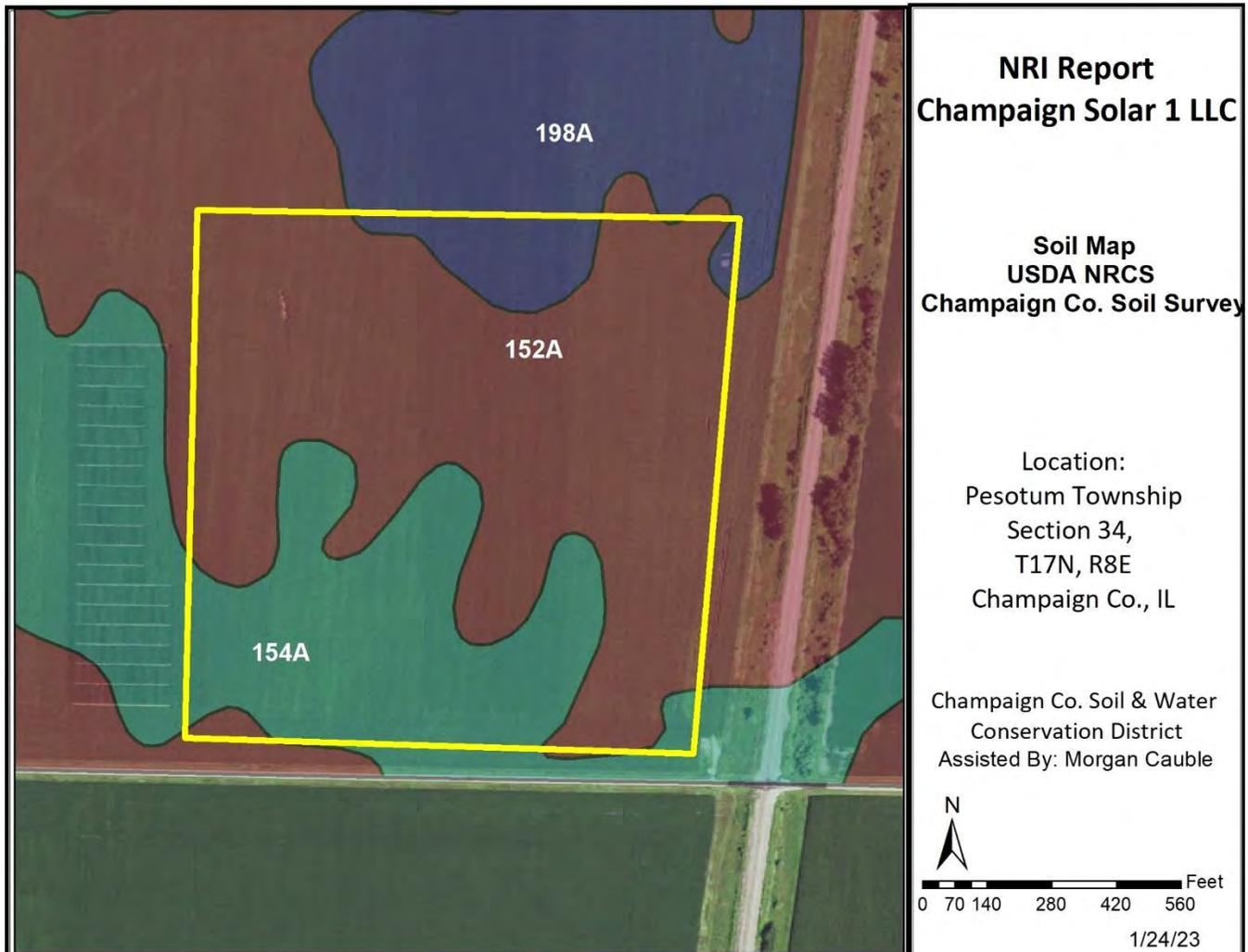


Table 1. Soil map unit descriptions.

Map Unit Symbol	Description	Acres	Percent of Area
152A	Drummer silty clay loam, 0-2% slopes	19.5	64.6%
154A	Flanagan silt loam, 0-2% slopes	8.9	29.6%
198A	Elburn silt loam, 0-2% slopes	1.8	5.8%

Introduction to Soil Interpretations

Non-agricultural soil interpretations are ratings that help engineers, planners, and others understand how soil properties influence behavior when used for nonagricultural uses such as building site development or construction materials. This report gives ratings for proposed uses in terms of limitations and restrictive features. The tables list only the most restrictive features. Other features may need treatment to overcome soil limitations for a specific purpose.

Ratings come from the soil's "natural" state, that is, no unusual modification occurs other than that which is considered normal practice for the rated use. Even though soils may have limitations, an engineer may alter soil features or adjust building plans for a structure to compensate for most degrees of limitations. However, most of these practices are costly. The final decision in selecting a site for a land use generally involves weighing the costs for site preparation and maintenance.

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for the types of proposed improvements that are listed or inferred by the petitioner as entered on the report application and/or zoning petition. The most common type of building limitation this report gives limitations ratings for is septic systems. It is understood that engineering practices can overcome most limitations for buildings with and without basements, and small commercial buildings. Organic soils, when present on the subject property, are referenced in the hydric soils section of the report.

The area of development will be susceptible to erosion both during and after construction. Any areas left bare for more than 7 days should be temporarily seeded or mulched and permanent vegetation needs to be established as soon as possible.

Limitation Ratings

1. *Not limited*- This soil has favorable properties for the intended use. The degree of limitation is minor and easy to overcome. Those involved can expect good performance and low maintenance.
2. *Somewhat limited*- This soil has moderately favorable properties for the intended use. Special planning, design, or maintenance can overcome this degree of limitation. During some part of the year, the expected performance is less desirable than for soils rated "*not limited*."
3. *Very limited*- This soil has one or more properties that are unfavorable for the rated use. These may include the following: steep slopes, bedrock near the surface, flooding, high shrink-swell potential, a seasonally high water table, or low strength. This degree of limitation generally requires major soil reclamation, special design, or intensive maintenance, which in most situations is difficult and costly.

Soil Interpretations

Sanitary Facilities

The table below shows the degree and kind of soil limitations that affect septic tank absorption fields and sewage lagoons.

Septic Tank Absorption Fields: Areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. The ratings are based on soil properties, site features, and observed performance of the soils. Permeability, high water table, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Large stones and bedrock or a cemented pan interfere with installation. Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage can affect public health. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively.

Table 2. Septic tank absorption fields.

Map Unit Symbol	Septic Tank Absorption Fields	Acres	Percent of Area
152A	Very limited: ponding, depth to saturated zone, slow water movement	19.5	64.6%
154A	Very limited: depth to saturated zone, slow water movement	8.9	29.6%
198A	Very limited: depth to saturated zone, seepage, slow water movement	1.8	5.8%

For the subject property: 100% of the soils on the property are very limited for the use of septic tank absorption fields and special design is required for any septic tank absorption field.

Building Site Development

The table below shows the degree and the kind of soil limitations that affect dwellings with or without basements and small commercial buildings.

Dwellings and Small Commercial Buildings: Structures built on a shallow foundation on undisturbed soil that are three stories or less. The ratings are based on soil properties, site features, and observed performance of the soils. High water table, depth to bedrock or to a cemented pan, large stones, slope, and flooding affect the ease of excavation, construction, and maintenance.

Table 3. Dwellings and small commercial buildings limitations.

Map Unit Symbol	Dwellings with Basements	Dwellings without Basements	Small Commercial Buildings	Acres	Percent of Area
152A	Very limited: ponding, depth to saturated zone, shrink-swell	Very limited: ponding, depth to saturated zone, shrink-swell	Very limited: ponding, depth to saturated zone, shrink-swell	19.5	64.6%
154A	Very limited: depth to saturated zone, shrink-swell	Somewhat limited: depth to saturated zone, shrink-swell	Somewhat limited: depth to saturated zone, shrink-swell	8.9	29.6%
198A	Very limited: depth to saturated zone, shrink-swell	Somewhat limited: depth to saturated zone, shrink-swell	Somewhat limited: depth to saturated zone, shrink-swell	1.8	5.8%

Soil Water (Wetness) Features

This section gives estimates of various soil water (wetness) features that should be taken into consideration when reviewing engineering for a land use project.

Hydrologic Soil Groups (HSGs): The groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

- Group A: Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well-drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.
- Group B: Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well-drained or well-drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.
- Group C: Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.
- Group D: Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water

table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Note: if a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D) the first letter is for drained areas and the second is for undrained areas.

Surface Runoff: Refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based upon slope, climate, and vegetative cover and indicates relative runoff for very specific conditions (it is assumed that the surface of the soil is bare and that the retention of surface water resulting from the irregularities in the ground surface is minimal). The classes are negligible, very low, low, medium, high, and very high.

Water Table: Refers to a saturated zone in the soil and the data indicates, by month, depth to the top (upper limit) and base (lower limit) of the saturated zone in most years. These estimates are based upon observations of the water table at selected sites and on evidence of a saturated zone (grayish colors or mottles, called redoximorphic features) in the soil. Note: a saturated zone that lasts for less than a month is not considered a water table.

Ponding: Refers to standing water in a closed depression and the data indicates duration and frequency of ponding.

- Duration: expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days and *very long* if more than 30 days.
- Frequency: expressed as *none* (ponding is not possible), *rare* (unlikely but possible under unusual weather conditions), *occasional* (occurs, on average, once or less in 2 years), *frequent* (occurs, on average, more than once in 2 years).

Flooding: The temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

- Duration: Expressed as *extremely brief* if 0.1 hour to 4 hours; *very brief* if 4 hours to 2 days; *brief* if 2 to 7 days; *long* if 7 to 30 days; and *very long* if more than 30 days.
- Frequency: Expressed as *none* (flooding is not probable), *very rare* (very unlikely but possible under extremely unusual weather conditions (chance of flooding is less than 1% in any year)), *rare* (unlikely but possible under unusual weather conditions (chance of flooding is 1 to 5% in any year)), *occasional* (occurs infrequently under normal weather conditions (chance of flooding is 5 to 50% in any year but is less than 50% in all months in any year)), and *very frequent* (likely to occur very often under normal weather conditions (chance of flooding is more than 50% in all months of any year)).

Note: The information is based on evidence in the soil profile. In addition, consideration is also given to local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Table 4. Soil water (wetness) features.

Map Unit Symbol	HSG	Surface Runoff	Depth to Water Table (ft)			Ponding		Flooding	
			Upper Limit	Lower Limit	Kind	Duration	Frequency	Duration	Frequency
152A	B/D	Neg	0.0-1.0	6.0	Apparent	Brief	Frequent	-	None
154A	C/D	Low	1.0-2.0	3.7-5.4	Perched	-	None	-	None
198A	B/D	Low	1.0-2.0	6.0	Apparent	-	None	-	None

Hydric Soils

Hydric soils by definition have seasonal high water at or near the soil surface and/or have potential flooding or ponding problems. All hydric soils range from poorly suited to unsuitable for building. Soil maps may not be small enough to show inclusions of hydric soils, so it is important to consult a soil scientist if building residential areas on hydric soils or soils with hydric inclusions.

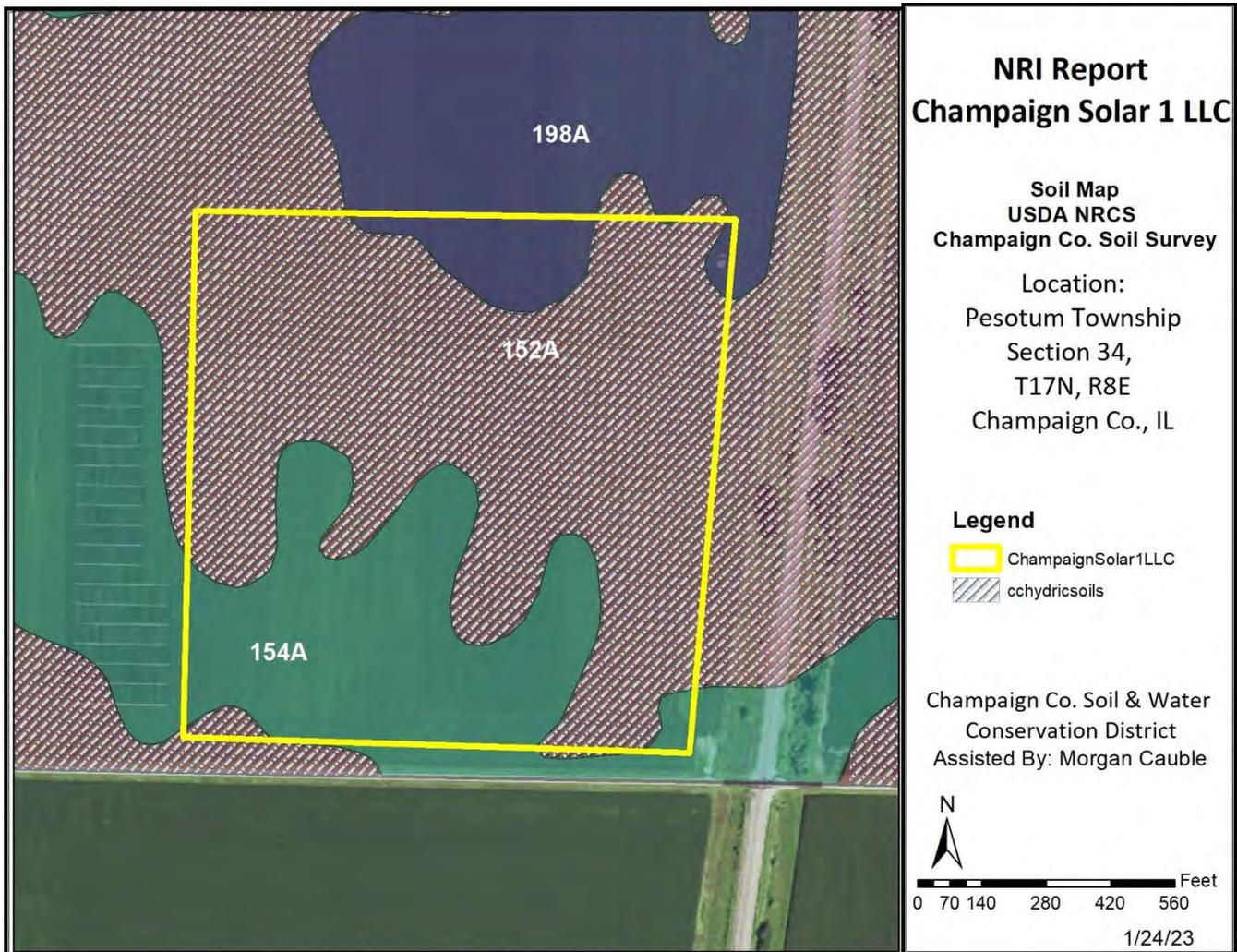
On most agricultural soils in the county that are poorly or somewhat poorly drained, subsurface agriculture drainage tile occurs. This expedites drainage but must be maintained and undisturbed so the soil does not return to its original hydrologic condition.

The Champaign County SWCD recommends the following for an intense land use, such as a subdivision:

1. A topographical survey with 1-foot contour intervals to define the flood area.
2. An intensive soil survey to define locations of hydric inclusions.
3. A drainage tile survey to locate tiles that must be preserved.

Table 5. Hydric soils.

Map Unit Symbol	Drainage Class	Hydric Designation	Acres	Percent of Area
152A	Poorly drained	Hydric	19.5	64.6%
154A	Somewhat poorly drained	Non hydric	8.9	29.6%
198A	Somewhat poorly drained	Non hydric	1.8	5.8%
			Percent Hydric	64.6%



Soil Erosion and Sediment Control

Erosion is the wearing away of the soil by water, wind, and other forces and a soil's erodibility is mainly determined by the following properties: soil texture, slope, soil structure, soil organic matter content. Soil erosion threatens the nation's soil productivity and contributes to pollutants in waterways. Sediment entering creeks, rivers, and lakes degrade water quality and reduce capacity, which increases the risk of flooding and disrupts ecosystems. Sediment also carries other possible pollutants, such as chemicals and metals, by adhering to the sediment's surface.

Erosion Control at Construction Sites

Construction sites can experience 20 to 200 tons/acre/year of soil loss, which is greater than other land uses, like agriculture, averaging 4-5 tons/acre/year. It is extremely important that the developer employ Best Management Practices, like the ones listed below, to help reduce soil erosion and protect water quality during and after construction.

- **Silt Fencing:** A woven geotextile fabric stretched across and attached to supporting posts used to intercept sediment-laden runoff from small drainage areas of disturbed soil. The purpose is to filter out sediment from runoff before it enters a water body.
- **Construction Road Stabilization:** The stabilization of temporary construction access routes, subdivision roads, on-site vehicle transportation routes, and construction parking areas with stone immediately after grading the area to reduce erosion.

- **Vegetative Cover:** One of the most important means to control runoff is to plant temporary vegetation around the perimeter of the construction site. This provides a natural buffer to filter sediment and chemicals. The CCSWCD recommends that temporary grass be planted (i.e. smooth brome grass, oats, cereal rye) to help protect soil from erosion during construction.

EPA Stormwater Pollution Prevention Plan (SWPPP) Reference Tool

EPA requires a plan to control storm water pollution for all construction sites over 1 acre in size. *A Guide for Construction Sites* is a reference tool for construction site operators who must prepare a SWPPP to obtain NPDES permit coverage for their storm water discharges. More information at the following website: <http://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources>.

Table 6. Soil erosion potential.

Map Unit Symbol	Slope	Rating	Acres	Percent of Area
152A	0.5%	Slight	19.5	64.6%
154A	0.9%	Slight	8.9	29.6%
198A	1.0%	Slight	1.8	5.8%

Prime Farmland Soils

Prime farmland soils are an important resource to Champaign County. Some of the most productive soils in the world occur locally. Each soil map unit in the United States is assigned a prime or non-prime rating. Urban or built-up land on prime farmland soils is not prime farmland.

Table 7. Prime farmland designation.

Map Unit Symbol	Prime Designation	Acres	Percent of Area
152A	Prime farmland if drained	19.5	64.6%
154A	All areas are prime farmland	8.9	29.6%
198A	All areas are prime farmland	1.8	5.8%
Percent Prime Farmland			100%

The Land Evaluation and Site Assessment System

Decision-makers in Champaign County use the Land Evaluation and Site Assessment (LESA) system to determine the suitability of a land use change and/or a zoning request as it relates to agricultural land. The LESAs system was developed by the USDA-NRCS and takes into consideration local conditions, such as physical characteristics of the land, compatibility of surrounding land uses, and urban growth factors. The LESAs system is a two-step procedure:

- Land Evaluation (LE) – the soils of a given area are rated and placed in groups ranging from the best to worst suited for a stated agricultural use. The best group is assigned a value of 100 and is based on data from the Champaign County Soil Survey. The Champaign County LE designates soils with a score of 91 to 100 as best prime farmland, as reported in Bulletin 811 Optimum Crop Productivity Ratings for Illinois Soils. Best Prime Farmland consists of:
 - a) Soils identified as agricultural value groups 1, 2, 3, and/or 4
 - b) Soils that, in combination on a subject site, have an average LE of 91 or higher
 - c) Any site that includes a significant amount (10% or more of the area proposed to be developed) of agriculture value groups 1, 2, 3, and/or 4
- Site Assessment (SA) – the site is numerically evaluated according to important factors that contribute to the quality of the site. Each factor selected is assigned values in accordance with the local needs and objectives.

The Champaign County LESA system is designed to provide officials with a systematic objective means to numerically rate a site in terms of its agricultural importance.

- To assist officials in evaluating the proposed conversion of farmland on a parcel or site in zoning cases that include farmland conversion to a non-agricultural land use.
- To assist in the review of state and federal projects for compliance with the Illinois Farmland Preservation Act and the Federal Farmland Protection Policy Act in terms of their impact on important farmland.

Note: A land evaluation (LE) score will be compiled for every project property, but a site assessment score is not applicable in most cases, making the full LESA score unavailable.

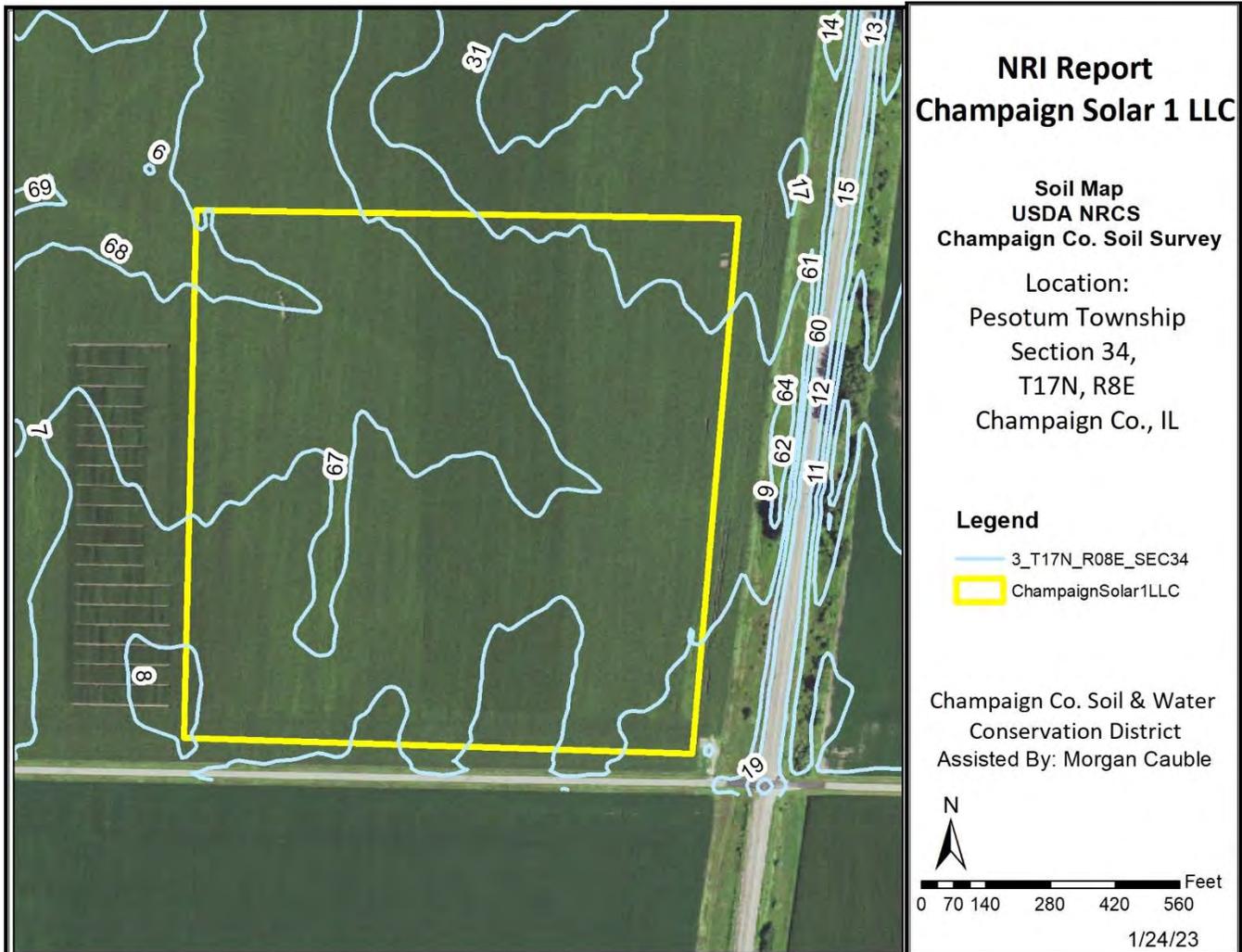
Table 8. Land Evaluation and Site Assessment System score.

Map Unit Symbol	Value Group	Relative Value	Acres	Product (Relative Value*Acres)
152A	2	100	19.5	1950
154A	1	100	8.9	890
198A	1	100	1.8	180
Totals			30.2	3020
LE Score		LE = 3020/30.2		LE = 100

For the subject property: the overall Land Evaluation (LE) score is 100.

Topographic Information

United States Geologic Survey (USGA) topographic maps give information on elevation, which are important mostly to determine slope, drainage direction, and watershed information. Elevation determines the area of impact of floods. Slope information determines steepness and erosion potential. Drainage directions determine where water leaves the subject property, possibly impacting surrounding natural resources.



Watershed Information

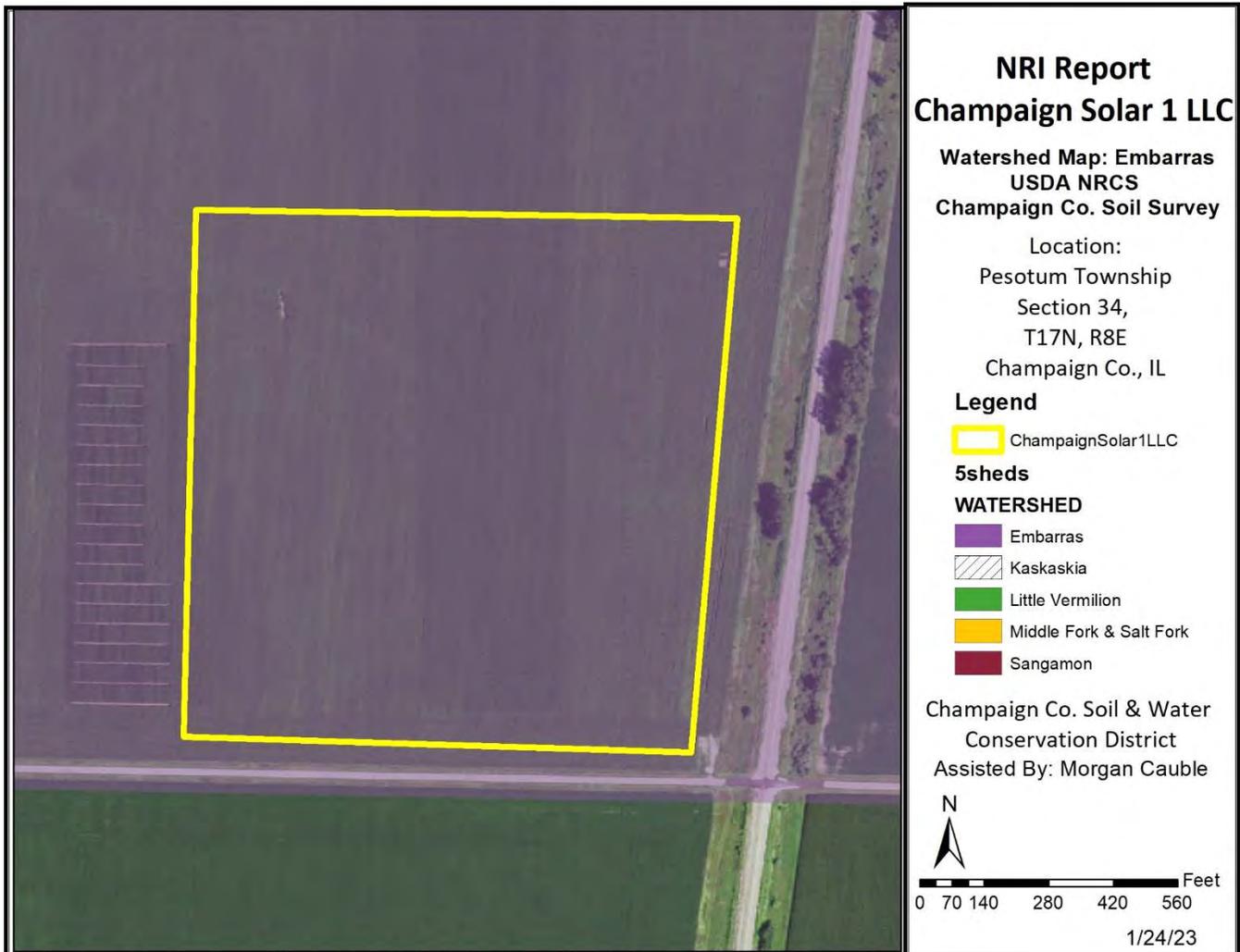
Watershed information is given when land use is changed to a subdivision type of development on parcels greater than 10 acres. A watershed is an area of land that drains to an associated water resource, such as a wetland, river, or lake. Rainwater carries pollutants through watersheds, impacting natural resources and people living downstream. Residents can minimize this impact by being aware of their environment and implications of their activities.

The following are recommendations to developers for protection of watersheds:

- Preserve open space
- Maintain wetlands as part of development
- Use natural water management
- Prevent soil from leaving construction sites
- Protect subsurface drainage
- Use native vegetation

- Retain natural features
- Mix housing and style types
- Decrease impervious surfaces
- Reduce area disturbed by mass grading
- Treat water where it falls

For the subject property: the property is located in the Embarras Watershed.



Floodplain and Wetland Information

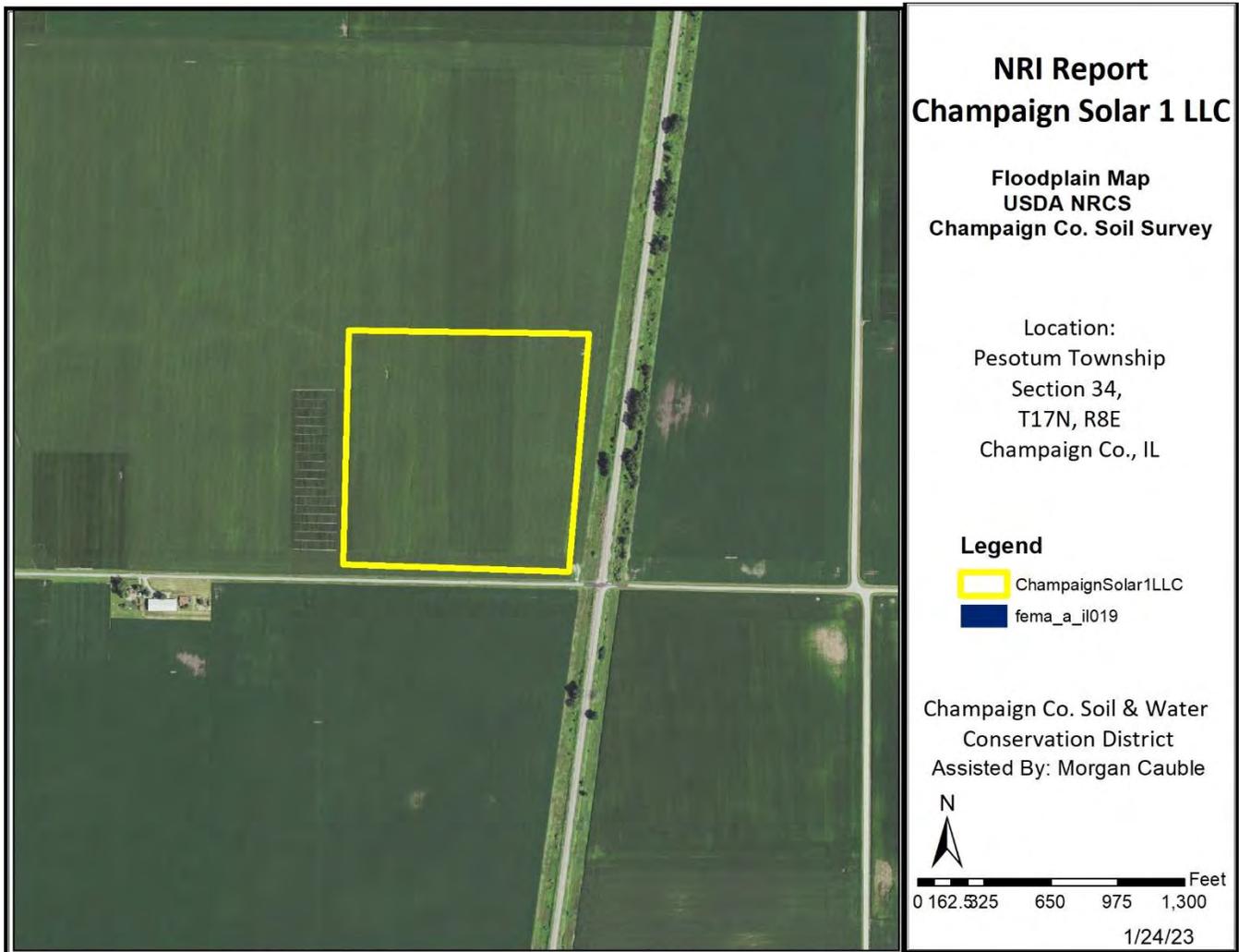
Floodplain Information

A floodplain is defined as land adjoining a watercourse (riverine) or an inland depression (non-riverine) that is subject to periodic inundation by high water. Floodplains are important areas that demand protection since they have water storage and conveyance functions that affect upstream and downstream flows, water quality and quantity, and suitability of the land for human activity. Since floodplains play distinct and vital roles in the hydrologic cycle, development that interferes with their hydrologic and biologic functions should be carefully considered.

Flooding is dangerous to people and destructive to their properties. The following map can help developers and future homeowners to “sidestep” potential flooding or ponding problems. The Flood Insurance Rate

Map (FIRM) was produced by the Federal Emergency Management Agency (FEMA) to define flood elevation adjacent to tributaries and major bodies of water that are superimposed onto a simplified USGS topographic map.

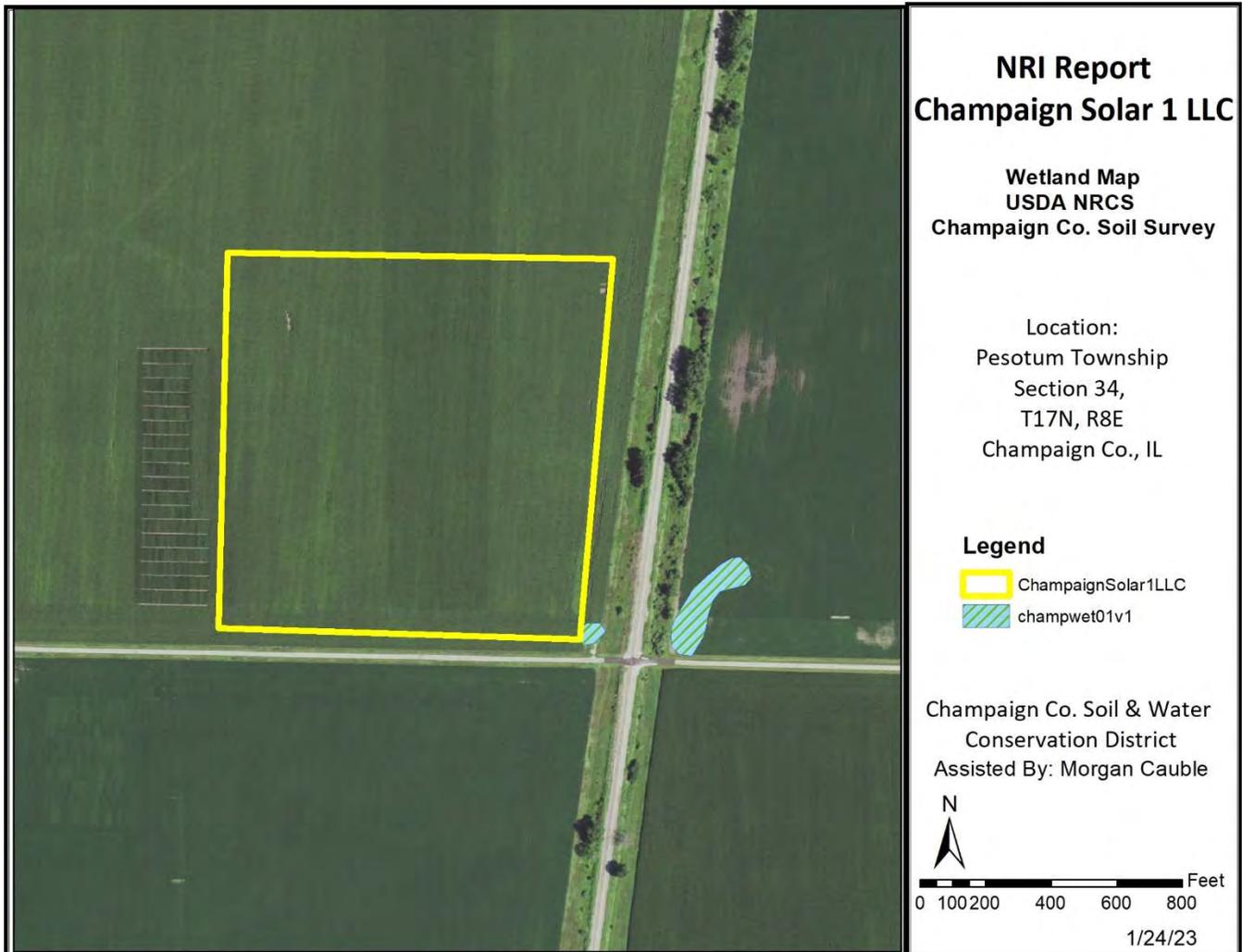
For the subject property: the property is not located near a floodplain.



Wetland Information

Wetlands function in many ways to provide numerous benefits to society and the environment, including flood control, cleanse water, recharge groundwater, and provide a wildlife habitat. However, approximately 95% of the wetlands that were historically present in Illinois have been destroyed. It is crucial that we take steps to conserve current wetlands and reestablish new wetlands where once destroyed. Wetland determinations are made by a certified NRCS staff.

For the subject property: a wetland is present near the subject property.



Wetland and Floodplain Regulations

Please read the following if you are planning to do any work near a stream, lake, wetland, or floodway, including: dredge, fill, rip rap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, flood plain, or floodway subject to State or Federal regulatory jurisdiction.

The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State's boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against flood way encroachments, maintenance and enhancement of water quality, protection of fish and wildlife habitat and recreational resources, and, in general, the protection of total public interest. Unregulated used of the waters within the State of Illinois could permanently destroy and adversely impact the public. Therefore, please contact the proper authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

Regulatory Agencies:

- Wetlands or U.S. Waters: U.S. Army Corps of Engineers
- Floodplains: Illinois Department of Natural Resources/Office of Water Resources, Natural Resources Way, Springfield, IL
- Water Quality/Erosion Control: Illinois Environmental Protection Agency

Coordination: we recommend early coordination with the agencies BEFORE finalizing work plans. This allows the agencies to recommend measures to mitigate or compensate for adverse impacts. This could reduce time required to process necessary approvals and reduce expense.

Cultural and Animal Resources

Cultural Resources

The most common cultural resources found during changes in land use are historical properties or non-structural archaeological sites. These sites often extend below the soil surface and must be protected against disruption by development or other earth moving activity if possible. Cultural resources are non-renewable because there is no way to grow a site to replace a disrupted site. Landowners with historical properties on their land have ownership of that historical property. However, the State of Illinois owns all of the following: human remains, grave markers, burial mounds, and artifacts associated with graves and human remains. Non-grave artifacts from archaeological sites and historical buildings are the property of the landowner. The landowner may choose to disturb a historical property but may not receive federal or state assistance to do so. If an earth-moving activity disturbs human remains, the landowner must contact the county coroner within 48 hours.

The Illinois Historic Preservation Agency may require a Phase 1 Archaeological review to identify any cultural resources that may be on the site. The IHPA has not been contacted by the Champaign County SWCD. The applicant may need to contact the IHPA according to current Illinois law.

Animal Resources

According to the Illinois Endangered Species Protection Act & Illinois Natural Areas Preservation Act, state agencies or local units of government must consult Illinois Department of Natural Resources (IDNR) about proposed actions that they will authorize, fund, or perform. Private parties do not have to consult, but they are liable for prohibited taking of state-listed plants and animals or for adversely modifying a Nature Preserve or a Land and Water Preserve. Home rule governments may delegate this responsibility through duly enacted ordinances to the parties seeking authorization or funding of the action.

Ecologically Sensitive Areas

Biodiversity is the sum of total of all the plants, animals, fungi, and microorganisms in the world, or in a particular area that make up the fabric of the Earth and allow it to function. Biodiversity must be protected, as it is diminishing, which weakens entire natural systems. It is intrinsically valuable for an ecosystem to be biologically diverse to sustain ecosystem health and support life.

As part of the Natural Resources Information Report, staff checks if any nature preserves are in the general vicinity of the subject property. If there is a nature preserve in the area, then that resource will be identified as part of the report. The SWCD recommends that every effort be made to protect that resource. Such efforts should include but are not limited to erosion control, sediment control, stormwater management, and groundwater monitoring.

For the subject property: as shown on the below EcoCAT, there is no record of sensitive areas or endangered species in or near the subject property.



Applicant: NRCS Champaign County Field Office
Contact: Taylor Shedd
Address: 2110 W. Park court suite C
Champaign , IL 61821

IDNR Project Number: 2309159
Date: 01/19/2023

Project: Champaign
Address: Champaign, Champaign

Description: Champaign

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under 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.

Location

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

County: Champaign

Township, Range, Section:
17N, 8E, 34



**IL Department of Natural Resources
Contact**
Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
U.S. Department of Agriculture

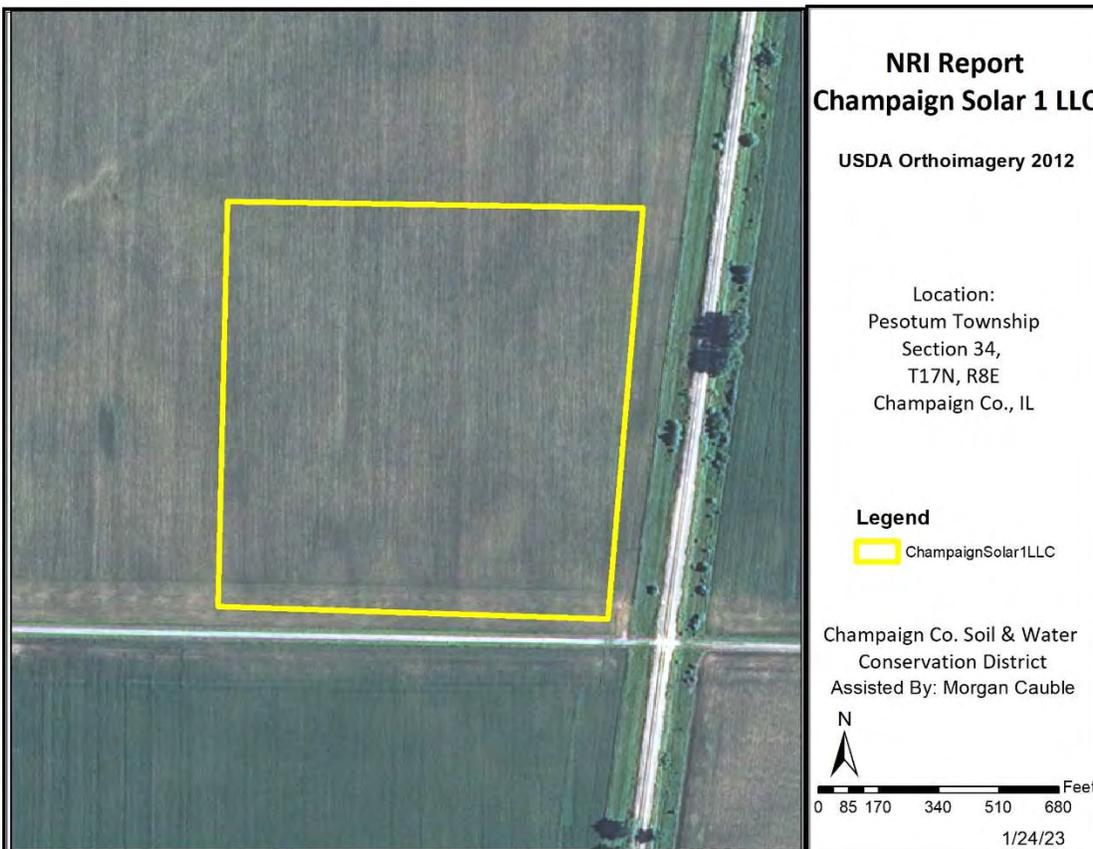
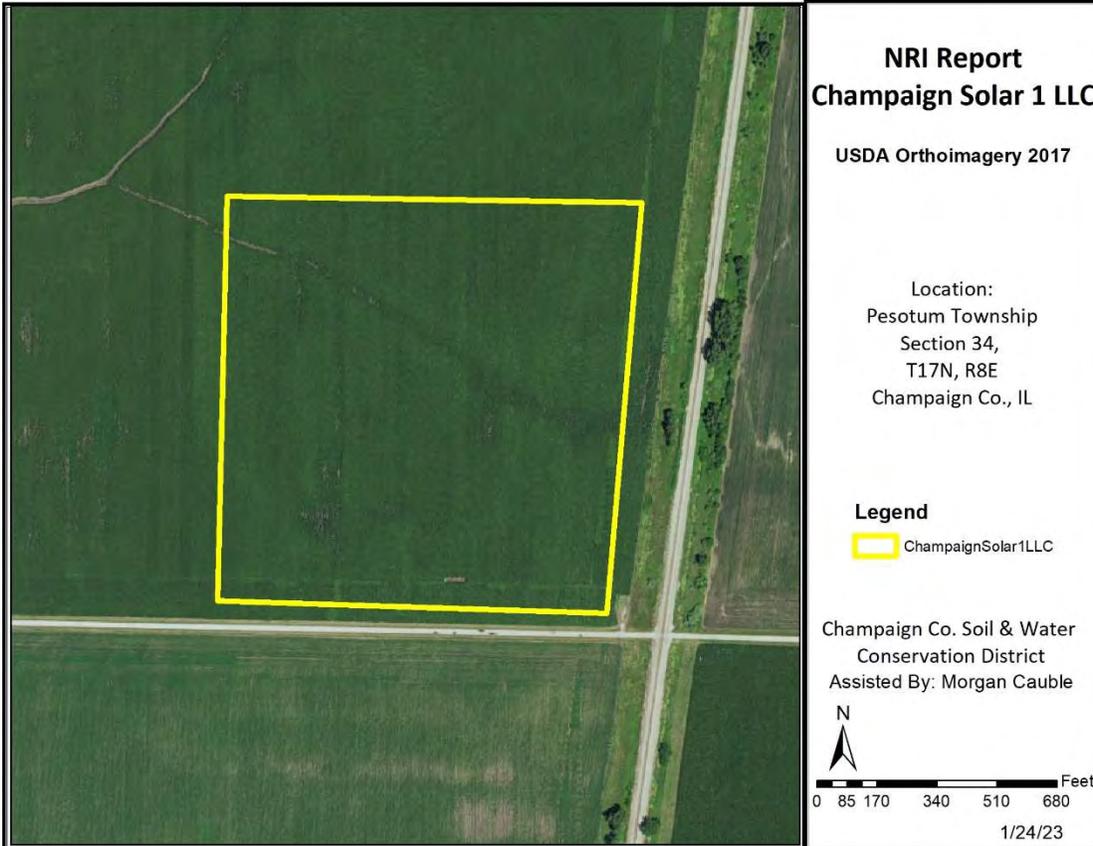
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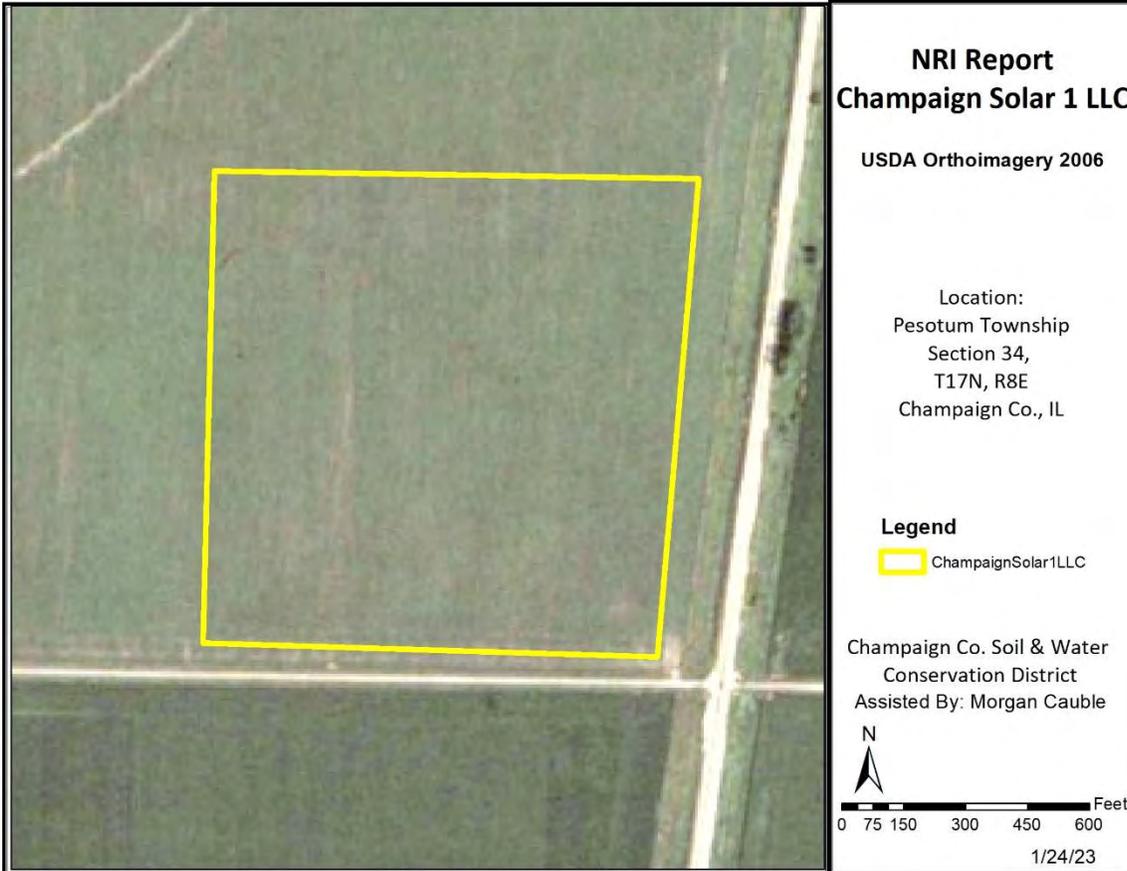
The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site 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.

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Historic Aerial Photos





Glossary and Acronyms

Agriculture – The growing, harvesting, and storing of crops, including legumes, hay, grain, fruit; and truck or vegetables, including dairy, poultry, swine, sheep, beef cattle, pony and horse, fur, and fish and wildlife; farm buildings used for growing, harvesting, and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, or for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants, or seasonal or year around hired farm workers.

ADT – average daily traffic that a local road normally receives, based upon records by the County Superintendent of Highways.

B.G. – below grade. Under the surface of the Earth.

Bedrock – indicates depth at which bedrock occurs. Also lists hardness as rippable or hard.

Flooding – indicates frequency, duration, and period during year when floods are likely to occur.

High Level Management – the application of effective practices adapted to different crops, soils, and climatic conditions. Such practices include providing for adequate soil drainage, protection from flooding, erosion and runoff control, near optimum tillage, and planting the correct kind and amount of high-quality seed. Weeds, diseases, and harmful insects are controlled. Favorable soil reaction and near-optimum levels of available nitrogen, phosphorus, and potassium for individual crops are maintained. Efficient use is made of available crop residues, barnyard manure, and/or green manure crops. All operations, when combined efficiently and timely, can create favorable growing conditions and reduce harvesting losses (within limits imposed by weather).

High Water Table – a seasonal highwater table is a zone of saturation at the highest average depth during the wettest part of the year. May be apparent, perched, or artesian.

Water Table, Apparent – a thick zone of free water in the soil indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil.

Water Table, Artesian – a water table under hydrostatic head, generally beneath an impermeable layer. When layer is penetrated, the water level rises in the uncased borehole.

Water Table, Perched – a water table standing above an unsaturated zone, often separated from a lower wet zone by a dry zone.

Delineation – (for wetlands) a series of orange flags placed on the ground by a certified professional that outlines the wetland boundary on a parcel.

Determination – (for wetlands) a polygon drawn on a map using map information that gives an outline of a wetland.

Hydric Soil – soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part (USDA Natural Resources Conservation Service, 1987).

Intensive Soil Mapping – mapping done on a small, intensive scale than a modern soil survey to determine soil properties of a specific site, i.e. mapping for septic suitability.

Land Evaluation Site Assessment (L.E.S.A.) – LESA is a systematic approach for evaluating a parcel of land and to determine a numerical value for the parcel for farmland preservation purposes.

Modern Soil Survey – a soil survey is a field investigation of the soils of a specific area, supported by information from other sources. The kinds of soil in the survey area are identified and their extent is shown on a map. An accompanying report describes, defines, classifies, and interprets the soils. Interpretations predict the behavior of soils under different uses and the soils' response to management. Predictions are made for areas of soil at specific places. Soil information collected in a soil survey are useful in developing land use plans and alternatives.

Palustrine – name given to inland fresh water wetlands.

Permeability – values listed estimate the range of time it takes for downward movement of water in the major soil layers when saturated but allowed to drain freely. The estimates are based on soil texture,

soil structure, available data on permeability and infiltration tests, and observation of water movement through soils or other geologic materials.

PIQ – parcel in question

Potential Frost Action – damage that may occur to structures and roads due to ice lens formation, causing upward and lateral soil movement. Based primarily on soil texture and wetness.

Prime Farmland – lands that are best suited for food, feed, forage, fiber, and oilseed crops. It may be cropland, pasture, woodland, or other land, but it is not urban, built up land, or water areas. When well-managed, the soil qualities and moisture supply provide a sustained high yield of crops with minimum inputs of energy and economic resources in the least damage to the environment. Prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The level of acidity or alkalinity is acceptable. Prime farmland has few or no rocks and is permeable to water and air. It is not excessively erodible or saturated with water for long periods and is not frequently flooding during the growing season. The slope ranges from 0 to 5 percent. (USDA Natural Resources Conservation Service)

Productivity Indexes – express the estimated yields of the major grain crops in Illinois as a single percentage of the average yields obtained under basic management from several of the more productive soils in the state (Muscatine, Ipava, Sable, Lisbon, Drummer, Flanagan, Littleton, Elburn, Joy soil series). See Circular 1156 from the Illinois Cooperative Extension Service.

Seasonal – when used in reference to wetlands, indicates the area flooded only during a portion of the year.

Shrink-Swell Potential – indicates volume changes to be expected for the specific soil material with changes in moisture content.

Soil Mapping Unit – collection of soil and miscellaneous areas delineated in mapping. Generally, an aggregate of the delineations of many different bodies of a kind of soil or miscellaneous area but may consist of only one delineated body. Taxonomic class names and accompanying terms are used to name soil map units. They are described in terms of ranges of soil properties within the limits defined for tax and in terms of ranges of tax adjuncts and inclusions.

Soil Series – a group of soils formed from a type of parent material, having horizons that, except for texture of the surface horizon, are similar in all profile characteristics and in arrangement in the soil profile. Among these characteristics are color, texture, structure, reaction, consistence, mineralogy, and chemical composition.

Subsidence – applies mainly to organic soils after drainage. Soil material subsides due to shrinkage and oxidation.

Terrain – the area or surface over which a particular rock or group of rocks is prevalent.

Topsoil – portion of the soil profile where higher concentrations of organic material, fertility, bacterial activity, and plant growth take place. Depths of topsoil vary between soil types.

Watershed – an area of land that drains to an associated water resource, such as a wetland, river, or lake. Depending on the size and topography, watersheds can contain numerous tributaries, such as streams, ditches, and ponding areas, such as detention structures, natural ponds, or wetlands.

Wetland – an area that has a predominance of hydric soils that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of hydrophilic vegetation typically adapted for life in saturated soil conditions.

References

Field Office Technical Guide. USDA Natural Resources Conservation Service.

Flood Insurance Rate Map. National Flood Insurance Program, Federal Emergency Management Agency.

Illinois Urban Manual. 2016. Association of Illinois Soil & Water Conservation Districts.

Soil Survey of Champaign County. USDA Natural Resources Conservation Service.

Wetlands Inventory Maps. Department of the Interior.

Potential for Contamination of Shallow Aquifers in Illinois. Illinois Department of Energy and Natural Resources, State Geological Survey Division.

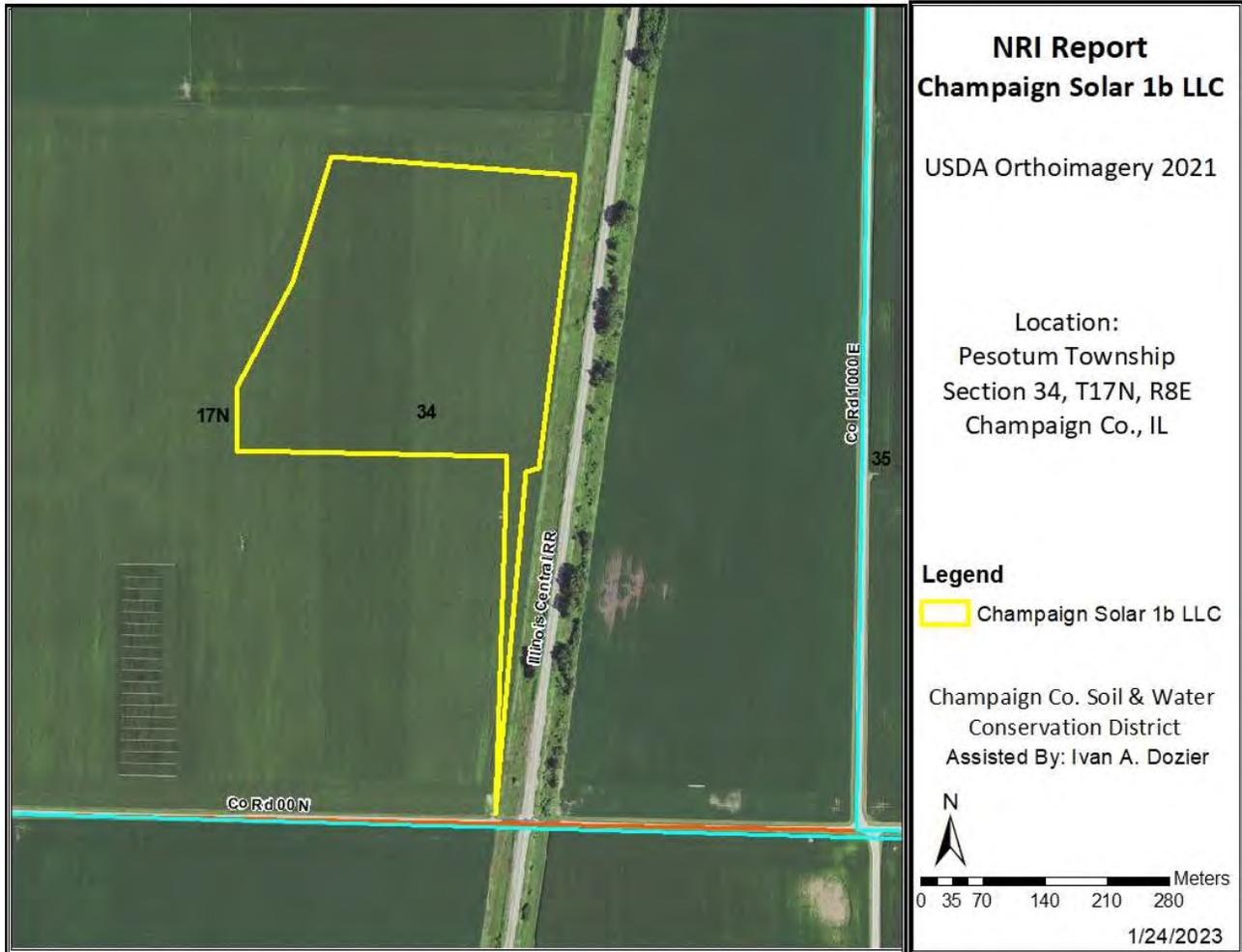
Land Evaluation and Site Assessment System. The Kendall County Department of Planning, Building, and Zoning, and the Champaign County Soil and Water Conservation District. In cooperation with USDA Natural Resources Conservation Service.

RECEIVED

JAN 24, 2023

**CHAMPAIGN COUNTY
PLANNING & ZONING**

JANUARY 24, 2023



**PREPARED BY: CHAMPAIGN COUNTY SOIL & WATER
CONSERVATION DISTRICT**

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(217) 352-3536 EXT 3 | WWW.CCSWCD.COM

Champaign County Soil and Water Conservation District Natural Resource Information Report (NRI)
--

Date District Board Reviewed Application	January 24, 2023
Applicant's Name	Champaign Solar 1b LLC
Contact Person	Elizabeth Reddington
Size of Subject Property	26.7
Present Zoning	-
Proposed Zoning	-
Present Land Use	Agricultural
Proposed Land Use	Solar Development

<i>Copies of this report or notification of the proposed land-use change were provided to:</i>	Yes	No
The Applicant	x	
The Contact Person	x	
The Local/Township Planning Commission	n/a	n/a
The Village/City/County Planning & Zoning Department	x	
The Champaign County Soil & Water Conservation District Files	x	

Report Prepared By: Morgan Cauble, Conservation Coordinator

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Forward

Soil and Water Conservation Districts are required to prepare Natural Resource Information (NRI) Reports under the Illinois Soil and Water Conservation Act of 1977, Illinois Revised Statutes, Chapter Five.

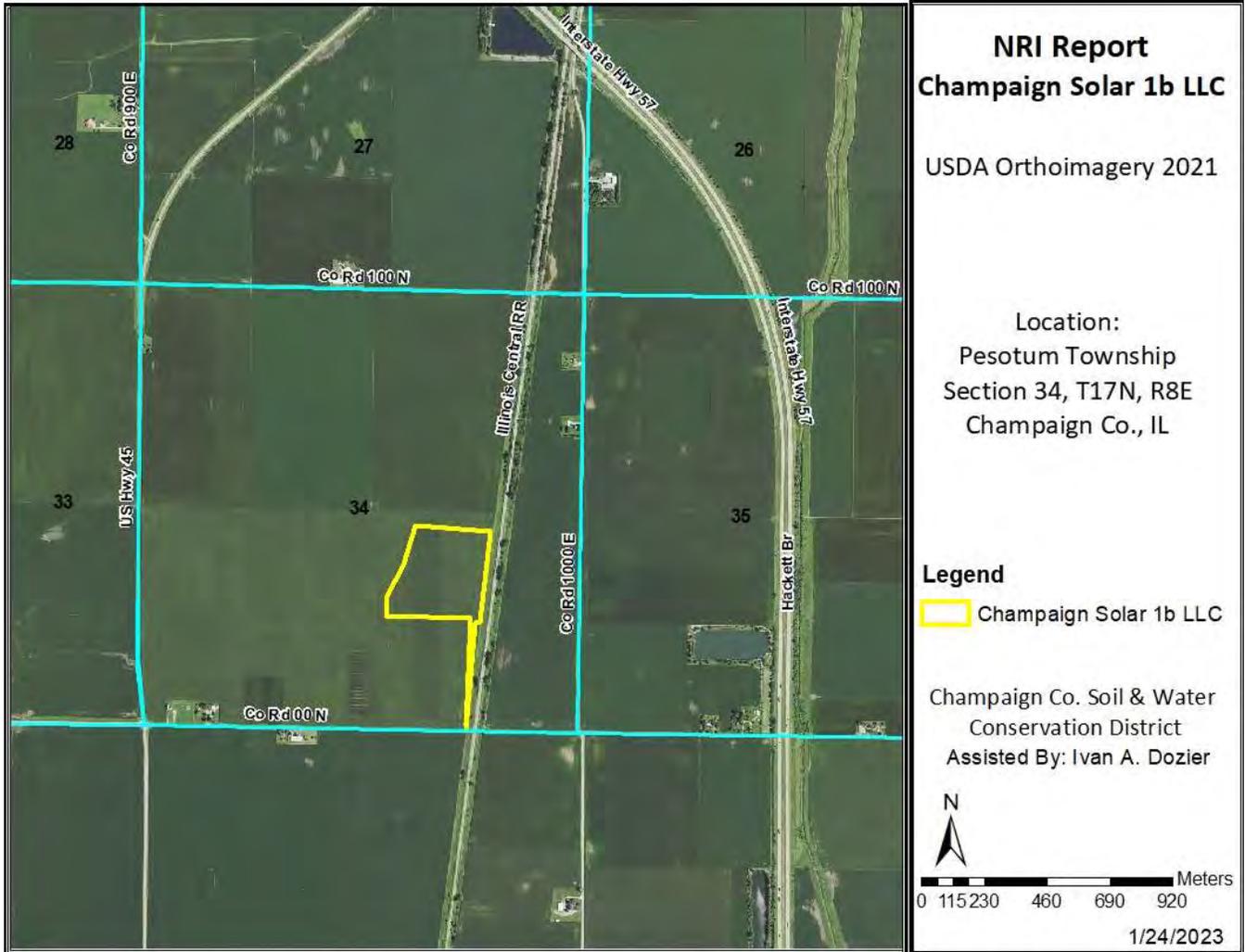
Section 22.02a The Soil and Water Conservation District shall make all natural resource information available to the appropriate county agency or municipality in the promulgation of zoning, ordinances or variances. Any person who petitions any municipality or county agency in the district for variation, amendment, or other relief from municipality's or county's zoning ordinance or who proposes to sub-divide vacant or agricultural lands therein shall furnish a copy of such petition or proposal to the Soil and Water Conservation District. The Soil and Water Conservation District shall be given not more than thirty days from the time of receipt of the petition or proposal to issue its written opinion concerning the petition or proposal and submit the same to the appropriate county agency or municipality for further action. Added by Act approved December 3, 1971.

This report provides technical data necessary to evaluate the natural resources of a specific area and the impacts or limitations associated with the proposed land use change. The report is limited to information researched by the Champaign County Soil and Water Conservation District staff. (Technical information is obtained from several different sources and may be subject to modification based on detailed site investigations or new technical information.) The information gathered in this report comes from several key reference materials and are cited throughout this report and listed in the Reference section. Any questions on the information contained in this report can be directed to:

Champaign County Soil and Water Conservation District
2110 W. Park Court, Suite C
Champaign, IL 61821
Phone 217-352-3536 ext. 3

Subject Property Location

Location Map for Natural Resources Information Report for the Champaign Solar 1b LLC near Pesotum. The property is located in the southeast quarter of Section 34, Township 17N, Range 8E in Champaign County, Illinois.



Summary and Concerns of the Board

The Champaign County Soil and Water Conservation District has reviewed the proposed land use change and has the following concerns relevant to the impact on the area's natural resources.

1. All soils on the subject property are not suitable sanitary facilities or dwellings. It is advised to perform onsite investigations with a professional to determine construction strategy before moving forward. See pages 7-9.
2. A portion of the soils on the subject property are not suitable for dwellings or small commercial buildings. It is advised to consult with a professional to determine safety and quality of current and future construction projects. See pages 7-9.
3. The subject property is located in the *Pesotum Consolidated Main* drainage district. Please contact drainage district officials for questions or concerns regarding drainage management.
4. The average Land Evaluation (LE) score for this site is: 100. See pages 13-14.
5. A wetland is present near the subject property. It is recommended to take precautions to protect wetland and water quality and health during project lifespan. See pages 17-18.

Soil Information

The soil information comes from the United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) Soil Survey of Champaign County. This information is important to all parties involved in determining the suitability of the proposed land use change. Each polygon is given a number with letters, which represents its soil type, slope, flooding, etc., and is then called a map unit. Each soil map unit has limitations for a variety of land uses, which are explained using interpretations.

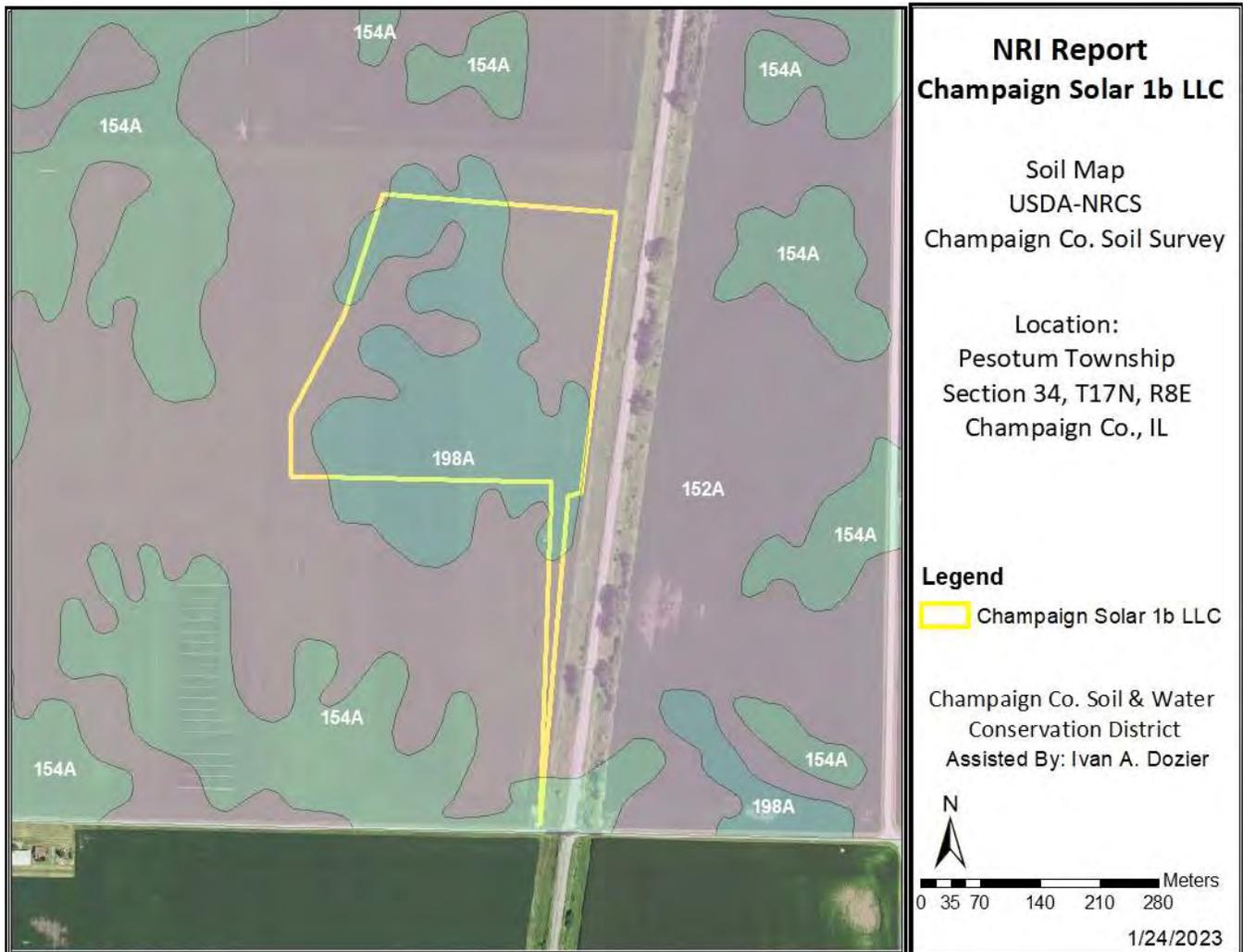


Table 1. Soil map unit descriptions.

Map Unit Symbol	Description	Acres	Percent of Area
198A	Elburn silt loam, 0-2% slopes	15.8	59.0%
152A	Drummer silty clay loam, 0-2% slopes	10.9	41.0%

Introduction to Soil Interpretations

Non-agricultural soil interpretations are ratings that help engineers, planners, and others understand how soil properties influence behavior when used for nonagricultural uses such as building site development or construction materials. This report gives ratings for proposed uses in terms of limitations and restrictive features. The tables list only the most restrictive features. Other features may need treatment to overcome soil limitations for a specific purpose.

Ratings come from the soil's "natural" state, that is, no unusual modification occurs other than that which is considered normal practice for the rated use. Even though soils may have limitations, an engineer may alter soil features or adjust building plans for a structure to compensate for most degrees of limitations. However, most of these practices are costly. The final decision in selecting a site for a land use generally involves weighing the costs for site preparation and maintenance.

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for the types of proposed improvements that are listed or inferred by the petitioner as entered on the report application and/or zoning petition. The most common type of building limitation this report gives limitations ratings for is septic systems. It is understood that engineering practices can overcome most limitations for buildings with and without basements, and small commercial buildings. Organic soils, when present on the subject property, are referenced in the hydric soils section of the report.

The area of development will be susceptible to erosion both during and after construction. Any areas left bare for more than 7 days should be temporarily seeded or mulched and permanent vegetation needs to be established as soon as possible.

Limitation Ratings

1. *Not limited*- This soil has favorable properties for the intended use. The degree of limitation is minor and easy to overcome. Those involved can expect good performance and low maintenance.
2. *Somewhat limited*- This soil has moderately favorable properties for the intended use. Special planning, design, or maintenance can overcome this degree of limitation. During some part of the year, the expected performance is less desirable than for soils rated "*not limited*."
3. *Very limited*- This soil has one or more properties that are unfavorable for the rated use. These may include the following: steep slopes, bedrock near the surface, flooding, high shrink-swell potential, a seasonally high water table, or low strength. This degree of limitation generally requires major soil reclamation, special design, or intensive maintenance, which in most situations is difficult and costly.

Soil Interpretations

Sanitary Facilities

The table below shows the degree and kind of soil limitations that affect septic tank absorption fields and sewage lagoons.

Septic Tank Absorption Fields: Areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. The ratings are based on soil properties, site features, and observed performance of the soils. Permeability, high water table, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Large stones and bedrock or a cemented pan interfere with installation. Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage can affect public health. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively.

Table 2. Septic tank absorption fields.

Map Unit Symbol	Septic Tank Absorption Fields	Acres	Percent of Area
198A	Very limited: seepage, depth to saturated zone, slow water movement	15.8	59.0%
152A	Very limited: ponding, depth to saturated zone, slow water movement	10.9	41.0%

For the subject property: 100% of the soils on the property are very limited for the use of septic tank absorption fields and special design is required for any septic tank absorption field.

Building Site Development

The table below shows the degree and the kind of soil limitations that affect dwellings with or without basements and small commercial buildings.

Dwellings and Small Commercial Buildings: Structures built on a shallow foundation on undisturbed soil that are three stories or less. The ratings are based on soil properties, site features, and observed performance of the soils. High water table, depth to bedrock or to a cemented pan, large stones, slope, and flooding effect the ease of excavation, construction, and maintenance.

Table 3. Dwellings and small commercial buildings limitations.

Map Unit Symbol	Dwellings with Basements	Dwellings without Basements	Small Commercial Buildings	Acres	Percent of Area
198A	Very limited: depth to saturated zone, shrink-swell	Somewhat limited: depth to saturated zone, shrink-swell	Somewhat limited: depth to saturated zone, shrink-swell	15.8	59.0%
152A	Very limited: ponding, depth to saturated zone, shrink-swell	Very limited: ponding, depth to saturated zone, shrink-swell	Very limited: ponding, depth to saturated zone, shrink-swell	10.9	41.0%

Soil Water (Wetness) Features

This section gives estimates of various soil water (wetness) features that should be taken into consideration when reviewing engineering for a land use project.

Hydrologic Soil Groups (HSGs): The groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

- Group A: Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.
- Group B: Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.
- Group C: Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.
- Group D: Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Note: if a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D) the first letter is for drained areas and the second is for undrained areas.

Surface Runoff: Refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based upon slope, climate, and vegetative cover and indicates relative runoff for very specific conditions (it is assumed that the surface of the soil is bare and that the retention of surface water resulting from the irregularities in the ground surface is minimal). The classes are negligible, very low, low, medium, high, and very high.

Water Table: Refers to a saturated zone in the soil and the data indicates, by month, depth to the top (upper limit) and base (lower limit) of the saturated zone in most years. These estimates are based upon observations of the water table at selected sites and on evidence of a saturated zone (grayish colors or mottles, called redoximorphic features) in the soil. Note: a saturated zone that lasts for less than a month is not considered a water table.

Ponding: Refers to standing water in a closed depression and the data indicates duration and frequency of ponding.

- Duration: expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days and *very long* if more than 30 days.
- Frequency: expressed as *none* (ponding is not possible), *rare* (unlikely but possible under unusual weather conditions), *occasional* (occurs, on average, once or less in 2 years), *frequent* (occurs, on average, more than once in 2 years).

Flooding: The temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

- Duration: Expressed as *extremely brief* if 0.1 hour to 4 hours; *very brief* if 4 hours to 2 days; *brief* if 2 to 7 days; *long* if 7 to 30 days; and *very long* if more than 30 days.
- Frequency: Expressed as *none* (flooding is not probable), *very rare* (very unlikely but possible under extremely unusual weather conditions (chance of flooding is less than 1% in any year)), *rare* (unlikely but possible under unusual weather conditions (chance of flooding is 1 to 5% in any year)), *occasional* (occurs infrequently under normal weather conditions (chance of flooding is 5 to 50% in any year but is less than 50% in all months in any year)), and *very frequent* (likely to occur very often under normal weather conditions (chance of flooding is more than 50% in all months of any year)).

Note: The information is based on evidence in the soil profile. In addition, consideration is also given to local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Table 4. Soil water (wetness) features.

Map Unit Symbol	HSG	Surface Runoff	Depth to Water Table (ft)			Ponding		Flooding	
			Upper Limit	Lower Limit	Kind	Duration	Frequency	Duration	Frequency
198A	B/D	Low	1.0-2.0	6.0	Apparent	-	None	-	None
152A	B/D	Neg	0.0-1.0	6.0	Apparent	Brief	Frequent	-	None

Hydric Soils

Hydric soils by definition have seasonal high water at or near the soil surface and/or have potential flooding or ponding problems. All hydric soils range from poorly suited to unsuitable for building. Soil maps may not be small enough to show inclusions of hydric soils, so it is important to consult a soil scientist if building residential areas on hydric soils or soils with hydric inclusions.

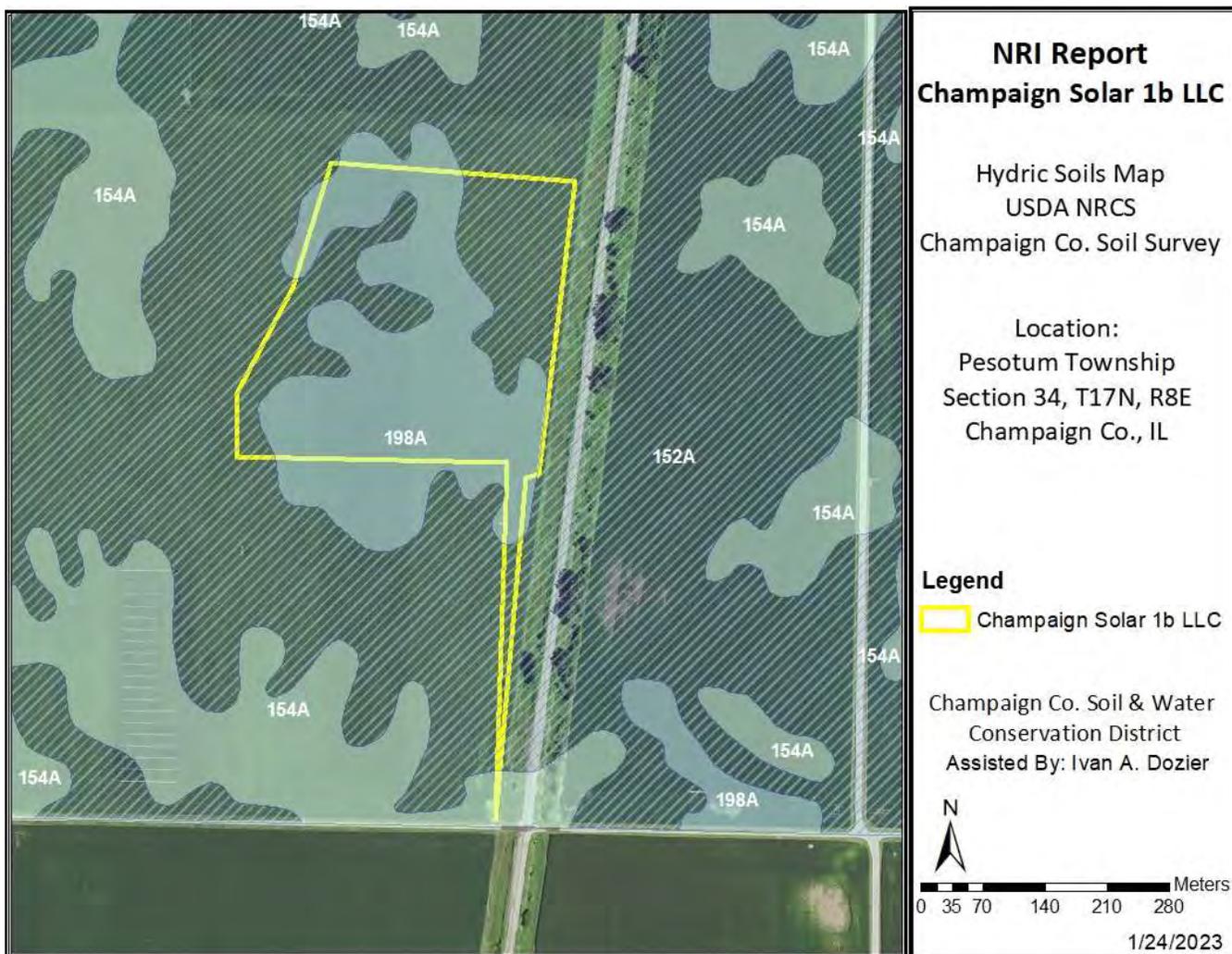
On most agricultural soils in the county that are poorly or somewhat poorly drained, subsurface agriculture drainage tile occurs. This expedites drainage but must be maintained and undisturbed so the soil does not return to its original hydrologic condition.

The Champaign County SWCD recommends the following for an intense land use, such as a subdivision:

1. A topographical survey with 1-foot contour intervals to define the flood area.
2. An intensive soil survey to define locations of hydric inclusions.
3. A drainage tile survey to locate tiles that must be preserved.

Table 5. Hydric soils.

Map Unit Symbol	Drainage Class	Hydric Designation	Acres	Percent of Area
198A	Somewhat poorly drained	Non-hydric	15.8	59.0%
152A	Poorly drained	Hydric	10.9	41.0%
		Percent Hydric		41.0%



Soil Erosion and Sediment Control

Erosion is the wearing away of the soil by water, wind, and other forces and a soil's erodibility is mainly determined by the following properties: soil texture, slope, soil structure, soil organic matter content. Soil erosion threatens the nation's soil productivity and contributes to pollutants in waterways. Sediment entering creeks, rivers, and lakes degrade water quality and reduce capacity, which increases the risk of flooding and disrupts ecosystems. Sediment also carries other possible pollutants, such as chemicals and metals, by adhering to the sediment's surface.

Erosion Control at Construction Sites

Construction sites can experience 20 to 200 tons/acre/year of soil loss, which is greater than other land uses, like agriculture, averaging 4-5 tons/acre/year. It is extremely important that the developer employ Best Management Practices, like the ones listed below, to help reduce soil erosion and protect water quality during and after construction.

- **Silt Fencing:** A woven geotextile fabric stretched across and attached to supporting posts used to intercept sediment-laden runoff from small drainage areas of disturbed soil. The purpose is to filter out sediment from runoff before it enters a water body.
- **Construction Road Stabilization:** The stabilization of temporary construction access routes, subdivision roads, on-site vehicle transportation routes, and construction parking areas with stone immediately after grading the area to reduce erosion.
- **Vegetative Cover:** One of the most important means to control runoff is to plant temporary vegetation around the perimeter of the construction site. This provides a natural buffer to filter sediment and chemicals. The CCSWCD recommends that temporary grass be planted (i.e. smooth bromegrass, oats, cereal rye) to help protect soil from erosion during construction.

EPA Stormwater Pollution Prevention Plan (SWPPP) Reference Tool

EPA requires a plan to control storm water pollution for all construction sites over 1 acre in size. *A Guide for Construction Sites* is a reference tool for construction site operators who must prepare a SWPPP to obtain NPDES permit coverage for their storm water discharges. More information at the following website: <http://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources>.

Table 6. Soil erosion potential.

Map Unit Symbol	Slope	Rating	Acres	Percent of Area
198A	0.5%	Slight	15.8	59.0%
152A	1.0%	Slight	10.9	41.0%

Prime Farmland Soils

Prime farmland soils are an important resource to Champaign County. Some of the most productive soils in the world occur locally. Each soil map unit in the United States is assigned a prime or non-prime rating. Urban or built-up land on prime farmland soils is not prime farmland.

Table 7. Prime farmland designation.

Map Unit Symbol	Prime Designation	Acres	Percent of Area
198A	All areas are prime farmland	15.8	59.0%
152A	Prime farmland if drained	10.9	41.0%
Percent Prime Farmland			100%

The Land Evaluation and Site Assessment System

Decision-makers in Champaign County use the Land Evaluation and Site Assessment (LESA) system to determine the suitability of a land use change and/or a zoning request as it relates to agricultural land. The LESA system was developed by the USDA-NRCS and takes into consideration local conditions, such as physical characteristics of the land, compatibility of surrounding land uses, and urban growth factors. The LESA system is a two-step procedure:

- Land Evaluation (LE) – the soils of a given area are rated and placed in groups ranging from the best to worst suited for a stated agricultural use. The best group is assigned a value of 100 and is based on data from the Champaign County Soil Survey. The Champaign County LE designates soils with a score of 91 to 100 as best prime farmland, as reported in Bulletin 811 Optimum Crop Productivity Ratings for Illinois Soils. Best Prime Farmland consists of:
 - a) Soils identified as agricultural value groups 1, 2, 3, and/or 4
 - b) Soils that, in combination on a subject site, have an average LE of 91 or higher
 - c) Any site that includes a significant amount (10% or more of the area proposed to be developed) of agriculture value groups 1, 2, 3, and/or 4
- Site Assessment (SA) – the site is numerically evaluated according to important factors that contribute to the quality of the site. Each factor selected is assigned values in accordance with the local needs and objectives.

The Champaign County LESA system is designed to provide officials with a systematic objective means to numerically rate a site in terms of its agricultural importance.

- To assist officials in evaluating the proposed conversion of farmland on a parcel or site in zoning cases that include farmland conversion to a non-agricultural land use.
- To assist in the review of state and federal projects for compliance with the Illinois Farmland Preservation Act and the Federal Farmland Protection Policy Act in terms of their impact on important farmland.

Note: A land evaluation (LE) score will be compiled for every project property, but a site assessment score is not applicable in most cases, making the full LESA score unavailable.

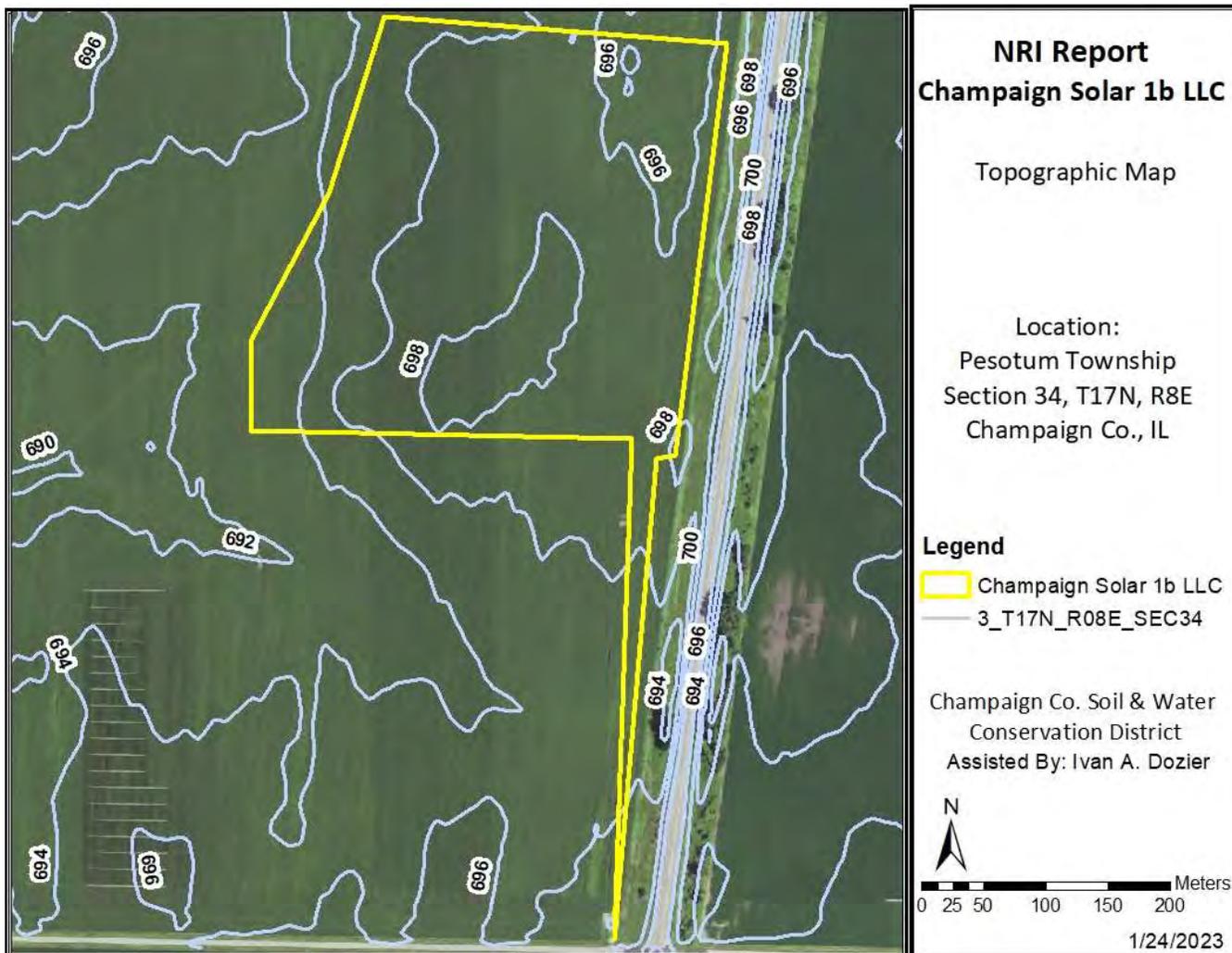
Table 8. Land Evaluation and Site Assessment System score.

Map Unit Symbol	Value Group	Relative Value	Acres	Product (Relative Value*Acres)
198A	1	100	15.8	158
152A	1	100	10.9	109
Totals			26.7	267
LE Score		LE=267/26.7		LE=100

For the subject property: the overall Land Evaluation (LE) score is 100.

Topographic Information

United States Geologic Survey (USGA) topographic maps give information on elevation, which are important mostly to determine slope, drainage direction, and watershed information. Elevation determines the area of impact of floods. Slope information determines steepness and erosion potential. Drainage directions determine where water leaves the subject property, possibly impacting surrounding natural resources.



Watershed Information

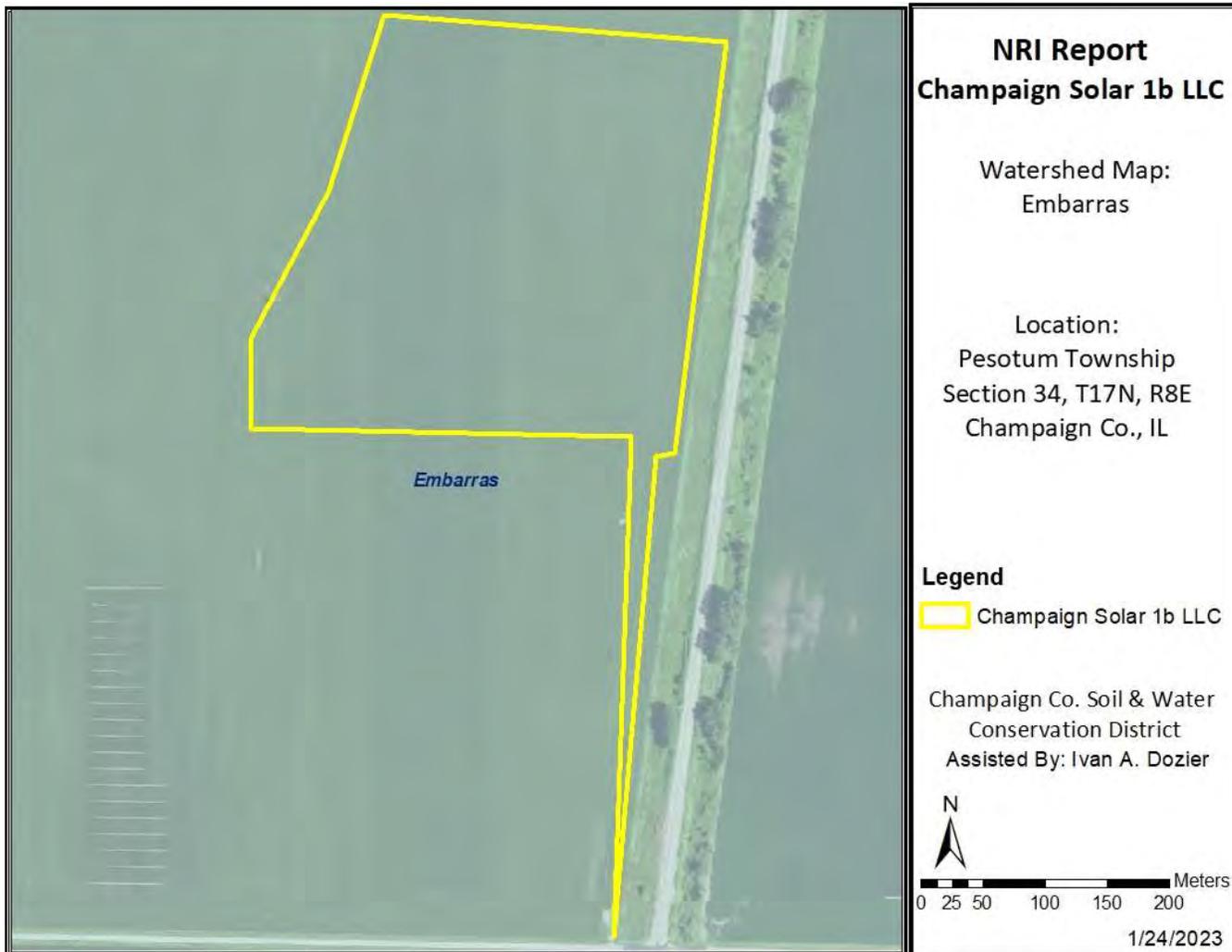
Watershed information is given when land use is changed to a subdivision type of development on parcels greater than 10 acres. A watershed is an area of land that drains to an associated water resource, such as a wetland, river, or lake. Rainwater carries pollutants through watersheds, impacting natural resources and people living downstream. Residents can minimize this impact by being aware of their environment and implications of their activities.

The following are recommendations to developers for protection of watersheds:

- Preserve open space
- Maintain wetlands as part of development
- Use natural water management
- Prevent soil from leaving construction sites
- Protect subsurface drainage
- Use native vegetation

- Retain natural features
- Mix housing and style types
- Decrease impervious surfaces
- Reduce area disturbed by mass grading
- Treat water where it falls

For the subject property: the property is located in the Embarras Watershed.



Floodplain and Wetland Information

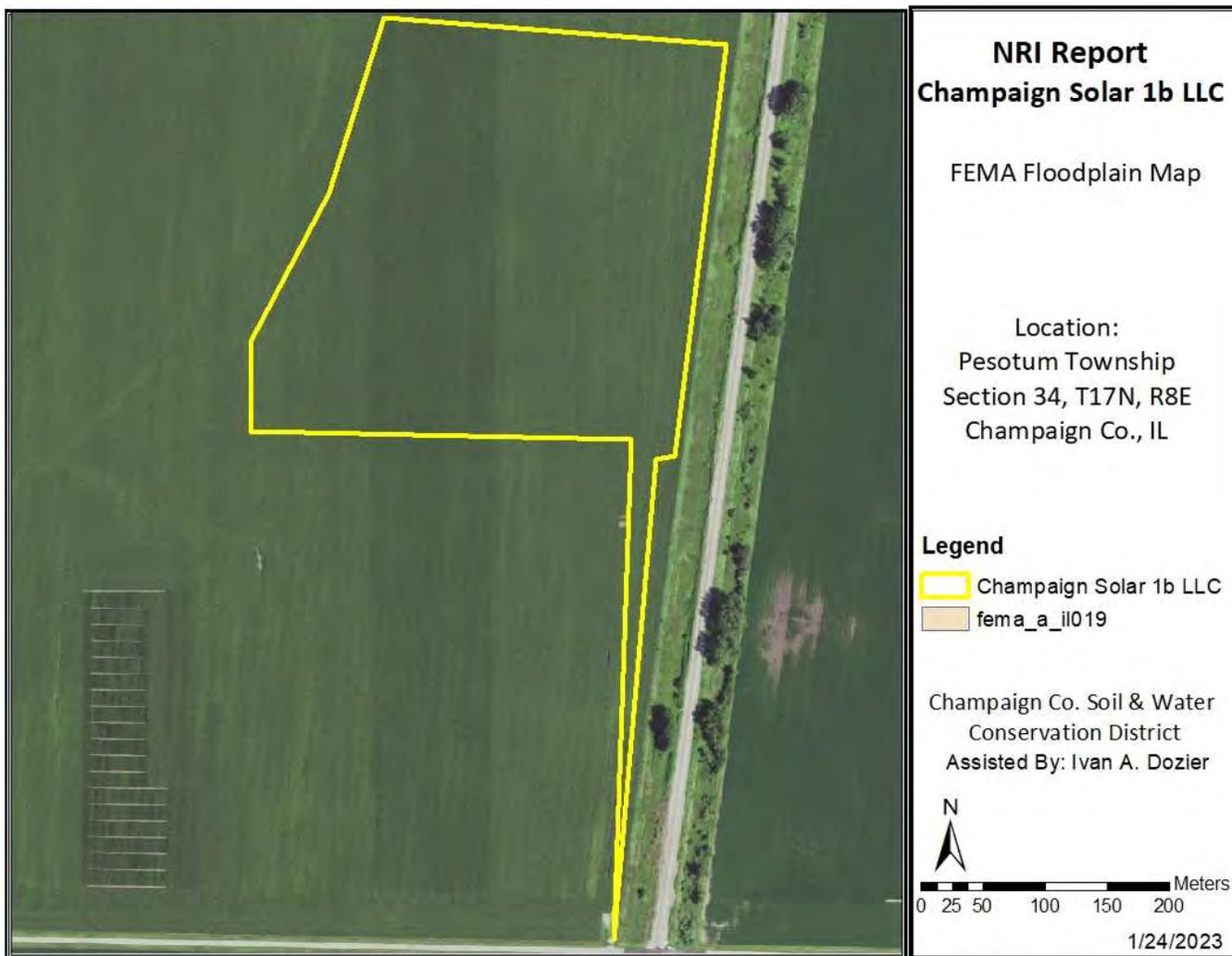
Floodplain Information

A floodplain is defined as land adjoining a watercourse (riverine) or an inland depression (non-riverine) that is subject to periodic inundation by high water. Floodplains are important areas that demand protection since they have water storage and conveyance functions that affect upstream and downstream flows, water quality and quantity, and suitability of the land for human activity. Since floodplains play distinct and vital roles in the hydrologic cycle, development that interferes with their hydrologic and biologic functions should be carefully considered.

Flooding is dangerous to people and destructive to their properties. The following map can help developers and future homeowners to “sidestep” potential flooding or ponding problems. The Flood Insurance Rate

Map (FIRM) was produced by the Federal Emergency Management Agency (FEMA) to define flood elevation adjacent to tributaries and major bodies of water that are superimposed onto a simplified USGS topographic map.

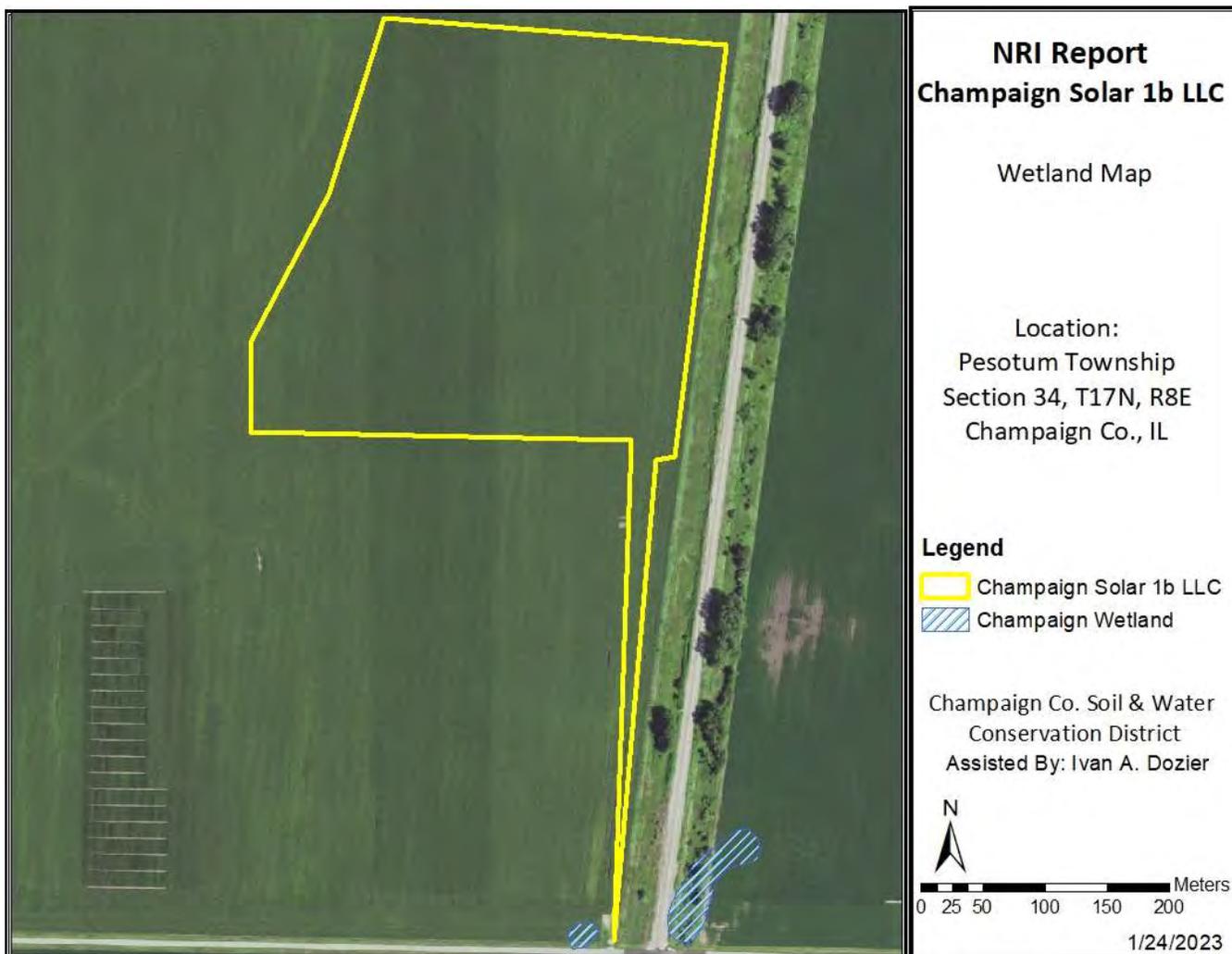
For the subject property: the property is not located within a floodplain.



Wetland Information

Wetlands function in many ways to provide numerous benefits to society and the environment, including flood control, cleanse water, recharge groundwater, and provide a wildlife habitat. However, approximately 95% of the wetlands that were historically present in Illinois have been destroyed. It is crucial that we take steps to conserve current wetlands and reestablish new wetlands where once destroyed. Wetland determinations are made by a certified NRCS staff.

For the subject property: a wetland is present near the subject property.



Wetland and Floodplain Regulations

Please read the following if you are planning to do any work near a stream, lake, wetland, or floodway, including: dredge, fill, rip rap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, flood plain, or floodway subject to State or Federal regulatory jurisdiction.

The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State's boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against flood way encroachments, maintenance and enhancement of water quality, protection of fish and wildlife habitat and recreational resources, and, in general, the protection of total public interest. Unregulated used of the waters within the State of Illinois could permanently destroy and adversely impact the public. Therefore, please contact the proper authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

Regulatory Agencies:

- Wetlands or U.S. Waters: U.S. Army Corps of Engineers
- Floodplains: Illinois Department of Natural Resources/Office of Water Resources, Natural Resources Way, Springfield, IL
- Water Quality/Erosion Control: Illinois Environmental Protection Agency

Coordination: we recommend early coordination with the agencies BEFORE finalizing work plans. This allows the agencies to recommend measures to mitigate or compensate for adverse impacts. This could reduce time required to process necessary approvals and reduce expense.

Cultural and Animal Resources

Cultural Resources

The most common cultural resources found during changes in land use are historical properties or non-structural archaeological sites. These sites often extend below the soil surface and must be protected against disruption by development or other earth moving activity if possible. Cultural resources are non-renewable because there is no way to grow a site to replace a disrupted site. Landowners with historical properties on their land have ownership of that historical property. However, the State of Illinois owns all of the following: human remains, grave markers, burial mounds, and artifacts associated with graves and human remains. Non-grave artifacts from archaeological sites and historical buildings are the property of the landowner. The landowner may choose to disturb a historical property but may not receive federal or state assistance to do so. If an earth-moving activity disturbs human remains, the landowner must contact the county coroner within 48 hours.

The Illinois Historic Preservation Agency may require a Phase 1 Archaeological review to identify any cultural resources that may be on the site. The IHPA has not been contacted by the Champaign County SWCD. The applicant may need to contact the IHPA according to current Illinois law.

Animal Resources

According to the Illinois Endangered Species Protection Act & Illinois Natural Areas Preservation Act, state agencies or local units of government must consult Illinois Department of Natural Resources (IDNR) about proposed actions that they will authorize, fund, or perform. Private parties do not have to consult, but they are liable for prohibited taking of state-listed plants and animals or for adversely modifying a Nature Preserve or a Land and Water Preserve. Home rule governments may delegate this responsibility through duly enacted ordinances to the parties seeking authorization or funding of the action.

Ecologically Sensitive Areas

Biodiversity is the sum of total of all the plants, animals, fungi, and microorganisms in the world, or in a particular area that make up the fabric of the Earth and allow it to function. Biodiversity must be protected, as it is diminishing, which weakens entire natural systems. It is intrinsically valuable for an ecosystem to be biologically diverse to sustain ecosystem health and support life.

As part of the Natural Resources Information Report, staff checks if any nature preserves are in the general vicinity of the subject property. If there is a nature preserve in the area, then that resource will be identified as part of the report. The SWCD recommends that every effort be made to protect that resource. Such efforts should include but are not limited to erosion control, sediment control, stormwater management, and groundwater monitoring.

For the subject property: as shown on the below EcoCAT, there is no record of sensitive areas or endangered species in or near the subject property.



Applicant: NRCS Champaign County Field Office
Contact: Taylor Shedd
Address: 2110 W. Park court suite C
 Champaign, IL 61821

Project: Champaign
Address: Champaign, Champaign

IDNR Project Number: 2309191
Date: 01/19/2023

Description: Champaign

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under 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.

Location

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

County: Champaign
Township, Range, Section:
 17N, 8E, 34



IL Department of Natural Resources
Contact
 Impact Assessment Section
 217-785-5500
 Division of Ecosystems & Environment

Government Jurisdiction
 U.S. Department of Agriculture

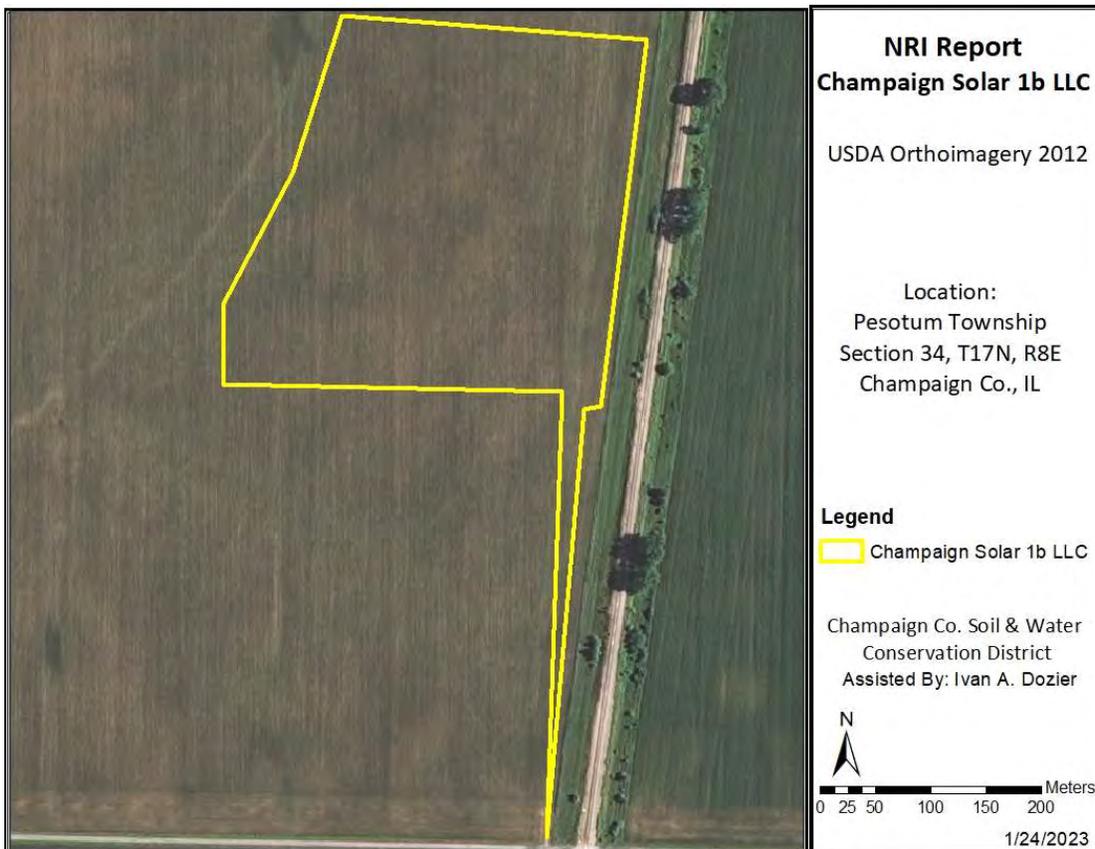
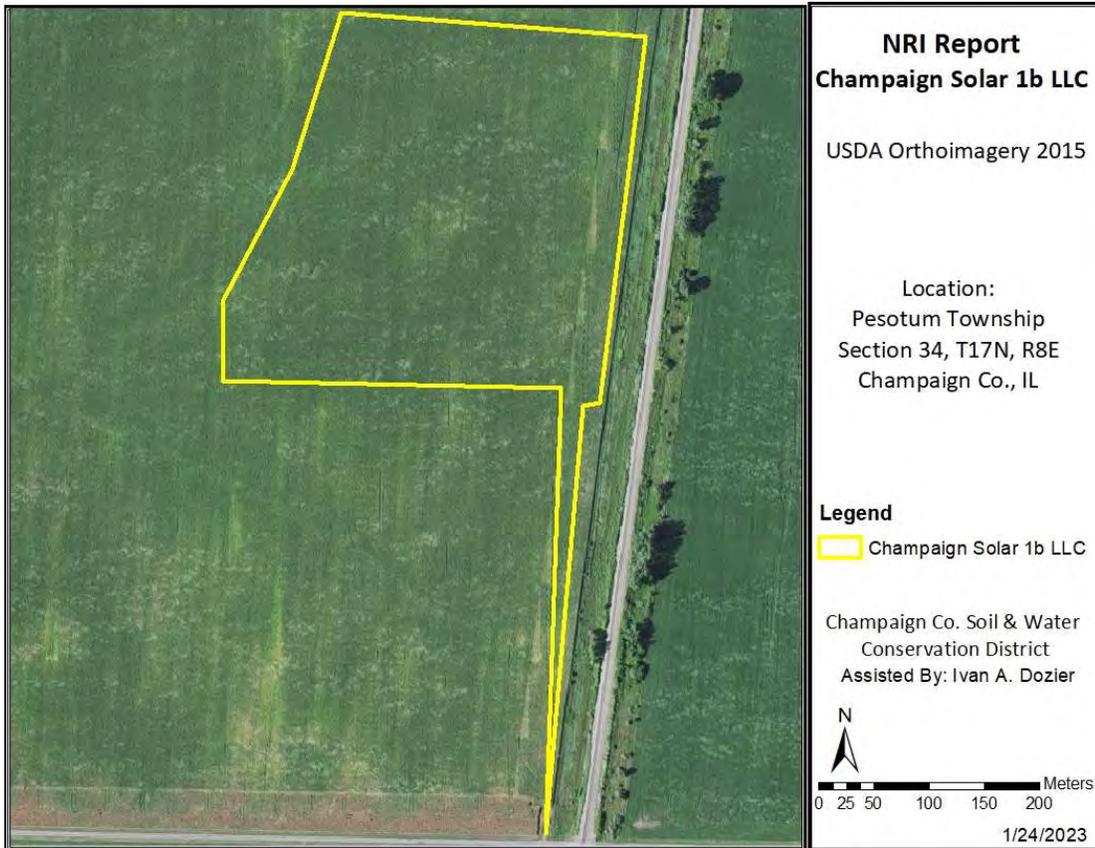
Disclaimer

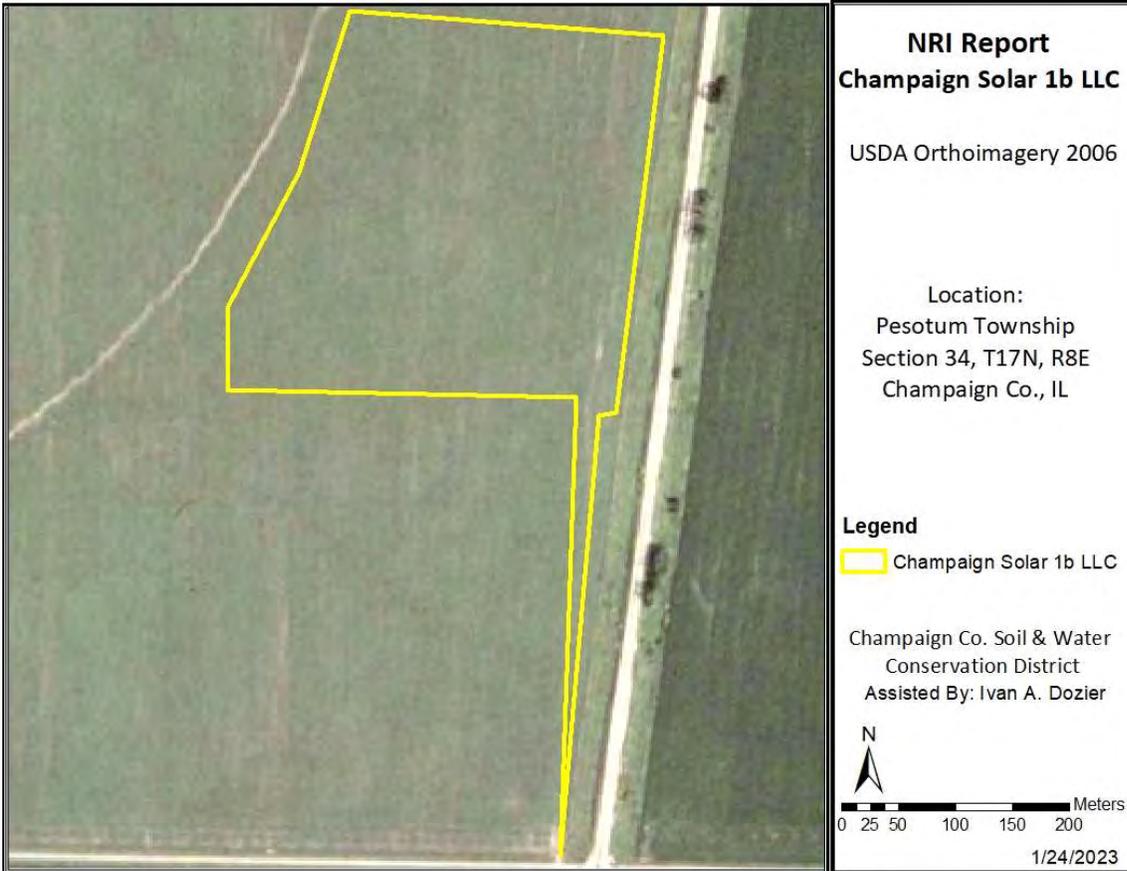
The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site 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.

Historic Aerial Photos





Glossary and Acronyms

Agriculture – The growing, harvesting, and storing of crops, including legumes, hay, grain, fruit; and truck or vegetables, including dairy, poultry, swine, sheep, beef cattle, pony and horse, fur, and fish and wildlife; farm buildings used for growing, harvesting, and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, or for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants, or seasonal or year around hired farm workers.

ADT – average daily traffic that a local road normally receives, based upon records by the County Superintendent of Highways.

B.G. – below grade. Under the surface of the Earth.

Bedrock – indicates depth at which bedrock occurs. Also lists hardness as rippable or hard.

Flooding – indicates frequency, duration, and period during year when floods are likely to occur.

High Level Management – the application of effective practices adapted to different crops, soils, and climatic conditions. Such practices include providing for adequate soil drainage, protection from flooding, erosion and runoff control, near optimum tillage, and planting the correct kind and amount of high-quality seed. Weeds, diseases, and harmful insects are controlled. Favorable soil reaction and near-optimum levels of available nitrogen, phosphorus, and potassium for individual crops are maintained. Efficient use is made of available crop residues, barnyard manure, and/or green manure crops. All operations, when combined efficiently and timely, can create favorable growing conditions and reduce harvesting losses (within limits imposed by weather).

High Water Table – a seasonal highwater table is a zone of saturation at the highest average depth during the wettest part of the year. May be apparent, perched, or artesian.

Water Table, Apparent – a thick zone of free water in the soil indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil.

Water Table, Artesian – a water table under hydrostatic head, generally beneath an impermeable layer. When layer is penetrated, the water level rises in the uncased borehole.

Water Table, Perched – a water table standing above an unsaturated zone, often separated from a lower wet zone by a dry zone.

Delineation – (for wetlands) a series of orange flags placed on the ground by a certified professional that outlines the wetland boundary on a parcel.

Determination – (for wetlands) a polygon drawn on a map using map information that gives an outline of a wetland.

Hydric Soil – soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part (USDA Natural Resources Conservation Service, 1987).

Intensive Soil Mapping – mapping done on a small, intensive scale than a modern soil survey to determine soil properties of a specific site, i.e. mapping for septic suitability.

Land Evaluation Site Assessment (L.E.S.A.) – LESA is a systematic approach for evaluating a parcel of land and to determine a numerical value for the parcel for farmland preservation purposes.

Modern Soil Survey – a soil survey is a field investigation of the soils of a specific area, supported by information from other sources. The kinds of soil in the survey area are identified and their extent is shown on a map. An accompanying report describes, defines, classifies, and interprets the soils. Interpretations predict the behavior of soils under different uses and the soils' response to management. Predictions are made for areas of soil at specific places. Soil information collected in a soil survey are useful in developing land use plans and alternatives.

Palustrine – name given to inland fresh water wetlands.

Permeability – values listed estimate the range of time it takes for downward movement of water in the major soil layers when saturated but allowed to drain freely. The estimates are based on soil texture,

soil structure, available data on permeability and infiltration tests, and observation of water movement through soils or other geologic materials.

PIQ – parcel in question

Potential Frost Action – damage that may occur to structures and roads due to ice lens formation, causing upward and lateral soil movement. Based primarily on soil texture and wetness.

Prime Farmland – lands that are best suited for food, feed, forage, fiber, and oilseed crops. It may be cropland, pasture, woodland, or other land, but it is not urban, built up land, or water areas. When well-managed, the soil qualities and moisture supply provide a sustained high yield of crops with minimum inputs of energy and economic resources in the least damage to the environment. Prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The level of acidity or alkalinity is acceptable. Prime farmland has few or no rocks and is permeable to water and air. It is not excessively erodible or saturated with water for long periods and is not frequently flooding during the growing season. The slope ranges from 0 to 5 percent. (USDA Natural Resources Conservation Service)

Productivity Indexes – express the estimated yields of the major grain crops in Illinois as a single percentage of the average yields obtained under basic management from several of the more productive soils in the state (Muscatine, Ipava, Sable, Lisbon, Drummer, Flanagan, Littleton, Elburn, Joy soil series). See Circular 1156 from the Illinois Cooperative Extension Service.

Seasonal – when used in reference to wetlands, indicates the area flooded only during a portion of the year.

Shrink-Swell Potential – indicates volume changes to be expected for the specific soil material with changes in moisture content.

Soil Mapping Unit – collection of soil and miscellaneous areas delineated in mapping. Generally, an aggregate of the delineations of many different bodies of a kind of soil or miscellaneous area but may consist of only one delineated body. Taxonomic class names and accompanying terms are used to name soil map units. They are described in terms of ranges of soil properties within the limits defined for tax and in terms of ranges of tax adjuncts and inclusions.

Soil Series – a group of soils formed from a type of parent material, having horizons that, except for texture of the surface horizon, are similar in all profile characteristics and in arrangement in the soil profile. Among these characteristics are color, texture, structure, reaction, consistence, mineralogy, and chemical composition.

Subsidence – applies mainly to organic soils after drainage. Soil material subsides due to shrinkage and oxidation.

Terrain – the area or surface over which a particular rock or group of rocks is prevalent.

Topsoil – portion of the soil profile where higher concentrations of organic material, fertility, bacterial activity, and plant growth take place. Depths of topsoil vary between soil types.

Watershed – an area of land that drains to an associated water resource, such as a wetland, river, or lake. Depending on the size and topography, watersheds can contain numerous tributaries, such as streams, ditches, and ponding areas, such as detention structures, natural ponds, or wetlands.

Wetland – an area that has a predominance of hydric soils that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of hydrophilic vegetation typically adapted for life in saturated soil conditions.

References

Field Office Technical Guide. USDA Natural Resources Conservation Service.

Flood Insurance Rate Map. National Flood Insurance Program, Federal Emergency Management Agency.

Illinois Urban Manual. 2016. Association of Illinois Soil & Water Conservation Districts.

Soil Survey of Champaign County. USDA Natural Resources Conservation Service.

Wetlands Inventory Maps. Department of the Interior.

Potential for Contamination of Shallow Aquifers in Illinois. Illinois Department of Energy and Natural Resources, State Geological Survey Division.

Land Evaluation and Site Assessment System. The Kendall County Department of Planning, Building, and Zoning, and the Champaign County Soil and Water Conservation District. In cooperation with USDA Natural Resources Conservation Service.

099-S-23 & 100-S-23 Site Images



From CR 0 N facing NW to subject property



From access drive off CR 0 N facing west

099-S-23 & 100-S-23 Site Images



From access drive off CR 0 N facing north



From CR 0 N facing east to subject property

PRELIMINARY DRAFT

099-S-23

**SUMMARY OF EVIDENCE, FINDING OF FACT
AND FINAL DETERMINATION**

**of
Champaign County Zoning Board of Appeals**

Final Determination: ***{RECOMMEND APPROVAL / RECOMMEND DENIAL}***

Date: ***{July 13, 2023}***

Petitioners: **Champaign Solar 1 LLC, via agent Merrill Read, with participating landowner JHBLT LLC**

Request: **Authorize a Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 Zoning District, and including the following waivers of standard conditions:**

Part A: A waiver for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, per Section 6.1.5 B.(2)a.

Part B: A waiver for a fence that is less than 10 feet from the side property line in lieu of the minimum required 10 feet, per Section 6.1.5 D.(3)b.

Part C: A waiver for a separation distance of 42 feet between the solar inverters and the perimeter fence in lieu of the minimum required 275 feet, per Section 6.1.5 D.(6).

Part D: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.

Other waivers may be necessary.

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PRELIMINARY DRAFT**SUMMARY OF EVIDENCE**

From the documents of record and the testimony and exhibits received at the public hearing conducted on **July 13, 2023**, the Zoning Board of Appeals of Champaign County finds that:

1. Champaign Solar 1 LLC, 1601 Wewatta St, Suite 700, Denver, CO 80202, a subsidiary of Pivot Energy Development LLC, with CEO Tom Hunt; via agent Merrill Read, and participating landowner JHBLT LLC, 305 E Sale St, Tuscola, IL 61953 are the developers of the proposed PV Solar Farm.
2. The subject property is a 90-acre tract of land west of the Canadian National Railroad in the Southeast Quarter of Section 34, Township 17 North, Range 8 East of the Third Principal Meridian in Pesotum Township, and commonly known as farmland owned by JHBLT LLC on the north side of CR 0N.
3. Regarding municipal extraterritorial jurisdiction and township planning jurisdiction:
 - A. The subject property is located 1.1 miles from the Village of Pesotum, a municipality with zoning. Municipalities with zoning are notified of Special Use Permit cases, but do not have protest rights in these cases. The Village of Pesotum does not have a one and one-half mile extra-territorial jurisdiction because it does not have a Comprehensive Plan.
 - B. The subject property is located within Pesotum Township, which does not have a Planning Commission. Townships with Planning Commissions are notified of Special Use Permit cases, but do not have protest rights in these cases.

GENERALLY REGARDING LAND USE AND ZONING IN THE IMMEDIATE VICINITY

4. Regarding land use and zoning on the subject property and in the vicinity of the subject property:
 - A. The 90-acre subject property is zoned AG-1 Agriculture and is currently in agricultural production.
 - (1) The proposed PV SOLAR FARM would be located on approximately 35.2 acres of the subject property.
 - B. Land north of the subject property is zoned AG-1 Agriculture and is in agricultural production.
 - C. Land south of the subject property is in Douglas County, which does not have zoning; land use is agricultural production.
 - D. Land west of the subject property is zoned AG-1 Agriculture and land is in agricultural production.
 - (1) There is a residence 1,700 feet west of the subject property and another approximately 850 feet southwest of the subject property.
 - E. Land east of the subject property on the other side of the railroad is zoned AG-1 Agriculture and is in agricultural production.

PRELIMINARY DRAFT**Case 099-S-23**
Page 3 of 52**GENERALLY REGARDING THE PROPOSED SPECIAL USE**

5. Regarding the Site plan for the proposed Special Use received April 14, 2023:
- A. The Site Plan includes the following proposed features:
- (1) One 5-megawatt community PV SOLAR FARM site on approximately 35.2 acres; and
 - (2) 8-feet tall perimeter fence; and
 - (3) One equipment pad located approximately 330 feet north of the CR 0N centerline; and
 - (4) A minimum 16-foot wide gravel access road extending approximately 458 feet north from CR 0N; and
 - (5) A gated security entrance approximately 60 feet north of the centerline of CR 0N; and
 - (6) The Point of Interconnection (POI) is proposed to connect to an existing power line that runs along the south side of CR 0N; and
 - (7) The nearest parcel 10 acres or less in area is 1,933 feet from the solar farm fenced area; and
 - (8) The nearest parcel greater than 10 acres in area is 60 feet from the solar farm fenced area, and the nearest principal building on that property is approximately 1,065 feet from the fenced area; and
 - (9) The nearest residence is approximately 1,065 feet from the solar farm fenced area; and
 - (10) There is a separation of 60 feet between the PV SOLAR FARM perimeter fence and the street centerline of CR 0N.
- C. There are no previous Zoning Use Permits for the subject property.
- D. There are no previous Zoning Cases for the subject property.

GENERALLY REGARDING SPECIFIC ORDINANCE REQUIREMENTS

6. Regarding authorization for a "COMMUNITY PV SOLAR FARM" in the AG-1 Agriculture Zoning District in the *Zoning Ordinance*:
- A. The County Board amended the Zoning Ordinance by adopting PV SOLAR FARM requirements when it adopted Ordinance No. 2018-4 on August 23, 2018.
- (1) The County Board amended the Zoning Ordinance by amending PV SOLAR FARM requirements when it adopted Ordinance 2020-1 on February 24, 2020, Ordinance 2020-7 on May 22, 2020, and Ordinance 2020-8 on May 22, 2020.

PRELIMINARY DRAFT

- B. The following definitions from the *Zoning Ordinance* are especially relevant to the requested Special Use Permit (capitalized words are defined in the Ordinance):
- (1) “ACCESS” is the way MOTOR VEHICLES move between a STREET or ALLEY and the principal USE or STRUCTURE on a LOT abutting such STREET or ALLEY.
 - (2) “BEST PRIME FARMLAND” is Prime Farmland Soils identified in the Champaign County Land Evaluation and Site Assessment (LESA) System that under optimum management have 91% to 100% of the highest soil productivities in Champaign County, on average, as reported in the *Bulletin 811 Optimum Crop Productivity Ratings for Illinois Soils*. Best Prime Farmland consists of the following:
 - a. Soils identified as Agriculture Value Groups 1, 2, 3 and/or 4 in the Champaign County LESA system;
 - b. Soils that, in combination on a subject site, have an average LE of 91 or higher, as determined by the Champaign County LESA system;
 - c. Any development site that includes a significant amount (10% or more of the area proposed to be developed) of Agriculture Value Groups 1, 2, 3 and/or 4 soils as determined by the Champaign County LESA system.
 - (3) “DWELLING OR PRINCIPAL BUILDING, PARTICIPATING” is a DWELLING on land that is leased to a WIND FARM or a PV SOLAR FARM.
 - (4) “DWELLING OR PRINCIPAL BUILDING, NON- PARTICIPATING” is a DWELLING on land that is not leased to a WIND FARM or a PV SOLAR FARM.
 - (5) “LOT” is a designated parcel, tract or area of land established by PLAT, SUBDIVISION or as otherwise permitted by law, to be used, developed or built upon as a unit.
 - (6) “LOT LINE, FRONT” is a line dividing a LOT from a STREET or easement of ACCESS. On a CORNER LOT or a LOT otherwise abutting more than one STREET or easement of ACCESS only one such LOT LINE shall be deemed the FRONT LOT LINE.
 - (7) “LOT LINE, REAR” is any LOT LINE which is generally opposite and parallel to the FRONT LOT LINE or to a tangent to the midpoint of the FRONT LOT LINE. In the case of a triangular or gore shaped LOT or where the LOT comes to a point opposite the FRONT LOT LINE it shall mean a line within the LOT 10 feet long and parallel to and at the maximum distance from the FRONT LOT LINE or said tangent.
 - (8) “LOT LINES” are the lines bounding a LOT.
 - (9) “PRIVATE ACCESSWAY” is a service way providing ACCESS to one or more LOTS which has not been dedicated to the public.
 - (10) “NON-ADAPTABLE STRUCTURE” is any STRUCTURE or physical alteration to the land which requires a SPECIAL USE permit, and which is likely to become economically unfeasible to remove or put to an alternate USE allowable in the DISTRICT (by right or by SPECIAL USE).

PRELIMINARY DRAFT**Case 099-S-23**
Page 5 of 52

- (11) “NOXIOUS WEEDS” are any of several plants designated pursuant to the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.) and that are identified in 8 Illinois Administrative Code 220.
- (12) “PHOTOVOLTAIC (PV)” is a type of solar energy system that produces electricity by the use of photovoltaic cells that generate electricity when struck by light.
- (13) “PV SOLAR FARM” is a unified development intended to convert sunlight into electricity by photovoltaic (PV) devices for the primary purpose of wholesale sales of generated electricity. A PV SOLAR FARM is under a common ownership and operating control even though parts of the PV SOLAR FARM may be located on land leased from different owners. A PV SOLAR FARM includes all necessary components including access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, a common switching station, maintenance and management facilities, and waterwells. PV SOLAR FARM should be understood to include COMMUNITY PV SOLAR FARM unless specified otherwise in the relevant section or paragraph.
- (14) “PV SOLAR FARM, COMMUNITY” is a PV SOLAR FARM of not more than 2,000 kilowatt nameplate capacity that meets the requirements of 20 ILCS 3855/1-10 for a “community renewable generation project” and provided that two COMMUNITY PV SOLAR FARMS may be co-located on the same or contiguous parcels as either a) two 2-MW projects on one parcel, or b) one 2-MW project on each of two contiguous parcels, as authorized by the Illinois Commerce Commission in Final Order 17-0838 on April 3, 2018.
- (15) “PRIVATE WAIVER” is a written statement asserting that a landowner has agreed to waive a specific WIND FARM or PV SOLAR FARM standard condition and has knowingly agreed to accept the consequences of the waiver. A PRIVATE WAIVER must be signed by the landowner.
- (16) “RIGHT-OF-WAY” is the entire dedicated tract or strip of land that is to be used by the public for circulation and service.
- (17) “SCREEN” is a STRUCTURE or landscaping element of sufficient opaqueness or density and maintained such that it completely obscures from view throughout its height the PREMISES upon which the screen is located.
- (18) “SCREEN PLANTING” is a vegetative material of sufficient height and density to filter adequately from view, in adjoining DISTRICTS, STRUCTURES, and USES on the PREMISES upon which the SCREEN PLANTING is located.
- (19) “SETBACK LINE” is the BUILDING RESTRICTION LINE nearest the front of and across a LOT establishing the minimum distance to be provided between a line of a STRUCTURE located on said LOT and the nearest STREET RIGHT-OF-WAY line.
- (20) “SPECIAL CONDITION” is a condition for the establishment of a SPECIAL USE.

PRELIMINARY DRAFT

- (21) “SPECIAL USE” is a USE which may be permitted in a DISTRICT pursuant to, and in compliance with, procedures specified herein.
 - (22) “STREET” is a thoroughfare dedicated to the public within a RIGHT-OF-WAY which affords the principal means of ACCESS to abutting PROPERTY. A STREET may be designated as an avenue, a boulevard, a drive, a highway, a lane, a parkway, a place, a road, a thoroughfare, or by other appropriate names. STREETS are identified on the Official Zoning Map according to type of USE, and generally as follows:
 - (a) MAJOR STREET: Federal or State highways.
 - (b) COLLECTOR STREET: COUNTY highways and urban arterial STREETS.
 - (c) MINOR STREET: Township roads and other local roads.
- C. Section 5.2 only authorizes a “PV SOLAR FARM” in the AG-1 or AG-2 Zoning Districts and requires a Special Use Permit authorized by the County Board.
- D. Paragraph 6.1.2 A. indicates that all Special Use Permits with exterior lighting shall be required to minimize glare on adjacent properties and roadways by the following means:
- (1) All exterior light fixtures shall be full-cutoff type lighting fixtures and shall be located and installed so as to minimize glare and light trespass. Full cutoff means that the lighting fixture emits no light above the horizontal plane.
 - (2) No lamp shall be greater than 250 watts and the Board may require smaller lamps when necessary.
 - (3) Locations and numbers of fixtures shall be indicated on the site plan (including floor plans and building elevations) approved by the Board.
 - (4) The Board may also require conditions regarding the hours of operation and other conditions for outdoor recreational uses and other large outdoor lighting installations.
 - (5) The Zoning Administrator shall not approve a Zoning Use Permit without the manufacturer’s documentation of the full-cutoff feature for all exterior light fixtures.
- E. Section 6.1.5 contains the standard conditions for any PV SOLAR FARM which are as follows (capitalized words are defined in the Ordinance):
- (1) Requirements for what must be included in the area of the PV SOLAR FARM are in 6.1.5 B.(1).
 - (2) Requirements for where a PV SOLAR FARM cannot be located are in 6.1.5 B.(2).
 - (3) Paragraph 6.1.5 C. eliminates LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, and maximum LOT COVERAGE requirements from applying to a PV SOLAR FARM.
 - (4) Paragraph 6.1.5 D. contains minimum separations for PV SOLAR FARMS from adjacent USES and STRUCTURES.

PRELIMINARY DRAFT**Case 099-S-23
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- (5) Paragraph 6.1.5 E. contains standard conditions for the design and installation of PV SOLAR FARMS.
 - (6) Paragraph 6.1.5 F. contains standard conditions to mitigate damage to farmland.
 - (7) Paragraph 6.1.5 G. contains standard conditions for use of public streets.
 - (8) Paragraph 6.1.5 H. contains standard conditions for coordination with local fire protection districts.
 - (9) Paragraph 6.1.5 I. contains standard conditions for the allowable noise level.
 - (10) Paragraph 6.1.5 J. contains standard conditions for endangered species consultation.
 - (11) Paragraph 6.1.5 K. contains standard conditions for historic and archaeological resources review.
 - (12) Paragraph 6.1.5 L. contains standard conditions for acceptable wildlife impacts from PV SOLAR FARM construction and ongoing operations.
 - (13) Paragraph 6.1.5 M. contains standard conditions for screening and fencing of PV SOLAR FARMS.
 - (14) Paragraph 6.1.5 N. contains standard conditions to minimize glare from PV SOLAR FARMS.
 - (15) Paragraph 6.1.5 O. contains standard conditions for liability insurance.
 - (16) Paragraph 6.1.5 P. contains other standard conditions for operation of PV SOLAR FARMS.
 - (17) Paragraph 6.1.5 Q. contains standard conditions for a decommissioning plan and site reclamation agreement for PV SOLAR FARMS and modifies the basic site reclamation requirements in paragraph 6.1.1 A.
 - (18) Paragraph 6.1.5 R. contains standard conditions for securing an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
 - (19) Paragraph 6.1.5 S. contains standard conditions for a complaint hotline for complaints related to PV SOLAR FARM construction and ongoing operations.
 - (20) Paragraph 6.1.5 T. contains the standard condition for expiration of the PV SOLAR FARM County Board Special Use Permit.
 - (21) Paragraph 6.1.5 U. contains standard conditions establishing additional requirements for application for a PV SOLAR FARM County Board Special Use Permit that supplement the basic requirements for a special use permit application.
- F. Section 9.1.11 requires that a Special Use Permit shall not be granted by the Zoning Board of Appeals unless the public hearing record and written application demonstrate the following:

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- (1) That the Special Use is necessary for the public convenience at that location;
 - (2) That the Special Use is so designed, located, and proposed as to be operated so that it will not be injurious to the DISTRICT in which it shall be located or otherwise detrimental to the public welfare except that in the CR, AG-1, and AG-2 DISTRICTS the following additional criteria shall apply:
 - a. The property is either BEST PRIME FARMLAND and the property with proposed improvements in WELL SUITED OVERALL or the property is not BEST PRIME FARMLAND and the property with proposed improvements is SUITED OVERALL.
 - b. The existing public services are available to support the proposed SPECIAL USE effectively and safely without undue public expense.
 - c. The existing public infrastructure together with proposed improvements is adequate to support the proposed development effectively and safely without undue public expense.
 - (3) That the Special Use conforms to the applicable regulations and standards of and preserves the essential character of the DISTRICT in which it shall be located, except where such regulations and standards are modified by Section 6.
 - (4) That the Special Use is in harmony with the general purpose and intent of this ordinance.
 - (5) That in the case of an existing NONCONFORMING USE, it will make such USE more compatible with its surroundings.
- G. Paragraph 9.1.11.D.1. states that a proposed Special Use that does not conform to the standard conditions requires only a waiver of that particular condition and does not require a variance. Regarding standard conditions:
- (1) The Ordinance requires that a waiver of a standard condition requires the following findings:
 - a. that the waiver is in accordance with the general purpose and intent of the ordinance; and
 - b. that the waiver will not be injurious to the neighborhood or to the public health, safety, and welfare.
 - (2) However, a waiver of a standard condition is the same thing as a variance and Illinois law (55ILCS/ 5-12009) requires that a variance can only be granted in accordance with general or specific rules contained in the Zoning Ordinance and the VARIANCE criteria in paragraph 9.1.9 C. include the following in addition to criteria that are identical to those required for a waiver:
 - a. Special conditions and circumstances exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district.

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- b. Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied will prevent reasonable or otherwise permitted use of the land or structure or construction
 - c. The special conditions, circumstances, hardships, or practical difficulties do not result from actions of the applicant.
- (3) Including findings based on all of the criteria that are required for a VARIANCE for any waiver of a standard condition will eliminate any concern related to the adequacy of the required findings for a waiver of a standard condition and will still provide the efficiency of not requiring a public hearing for a VARIANCE, which was the original reason for adding waivers of standard conditions to the Ordinance.
- H. Paragraph 9.1.11.D.2. states that in granting any SPECIAL USE permit, the BOARD may prescribe SPECIAL CONDITIONS as to appropriate conditions and safeguards in conformity with the Ordinance. Violation of such SPECIAL CONDITIONS when made a party of the terms under which the SPECIAL USE permit is granted, shall be deemed a violation of this Ordinance and punishable under this Ordinance.

GENERALLY REGARDING WHETHER THE SPECIAL USE IS NECESSARY FOR THE PUBLIC CONVENIENCE AT THIS LOCATION

7. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use is necessary for the public convenience at this location:
- A. The Petitioner has testified on the application, **“New Illinois Legislature encourages renewable energy facilities in the state, and more importantly, the energy produced from this project will support local Champaign County residences and businesses who subscribe to the project.”**
 - B. The State of Illinois has adopted a Renewable Portfolio Standard that established a goal of 25% of the State’s energy coming from renewable sources by the year 2025.
 - C. The Illinois Future Energy Jobs Act requires installation of 3,000 MW of new solar capacity by the year 2030.
 - D. There is an existing power line along the south side of CR 0N.

GENERALLY REGARDING WHETHER THE SPECIAL USE WILL BE INJURIOUS TO THE DISTRICT OR OTHERWISE INJURIOUS TO THE PUBLIC WELFARE

8. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use be designed, located, and operated so that it will not be injurious to the District in which it shall be located, or otherwise detrimental to the public welfare:
- A. The Petitioner has testified on the application, **“Community PV Solar Farms are low impact and will not be injurious to the district or to the public welfare. Further description of project and supporting documentation is included in the narrative of this application.”**

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- B. Regarding surface drainage, the PV SOLAR FARM fenced area generally drains toward the west.
- C. Regarding traffic in the subject property area:
- (1) The proposed solar farm would have one access on CR 0N.
 - (2) CR 0N is an unmarked rural road that at times is one car width wide. It is approximately 15 feet wide adjacent to the subject property. It is comprised of oil and chip and has grass shoulders.
 - (3) The Illinois Department of Transportation measures traffic on various roads throughout the County and determines the annual average 24-hour traffic volume for those roads and reports it as Average Daily Traffic (ADT). The most recent ADT data is from 2017 near the subject property. CR 0N had an ADT of 150 near the subject property.
 - (4) No significant increase in traffic is expected except during construction of the PV SOLAR FARM.
 - (5) The Pesotum and Tuscola Township Highway Commissioners have been notified of this case and no comments have been received. Tuscola Township has maintenance jurisdiction over CR 0N.
 - (7) The petitioner is working on a Roadway Upgrade and Maintenance Agreement or waiver therefrom with Tuscola Township.
- D. Regarding fire protection:
- (1) The subject property is approximately 2.9 road miles from the Pesotum fire station.
 - (2) The petitioners stated in their application materials, “The Applicant has shared the proposed Site plan to the local Pesotum Fire Department and has offered to provide training and necessary equipment to the local emergency response authorities to prepare for proper emergency response during construction of the Project. In addition, the Applicant will create an emergency response plan and solicit input from the Pesotum Fire Department. The Applicant will submit a final site plan and Safety & Emergency Management Plan upon completion of the Project. In addition, the Project proposes a “knox box” on the Project gate for emergency personnel to gain access to the Site. Warning signs concerning voltage will be placed at the base of all pad-mounted transformers.”
 - (3) The Pesotum Fire Protection District was notified of this case and no comments have been received.
- E. No part of the subject property is located within a Special Flood Hazard Area.
- F. The subject properties are considered Best Prime Farmland. The Natural Resource Information Report received January 24, 2023, states that the soil on the subject properties

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consists of 152A Drummer silty clay loam, 154A Flanagan silt loam, and 198 Elburn silt loam, and has an average Land Evaluation Factor of 100.

- G. Regarding outdoor lighting on the subject property, the application received April 14, 2023, states that there will no outdoor lighting. A special condition has been added to ensure compliance for any future outdoor lighting installation.
- H. Regarding wastewater treatment and disposal on the subject property, there is no wastewater treatment and disposal required or planned for the proposed PV SOLAR FARM.
- I. Regarding parking, there is no required parking for the proposed PV SOLAR FARM.
- J. Other than as reviewed elsewhere in this Summary of Evidence, there is no evidence to suggest that the proposed Special Use will generate either nuisance conditions such as odor, noise, vibration, glare, heat, dust, electromagnetic fields or public safety hazards such as fire, explosion, or toxic materials release, that are in excess of those lawfully permitted and customarily associated with other uses permitted in the zoning district.

GENERALLY REGARDING WHETHER THE SPECIAL USE CONFORMS TO APPLICABLE REGULATIONS AND STANDARDS AND PRESERVES THE ESSENTIAL CHARACTER OF THE DISTRICT

- 9. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use conforms to all applicable regulations and standards and preserves the essential character of the District in which it shall be located, except where such regulations and standards are modified by Section 6 of the Ordinance:
 - A. The Petitioner has testified on the application, **“Community PV Solar Farms are authorized as a special use in Champaign County’s agricultural district. The project use conforms to the regulations and standards of the district and will preserve the essential character of the district as well.”**
 - B. Regarding compliance with the *Zoning Ordinance*, the following evidence was provided:
 - (1) Section 5.2 authorizes a PV SOLAR FARM only by a County Board Special Use Permit in the AG-1 and AG-2 Agriculture Zoning Districts. It is not permitted by right in any district.
 - (2) There is no required parking.
 - (3) Requirements for what must be included in the area of the PV SOLAR FARM Special Use Permit are in subparagraph 6.1.5 B.(1).
 - a. The revised Site Plan received April 14, 2023 appears to conform to this requirement.
 - (4) Requirements which identify certain areas where a PV SOLAR FARM Special Use Permit shall not be located can be found in Subparagraph 6.1.5 B.(2).
 - a. Item 6.1.5 B.(2)a. requires a PV SOLAR FARM to be more than one and one half miles from an incorporated municipality with a zoning ordinance, unless the following is provided:

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- (a) No part of a PV SOLAR FARM shall be located within a contiguous urban growth area (CUGA) as indicated in the most recent update of the CUGA in the Champaign County Land Resource Management Plan, and there shall be a separation of one-half mile from a proposed PV SOLAR FARM to a municipal boundary at the time of application for the SPECIAL USE Permit, except for any power lines of 34.5 kVA or less and except for any proposed PV SOLAR FARM substation and related proposed connection to an existing substation.
 - i. The subject property is located 1.07 miles of the Village of Pesotum, a municipality with zoning. The PV Solar Farm will not be located in the CUGA.

- (b) The PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM.
 - i. The petitioner sent an email to the Village of Pesotum Clerk on April 14, 2023 which included the Special Use Permit application.

- (c) If no municipal resolution regarding the PV SOLAR FARM is received from any municipality located within one-and-one-half miles of the PV SOLAR FARM prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board.
 - i. No resolution from the Village of Pesotum has been received as of July 5, 2023.

 - ii. Notice of the July 13, 2023, ZBA public hearing was sent by P&Z Staff to the Village of Pesotum on June 28, 2023.

- (5) Requirements regarding interconnection to the power grid can be found in Subparagraph 6.1.5 B.(3):
 - a. The utility interconnection application must be applied for with the relevant utility and documentation provided at the time of Special Use Permit application.
 - (a) The petitioner included an interconnection application with their Special Use Permit application received April 14, 2023.

 - b. Documentation must be provided that the utility has accepted the application for the PV SOLAR FARM prior to issuance of the Zoning Compliance Certificate.

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- (6) Requirements regarding Right to Farm can be found in Subparagraph 6.1.5 B.(4):
 “The owners of the subject property and the Applicant, its successors in interest, and all parties to the decommissioning plan and site reclamation plan hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.”
- a. A special condition has been added to ensure compliance.
- (7) Requirements regarding minimum lot standards can be found in Subparagraph 6.1.5 C.:
- a. Subparagraph 6.1.5 C. eliminates LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, maximum LOT COVERAGE, or maximum LOT AREA requirements on BEST PRIME FARMLAND requirements for a PV SOLAR FARM or for LOTS for PV SOLAR FARM substations and/ or PV SOLAR FARM maintenance and management facilities.
- (8) Requirements regarding minimum separations for PV SOLAR FARMS from other STRUCTURES, BUILDINGS, and USES can be found in Subparagraph 6.1.5 D.
- a. The Special Use Permit application received April 14, 2023 shows the separations between the solar farm fence and adjacent buildings and uses.
- b. The proposed PV SOLAR FARM complies with all minimum separations in paragraph 6.1.5 D. in the following manner:
- (a) Subparagraph 6.1.5 D.(1) requires PV SOLAR FARM fencing to be set back from the street centerline a minimum of 40 feet from a MINOR STREET and a minimum of 55 feet from a COLLECTOR STREET and a minimum of 60 feet from a MAJOR STREET unless a greater separation is required for screening pursuant to Section 6.1.5 M.(2)a., but in no case shall the perimeter fencing be less than 10 feet from the RIGHT OF WAY of any STREET.
- i. The Site Plan received April 14, 2023 demonstrates compliance with the 40 feet setback from the centerline of CR ON, which is a MINOR STREET.
- (b) Subparagraph 6.1.5 D.(2) states that for properties participating in the solar farm, there is no required separation from any existing DWELLING or existing PRINCIPAL BUILDING except as required to ensure that a minimum zoning lot is provided for the existing DWELLING or PRINCIPAL BUILDING.
- a. The subject properties meet minimum zoning lot requirements.
- (c) Subparagraph 6.1.5 D.(3)a. states that for any adjacent LOT that is 10 acres or less in area (not including the STREET RIGHT OF WAY):
- i. For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on no more than two sides by the PV SOLAR FARM, the separation shall be no less than 240 feet from the property line.
- (i) There are no lots that are 10 acres or less in lot area adjacent to the subject property.

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- ii. For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on more than two sides by the PV SOLAR FARM, the separation shall exceed 240 feet as deemed necessary by the BOARD.
 - (i) There are no lots that are 10 acres or less in lot area adjacent to the subject property.

- (d) Subparagraph 6.1.5 D.(3)b. states that for any adjacent LOT that is more than 10 acres in area (not including the STREET RIGHT OF WAY), the separation shall be no less than 255 feet from any existing DWELLING or existing PRINCIPAL BUILDING and otherwise the perimeter fencing shall be a minimum of 10 feet from a SIDE or REAR LOT LINE. This separation distance applies to properties that are adjacent to or across a STREET from a PV SOLAR FARM.
 - i. The nearest dwelling or principal building is approximately 1,080 feet from the PV SOLAR FARM fenced area.

 - ii. The PV SOLAR FARM perimeter fencing is at least 10 feet from the REAR LOT LINE but is less than 10 feet from the east side LOT LINE. A waiver has been added.

- (e) Subparagraph 6.1.5 D.(3)c. states that additional separation may be required to ensure that the noise level required by 35 Ill. Admin. Code Parts 900, 901 and 910 is not exceeded or for other purposes deemed necessary by the BOARD.
 - i. There are no proposed additional separations at this time.

- (f) Subparagraph 6.1.5 D.(4) states that there must be a separation of at least 500 feet from specific types of airport and restricted landing area facilities unless the SPECIAL USE permit application includes results provided from an analysis using the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, Federal Aviation Administration (FAA) Review of Solar Energy Projects on Federally Obligated Airports, or the most recent version adopted by the FAA, and the SGHAT results show no detrimental affect with less than a 500 feet separation.
 - i. There is no AIRPORT or RESTRICTED LANDING AREA within 500 feet of the subject property.

- (g) Subparagraph 6.1.5 D.(5) requires a separation of at least 500 feet between substations and transmission lines of greater than 34.5 kVA to adjacent dwellings and residential DISTRICTS.
 - i. There are no new substations or transmission lines of greater than 34.5 kVA within 500 feet of adjacent dwellings or residential DISTRICTS.

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- (h) Subparagraph 6.1.5 D.(6) states that electrical inverters shall be located as far as possible from property lines and adjacent DWELLINGS consistent with good engineering practice. Inverter locations that are less than 275 feet from the perimeter fence shall require specific approval and may require special sound deadening construction and noise analysis.
 - i. The inverters shown on the Site Plan received April 14, 2023, are approximately 42 feet away from the PV SOLAR FARM perimeter fence. A waiver has been added.
 - ii. Regarding the distance between the inverters and nearby lots with dwellings, based on the Site Plan received April 14, 2023:
 - (i) The inverters are located on the east side of the subject property. The distance between an inverter and the closest dwelling is 2,200 feet.
- (i) Subparagraph 6.1.5 D.(7) states that separation distances for any PV SOLAR FARM with solar equipment exceeding 8 feet in height, with the exception of transmission lines which may be taller, shall be determined by the BOARD on a case-by-case basis.
 - i. The application stated that the arrays will not exceed 12 feet in height at maximum tilt.
- (j) Subparagraph 6.1.5 D.(8) states that PV SOLAR FARM solar equipment other than inverters shall be no less than 26 feet from the property line of any lot more than 10 acres in area.
 - i. The Site Plan received April 14, 2023, shows that there is at least 26 feet separation between the property line of any lot more than 10 acres in area and the PV SOLAR FARM fenced area.
- (9) Paragraph 6.1.5 E. contains standard conditions for the design and installation of PV SOLAR FARMS. Compliance with paragraph 6.1.5 E. can be summarized as follows:
 - a. Subparagraph 6.1.5 E.(1) requires certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer or other qualified professional that that the constructed building conforms to Public Act 96-704 regarding building code compliance and conforms to the Illinois Accessibility Code.
 - (a) The Special Use Permit application packet received April 14, 2023, does not include any buildings.
 - b. Subparagraph 6.1.5 E.(2) establishes minimum requirements for electrical components.
 - (a) Part 6.1.5 E.(2)a. states that all electrical components of the PV SOLAR FARM shall conform to the National Electrical Code as

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amended and shall comply with Federal Communications Commission (FCC) requirements.

- i. The petitioner stated in their application materials, “The design and construction of the solar farm will meet standards and guidelines as provided by the nationally accepted electric code and will comply with Federal Communications Commission (FCC) requirements.”
- (b) Part 6.1.5 E.(2)b. states that burying power and communication wiring underground shall be minimized consistent with best management practice regarding PV solar farm construction and minimizing impacts on agricultural drainage tile.
 - i. The petitioner stated in their application materials, “The Project proposes underground electrical lines that will be buried to the furthest extent reasonable, in order to avoid drain tiles, at a minimum depth of at least 5 feet below grade and will interconnect into the existing and proposed Ameren Illinois utility poles located off County Road 00 North.”
 - c. Subparagraph 6.1.5 E.(3) states that the height limitation established in Section 5.3 shall not apply to a PV SOLAR FARM, and requires the maximum height of all above ground STRUCTURES to be identified in the application and as approved in the SPECIAL USE permit.
 - (a) The petitioner indicated that all above ground structures would be less than twelve feet tall except for the utility poles.
 - d. Subparagraph 6.1.5 E.(4) requires that a reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.
 - (a) The petitioner stated in the Special Use Permit application that appropriate warning signs will be posted.
 - e. Subparagraph 6.1.5 E.(5) requires that no PV SOLAR FARM construction may intrude on any easement or right of way for a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE, an underground water main or sanitary sewer, a drainage district ditch or tile, or any other public utility facility unless specifically authorized by a crossing agreement that has been entered into with the relevant party.
 - (a) Drainage districts have been notified of the proposed project and no comments have been received.
 - (b) The subject property does not have a connection to public sewer or water.
 - (c) Champaign County Geographic Information Systems data does not show any gas or hazardous liquid lines on the subject property.

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- (10) Paragraph 6.1.5 F. contains standard conditions to mitigate damage to farmland.
- a. The soil within the approximate PV SOLAR FARM fenced area is Best Prime Farmland and consists of 152A Drummer silty clay loam, 154A Flanagan silt loam, 198A Elburn silt loam, and has an average Land Evaluation score of 100.
 - b. The Applicant is required to sign an Agricultural Impact Mitigation Agreement, which would include requirements to mitigate damage to farmland per *505 ILCS 147/15(b)*. A special condition has been added to ensure compliance.
 - c. Regarding pollinator friendly ground cover in the mitigation of damage to farmland, the petitioner stated in their application materials received April 14, 2023, “To control noxious weeds and erosion in the area of the Project, disturbed areas of the Site will be seeded with a native grass mix that will include native wildflowers that are pollinator friendly. The use of native vegetation and/or pollinator-friendly seed mixes supports the habitat of bees, butterflies, wasps, flies, beetles, and other pollinator species needed for agriculture. The seed mix chosen will be native and local to the Illinois environment, which naturally allows the Site to be resilient to droughts and intense downpours.”
 - d. Subparagraph 6.1.5 F.(1) establishes a minimum depth of 5 feet for underground wiring or cabling below grade or deeper if required to maintain a minimum one foot of clearance between the wire or cable and any agricultural drainage tile or a lesser depth if so authorized by the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.
 - (a) The Special Use Permit application received April 14, 2023 states that all underground wiring or cabling will be at a minimum depth of 5 feet below grade.
 - e. Subparagraph 6.1.5 F.(2) establishes requirements for protection of agricultural drainage tile.
 - (a) The petitioner stated on the application, “Should the Project damage any drain tiles on the Project parcel during construction or operation, then the Applicant shall promptly repair or replace those drain tiles. In cooperation with the landowner, Pivot will identify existing drainage infrastructure to avoid during the installation and ongoing operation of the Project. If any drainage district tile lines are located, they will be flagged and protected by a 30-foot-wide, no construction buffer on either side of the drain tile. There are no gas or hazardous liquid pipelines on the Site. The Project will comply with the standards set for in the Agricultural Impact Mitigation Agreement that will be finalized prior to applying for a construction permit.”

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- f. Subparagraph 6.1.5 F.(3) requires restoration for any damage to soil conservation practices.
 - (a) The petitioner stated on the application, “Any conservation practices damaged by construction will be restored by the Applicant to their pre-construction condition and care will be taken to maintain the existing practices to preserve erosion control, flood control, and water quality.”

- g. Subparagraph 6.1.5 F.(4) establishes requirements for topsoil replacement pursuant to any open trenching.
 - (a) The petitioner stated on the application, “Should any open trenching be required, the Project will do so in accordance with the trenching requirements listed in the Champaign County Zoning Ordinance.”

- h. Subparagraph 6.1.5 F.(5) establishes requirements for mitigation of soil compaction and rutting.
 - (a) The petitioner stated on the application, “Soil compaction and rutting will be mitigated and shall be consistent with the Agricultural Impact Mitigation Agreement.”

- i. Subparagraph 6.1.5 F.(6) establishes requirements for land leveling.
 - (a) The petitioner did not provide a response in the application materials.

- j. Subparagraph 6.1.5 F.(7) establishes requirements for a permanent Erosion and Sedimentation Control Plan.
 - (a) The petitioner stated on the application, “An Erosion and Sedimentation Control Plan will be designed prior to our application for a building permit and as-build documentation will be provided to the zoning administrator.”

- k. Subparagraph 6.1.5 F.(8) establishes requirements for retention of all topsoil.
 - (a) The petitioner did not provide a response in the application materials.

- l. Subparagraph 6.1.5 F.(9) establishes requirements for minimizing the disturbance to BEST PRIME FARMLAND by establishing a specific type of vegetative ground cover.
 - (a) The petitioner stated on the application, “The Project will minimize disturbance to prime farmland and will be consistent with good engineering practices. As mentioned in the landscaping section, the vegetative ground cover will be comprised of native plant species suitable for the conditions of the Site. This native seeding will be oriented towards fostering an environment that is beneficial to pollinators.”

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- (11) Paragraph 6.1.5 G. contains standard conditions for use of public streets.
- a. Paragraph 6.1.5 G.(1) requires the Applicant to enter into a signed Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney and/or any relevant Township Highway Commissioner prior to the close of the public hearing for the use of public streets, except for any COMMUNITY PV SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements, and the signed and executed Roadway Upgrade and Maintenance agreements must provide for certain conditions.
 - (a) The petitioner is in discussion with Tuscola Township regarding this requirement, and a waiver has been added.
 - b. Paragraph 6.1.5 G.(2) requires that the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality where relevant, has approved a Transportation Impact Analysis provided by the Applicant and prepared by an independent engineer that is mutually acceptable to the Applicant and the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality.
 - (a) The petitioner is in discussion with Tuscola Township regarding this requirement, and a waiver has been added.
 - c. Paragraph 6.1.5 G.(3) requires the Applicant or its successors in interest to enter into a Roadway Use and Repair Agreement with the appropriate highway authority for decommissioning the PV SOLAR FARM.
 - (a) No information was required or submitted for the Special Use Permit application.
- (12) Paragraph 6.1.5 H. contains standard conditions for coordination with local fire protection districts.
- a. The subject property is approximately 2.9 road miles from the Pesotum fire station.
 - b. The petitioners stated in their application materials, "The Applicant has shared the proposed Site plan to the local Pesotum Fire Department and has offered to provide training and necessary equipment to the local emergency response authorities to prepare for proper emergency response during construction of the Project. In addition, the Applicant will create an emergency response plan and solicit input from the Pesotum Fire Department. The Applicant will submit a final site plan and Safety & Emergency Management Plan upon completion of the Project. In addition, the Project proposes a "knox box" on the Project gate for emergency personnel to gain access to the Site. Warning signs concerning voltage will be placed at the base of all pad-mounted transformers."
 - c. The Pesotum Fire Protection District was notified of this case and no comments have been received.

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- (13) Paragraph 6.1.5 I. contains standard conditions for the allowable noise level.
- a. Subparagraph 6.1.5 I.(1) requires the noise level from each PV SOLAR FARM to be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (35 *Illinois Administrative Code* Subtitle H: Noise Parts 900, 901, 910).
 - (a) The petitioner stated in their application, “The noise level related to the Project will be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations. The proposed single axis tracker ground mount solar photovoltaic has motors for each racking row that moves the panels imperceptible throughout the day. At three meters from the racking motor, the ambient noise level is 43 decibels and the motor running level is 53 decibels. The motor only turns on to move the array periodically as the sun makes its arc, and in between movements it does not run. 43 decibels would be the equivalent of quiet library sounds, and 50 decibels would be the equivalent of your typical residential fridge. The ATI DuraTrack V3 tracker motor operates for a total of 17.91 minutes per day. The transformer that will be used on Site has an average ambient noise level of 53 decibels. From the fence line, the Project will not be audible, and all abovementioned decibel levels are below the allowable octave band listed in Subtitle H: Noise, Parts 901 of the IPCB Administrative Code.”
 - b. Subparagraph 6.1.5 I.(3)a. requires that a SPECIAL USE Permit application for other than a COMMUNITY PV SOLAR FARM shall include a noise analysis.
 - (a) The project size is considered to be a COMMUNITY PV SOLAR FARM and therefore a noise analysis is not required unless the ZBA requires one.
- (14) Paragraph 6.1.5 J. contains standard conditions for endangered species consultation. Regarding compliance with 6.1.5 J.:
- a. The petitioner stated in their application, “The Illinois Department of Natural Resources (IDNR) was consulted through their Ecological Compliance Assessment Tool (EcoCAT) regarding any state-listed threatened or endangered species that may be located within the Project. On November 17, 2022, the EcoCAT results terminated consultation as there were no threatened or endangered species within the Project vicinity. The Project was designed and sited to mitigate impacts to wildlife; there will be no tree removal on Site or drastic change in land configuration.”
- (15) Paragraph 6.1.5 K. contains standard conditions for historic and archaeological resources review. Regarding compliance with 6.1.5 K.:
- a. The petitioner stated in their application, “The State Historic Preservation Office (SHPO) was contacted on October 12, 2022 to review the Site for any significant historic, architectural, or archeological resources. In the SHPO’s November 18, 2022 response, they determined that there was no significant resources documented within the Site.”

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- (16) Paragraph 6.1.5 L. states: “The PV SOLAR FARM shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife to a sustainable level of mortality.”
- a. The petitioner stated in their application, “The Project was designed and sited to mitigate impacts to wildlife; there will be no tree removal on Site or drastic change in land configuration.”
- (17) Paragraph 6.1.5 M. contains standard conditions for screening and fencing.
- a. Subparagraph 6.1.5 M.(1) requires the PV SOLAR FARM to have perimeter fencing that is at least 7 feet tall, with Knox boxes and keys provided at locked entrances, and a vegetation management plan included in the application to control NOXIOUS WEEDS.
 - (a) The petitioner stated in their application, “A 8’ chain link fence, or game fence, will be installed to surround the perimeter of the solar equipment components. In addition, the Project proposes a “knox box” on the Project gate for emergency personnel to gain access to the Site.”
 - (b) The petitioner included a Landscaping Plan in their application, and also stated, “Noxious weeds and other vegetation between the fencing and the lot line will be controlled in accordance with Illinois Noxious Weed Law (505 ILCS 100/1 et. Seq.).”
 - b. Subparagraph 6.1.5 M.(2) requires a visual screen around the perimeter of the PV SOLAR FARM.
 - (a) Subparagraph 6.1.5 M.(2)a.(a) requires that a visual screen be provided for any part of the PV SOLAR FARM that is visible to and located within 1,000 feet of an existing DWELLING or residential DISTRICT.
 - i. The petitioner stated in their application, “The Project does not propose screening as there are no dwellings unrelated to the Project within 1,000 feet of the Site. The one dwelling that is approximately 945 feet from the Project is the Project parcel landowner’s (JHBLT LLC) adjacent property and dwelling. The authorized signatory Janet Boyer, a trustee of JHBLT LLC, has signed a waiver for screening attached as Exhibit I.”
- (18) Paragraph 6.1.5 N. contains standard conditions to minimize glare from the PV SOLAR FARM. Subparagraph 6.1.5 N.(1) requires that the design and construction of the PV SOLAR FARM shall minimize glare that may affect adjacent properties and the application shall include an explanation of how glare will be minimized.
- a. The petitioner stated in the application, “The design of the Project is for the solar array to absorb the sunlight, rather than reflect it. The Project will not produce glare, and the array will face the sun for the entirety of the day. Upon review by the Federal Aviation Agency (FAA), a “no determination of hazard” letter was issued. Should any complaints arise due to the Project,

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the Applicant will work to resolve said complaint submitted through the complaint hotline."

- (19) Paragraph 6.1.5 O. contains standard conditions for the minimum liability insurance for the PV SOLAR FARM.
- a. The petitioner stated in the application, "The Applicant will maintain a general liability insurance policy covering bodily injury and property damage with minimum limits of at least \$5 million per occurrence and \$5 million in the aggregate. This policy shall identify landowners as additional insured."
- (20) Paragraph 6.1.5 P. contains other standard conditions for operation of the PV SOLAR FARM.
- a. Subparagraph 6.1.5 P.(1)c. states: "The Application shall explain methods and materials used to clean the PV SOLAR FARM equipment including an estimation of the daily and annual gallons of water used and the source of the water and the management of wastewater. The BOARD may request copies of well records from the Illinois State Water Survey and may require an estimate by a qualified hydrogeologist of the likely impact on adjacent waterwells."
- (a) The petitioner stated on the application, "The Applicant does not assume any annual cleaning frequency as the Illinois climate is more humid and has frequent rain events. In Illinois, snow and rainfall help to naturally "clean" the panels, so manual cleaning would be unlikely. However, should there be an abnormally dry year where the Applicant notices production loss due to dust accumulation, then the Applicant would dispatch for cleaning in that instance. When module cleaning is necessary (fairly rare in Illinois), the cleaning service is responsible for trucking in the water required for the cleaning. No on-site well or local utilities would be used as the water source. General data indicates about 6,400 gallons of water used per MW AC per cleaning. This estimate of water usage may vary depending on the provider and cleaning equipment available."
- b. Subparagraph 6.1.5 P.(3) states: "The PV SOLAR FARM SPECIAL USE permit application shall include a weed control plan for the total area of the SPECIAL USE permit including areas both inside of and outside of the perimeter fencing. The weed control plan shall ensure the control and/or eradication of NOXIOUS WEEDS consistent with the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.). The weed control plan shall be explained in the application.
- (a) The petitioner submitted a Landscape Plan including a weed control plan received April 14, 2023.
- c. All other requirements in Paragraph 6.1.5 P. do not have to be submitted as part of the Special Use Permit application; rather, they will be required during construction, operations, and/or decommissioning phases of the project.

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- (21) Paragraph 6.1.5 Q. contains standard conditions for a Decommissioning and Site Reclamation Plan for the PV SOLAR FARM and modifies the basic site reclamation requirements in paragraph 6.1.1 A. Compliance with paragraph 6.1.5 Q. can be summarized as follows:
- a. Subparagraph 6.1.5 Q.(1) of the Ordinance requires a signed Decommissioning and Site Reclamation Plan conforming to the requirements of paragraph 6.1.1 A. of the Ordinance and the remainder of 6.1.5 Q. of the Ordinance. Compliance with the requirements of paragraph 6.1.1 A. of the Ordinance can be summarized as follows:
 - (a) Subparagraph 6.1.1 A.1. of the Ordinance requires the petitioner to submit a Decommissioning and Site Reclamation Plan for consideration by the Board.
 - i. The petitioner included a signed Decommissioning and Site Reclamation Plan with their application received April 14, 2023.
 - (b) Subparagraph 6.1.1 A.2. of the Ordinance requires that the decommissioning and site reclamation plan shall be binding upon all successors of title, lessees, to any operator and/or owner of a NON-ADAPTABLE STRUCTURE, and to all parties to the decommissioning and site reclamation plan. Prior to the issuance of a SPECIAL USE Permit for such NON-ADAPTABLE STRUCTURES, the landowner or applicant shall also record a covenant incorporating the provisions of the decommissioning and site reclamation plan on the deed subject to the LOT, requiring that the reclamation work be performed and that a letter of credit be provided for financial assurance.
 - i. The petitioner's Decommissioning and Site Reclamation Plan received April 14, 2023 states, "Any successor in interest, assignee, and all parties to the decommissioning and site reclamation plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the Champaign Solar 1 facility."
 - (c) Subparagraph 6.1.1 A.3. of the Ordinance requires that separate cost estimates for Section 6.1.1 A.4.a., 6.1.1 A.4.b., and 6.1.1 A.4.c. shall be provided by an Illinois Licensed Professional Engineer and are subject to approval of the BOARD.
 - i. The petitioner included cost estimates with their Decommissioning and Site Reclamation Plan received April 14, 2023."
 - (d) Subparagraph 6.1.1 A.4.d. of the Ordinance requires the Decommissioning and Site Reclamation Plan to provide for provision and maintenance of a letter of credit, as set forth in Section 6.1.1 A.5.

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- i. The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to a Letter of Credit.
- (e) Subparagraph 6.1.1 A.5. of the Ordinance requires submission of an irrevocable letter of credit in the amount of 150% of the cost estimate required by 6.1.1 A.3 prior to issuance of a Zoning Use Permit.
 - i. No specifics were required or submitted regarding the Letter of Credit.
- (f) Subparagraph 6.1.1 A.6. of the Ordinance establishes a time period prior to the expiration of the irrevocable letter of credit during which the Zoning Administrator shall contact the landowner regarding the intent to renew the letter of credit and the landowner shall reply within a certain amount of time.
 - i. No specifics were required or submitted for the Special Use Permit application regarding this requirement.
- (g) Subparagraph 6.1.1 A.7. of the Ordinance establishes 5 factors to be considered in determining if a NON-ADAPTABLE structure (PV SOLAR FARM in this instance) is abandoned in place and 6.1.1 A.9. of the Ordinance establishes 7 conditions when the Zoning Administrator may draw upon the letter of credit and jointly these 12 circumstances comprise when the Zoning Administrator may draw upon the letter of credit.
 - i. The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to these items.
- (h) All other requirements in Paragraph 6.1.5 Q.(1) do not have to be submitted as part of the Special Use Permit application; rather, they will be required during construction, operations, and/or decommissioning phases of the project.
- b. Subparagraph 6.1.5 Q.(2) of the Ordinance requires that in addition to the costs listed in subparagraph 6.1.1 A.4. of the Ordinance, the decommissioning and site reclamation plan shall also include provisions for anticipated repairs to any public STREET used for the purpose of reclamation of the PV SOLAR FARM and all costs related to removal of access driveways.
 - (a) The Decommissioning and Site Reclamation Plan received April 14, 2023 includes provisions for repairing public streets via a Roadway Use and Repair Agreement and removal of access roads should the landowner require it.
- c. Subparagraph 6.1.5 Q.(3) of the Ordinance requires the Decommissioning and Site Reclamation Plan to include additional information.
 - (a) The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to 6.1.5 Q.(3).

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- d. Subparagraph 6.1.5 Q.(4) of the Ordinance requires that the Applicant shall provide financial assurance in the form of an irrevocable letter of credit as required in paragraph 6.1.1 A.5. of the Ordinance. Regarding compliance with this subparagraph:
- (a) The Letter of Credit must be supplied prior to receiving a Zoning Use Permit.
- e. Subparagraph 6.1.5 Q.(5) of the Ordinance states that in addition to the conditions listed in subparagraph 6.1.1 A.9. the Zoning Administrator may also draw on the funds for a myriad of reasons.
- (a) The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to 6.1.5 Q.(5).
- f. Subparagraph 6.1.5 Q.(6) of the Ordinance states that the Zoning Administrator may, but is not required to, deem the PV SOLAR FARM abandoned, or the standards set forth in Section 6.1.5 Q.(5) met, with respect to some, but not all, of the PV SOLAR FARM. In that event, the Zoning Administrator may draw upon the financial assurance to perform the reclamation work as to that portion of the PV SOLAR FARM only. Upon completion of that reclamation work, the salvage value and reclamation costs shall be recalculated as to the remaining PV SOLAR FARM.
- (a) No information was provided regarding this section in the Decommissioning and Site Reclamation Plan.
- g. Subparagraph 6.1.5 Q.(7) of the Ordinance states that the Decommissioning and Site Reclamation Plan shall be included as a condition of approval by the BOARD and the signed and executed irrevocable letter of credit must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.
- (a) A special condition has been added to ensure compliance.
- (22) Paragraph 6.1.5 R. contains standard conditions for securing an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
- a. The petitioner stated in the application, “The Project will comply with the standards set for in the Agricultural Impact Mitigation Agreement that will be finalized prior to applying for a construction permit.”
 - b. No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received. A special condition has been added to ensure compliance.
- (23) Paragraph 6.1.5 S. contains standard conditions for a complaint hotline for complaints related to PV SOLAR FARM construction and ongoing operations.
- a. No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received. A special condition has been added to ensure compliance.

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- (24) Paragraph 6.1.5 T. contains a standard condition stating that the PV SOLAR FARM County Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.
- a. A special condition has been added to ensure compliance.
- (25) Paragraph 6.1.5 U. contains standard conditions establishing additional requirements for application for a PV SOLAR FARM County Board Special Use Permit that supplement the basic requirements for a special use permit application.
- a. Subparagraph 6.1.5 U.(1)a. requires a PV SOLAR FARM Project Summary.
 - (a) A Project Description was included with the application received April 14, 2023.
 - b. Subparagraph 6.1.5 U.(1)b. requires the name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s) for the PV SOLAR FARM County Board SPECIAL USE permit.
 - (a) The application received April 14, 2023, demonstrates compliance with this requirement.
 - c. Subparagraph 6.1.5 U.(1)c. requires a site plan for the SOLAR FARM which includes the following:
 - (a) The approximate planned location of all PV SOLAR FARM STRUCTURES, property lines (including identification of adjoining properties), required separations, public access roads and turnout locations, access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the PV SOLAR FARM to the Substations(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback.
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.
 - (b) The site plan shall clearly indicate the area of the proposed PV SOLAR FARM County Board SPECIAL USE Permit as required by subparagraph 6.1.5 B.(1).
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.
 - (c) The location of all below-ground wiring.
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.
 - (d) The location, height, and appearance of all above-ground wiring and wiring structures.
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.

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- (e) The separation of all PV SOLAR FARM structures from adjacent DWELLINGS and/or PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit. Greater separation and somewhat different locations may be provided in the approved site plan for the Zoning Use Permit provided that that the greater separation does not increase the noise impacts and/or glare that were approved in the PV SOLAR FARM County Board SPECIAL USE Permit. PV SOLAR FARM structures includes substations, third party transmission lines, maintenance and management facilities, or other significant structures.
 - i. The application received April 14, 2023 appears to conform to this requirement.

- d. Subparagraph 6.1.5 U.(1)d. requires submittal of all other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.
 - (a) Compliance with this subparagraph has been shown in previous sections of this Summary of Evidence.

- e. Subparagraph 6.1.5 U.(1)e. requires that the PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM as required by Section 6.1.5 B.(2)a.(b).
 - (a) The Petitioner emailed a copy of the Special Use Permit application to the Village of Pesotum Clerk on April 14, 2023.

- f. Subparagraph 6.1.5 U.(1)f. requires that a municipal resolution regarding the PV SOLAR FARM by any municipality located within one-and-one-half miles of the PV SOLAR FARM must be submitted to the ZONING ADMINISTRATOR prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board or, in the absence of such a resolution, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board as required by Section 6.1.5 B.(2)a.(c).
 - (a) No resolution from the Village of Pesotum has been received as of July 5, 2023.

 - (b) Notice of the July 13, 2023 public hearing was sent by P&Z Staff to the Village of Pesotum on June 28, 2023.

- g. Subparagraph 6.1.5 U.(1)g. requires that documentation of an executed interconnection agreement with the appropriate electric utility shall be

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provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM as required by Section 6.1.5 B.(3)b.

- (a) The petitioner included an application for an interconnection agreement with their Special Use Permit application received April 14, 2023.
 - (b) A special condition has been added to ensure compliance.
 - h. Subparagraph 6.1.5 U.(2) requires that the Applicant shall notify the COUNTY of any changes to the information provided above that occurs while the County Board SPECIAL USE permit application is pending.
 - (a) No new information has been provided to date.
 - i. Subparagraph 6.1.5 U.(2) requires that the Applicant shall include a copy of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture with the Zoning Use Permit Application to authorize construction.
 - (a) A special condition has been added to ensure compliance.
- C. Regarding compliance with the *Storm Water Management and Erosion Control Ordinance*:
- (1) The proposed Special Use is not exempt from the *Storm Water Management and Erosion Control Ordinance*. A Storm Water Drainage Plan and detention basin will be required if more than 16% of the subject property is impervious area, including gravel, buildings, and solar array rack posts.
 - (2) Regarding the SWMEC requirement to protect agricultural field tile, see the review of compliance with paragraph 6.1.5 F. that contains standard conditions to mitigate damage to farmland.
- D. Regarding the Special Flood Hazard Areas Ordinance, no part of the subject property is located within a Special Flood Hazard Area.
- E. Regarding the Subdivision Regulations, the subject property is located in Champaign County's subdivision jurisdiction and appears to be in compliance.
- F. Regarding the requirement that the Special Use preserve the essential character of the AG-1 Agriculture Zoning District:
- (1) The proposed use is a PV SOLAR FARM that is consistent with the essential character of the AG-1 Agriculture District because it is only authorized in the AG-1 and AG-2 Districts.
- G. The proposed Special Use must comply with the Illinois Accessibility Code, which is not a County ordinance or policy and the County cannot provide any flexibility regarding that Code. A Zoning Use Permit cannot be issued for any part of the proposed Special Use until full compliance with the Illinois Accessibility Code has been indicated in drawings.

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10. Regarding the *Zoning Ordinance* requirement that the proposed Special Use is in harmony with the general intent and purpose of the Ordinance:
- A. A PV SOLAR FARM may be authorized by the County Board in the AG-1 or AG-2 Agriculture Zoning Districts as a Special Use provided all other zoning requirements and standard conditions are met or waived.
- (1) A proposed Special Use that does not conform to the standard conditions requires only a waiver of that particular condition and does not require a variance. Waivers of standard conditions are subject to the following findings:
- a. that the waiver is in accordance with the general purpose and intent of the ordinance; and
- b. that the waiver will not be injurious to the neighborhood or to the public health, safety, and welfare.
- B. See Section 15 for a summary of evidence regarding whether any requested waiver of standard conditions will be in harmony with the general intent and purpose of the Ordinance.
- C. Regarding whether the proposed Special Use Permit is in harmony with the general intent of the Zoning Ordinance:
- (1) Subsection 5.1.1 of the Ordinance states the general intent of the AG-1 District and states as follows (capitalized words are defined in the Ordinance):
- The AG-1, Agriculture DISTRICT is intended to protect the areas of the COUNTY where soil and topographic conditions are best adapted to the pursuit of AGRICULTURAL USES and to prevent the admixture of urban and rural USES which would contribute to the premature termination of AGRICULTURE pursuits.
- (2) The types of uses authorized in the AG-1 District are in fact the types of uses that have been determined to be acceptable in the AG-1 District. Uses authorized by Special Use Permit are acceptable uses in the districts provided that they are determined by the ZBA to meet the criteria for Special Use Permits established in paragraph 9.1.11 B. of the Ordinance.
- (3) Paragraph 2.0(a) of the Ordinance states that one purpose of the Ordinance is securing adequate light, pure air, and safety from fire and other dangers.
- This purpose is directly related to the limits on building coverage and the minimum yard requirements in the Ordinance and the proposed site plan appears to be in compliance with those requirements.
- (4) Paragraph 2.0(b) of the Ordinance states that one purpose of the Ordinance is conserving the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY.

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- a. Regarding the value of nearby properties, it is not clear whether the proposed Special Use will have any impact on the value of nearby properties without a formal real estate appraisal, which has not been requested nor provided, and so any discussion of values is necessarily general.
 - b. Regarding the value of the subject property, it also is not clear if the requested Special Use Permit would have any effect.
 - (a) If the petitioner is denied the special use permit, the property can still be used for agricultural production.
 - c. Section 6.1.5 Q. of the PV SOLAR FARM text amendment approved on August 23, 2018, includes a standard condition requiring a Decommissioning and Site Reclamation Plan that is intended to ensure there is adequate financial assurance for removal of a PV SOLAR FARM at the end of its useful life. Ensuring adequate site reclamation is one method of protecting surrounding property values.
- (5) Paragraph 2.0(c) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding congestion in the public STREETS.
- Other than additional traffic during construction and/or decommissioning of the PV SOLAR FARM, no significant increase in traffic is anticipated.
- (6) Paragraph 2.0(d) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding the hazards to persons and damage to PROPERTY resulting from the accumulation of runoff from storm or flood waters.
 - a. The requested Special Use Permit is not in a Special Flood Hazard Area.
 - b. The proposed Special Use is not exempt from the *Storm Water Management and Erosion Control Ordinance*. A Storm Water Drainage Plan and detention basin will be required if more than 16% of the subject property is impervious area, including gravel, buildings, and solar array rack posts.
 - (7) Paragraph 2.0(e) of the Ordinance states that one purpose of the Ordinance is promoting the public health, safety, comfort, morals, and general welfare.
 - a. In regards to public safety, this purpose is similar to the purpose established in paragraph 2.0 (a) and is in harmony to the same degree.
 - b. In regards to public comfort and general welfare, this purpose is similar to the purpose of conserving property values established in paragraph 2.0 (b) and is in harmony to the same degree.
 - (8) Paragraph 2.0 (f) states that one purpose of the Ordinance is regulating and limiting the height and bulk of BUILDINGS and STRUCTURES hereafter to be erected; and paragraph 2.0 (g) states that one purpose is establishing, regulating, and limiting the BUILDING or SETBACK lines on or along any STREET, trafficway, drive or parkway; and paragraph 2.0 (h) states that one purpose is regulating and limiting the

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intensity of the USE of LOT AREAS, and regulating and determining the area of OPEN SPACES within and surrounding BUILDINGS and STRUCTURES.

These three purposes are directly related to the limits on building height and building coverage and the minimum setback and yard requirements in the Ordinance and the proposed site plan appears to be in compliance with those limits.

- (9) Paragraph 2.0(i) of the Ordinance states that one purpose of the Ordinance is classifying, regulating, and restricting the location of trades and industries and the location of BUILDINGS, STRUCTURES, and land designed for specified industrial, residential, and other land USES; and paragraph 2.0(j.) states that one purpose is dividing the entire COUNTY into DISTRICTS of such number, shape, area, and such different classes according to the USE of land, BUILDINGS, and STRUCTURES, intensity of the USE of LOT AREA, area of OPEN SPACES, and other classification as may be deemed best suited to carry out the purpose of the ordinance; and paragraph 2.0(k) states that one purpose is fixing regulations and standards to which BUILDINGS, STRUCTURES, or USES therein shall conform; and paragraph 2.0(l) states that one purpose is prohibiting USES, BUILDINGS, OR STRUCTURES incompatible with the character of such DISTRICT.

Harmony with these four purposes requires that the special conditions of approval sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate nonconforming conditions.

- (10) Paragraph 2.0(m) of the Ordinance states that one purpose of the Ordinance is preventing additions to and alteration or remodeling of existing BUILDINGS, STRUCTURES, or USES in such a way as to avoid the restrictions and limitations lawfully imposed under this ordinance.

This purpose is not relevant to the proposed Special Use Permit because it relates to nonconforming buildings, structures, or uses that existed on the date of the adoption of the Ordinance and no structures exist on the subject property.

- (11) Paragraph 2.0(n) of the Ordinance states that one purpose of the Ordinance is protecting the most productive AGRICULTURAL lands from haphazard and unplanned intrusions of urban USES.

The subject property is located in the AG-1 Agriculture District and is rural in use.

- (12) Paragraph 2.0(o) of the Ordinance states that one purpose of the Ordinance is protecting natural features such as forested areas and watercourses.

The petitioners requested a natural resource review from the Illinois Department of Natural Resources EcoCAT tool. The review identified no protected resources that might be in the vicinity of the proposed PV Solar Farm. No further action is required by IDNR regarding natural resources.

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- (13) Paragraph 2.0(p) of the Ordinance states that one purpose of the Ordinance is encouraging the compact development of urban areas to minimize the cost of development of public utilities and public transportation facilities.

The subject property is located in the AG-1 Agriculture District and is, by definition, rural in use.

- (14) Paragraph 2.0(q) of the Ordinance states that one purpose of the Ordinance is encouraging the preservation of AGRICULTURAL belts surrounding urban areas, to retain the AGRICULTURAL nature of the COUNTY, and the individual character of existing communities.

The subject property is located in the AG-1 Agriculture District and is, by definition, rural in use.

- (15) Paragraph 2.0(r) of the Ordinance states that one purpose of the Ordinance is to provide for the safe and efficient development of renewable energy sources in those parts of the COUNTY that are most suited to their development.

The entire project area is located in an Agriculture zoning district, which is the only zoning DISTRICT in which a PV SOLAR FARM is authorized.

GENERALLY REGARDING WHETHER THE SPECIAL USE IS AN EXISTING NONCONFORMING USE

11. The proposed Special Use is not an existing NONCONFORMING USE.

RELATED TO THE WAIVERS, GENERALLY REGARDING SPECIAL CONDITIONS THAT MAY BE PRESENT

12. Generally regarding the Zoning Ordinance requirement of a finding that special conditions and circumstances exist which are peculiar to the land or structure involved which are not applicable to other similarly situated land or structures elsewhere in the same district:
- A. Regarding Part A of the proposed waivers, for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles:
- (1) There is an interstate and interchange limiting visibility of the PV SOLAR FARM between the Village of Pesotum and the PV SOLAR FARM.
 - (2) The P&Z Department sent the Village of Pesotum Clerk notice of the ZBA hearing for this case on June 28, 2023.
- B. Regarding Part B of the proposed waivers, for a fence that is less than 10 feet from the side property line in lieu of the minimum required 10 feet:
- (1) The eastern fence of the PV SOLAR FARM is on the shared property line with the Canadian National railroad tracks.
- C. Regarding Part C of the proposed waivers, for inverters that are 42 feet from the PV SOLAR FARM fence in lieu of 275 feet:
- (1) The inverters have been placed as far away as possible from the nearest residences.

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- D. Regarding Part D of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board:
- (1) The petitioner is working with Tuscola Township on either a waiver or a Roadway Upgrade and Maintenance Agreement.
 - (2) A special condition has been added requiring the applicant to submit a Roadway Upgrade and Maintenance Agreement or waiver therefrom and approved by ELUC at the time of application for a Zoning Use Permit from Tuscola Township.

RELATED TO THE WAIVERS, GENERALLY REGARDING ANY PRACTICAL DIFFICULTIES OR HARDSHIPS RELATED TO CARRYING OUT THE STRICT LETTER OF THE ORDINANCE

13. Generally regarding the Zoning Ordinance requirement of a finding that practical difficulties or hardships related to carrying out the strict letter of the regulations sought to be varied prevent reasonable and otherwise permitted use of the land or structures or construction on the lot:
- A. Without Part A of the proposed waivers, the PV SOLAR FARM could not be located on the subject property.
 - B. Without Part B of the proposed waivers, the eastern fence would have to be moved west, which would encroach on the access driveway.
 - C. Without Part C of the proposed waivers, the inverters would have to be moved farther west, which is closer to the nearest residences.
 - D. Without Part D of the proposed waivers, the Special Use Permit process might have to be extended in order to have sufficient time to prepare these documents.

RELATED TO THE WAIVERS, GENERALLY PERTAINING TO WHETHER OR NOT THE PRACTICAL DIFFICULTIES OR HARDSHIPS RESULT FROM THE ACTIONS OF THE APPLICANT

14. Generally regarding the Zoning Ordinance requirement for a finding that the special conditions, circumstances, hardships, or practical difficulties do not result from the actions of the Applicant:
- A. Regarding Part A of the proposed waivers, for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles:
 - (1) The petitioners were not aware of this separation requirement when they leased the land for the PV SOLAR FARM.
 - B. Regarding Part B of the proposed waivers, for a fence that is less than 10 feet from the side property line in lieu of the minimum required 10 feet:
 - (1) The petitioners were not aware of this requirement when they leased the land for the PV SOLAR FARM.
 - C. Regarding Part C of the proposed waivers, for inverters that are 42 feet from the PV SOLAR FARM fence in lieu of 275 feet:
 - (1) The petitioners placed the inverters where they are in order to maintain the greatest distance from the nearest residences.

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- D. Regarding Part D of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board:
- (1) The petitioner is working with Tuscola Township to receive either an agreement or a waiver from this requirement.

GENERALLY PERTAINING TO WHETHER OR NOT THE WAIVERS ARE IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ORDINANCE

15. Regarding the *Zoning Ordinance* requirement that the waivers of standard conditions of the Special Use will be in harmony with the general purpose and intent of the ordinance:
- A. Regarding Part A of the proposed waivers, for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, the requested waiver (variance) is 71.3% of the minimum required, for a variance of 28.7%.
- B. Regarding Part B of the proposed waivers, for a fence that is less than 10 feet from the side property line in lieu of the minimum required 10 feet: the requested waiver (variance) is 0% of the minimum required, for a variance of 100%.
- C. Regarding Part C of the proposed waivers, for inverters that are 42 feet from the PV SOLAR FARM fence in lieu of 275 feet: the requested waiver (variance) is 15% of the minimum required, for a variance of 85%.
- D. Regarding Part D of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, the requested waiver (variance) is 0% of the minimum required, for a variance of 100%.

RELATED TO THE WAIVERS, GENERALLY PERTAINING TO THE EFFECTS OF THE REQUESTED WAIVERS ON THE NEIGHBORHOOD AND THE PUBLIC HEALTH, SAFETY, AND WELFARE

16. Regarding the *Zoning Ordinance* requirement for a finding that the granting of the waiver (variance) will not be injurious to the neighborhood, or otherwise detrimental to the public health, safety, or welfare:
- A. Pesotum Township and Tuscola Township have been notified of this case, and no comments have been received.
- B. The Pesotum Fire Protection District has been notified of this case, and no comments have been received.
- C. Pesotum Consolidated Main Drainage District and Hayes Branch Drainage District have been notified of this case, and no comments have been received.
- D. Considerations of public health, safety, and welfare for the proposed special use are discussed under Item 8 and are also applicable to the proposed waivers.

GENERALLY REGARDING PROPOSED SPECIAL CONDITIONS OF APPROVAL

17. Regarding proposed special conditions of approval:

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A. The approved site plan consists of the following documents:

- **Site Plan received April 14, 2023.**

The special condition stated above is required to ensure the following:

The constructed PV SOLAR FARM is consistent with the special use permit approval.

B. The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.

The special condition stated above is required to ensure the following:

That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.

C. The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.

The special condition stated above is required to ensure the following:

That the proposed Special Use meets applicable state requirements for accessibility.

D. The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.

The special condition stated above is required to ensure the following:

That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.

E. A signed Decommissioning and Site Reclamation Plan that has been approved by the Environment and Land Use Committee is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.

The special condition stated above is required to ensure the following:

The Special Use Permit complies with Ordinance requirements and as authorized by waiver.

F. (Note: not needed if a waiver is received) A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by Tuscola Township and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.

The special condition stated above is required to ensure the following:

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To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.

- G. The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
- 1. Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
 - 2. Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
 - 3. An irrevocable letter of credit to be drawn upon a federally insured financial institution with a minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of "A" by S&P or a rating of "A2" by Moody's or a rating of "A-" by Kroll's within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
 - 4. A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
 - 5. Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
 - 6. (Note: not needed if a waiver is received) A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
 - 7. The telephone number for the complaint hotline required by 6.1.5 S.**
 - 8. Any updates to the approved Site Plan from Case 099-S-23 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.

- H. A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
- 1. An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from**

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the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.

- 2. As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
- 3. An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.

- I. The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
 - 1. Maintain the pollinator plantings in perpetuity.**
 - 2. Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
 - 3. Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
 - 4. Maintain a current general liability policy as required by 6.1.5 O.**
 - 5. Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
 - 6. Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
 - 7. Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The special condition stated above is required to ensure the following:

Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.

- J. The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

The special condition stated above is required to ensure the following:

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The PV SOLAR FARM is constructed in compliance with the Ordinance requirements.

- K. The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

The special condition stated above is required to ensure the following:

Conformance with Policy 4.2.3 of the Land Resource Management Plan.

- L. A 5 feet deep open trench shall extend for 30 feet on either side of any drainageway that is crossed with underground wiring and the relevant drainage district shall be provided 48 hours in which to inspect for tile and the positions of any tile lines that are discovered shall be recorded using Global Positioning System (GPS) technology.**

The special condition stated above is required to ensure the following:

That drainage district tiles are protected.

- M. The terms of approval are the requirements of the current Section 6.1.5 of the Zoning Ordinance as amended August 18, 2022.**

The special condition stated above is required to ensure the following:

That the current version of the Zoning Ordinance has been referenced.

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1. Special Use Permit Application received April 14, 2023, with attachments:
 - A Site Plan
 - B Supplemental Application Information, including:
 - Project Description
 - Erosion and Sedimentation Control Plan
 - Decommissioning and Site Reclamation Plan
 - Landscaping Plan

2. Natural Resource Report by the Champaign County Soil and Water Conservation District received January 24, 2023

3. Preliminary Memorandum dated July 5, 2023, with attachments:
 - A Case Maps (Location Map, Land Use, and Zoning)
 - B Site Plan received April 14, 2023
 - C Project Narrative received April 14, 2023
 - D Landscaping Plan received April 14, 2023
 - E Inverters spec sheet downloaded April 20, 2023
 - F Solar Module spec sheet downloaded April 20, 2023
 - G Interconnection application received April 14, 2023
 - H Complaint resolution received April 14, 2023
 - I1 Decommissioning and Site Reclamation Plan for Site 1 received April 28, 2023
 - I1b Decommissioning and Site Reclamation Plan for Site 1b received April 28, 2023
 - J Letter waiving screening requirement received April 14, 2023
 - K1 Natural Resource Report by the Champaign County Soil and Water Conservation District for Site 1 received January 24, 2023 (*on ZBA website*)
 - K1b Natural Resource Report by the Champaign County Soil and Water Conservation District for Site 1b received January 24, 2023 (*on ZBA website*)
 - L Site visit images taken April 12, 2023
 - M Summary of Evidence, Summary Finding of Fact and Final Determination dated July 13, 2023

PRELIMINARY DRAFT**FINDINGS OF FACT**

From the documents of record and the testimony and exhibits received at the public hearing for zoning case **099-S-22** held on **July 13, 2023**, the Zoning Board of Appeals of Champaign County finds that:

1. The requested Special Use Permit *{IS / IS NOT}* necessary for the public convenience at this location because:
 - a. *The State of Illinois has adopted a Renewable Portfolio Standard that established a goal of 25% of the State's energy coming from renewable sources by the year 2025.*
 - b. *The Illinois Future Energy Jobs Act requires installation of 3,000 MW of new solar capacity by the year 2030.*
 - c. *There is an existing power line along the south side of CR 0N.*

2. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}* is so designed, located, and proposed to be operated so that it *{WILL NOT / WILL}* be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare because:
 - a. The street has *{ADEQUATE / INADEQUATE}* traffic capacity and the entrance location has *{ADEQUATE / INADEQUATE}* visibility.
 - b. Emergency services availability is *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *The subject property is approximately 2.9 miles from the Pesotum fire station.*
 - b. *The Pesotum Fire Protection District was notified of this case and no comments have been received.*
 - c. The Special Use *{WILL / WILL NOT}* be compatible with adjacent uses *{because*}*:
 - a. *The proposed project is surrounded by land in agricultural production and the nearest residence is about 1,080 feet from the PV SOLAR FARM fenced area.*
 - d. Surface and subsurface drainage will be *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *No part of the subject property is in the Special Flood Hazard Area.*
 - b. *The proposed project must comply with the Storm Water Management and Erosion Control Ordinance.*
 - e. Public safety will be *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *Relevant jurisdictions were notified of this case, and no comments have been received.*
 - f. The provisions for parking will be *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *No parking is required for a PV SOLAR FARM.*
 - g. The property *{IS/IS NOT}* WELL SUITED OVERALL for the proposed improvements *{because*}*:
 - a. *The site is reasonably well-suited in all respects and has no major defects.*

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- h. Existing public services *{ARE/ARE NOT}* available to support the proposed SPECIAL USE without undue public expense *{because*}*:
 - a. ***No additional public services are necessary for the proposed development.***
- i. Existing public infrastructure together with the proposed development *{IS/IS NOT}* adequate to support the proposed development effectively and safely without undue public expense *{because*}*:
 - a. ***No new public infrastructure is required for the proposed development.***

(Note the Board may include other relevant considerations as necessary or desirable in each case.)

*The Board may include additional justification if desired, but it is not required.

- 3a. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT}* conform to the applicable regulations and standards of the DISTRICT in which it is located, subject to approval of the requested waivers.
- 3b. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT}* preserve the essential character of the DISTRICT in which it is located because:
 - a. The Special Use will be designed to *{CONFORM / NOT CONFORM}* to all relevant County ordinances and codes.
 - b. The Special Use *{WILL / WILL NOT}* be compatible with adjacent uses.
 - c. Public safety will be *{ADEQUATE / INADEQUATE}*.
- 4. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {IS / IS NOT}* in harmony with the general purpose and intent of the Ordinance because:
 - a. The Special Use is authorized in the District.
 - b. The requested Special Use Permit *{IS/ IS NOT}* necessary for the public convenience at this location.
 - c. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}* is so designed, located, and proposed to be operated so that it *{WILL / WILL NOT}* be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare.
 - d. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT}* preserve the essential character of the DISTRICT in which it is located.
- 5. The requested Special Use **IS NOT** an existing nonconforming use.
- 6. Regarding necessary waivers of standard conditions:

Per Section 7.15 of the Champaign County ZBA Bylaws, “waivers may be approved individually or *en masse* by the affirmative vote of a majority of those members voting on the issue, and shall be incorporated into the Findings of Fact with the reason for granting each waiver described.”

- A. Regarding Part A of the proposed waivers, for a distance of 1.07 miles between a PV FARM and a municipality with zoning in lieu of the minimum required one and one-half miles:

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- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because:
 - a. *The requested waiver (variance) is 71.3% of the minimum required, for a variance of 28.7%.*
 - b. *Relevant jurisdictions have been notified of this case, and no comments have been received.*

 - (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
 - a. *There is an interstate and interchange limiting visibility of the PV SOLAR FARM between the Village of Pesotum and the PV SOLAR FARM.*
 - b. *Adjacent landowners within 250 feet of the subject property were sent notification of the proposed project on June 28, 2023, and no comments have been received.*

 - (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because:
 - a. *Without the proposed waiver, the PV SOLAR FARM could not be located on the subject property.*

 - (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because:
 - a. *The petitioners were not aware of this separation requirement when they leased the land for the PV SOLAR FARM.*

 - (5) The requested waiver *{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}* the minimum variation that will make possible the reasonable use of the land/structure because:
 - a. *The requested waiver (variance) is 0% of the minimum required, for a variance of 100%.*
 - b. *Relevant jurisdictions have been notified of this case, and no comments have been received.*
- B. Regarding Part B of the proposed waivers, for a fence that is less than 10 feet from the side property line in lieu of the minimum required 10 feet:
- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because:
 - a. *The requested waiver (variance) is 0% of the minimum required, for a variance of 100%.*
 - b. *Relevant jurisdictions have been notified of this case, and no comments have been received.*

 - (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
 - a. *The eastern fence of the PV SOLAR FARM is on the shared property line with the Canadian National railroad tracks.*

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- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied **{WILL / WILL NOT}** prevent reasonable or otherwise permitted use of the land or structure or construction because:
- a. The eastern fence would have to be moved west, which would encroach on the access driveway.*
- (4) The special conditions, circumstances, hardships, or practical difficulties **{DO / DO NOT}** result from actions of the applicant because:
- a. The petitioners were not aware of this requirement when they leased the land for the PV SOLAR FARM.*
- (5) The requested waiver **{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}** the minimum variation that will make possible the reasonable use of the land/structure because:
- C. Regarding Part C of the proposed waivers, for inverters that are 42 feet from the PV SOLAR FARM fence in lieu of 275 feet:
- (1) The waiver **{IS/ IS NOT}** in accordance with the general purpose and intent of the Zoning Ordinance and **{WILL/ WILL NOT}** be injurious to the neighborhood or to the public health, safety, and welfare because:
- a. The requested waiver (variance) is 15% of the minimum required, for a variance of 85%.*
- b. Relevant jurisdictions have been notified of this case, and no comments have been received.*
- (2) Special conditions and circumstances **{DO / DO NOT}** exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
- a. The inverters have been placed as far away as possible from the nearest residences.*
- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied **{WILL / WILL NOT}** prevent reasonable or otherwise permitted use of the land or structure or construction because:
- a. The inverters would have to be moved farther west, which is closer to the nearest residences.*
- (4) The special conditions, circumstances, hardships, or practical difficulties **{DO / DO NOT}** result from actions of the applicant because:
- a. The petitioners placed the inverters where they are in order to maintain the greatest distance from the nearest residences.*
- (5) The requested waiver **{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}** the minimum variation that will make possible the reasonable use of the land/structure because:

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- D. Regarding Part D of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board:
- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because:
 - a. *The requested waiver (variance) is 0% of the minimum required, for a variance of 100%.*
 - b. *A special condition has been added requiring this information prior to approval of a Zoning Use Permit.*
 - (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
 - a. *The petitioner is working with Tuscola Township on either a waiver or a Roadway Upgrade and Maintenance Agreement.*
 - b. *A special condition has been added requiring this information prior to approval of a Zoning Use Permit.*
 - (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because:
 - a. *Without the proposed waiver, the Special Use Permit process might have to be extended in order to have sufficient time to prepare this document.*
 - (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because:
 - a. *The petitioner is working with Tuscola Township to receive either an agreement or a waiver from this requirement.*
 - (5) The requested waiver *{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}* the minimum variation that will make possible the reasonable use of the land/structure because:

7. **{NO SPECIAL CONDITIONS ARE HEREBY IMPOSED / THE SPECIAL CONDITIONS IMPOSED HEREIN ARE REQUIRED TO ENSURE COMPLIANCE WITH THE CRITERIA FOR SPECIAL USE PERMITS AND FOR THE PARTICULAR PURPOSES DESCRIBED BELOW:**

- A. **The approved site plan consists of the following documents:**
- **Site Plan received April 14, 2023.**

The special condition stated above is required to ensure the following:

The constructed PV SOLAR FARM is consistent with the special use permit approval.

- B. **The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

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The special condition stated above is required to ensure the following:

That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.

- C. **The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.**

The special condition stated above is required to ensure the following:

That the proposed Special Use meets applicable state requirements for accessibility.

- D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**

The special condition stated above is required to ensure the following:

That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.

- E. **A signed Decommissioning and Site Reclamation Plan that has been approved by the Environment and Land Use Committee is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**

The special condition stated above is required to ensure the following:

The Special Use Permit complies with Ordinance requirements and as authorized by waiver.

- F. *(Note: not needed if a waiver is received)* **A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by Tuscola Township and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**

The special condition stated above is required to ensure the following:

To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.

- G. **The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
1. **Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
 2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**

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3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution with a minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of “A” by S&P or a rating of “A2” by Moody’s or a rating of “A-” by Kroll’s within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
6. **(Note: not needed if a waiver is received) A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State’s Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
7. **The telephone number for the complaint hotline required by 6.1.5 S.**
8. **Any updates to the approved Site Plan from Case 099-S-23 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.

- H. **A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
 2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
 3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.

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- I. The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
- 1. Maintain the pollinator plantings in perpetuity.**
 - 2. Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
 - 3. Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
 - 4. Maintain a current general liability policy as required by 6.1.5 O.**
 - 5. Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
 - 6. Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
 - 7. Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The special condition stated above is required to ensure the following:

Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.

- J. The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed in compliance with the Ordinance requirements.

- K. The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

The special condition stated above is required to ensure the following:

Conformance with Policy 4.2.3 of the Land Resource Management Plan.

- L. A 5 feet deep open trench shall extend for 30 feet on either side of any drainageway that is crossed with underground wiring and the relevant drainage district shall be provided 48 hours in which to inspect for tile and the positions of any tile lines that are discovered shall be recorded using Global Positioning System (GPS) technology.**

The special condition stated above is required to ensure the following:

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That drainage district tiles are protected.

- M. The terms of approval are the requirements of the current Section 6.1.5 of the Zoning Ordinance as amended August 18, 2022.**

The special condition stated above is required to ensure the following:

That the current version of the Zoning Ordinance has been referenced.

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FINAL DETERMINATION

The Champaign County Zoning Board of Appeals finds that, based upon the application, testimony, and other evidence received in this case, that the requirements for approval of Section 9.1.11B. **{HAVE / HAVE NOT}** been met, and pursuant to the authority granted by Section 9.1.6 B. of the Champaign County Zoning Ordinance, recommends that:

The Special Use requested in Case **099-S-23** is hereby **{GRANTED/ GRANTED WITH SPECIAL CONDITIONS / DENIED}** to the applicant, **Champaign Solar 1 LLC**, to authorize the following as a Special Use on land in the AG-1 Agriculture Zoning District:

Authorize a Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, and

{SUBJECT TO THE FOLLOWING WAIVERS OF STANDARD CONDITIONS:}

- Part A:** A waiver for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, per Section 6.1.5 B.(2)a.
- Part B:** A waiver for a fence that is less than 10 feet from the side property line in lieu of the minimum required 10 feet, per Section 6.1.5 D.(3)b.
- Part C:** A waiver for a separation distance of 42 feet between the solar inverters and the perimeter fence in lieu of the minimum required 275 feet, per Section 6.1.5 D.(6).
- Part D:** A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.

{ SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS: }

- A.** The approved site plan consists of the following documents:
- Site Plan received April 14, 2023.
- B.** The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.
- C.** The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.
- D.** The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.

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- E. **A signed Decommissioning and Site Reclamation Plan that has been approved by the Environment and Land Use Committee is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**
- F. *(Note: not needed if a waiver is received)* **A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by Tuscola Township and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**
- G. **The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
1. **Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
 2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
 3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution with a minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of "A" by S&P or a rating of "A2" by Moody's or a rating of "A-" by Kroll's within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
 4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
 5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
 6. *(Note: not needed if a waiver is received)* **A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
 7. **The telephone number for the complaint hotline required by 6.1.5 S.**
 8. **Any updates to the approved Site Plan from Case 099-S-23 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

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- H. A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
- 1. An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
 - 2. As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
 - 3. An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**
- I. The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
- 1. Maintain the pollinator plantings in perpetuity.**
 - 2. Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
 - 3. Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
 - 4. Maintain a current general liability policy as required by 6.1.5 O.**
 - 5. Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
 - 6. Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
 - 7. Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**
- J. The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**
- K. The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

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- L. A 5 feet deep open trench shall extend for 30 feet on either side of any drainageway that is crossed with underground wiring and the relevant drainage district shall be provided 48 hours in which to inspect for tile and the positions of any tile lines that are discovered shall be recorded using Global Positioning System (GPS) technology.**

- M. The terms of approval are the requirements of the current Section 6.1.5 of the Zoning Ordinance as amended August 18, 2022.**

The foregoing is an accurate and complete record of the Findings and Determination of the Zoning Board of Appeals of Champaign County.

SIGNED:

ATTEST:

Ryan Elwell, Chair
Champaign County Zoning Board of Appeals

Secretary to the Zoning Board of Appeals

Date

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**SUMMARY OF EVIDENCE, FINDING OF FACT
AND FINAL DETERMINATION**

**of
Champaign County Zoning Board of Appeals**

Final Determination: *{RECOMMEND APPROVAL / RECOMMEND DENIAL}*

Date: *{July 13, 2023}*

Petitioners: **Champaign Solar 1b LLC, via agent Merrill Read, with participating landowner JHBLT LLC**

Request: **Authorize a second Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 Agriculture Zoning District, and including the following waivers of standard conditions:**

Part A: A waiver for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, per Section 6.1.5 B.(2)a.

Part B: A waiver for a separation distance of 10 feet between the solar inverters and the perimeter fence in lieu of the minimum required 275 feet, per Section 6.1.5 D.(6).

Part C: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.

Other waivers may be necessary.

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SUMMARY OF EVIDENCE

From the documents of record and the testimony and exhibits received at the public hearing conducted on **July 13, 2023**, the Zoning Board of Appeals of Champaign County finds that:

1. Champaign Solar 1b LLC, 1601 Wewatta St, Suite 700, Denver, CO 80202, a subsidiary of Pivot Energy Development LLC, with CEO Tom Hunt; via agent Merrill Read, and participating landowner JHBLT LLC, 305 E Sale St, Tuscola, IL 61953 are the developers of the proposed PV Solar Farm.
2. The subject property is a 90-acre tract of land west of the Canadian National Railroad in the Southeast Quarter of Section 34, Township 17 North, Range 8 East of the Third Principal Meridian in Pesotum Township, and commonly known as farmland owned by JHBLT LLC on the north side of CR 0N.
3. Regarding municipal extraterritorial jurisdiction and township planning jurisdiction:
 - A. The subject property is located 1.1 miles from the Village of Pesotum, a municipality with zoning. Municipalities with zoning are notified of Special Use Permit cases, but do not have protest rights in these cases. The Village of Pesotum does not have a one and one-half mile extra-territorial jurisdiction because it does not have a Comprehensive Plan.
 - B. The subject property is located within Pesotum Township, which does not have a Planning Commission. Townships with Planning Commissions are notified of Special Use Permit cases, but do not have protest rights in these cases.

GENERALLY REGARDING LAND USE AND ZONING IN THE IMMEDIATE VICINITY

4. Regarding land use and zoning on the subject property and in the vicinity of the subject property:
 - A. The 90-acre subject property is zoned AG-1 Agriculture and is currently in agricultural production.
 - (1) The proposed PV SOLAR FARM would be located on approximately 26.7 acres of the subject property.
 - B. Land north of the subject property is zoned AG-1 Agriculture and is in agricultural production.
 - C. Land south of the subject property is in Douglas County, which does not have zoning; land use is agricultural production.
 - D. Land west of the subject property is zoned AG-1 Agriculture and land is in agricultural production.
 - (1) There is a residence 1,700 feet west of the subject property and another approximately 850 feet southwest of the subject property.
 - E. Land east of the subject property on the other side of the railroad is zoned AG-1 Agriculture and is in agricultural production.

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5. Regarding the Site plan for the proposed Special Use received April 14, 2023:
- A. The Site Plan includes the following proposed features:
- (1) One 5-megawatt community PV SOLAR FARM site on approximately 26.7 acres; and
 - (2) 8-feet tall perimeter fence; and
 - (3) One equipment pad located approximately 1,975 feet north of the CR 0N centerline; and
 - (4) A minimum 16-foot wide gravel access road extending approximately 2,170 feet north from CR 0N; and
 - (5) A gated security entrance approximately 60 feet north of the centerline of CR 0N; and
 - (6) The Point of Interconnection (POI) is proposed to connect to an existing power line that runs along the south side of CR 0N; and
 - (7) The nearest parcel 10 acres or less in area is 1,933 feet from the solar farm fenced area; and
 - (8) The nearest parcel greater than 10 acres in area is 60 feet from the solar farm fenced area, and the nearest principal building on that property is approximately 1,875 feet from the fenced area; and
 - (9) The nearest residence is approximately 1,500 feet to the northeast from the solar farm fenced area; and
 - (10) There is a separation of 60 feet between the PV SOLAR FARM perimeter fence and the street centerline of CR 0N.
- C. There are no previous Zoning Use Permits for the subject property.
- D. There are no previous Zoning Cases for the subject property.

GENERALLY REGARDING SPECIFIC ORDINANCE REQUIREMENTS

6. Regarding authorization for a "COMMUNITY PV SOLAR FARM" in the AG-1 Agriculture Zoning District in the *Zoning Ordinance*:
- A. The County Board amended the Zoning Ordinance by adopting PV SOLAR FARM requirements when it adopted Ordinance No. 2018-4 on August 23, 2018.
- (1) The County Board amended the Zoning Ordinance by amending PV SOLAR FARM requirements when it adopted Ordinance 2020-1 on February 24, 2020, Ordinance 2020-7 on May 22, 2020, and Ordinance 2020-8 on May 22, 2020.

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- B. The following definitions from the *Zoning Ordinance* are especially relevant to the requested Special Use Permit (capitalized words are defined in the Ordinance):
- (1) “ACCESS” is the way MOTOR VEHICLES move between a STREET or ALLEY and the principal USE or STRUCTURE on a LOT abutting such STREET or ALLEY.
 - (2) “BEST PRIME FARMLAND” is Prime Farmland Soils identified in the Champaign County Land Evaluation and Site Assessment (LESA) System that under optimum management have 91% to 100% of the highest soil productivities in Champaign County, on average, as reported in the *Bulletin 811 Optimum Crop Productivity Ratings for Illinois Soils*. Best Prime Farmland consists of the following:
 - a. Soils identified as Agriculture Value Groups 1, 2, 3 and/or 4 in the Champaign County LESA system;
 - b. Soils that, in combination on a subject site, have an average LE of 91 or higher, as determined by the Champaign County LESA system;
 - c. Any development site that includes a significant amount (10% or more of the area proposed to be developed) of Agriculture Value Groups 1, 2, 3 and/or 4 soils as determined by the Champaign County LESA system.
 - (3) “DWELLING OR PRINCIPAL BUILDING, PARTICIPATING” is a DWELLING on land that is leased to a WIND FARM or a PV SOLAR FARM.
 - (4) “DWELLING OR PRINCIPAL BUILDING, NON- PARTICIPATING” is a DWELLING on land that is not leased to a WIND FARM or a PV SOLAR FARM.
 - (5) “LOT” is a designated parcel, tract or area of land established by PLAT, SUBDIVISION or as otherwise permitted by law, to be used, developed or built upon as a unit.
 - (6) “LOT LINE, FRONT” is a line dividing a LOT from a STREET or easement of ACCESS. On a CORNER LOT or a LOT otherwise abutting more than one STREET or easement of ACCESS only one such LOT LINE shall be deemed the FRONT LOT LINE.
 - (7) “LOT LINE, REAR” is any LOT LINE which is generally opposite and parallel to the FRONT LOT LINE or to a tangent to the midpoint of the FRONT LOT LINE. In the case of a triangular or gore shaped LOT or where the LOT comes to a point opposite the FRONT LOT LINE it shall mean a line within the LOT 10 feet long and parallel to and at the maximum distance from the FRONT LOT LINE or said tangent.
 - (8) “LOT LINES” are the lines bounding a LOT.
 - (9) “PRIVATE ACCESSWAY” is a service way providing ACCESS to one or more LOTS which has not been dedicated to the public.
 - (10) “NON-ADAPTABLE STRUCTURE” is any STRUCTURE or physical alteration to the land which requires a SPECIAL USE permit, and which is likely to become economically unfeasible to remove or put to an alternate USE allowable in the DISTRICT (by right or by SPECIAL USE).

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- (11) “NOXIOUS WEEDS” are any of several plants designated pursuant to the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.) and that are identified in 8 Illinois Administrative Code 220.
- (12) “PHOTOVOLTAIC (PV)” is a type of solar energy system that produces electricity by the use of photovoltaic cells that generate electricity when struck by light.
- (13) “PV SOLAR FARM” is a unified development intended to convert sunlight into electricity by photovoltaic (PV) devices for the primary purpose of wholesale sales of generated electricity. A PV SOLAR FARM is under a common ownership and operating control even though parts of the PV SOLAR FARM may be located on land leased from different owners. A PV SOLAR FARM includes all necessary components including access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, a common switching station, maintenance and management facilities, and waterwells. PV SOLAR FARM should be understood to include COMMUNITY PV SOLAR FARM unless specified otherwise in the relevant section or paragraph.
- (14) “PV SOLAR FARM, COMMUNITY” is a PV SOLAR FARM of not more than 2,000 kilowatt nameplate capacity that meets the requirements of 20 ILCS 3855/1-10 for a “community renewable generation project” and provided that two COMMUNITY PV SOLAR FARMS may be co-located on the same or contiguous parcels as either a) two 2-MW projects on one parcel, or b) one 2-MW project on each of two contiguous parcels, as authorized by the Illinois Commerce Commission in Final Order 17-0838 on April 3, 2018.
- (15) “PRIVATE WAIVER” is a written statement asserting that a landowner has agreed to waive a specific WIND FARM or PV SOLAR FARM standard condition and has knowingly agreed to accept the consequences of the waiver. A PRIVATE WAIVER must be signed by the landowner.
- (16) “RIGHT-OF-WAY” is the entire dedicated tract or strip of land that is to be used by the public for circulation and service.
- (17) “SCREEN” is a STRUCTURE or landscaping element of sufficient opaqueness or density and maintained such that it completely obscures from view throughout its height the PREMISES upon which the screen is located.
- (18) “SCREEN PLANTING” is a vegetative material of sufficient height and density to filter adequately from view, in adjoining DISTRICTS, STRUCTURES, and USES on the PREMISES upon which the SCREEN PLANTING is located.
- (19) “SETBACK LINE” is the BUILDING RESTRICTION LINE nearest the front of and across a LOT establishing the minimum distance to be provided between a line of a STRUCTURE located on said LOT and the nearest STREET RIGHT-OF-WAY line.
- (20) “SPECIAL CONDITION” is a condition for the establishment of a SPECIAL USE.

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- (21) “SPECIAL USE” is a USE which may be permitted in a DISTRICT pursuant to, and in compliance with, procedures specified herein.
 - (22) “STREET” is a thoroughfare dedicated to the public within a RIGHT-OF-WAY which affords the principal means of ACCESS to abutting PROPERTY. A STREET may be designated as an avenue, a boulevard, a drive, a highway, a lane, a parkway, a place, a road, a thoroughfare, or by other appropriate names. STREETS are identified on the Official Zoning Map according to type of USE, and generally as follows:
 - (a) MAJOR STREET: Federal or State highways.
 - (b) COLLECTOR STREET: COUNTY highways and urban arterial STREETS.
 - (c) MINOR STREET: Township roads and other local roads.
- C. Section 5.2 only authorizes a “PV SOLAR FARM” in the AG-1 or AG-2 Zoning Districts and requires a Special Use Permit authorized by the County Board.
- D. Paragraph 6.1.2 A. indicates that all Special Use Permits with exterior lighting shall be required to minimize glare on adjacent properties and roadways by the following means:
- (1) All exterior light fixtures shall be full-cutoff type lighting fixtures and shall be located and installed so as to minimize glare and light trespass. Full cutoff means that the lighting fixture emits no light above the horizontal plane.
 - (2) No lamp shall be greater than 250 watts and the Board may require smaller lamps when necessary.
 - (3) Locations and numbers of fixtures shall be indicated on the site plan (including floor plans and building elevations) approved by the Board.
 - (4) The Board may also require conditions regarding the hours of operation and other conditions for outdoor recreational uses and other large outdoor lighting installations.
 - (5) The Zoning Administrator shall not approve a Zoning Use Permit without the manufacturer’s documentation of the full-cutoff feature for all exterior light fixtures.
- E. Section 6.1.5 contains the standard conditions for any PV SOLAR FARM which are as follows (capitalized words are defined in the Ordinance):
- (1) Requirements for what must be included in the area of the PV SOLAR FARM are in 6.1.5 B.(1).
 - (2) Requirements for where a PV SOLAR FARM cannot be located are in 6.1.5 B.(2).
 - (3) Paragraph 6.1.5 C. eliminates LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, and maximum LOT COVERAGE requirements from applying to a PV SOLAR FARM.
 - (4) Paragraph 6.1.5 D. contains minimum separations for PV SOLAR FARMS from adjacent USES and STRUCTURES.

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- (5) Paragraph 6.1.5 E. contains standard conditions for the design and installation of PV SOLAR FARMS.
 - (6) Paragraph 6.1.5 F. contains standard conditions to mitigate damage to farmland.
 - (7) Paragraph 6.1.5 G. contains standard conditions for use of public streets.
 - (8) Paragraph 6.1.5 H. contains standard conditions for coordination with local fire protection districts.
 - (9) Paragraph 6.1.5 I. contains standard conditions for the allowable noise level.
 - (10) Paragraph 6.1.5 J. contains standard conditions for endangered species consultation.
 - (11) Paragraph 6.1.5 K. contains standard conditions for historic and archaeological resources review.
 - (12) Paragraph 6.1.5 L. contains standard conditions for acceptable wildlife impacts from PV SOLAR FARM construction and ongoing operations.
 - (13) Paragraph 6.1.5 M. contains standard conditions for screening and fencing of PV SOLAR FARMS.
 - (14) Paragraph 6.1.5 N. contains standard conditions to minimize glare from PV SOLAR FARMS.
 - (15) Paragraph 6.1.5 O. contains standard conditions for liability insurance.
 - (16) Paragraph 6.1.5 P. contains other standard conditions for operation of PV SOLAR FARMS.
 - (17) Paragraph 6.1.5 Q. contains standard conditions for a decommissioning plan and site reclamation agreement for PV SOLAR FARMS and modifies the basic site reclamation requirements in paragraph 6.1.1 A.
 - (18) Paragraph 6.1.5 R. contains standard conditions for securing an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
 - (19) Paragraph 6.1.5 S. contains standard conditions for a complaint hotline for complaints related to PV SOLAR FARM construction and ongoing operations.
 - (20) Paragraph 6.1.5 T. contains the standard condition for expiration of the PV SOLAR FARM County Board Special Use Permit.
 - (21) Paragraph 6.1.5 U. contains standard conditions establishing additional requirements for application for a PV SOLAR FARM County Board Special Use Permit that supplement the basic requirements for a special use permit application.
- F. Section 9.1.11 requires that a Special Use Permit shall not be granted by the Zoning Board of Appeals unless the public hearing record and written application demonstrate the following:

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- (1) That the Special Use is necessary for the public convenience at that location;
 - (2) That the Special Use is so designed, located, and proposed as to be operated so that it will not be injurious to the DISTRICT in which it shall be located or otherwise detrimental to the public welfare except that in the CR, AG-1, and AG-2 DISTRICTS the following additional criteria shall apply:
 - a. The property is either BEST PRIME FARMLAND and the property with proposed improvements in WELL SUITED OVERALL or the property is not BEST PRIME FARMLAND and the property with proposed improvements is SUITED OVERALL.
 - b. The existing public services are available to support the proposed SPECIAL USE effectively and safely without undue public expense.
 - c. The existing public infrastructure together with proposed improvements is adequate to support the proposed development effectively and safely without undue public expense.
 - (3) That the Special Use conforms to the applicable regulations and standards of and preserves the essential character of the DISTRICT in which it shall be located, except where such regulations and standards are modified by Section 6.
 - (4) That the Special Use is in harmony with the general purpose and intent of this ordinance.
 - (5) That in the case of an existing NONCONFORMING USE, it will make such USE more compatible with its surroundings.
- G. Paragraph 9.1.11.D.1. states that a proposed Special Use that does not conform to the standard conditions requires only a waiver of that particular condition and does not require a variance. Regarding standard conditions:
- (1) The Ordinance requires that a waiver of a standard condition requires the following findings:
 - a. that the waiver is in accordance with the general purpose and intent of the ordinance; and
 - b. that the waiver will not be injurious to the neighborhood or to the public health, safety, and welfare.
 - (2) However, a waiver of a standard condition is the same thing as a variance and Illinois law (55ILCS/ 5-12009) requires that a variance can only be granted in accordance with general or specific rules contained in the Zoning Ordinance and the VARIANCE criteria in paragraph 9.1.9 C. include the following in addition to criteria that are identical to those required for a waiver:
 - a. Special conditions and circumstances exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district.

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- b. Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied will prevent reasonable or otherwise permitted use of the land or structure or construction
 - c. The special conditions, circumstances, hardships, or practical difficulties do not result from actions of the applicant.
- (3) Including findings based on all of the criteria that are required for a VARIANCE for any waiver of a standard condition will eliminate any concern related to the adequacy of the required findings for a waiver of a standard condition and will still provide the efficiency of not requiring a public hearing for a VARIANCE, which was the original reason for adding waivers of standard conditions to the Ordinance.
- H. Paragraph 9.1.11.D.2. states that in granting any SPECIAL USE permit, the BOARD may prescribe SPECIAL CONDITIONS as to appropriate conditions and safeguards in conformity with the Ordinance. Violation of such SPECIAL CONDITIONS when made a party of the terms under which the SPECIAL USE permit is granted, shall be deemed a violation of this Ordinance and punishable under this Ordinance.

GENERALLY REGARDING WHETHER THE SPECIAL USE IS NECESSARY FOR THE PUBLIC CONVENIENCE AT THIS LOCATION

7. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use is necessary for the public convenience at this location:
- A. The Petitioner has testified on the application, **“New Illinois Legislature encourages renewable energy facilities in the state, and more importantly, the energy produced from this project will support local Champaign County residences and businesses who subscribe to the project.”**
 - B. The State of Illinois has adopted a Renewable Portfolio Standard that established a goal of 25% of the State’s energy coming from renewable sources by the year 2025.
 - C. The Illinois Future Energy Jobs Act requires installation of 3,000 MW of new solar capacity by the year 2030.
 - D. There is an existing power line along the south side of CR 0N.

GENERALLY REGARDING WHETHER THE SPECIAL USE WILL BE INJURIOUS TO THE DISTRICT OR OTHERWISE INJURIOUS TO THE PUBLIC WELFARE

8. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use be designed, located, and operated so that it will not be injurious to the District in which it shall be located, or otherwise detrimental to the public welfare:
- A. The Petitioner has testified on the application, **“Community PV Solar Farms are low impact and will not be injurious to the district or to the public welfare. Further description of project and supporting documentation is included in the narrative of this application.”**

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- B. Regarding surface drainage, the PV SOLAR FARM fenced area generally drains toward the west.
- C. Regarding traffic in the subject property area:
- (1) The proposed solar farm would have one access on CR 0N.
 - (2) CR 0N is an unmarked rural road that at times is one car width wide. It is approximately 15 feet wide adjacent to the subject property. It is comprised of oil and chip and has grass shoulders.
 - (3) The Illinois Department of Transportation measures traffic on various roads throughout the County and determines the annual average 24-hour traffic volume for those roads and reports it as Average Daily Traffic (ADT). The most recent ADT data is from 2017 near the subject property. CR 0N had an ADT of 150 near the subject property.
 - (4) No significant increase in traffic is expected except during construction of the PV SOLAR FARM.
 - (5) The Pesotum and Tuscola Township Highway Commissioners have been notified of this case and no comments have been received. Tuscola Township has maintenance jurisdiction over CR 0N.
 - (7) The petitioner is working on a Roadway Upgrade and Maintenance Agreement or waiver therefrom with Tuscola Township.
- D. Regarding fire protection:
- (1) The subject property is approximately 2.9 road miles from the Pesotum fire station.
 - (2) The petitioners stated in their application materials, “The Applicant has shared the proposed Site plan to the local Pesotum Fire Department and has offered to provide training and necessary equipment to the local emergency response authorities to prepare for proper emergency response during construction of the Project. In addition, the Applicant will create an emergency response plan and solicit input from the Pesotum Fire Department. The Applicant will submit a final site plan and Safety & Emergency Management Plan upon completion of the Project. In addition, the Project proposes a “knox box” on the Project gate for emergency personnel to gain access to the Site. Warning signs concerning voltage will be placed at the base of all pad-mounted transformers.”
 - (3) The Pesotum Fire Protection District was notified of this case and no comments have been received.
- E. No part of the subject property is located within a Special Flood Hazard Area.
- F. The subject properties are considered Best Prime Farmland. The Natural Resource Information Report received January 24, 2023, states that the soil on the subject properties

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consists of 152A Drummer silty clay loam, 154A Flanagan silt loam, and 198 Elburn silt loam, and has an average Land Evaluation Factor of 100.

- G. Regarding outdoor lighting on the subject property, the application received April 14, 2023, states that there will no outdoor lighting. A special condition has been added to ensure compliance for any future outdoor lighting installation.
- H. Regarding wastewater treatment and disposal on the subject property, there is no wastewater treatment and disposal required or planned for the proposed PV SOLAR FARM.
- I. Regarding parking, there is no required parking for the proposed PV SOLAR FARM.
- J. Other than as reviewed elsewhere in this Summary of Evidence, there is no evidence to suggest that the proposed Special Use will generate either nuisance conditions such as odor, noise, vibration, glare, heat, dust, electromagnetic fields or public safety hazards such as fire, explosion, or toxic materials release, that are in excess of those lawfully permitted and customarily associated with other uses permitted in the zoning district.

GENERALLY REGARDING WHETHER THE SPECIAL USE CONFORMS TO APPLICABLE REGULATIONS AND STANDARDS AND PRESERVES THE ESSENTIAL CHARACTER OF THE DISTRICT

- 9. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use conforms to all applicable regulations and standards and preserves the essential character of the District in which it shall be located, except where such regulations and standards are modified by Section 6 of the Ordinance:
 - A. The Petitioner has testified on the application, **“Community PV Solar Farms are authorized as a special use in Champaign County’s agricultural district. The project use conforms to the regulations and standards of the district and will preserve the essential character of the district as well.”**
 - B. Regarding compliance with the *Zoning Ordinance*, the following evidence was provided:
 - (1) Section 5.2 authorizes a PV SOLAR FARM only by a County Board Special Use Permit in the AG-1 and AG-2 Agriculture Zoning Districts. It is not permitted by right in any district.
 - (2) There is no required parking.
 - (3) Requirements for what must be included in the area of the PV SOLAR FARM Special Use Permit are in subparagraph 6.1.5 B.(1).
 - a. The revised Site Plan received April 14, 2023 appears to conform to this requirement.
 - (4) Requirements which identify certain areas where a PV SOLAR FARM Special Use Permit shall not be located can be found in Subparagraph 6.1.5 B.(2).
 - a. Item 6.1.5 B.(2)a. requires a PV SOLAR FARM to be more than one and one half miles from an incorporated municipality with a zoning ordinance, unless the following is provided:

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- (a) No part of a PV SOLAR FARM shall be located within a contiguous urban growth area (CUGA) as indicated in the most recent update of the CUGA in the Champaign County Land Resource Management Plan, and there shall be a separation of one-half mile from a proposed PV SOLAR FARM to a municipal boundary at the time of application for the SPECIAL USE Permit, except for any power lines of 34.5 kVA or less and except for any proposed PV SOLAR FARM substation and related proposed connection to an existing substation.
 - i. The subject property is located 1.07 miles of the Village of Pesotum, a municipality with zoning. The PV Solar Farm will not be located in the CUGA.

- (b) The PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM.
 - i. The petitioner sent an email to the Village of Pesotum Clerk on April 14, 2023 which included the Special Use Permit application.

- (c) If no municipal resolution regarding the PV SOLAR FARM is received from any municipality located within one-and-one-half miles of the PV SOLAR FARM prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board.
 - i. No resolution from the Village of Pesotum has been received as of July 5, 2023.

 - ii. Notice of the July 13, 2023, ZBA public hearing was sent by P&Z Staff to the Village of Pesotum on June 28, 2023.

- (5) Requirements regarding interconnection to the power grid can be found in Subparagraph 6.1.5 B.(3):
 - a. The utility interconnection application must be applied for with the relevant utility and documentation provided at the time of Special Use Permit application.
 - (a) The petitioner included an interconnection application with their Special Use Permit application received April 14, 2023.

 - b. Documentation must be provided that the utility has accepted the application for the PV SOLAR FARM prior to issuance of the Zoning Compliance Certificate.

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- (6) Requirements regarding Right to Farm can be found in Subparagraph 6.1.5 B.(4):
“The owners of the subject property and the Applicant, its successors in interest, and all parties to the decommissioning plan and site reclamation plan hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.”
- a. A special condition has been added to ensure compliance.
- (7) Requirements regarding minimum lot standards can be found in Subparagraph 6.1.5 C.:
- a. Subparagraph 6.1.5 C. eliminates LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, maximum LOT COVERAGE, or maximum LOT AREA requirements on BEST PRIME FARMLAND requirements for a PV SOLAR FARM or for LOTS for PV SOLAR FARM substations and/ or PV SOLAR FARM maintenance and management facilities.
- (8) Requirements regarding minimum separations for PV SOLAR FARMS from other STRUCTURES, BUILDINGS, and USES can be found in Subparagraph 6.1.5 D.
- a. The Special Use Permit application received April 14, 2023 shows the separations between the solar farm fence and adjacent buildings and uses.
- b. The proposed PV SOLAR FARM complies with all minimum separations in paragraph 6.1.5 D. in the following manner:
- (a) Subparagraph 6.1.5 D.(1) requires PV SOLAR FARM fencing to be set back from the street centerline a minimum of 40 feet from a MINOR STREET and a minimum of 55 feet from a COLLECTOR STREET and a minimum of 60 feet from a MAJOR STREET unless a greater separation is required for screening pursuant to Section 6.1.5 M.(2)a., but in no case shall the perimeter fencing be less than 10 feet from the RIGHT OF WAY of any STREET.
- i. The Site Plan received April 14, 2023 demonstrates compliance with the 40 feet setback from CR 0N, which is a MINOR STREET.
- (b) Subparagraph 6.1.5 D.(2) states that for properties participating in the solar farm, there is no required separation from any existing DWELLING or existing PRINCIPAL BUILDING except as required to ensure that a minimum zoning lot is provided for the existing DWELLING or PRINCIPAL BUILDING.
- a. The subject properties meet minimum zoning lot requirements.
- (c) Subparagraph 6.1.5 D.(3)a. states that for any adjacent LOT that is 10 acres or less in area (not including the STREET RIGHT OF WAY):
- i. For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on no more than two sides by the PV SOLAR FARM, the separation shall be no less than 240 feet from the property line.
- (i) There are no lots that are 10 acres or less in lot area adjacent to the subject property.

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- ii. For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on more than two sides by the PV SOLAR FARM, the separation shall exceed 240 feet as deemed necessary by the BOARD.
 - (i) There are no lots that are 10 acres or less in lot area adjacent to the subject property.

- (d) Subparagraph 6.1.5 D.(3)b. states that for any adjacent LOT that is more than 10 acres in area (not including the STREET RIGHT OF WAY), the separation shall be no less than 255 feet from any existing DWELLING or existing PRINCIPAL BUILDING and otherwise the perimeter fencing shall be a minimum of 10 feet from a SIDE or REAR LOT LINE. This separation distance applies to properties that are adjacent to or across a STREET from a PV SOLAR FARM.
 - i. The nearest dwelling or principal building is approximately 1,080 feet from the PV SOLAR FARM fenced area.
 - ii. The PV SOLAR FARM perimeter fencing is at least 10 feet from the REAR LOT LINE and SIDE LOT LINE.

- (e) Subparagraph 6.1.5 D.(3)c. states that additional separation may be required to ensure that the noise level required by 35 Ill. Admin. Code Parts 900, 901 and 910 is not exceeded or for other purposes deemed necessary by the BOARD.
 - i. There are no proposed additional separations at this time.

- (f) Subparagraph 6.1.5 D.(4) states that there must be a separation of at least 500 feet from specific types of airport and restricted landing area facilities unless the SPECIAL USE permit application includes results provided from an analysis using the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, Federal Aviation Administration (FAA) Review of Solar Energy Projects on Federally Obligated Airports, or the most recent version adopted by the FAA, and the SGHAT results show no detrimental affect with less than a 500 feet separation.
 - i. There is no AIRPORT or RESTRICTED LANDING AREA within 500 feet of the subject property.

- (g) Subparagraph 6.1.5 D.(5) requires a separation of at least 500 feet between substations and transmission lines of greater than 34.5 kVA to adjacent dwellings and residential DISTRICTS.
 - i. There are no new substations or transmission lines of greater than 34.5 kVA within 500 feet of adjacent dwellings or residential DISTRICTS.

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- (h) Subparagraph 6.1.5 D.(6) states that electrical inverters shall be located as far as possible from property lines and adjacent DWELLINGS consistent with good engineering practice. Inverter locations that are less than 275 feet from the perimeter fence shall require specific approval and may require special sound deadening construction and noise analysis.
 - i. The inverters shown on the Site Plan received April 14, 2023, are approximately 10 feet away from the PV SOLAR FARM perimeter fence. A waiver has been added.
 - ii. Regarding the distance between the inverters and nearby lots with dwellings, based on the Site Plan received April 14, 2023:
 - (i) The inverters are located on the east side of the subject property. The distance between an inverter and the closest dwelling is 2,000 feet.
- (i) Subparagraph 6.1.5 D.(7) states that separation distances for any PV SOLAR FARM with solar equipment exceeding 8 feet in height, with the exception of transmission lines which may be taller, shall be determined by the BOARD on a case-by-case basis.
 - i. The application stated that the arrays will not exceed 12 feet in height at maximum tilt.
- (j) Subparagraph 6.1.5 D.(8) states that PV SOLAR FARM solar equipment other than inverters shall be no less than 26 feet from the property line of any lot more than 10 acres in area.
 - i. The Site Plan received April 14, 2023, shows that there is at least 26 feet separation between the property line of any lot more than 10 acres in area and the PV SOLAR FARM fenced area.
- (9) Paragraph 6.1.5 E. contains standard conditions for the design and installation of PV SOLAR FARMS. Compliance with paragraph 6.1.5 E. can be summarized as follows:
 - a. Subparagraph 6.1.5 E.(1) requires certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer or other qualified professional that that the constructed building conforms to Public Act 96-704 regarding building code compliance and conforms to the Illinois Accessibility Code.
 - (a) The Special Use Permit application packet received April 14, 2023, does not include any buildings.
 - b. Subparagraph 6.1.5 E.(2) establishes minimum requirements for electrical components.
 - (a) Part 6.1.5 E.(2)a. states that all electrical components of the PV SOLAR FARM shall conform to the National Electrical Code as

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amended and shall comply with Federal Communications Commission (FCC) requirements.

- i. The petitioner stated in their application materials, “The design and construction of the solar farm will meet standards and guidelines as provided by the nationally accepted electric code and will comply with Federal Communications Commission (FCC) requirements.”
- (b) Part 6.1.5 E.(2)b. states that burying power and communication wiring underground shall be minimized consistent with best management practice regarding PV solar farm construction and minimizing impacts on agricultural drainage tile.
 - i. The petitioner stated in their application materials, “The Project proposes underground electrical lines that will be buried to the furthest extent reasonable, in order to avoid drain tiles, at a minimum depth of at least 5 feet below grade and will interconnect into the existing and proposed Ameren Illinois utility poles located off County Road 00 North.”
 - c. Subparagraph 6.1.5 E.(3) states that the height limitation established in Section 5.3 shall not apply to a PV SOLAR FARM, and requires the maximum height of all above ground STRUCTURES to be identified in the application and as approved in the SPECIAL USE permit.
 - (a) The petitioner indicated that all above ground structures would be less than twelve feet tall except for the utility poles.
 - d. Subparagraph 6.1.5 E.(4) requires that a reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.
 - (a) The petitioner stated in the Special Use Permit application that appropriate warning signs will be posted.
 - e. Subparagraph 6.1.5 E.(5) requires that no PV SOLAR FARM construction may intrude on any easement or right of way for a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE, an underground water main or sanitary sewer, a drainage district ditch or tile, or any other public utility facility unless specifically authorized by a crossing agreement that has been entered into with the relevant party.
 - (a) Drainage districts have been notified of the proposed project and no comments have been received.
 - (b) The subject property does not have a connection to public sewer or water.
 - (c) Champaign County Geographic Information Systems data does not show any gas or hazardous liquid lines on the subject property.

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- (10) Paragraph 6.1.5 F. contains standard conditions to mitigate damage to farmland.
- a. The soil within the approximate PV SOLAR FARM fenced area is Best Prime Farmland and consists of 152A Drummer silty clay loam, 154A Flanagan silt loam, 198A Elburn silt loam, and has an average Land Evaluation score of 100.
 - b. The Applicant is required to sign an Agricultural Impact Mitigation Agreement, which would include requirements to mitigate damage to farmland per *505 ILCS 147/15(b)*. A special condition has been added to ensure compliance.
 - c. Regarding pollinator friendly ground cover in the mitigation of damage to farmland, the petitioner stated in their application materials received April 14, 2023, “To control noxious weeds and erosion in the area of the Project, disturbed areas of the Site will be seeded with a native grass mix that will include native wildflowers that are pollinator friendly. The use of native vegetation and/or pollinator-friendly seed mixes supports the habitat of bees, butterflies, wasps, flies, beetles, and other pollinator species needed for agriculture. The seed mix chosen will be native and local to the Illinois environment, which naturally allows the Site to be resilient to droughts and intense downpours.”
 - d. Subparagraph 6.1.5 F.(1) establishes a minimum depth of 5 feet for underground wiring or cabling below grade or deeper if required to maintain a minimum one foot of clearance between the wire or cable and any agricultural drainage tile or a lesser depth if so authorized by the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.
 - (a) The Special Use Permit application received April 14, 2023 states that all underground wiring or cabling will be at a minimum depth of 5 feet below grade.
 - e. Subparagraph 6.1.5 F.(2) establishes requirements for protection of agricultural drainage tile.
 - (a) The petitioner stated on the application, “Should the Project damage any drain tiles on the Project parcel during construction or operation, then the Applicant shall promptly repair or replace those drain tiles. In cooperation with the landowner, Pivot will identify existing drainage infrastructure to avoid during the installation and ongoing operation of the Project. If any drainage district tile lines are located, they will be flagged and protected by a 30-foot-wide, no construction buffer on either side of the drain tile. There are no gas or hazardous liquid pipelines on the Site. The Project will comply with the standards set for in the Agricultural Impact Mitigation Agreement that will be finalized prior to applying for a construction permit.”

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- f. Subparagraph 6.1.5 F.(3) requires restoration for any damage to soil conservation practices.
 - (a) The petitioner stated on the application, “Any conservation practices damaged by construction will be restored by the Applicant to their pre-construction condition and care will be taken to maintain the existing practices to preserve erosion control, flood control, and water quality.”

- g. Subparagraph 6.1.5 F.(4) establishes requirements for topsoil replacement pursuant to any open trenching.
 - (a) The petitioner stated on the application, “Should any open trenching be required, the Project will do so in accordance with the trenching requirements listed in the Champaign County Zoning Ordinance.”

- h. Subparagraph 6.1.5 F.(5) establishes requirements for mitigation of soil compaction and rutting.
 - (a) The petitioner stated on the application, “Soil compaction and rutting will be mitigated and shall be consistent with the Agricultural Impact Mitigation Agreement.”

- i. Subparagraph 6.1.5 F.(6) establishes requirements for land leveling.
 - (a) The petitioner did not provide a response in the application materials.

- j. Subparagraph 6.1.5 F.(7) establishes requirements for a permanent Erosion and Sedimentation Control Plan.
 - (a) The petitioner stated on the application, “An Erosion and Sedimentation Control Plan will be designed prior to our application for a building permit and as-build documentation will be provided to the zoning administrator.”

- k. Subparagraph 6.1.5 F.(8) establishes requirements for retention of all topsoil.
 - (a) The petitioner did not provide a response in the application materials.

- l. Subparagraph 6.1.5 F.(9) establishes requirements for minimizing the disturbance to BEST PRIME FARMLAND by establishing a specific type of vegetative ground cover.
 - (a) The petitioner stated on the application, “The Project will minimize disturbance to prime farmland and will be consistent with good engineering practices. As mentioned in the landscaping section, the vegetative ground cover will be comprised of native plant species suitable for the conditions of the Site. This native seeding will be oriented towards fostering an environment that is beneficial to pollinators.”

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- (11) Paragraph 6.1.5 G. contains standard conditions for use of public streets.
- a. Paragraph 6.1.5 G.(1) requires the Applicant to enter into a signed Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney and/or any relevant Township Highway Commissioner prior to the close of the public hearing for the use of public streets, except for any COMMUNITY PV SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements, and the signed and executed Roadway Upgrade and Maintenance agreements must provide for certain conditions.
 - (a) The petitioner is in discussion with Tuscola Township regarding this requirement, and a waiver has been added.
 - b. Paragraph 6.1.5 G.(2) requires that the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality where relevant, has approved a Transportation Impact Analysis provided by the Applicant and prepared by an independent engineer that is mutually acceptable to the Applicant and the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality.
 - (a) The petitioner is in discussion with Tuscola Township regarding this requirement, and a waiver has been added.
 - c. Paragraph 6.1.5 G.(3) requires the Applicant or its successors in interest to enter into a Roadway Use and Repair Agreement with the appropriate highway authority for decommissioning the PV SOLAR FARM.
 - (a) No information was required or submitted for the Special Use Permit application.
- (12) Paragraph 6.1.5 H. contains standard conditions for coordination with local fire protection districts.
- a. The subject property is approximately 2.9 road miles from the Pesotum fire station.
 - b. The petitioners stated in their application materials, "The Applicant has shared the proposed Site plan to the local Pesotum Fire Department and has offered to provide training and necessary equipment to the local emergency response authorities to prepare for proper emergency response during construction of the Project. In addition, the Applicant will create an emergency response plan and solicit input from the Pesotum Fire Department. The Applicant will submit a final site plan and Safety & Emergency Management Plan upon completion of the Project. In addition, the Project proposes a "knox box" on the Project gate for emergency personnel to gain access to the Site. Warning signs concerning voltage will be placed at the base of all pad-mounted transformers."
 - c. The Pesotum Fire Protection District was notified of this case and no comments have been received.

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- (13) Paragraph 6.1.5 I. contains standard conditions for the allowable noise level.
- a. Subparagraph 6.1.5 I.(1) requires the noise level from each PV SOLAR FARM to be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (35 *Illinois Administrative Code* Subtitle H: Noise Parts 900, 901, 910).
 - (a) The petitioner stated in their application, “The noise level related to the Project will be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations. The proposed single axis tracker ground mount solar photovoltaic has motors for each racking row that moves the panels imperceptible throughout the day. At three meters from the racking motor, the ambient noise level is 43 decibels and the motor running level is 53 decibels. The motor only turns on to move the array periodically as the sun makes its arc, and in between movements it does not run. 43 decibels would be the equivalent of quiet library sounds, and 50 decibels would be the equivalent of your typical residential fridge. The ATI DuraTrack V3 tracker motor operates for a total of 17.91 minutes per day. The transformer that will be used on Site has an average ambient noise level of 53 decibels. From the fence line, the Project will not be audible, and all abovementioned decibel levels are below the allowable octave band listed in Subtitle H: Noise, Parts 901 of the IPCB Administrative Code.”
 - b. Subparagraph 6.1.5 I.(3)a. requires that a SPECIAL USE Permit application for other than a COMMUNITY PV SOLAR FARM shall include a noise analysis.
 - (a) The project size is considered to be a COMMUNITY PV SOLAR FARM and therefore a noise analysis is not required unless the ZBA requires one.
- (14) Paragraph 6.1.5 J. contains standard conditions for endangered species consultation. Regarding compliance with 6.1.5 J.:
- a. The petitioner stated in their application, “The Illinois Department of Natural Resources (IDNR) was consulted through their Ecological Compliance Assessment Tool (EcoCAT) regarding any state-listed threatened or endangered species that may be located within the Project. On November 17, 2022, the EcoCAT results terminated consultation as there were no threatened or endangered species within the Project vicinity. The Project was designed and sited to mitigate impacts to wildlife; there will be no tree removal on Site or drastic change in land configuration.”
- (15) Paragraph 6.1.5 K. contains standard conditions for historic and archaeological resources review. Regarding compliance with 6.1.5 K.:
- a. The petitioner stated in their application, “The State Historic Preservation Office (SHPO) was contacted on October 12, 2022 to review the Site for any significant historic, architectural, or archeological resources. In the SHPO’s November 18, 2022 response, they determined that there was no significant resources documented within the Site.”

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- (16) Paragraph 6.1.5 L. states: “The PV SOLAR FARM shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife to a sustainable level of mortality.”
- a. The petitioner stated in their application, “The Project was designed and sited to mitigate impacts to wildlife; there will be no tree removal on Site or drastic change in land configuration.”
- (17) Paragraph 6.1.5 M. contains standard conditions for screening and fencing.
- a. Subparagraph 6.1.5 M.(1) requires the PV SOLAR FARM to have perimeter fencing that is at least 7 feet tall, with Knox boxes and keys provided at locked entrances, and a vegetation management plan included in the application to control NOXIOUS WEEDS.
 - (a) The petitioner stated in their application, “A 8’ chain link fence, or game fence, will be installed to surround the perimeter of the solar equipment components. In addition, the Project proposes a “knox box” on the Project gate for emergency personnel to gain access to the Site.”
 - (b) The petitioner included a Landscaping Plan in their application, and also stated, “Noxious weeds and other vegetation between the fencing and the lot line will be controlled in accordance with Illinois Noxious Weed Law (505 ILCS 100/1 et. Seq.).”
 - b. Subparagraph 6.1.5 M.(2) requires a visual screen around the perimeter of the PV SOLAR FARM.
 - (a) Subparagraph 6.1.5 M.(2)a.(a) requires that a visual screen be provided for any part of the PV SOLAR FARM that is visible to and located within 1,000 feet of an existing DWELLING or residential DISTRICT.
 - i. The petitioner stated in their application, “The Project does not propose screening as there are no dwellings unrelated to the Project within 1,000 feet of the Site. The one dwelling that is approximately 945 feet from the Project is the Project parcel landowner’s (JHBLT LLC) adjacent property and dwelling. The authorized signatory Janet Boyer, a trustee of JHBLT LLC, has signed a waiver for screening attached as Exhibit I.”
- (18) Paragraph 6.1.5 N. contains standard conditions to minimize glare from the PV SOLAR FARM. Subparagraph 6.1.5 N.(1) requires that the design and construction of the PV SOLAR FARM shall minimize glare that may affect adjacent properties and the application shall include an explanation of how glare will be minimized.
- a. The petitioner stated in the application, “The design of the Project is for the solar array to absorb the sunlight, rather than reflect it. The Project will not produce glare, and the array will face the sun for the entirety of the day. Upon review by the Federal Aviation Agency (FAA), a “no determination of hazard” letter was issued. Should any complaints arise due to the Project,

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the Applicant will work to resolve said complaint submitted through the complaint hotline."

- (19) Paragraph 6.1.5 O. contains standard conditions for the minimum liability insurance for the PV SOLAR FARM.
- a. The petitioner stated in the application, "The Applicant will maintain a general liability insurance policy covering bodily injury and property damage with minimum limits of at least \$5 million per occurrence and \$5 million in the aggregate. This policy shall identify landowners as additional insured."
- (20) Paragraph 6.1.5 P. contains other standard conditions for operation of the PV SOLAR FARM.
- a. Subparagraph 6.1.5 P.(1)c. states: "The Application shall explain methods and materials used to clean the PV SOLAR FARM equipment including an estimation of the daily and annual gallons of water used and the source of the water and the management of wastewater. The BOARD may request copies of well records from the Illinois State Water Survey and may require an estimate by a qualified hydrogeologist of the likely impact on adjacent waterwells."
- (a) The petitioner stated on the application, "The Applicant does not assume any annual cleaning frequency as the Illinois climate is more humid and has frequent rain events. In Illinois, snow and rainfall help to naturally "clean" the panels, so manual cleaning would be unlikely. However, should there be an abnormally dry year where the Applicant notices production loss due to dust accumulation, then the Applicant would dispatch for cleaning in that instance. When module cleaning is necessary (fairly rare in Illinois), the cleaning service is responsible for trucking in the water required for the cleaning. No on-site well or local utilities would be used as the water source. General data indicates about 6,400 gallons of water used per MW AC per cleaning. This estimate of water usage may vary depending on the provider and cleaning equipment available."
- b. Subparagraph 6.1.5 P.(3) states: "The PV SOLAR FARM SPECIAL USE permit application shall include a weed control plan for the total area of the SPECIAL USE permit including areas both inside of and outside of the perimeter fencing. The weed control plan shall ensure the control and/or eradication of NOXIOUS WEEDS consistent with the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.). The weed control plan shall be explained in the application.
- (a) The petitioner submitted a Landscape Plan including a weed control plan received April 14, 2023.
- c. All other requirements in Paragraph 6.1.5 P. do not have to be submitted as part of the Special Use Permit application; rather, they will be required during construction, operations, and/or decommissioning phases of the project.

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- (21) Paragraph 6.1.5 Q. contains standard conditions for a Decommissioning and Site Reclamation Plan for the PV SOLAR FARM and modifies the basic site reclamation requirements in paragraph 6.1.1 A. Compliance with paragraph 6.1.5 Q. can be summarized as follows:
- a. Subparagraph 6.1.5 Q.(1) of the Ordinance requires a signed Decommissioning and Site Reclamation Plan conforming to the requirements of paragraph 6.1.1 A. of the Ordinance and the remainder of 6.1.5 Q. of the Ordinance. Compliance with the requirements of paragraph 6.1.1 A. of the Ordinance can be summarized as follows:
 - (a) Subparagraph 6.1.1 A.1. of the Ordinance requires the petitioner to submit a Decommissioning and Site Reclamation Plan for consideration by the Board.
 - i. The petitioner included a signed Decommissioning and Site Reclamation Plan with their application received April 14, 2023.
 - (b) Subparagraph 6.1.1 A.2. of the Ordinance requires that the decommissioning and site reclamation plan shall be binding upon all successors of title, lessees, to any operator and/or owner of a NON-ADAPTABLE STRUCTURE, and to all parties to the decommissioning and site reclamation plan. Prior to the issuance of a SPECIAL USE Permit for such NON-ADAPTABLE STRUCTURES, the landowner or applicant shall also record a covenant incorporating the provisions of the decommissioning and site reclamation plan on the deed subject to the LOT, requiring that the reclamation work be performed and that a letter of credit be provided for financial assurance.
 - i. The petitioner's Decommissioning and Site Reclamation Plan received April 14, 2023 states, "Any successor in interest, assignee, and all parties to the decommissioning and site reclamation plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the Champaign Solar 1 facility."
 - (c) Subparagraph 6.1.1 A.3. of the Ordinance requires that separate cost estimates for Section 6.1.1 A.4.a., 6.1.1 A.4.b., and 6.1.1 A.4.c. shall be provided by an Illinois Licensed Professional Engineer and are subject to approval of the BOARD.
 - i. The petitioner included cost estimates with their Decommissioning and Site Reclamation Plan received April 14, 2023."
 - (d) Subparagraph 6.1.1 A.4.d. of the Ordinance requires the Decommissioning and Site Reclamation Plan to provide for provision and maintenance of a letter of credit, as set forth in Section 6.1.1 A.5.

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- i. The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to a Letter of Credit.
- (e) Subparagraph 6.1.1 A.5. of the Ordinance requires submission of an irrevocable letter of credit in the amount of 150% of the cost estimate required by 6.1.1 A.3 prior to issuance of a Zoning Use Permit.
 - i. No specifics were required or submitted regarding the Letter of Credit.
- (f) Subparagraph 6.1.1 A.6. of the Ordinance establishes a time period prior to the expiration of the irrevocable letter of credit during which the Zoning Administrator shall contact the landowner regarding the intent to renew the letter of credit and the landowner shall reply within a certain amount of time.
 - i. No specifics were required or submitted for the Special Use Permit application regarding this requirement.
- (g) Subparagraph 6.1.1 A.7. of the Ordinance establishes 5 factors to be considered in determining if a NON-ADAPTABLE structure (PV SOLAR FARM in this instance) is abandoned in place and 6.1.1 A.9. of the Ordinance establishes 7 conditions when the Zoning Administrator may draw upon the letter of credit and jointly these 12 circumstances comprise when the Zoning Administrator may draw upon the letter of credit.
 - i. The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to these items.
- (h) All other requirements in Paragraph 6.1.5 Q.(1) do not have to be submitted as part of the Special Use Permit application; rather, they will be required during construction, operations, and/or decommissioning phases of the project.
- b. Subparagraph 6.1.5 Q.(2) of the Ordinance requires that in addition to the costs listed in subparagraph 6.1.1 A.4. of the Ordinance, the decommissioning and site reclamation plan shall also include provisions for anticipated repairs to any public STREET used for the purpose of reclamation of the PV SOLAR FARM and all costs related to removal of access driveways.
 - (a) The Decommissioning and Site Reclamation Plan received April 14, 2023 includes provisions for repairing public streets via a Roadway Use and Repair Agreement and removal of access roads should the landowner require it.
- c. Subparagraph 6.1.5 Q.(3) of the Ordinance requires the Decommissioning and Site Reclamation Plan to include additional information.
 - (a) The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to 6.1.5 Q.(3).

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- d. Subparagraph 6.1.5 Q.(4) of the Ordinance requires that the Applicant shall provide financial assurance in the form of an irrevocable letter of credit as required in paragraph 6.1.1 A.5. of the Ordinance. Regarding compliance with this subparagraph:
- (a) The Letter of Credit must be supplied prior to receiving a Zoning Use Permit.
- e. Subparagraph 6.1.5 Q.(5) of the Ordinance states that in addition to the conditions listed in subparagraph 6.1.1 A.9. the Zoning Administrator may also draw on the funds for a myriad of reasons.
- (a) The Decommissioning and Site Reclamation Plan received April 28, 2023 includes reference to 6.1.5 Q.(5).
- f. Subparagraph 6.1.5 Q.(6) of the Ordinance states that the Zoning Administrator may, but is not required to, deem the PV SOLAR FARM abandoned, or the standards set forth in Section 6.1.5 Q.(5) met, with respect to some, but not all, of the PV SOLAR FARM. In that event, the Zoning Administrator may draw upon the financial assurance to perform the reclamation work as to that portion of the PV SOLAR FARM only. Upon completion of that reclamation work, the salvage value and reclamation costs shall be recalculated as to the remaining PV SOLAR FARM.
- (a) No information was provided regarding this section in the Decommissioning and Site Reclamation Plan.
- g. Subparagraph 6.1.5 Q.(7) of the Ordinance states that the Decommissioning and Site Reclamation Plan shall be included as a condition of approval by the BOARD and the signed and executed irrevocable letter of credit must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.
- (a) A special condition has been added to ensure compliance.
- (22) Paragraph 6.1.5 R. contains standard conditions for securing an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
- a. The petitioner stated in the application, “The Project will comply with the standards set for in the Agricultural Impact Mitigation Agreement that will be finalized prior to applying for a construction permit.”
- b. No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received. A special condition has been added to ensure compliance.
- (23) Paragraph 6.1.5 S. contains standard conditions for a complaint hotline for complaints related to PV SOLAR FARM construction and ongoing operations.
- a. No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received. A special condition has been added to ensure compliance.

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- (24) Paragraph 6.1.5 T. contains a standard condition stating that the PV SOLAR FARM County Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.
- a. A special condition has been added to ensure compliance.
- (25) Paragraph 6.1.5 U. contains standard conditions establishing additional requirements for application for a PV SOLAR FARM County Board Special Use Permit that supplement the basic requirements for a special use permit application.
- a. Subparagraph 6.1.5 U.(1)a. requires a PV SOLAR FARM Project Summary.
 - (a) A Project Description was included with the application received April 14, 2023.
 - b. Subparagraph 6.1.5 U.(1)b. requires the name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s) for the PV SOLAR FARM County Board SPECIAL USE permit.
 - (a) The application received April 14, 2023, demonstrates compliance with this requirement.
 - c. Subparagraph 6.1.5 U.(1)c. requires a site plan for the SOLAR FARM which includes the following:
 - (a) The approximate planned location of all PV SOLAR FARM STRUCTURES, property lines (including identification of adjoining properties), required separations, public access roads and turnout locations, access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the PV SOLAR FARM to the Substations(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback.
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.
 - (b) The site plan shall clearly indicate the area of the proposed PV SOLAR FARM County Board SPECIAL USE Permit as required by subparagraph 6.1.5 B.(1).
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.
 - (c) The location of all below-ground wiring.
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.
 - (d) The location, height, and appearance of all above-ground wiring and wiring structures.
 - i. The Site Plan received April 14, 2023, appears to demonstrate compliance with this requirement.

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- (e) The separation of all PV SOLAR FARM structures from adjacent DWELLINGS and/or PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit. Greater separation and somewhat different locations may be provided in the approved site plan for the Zoning Use Permit provided that that the greater separation does not increase the noise impacts and/or glare that were approved in the PV SOLAR FARM County Board SPECIAL USE Permit. PV SOLAR FARM structures includes substations, third party transmission lines, maintenance and management facilities, or other significant structures.
 - i. The application received April 14, 2023 appears to conform to this requirement.

- d. Subparagraph 6.1.5 U.(1)d. requires submittal of all other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.
 - (a) Compliance with this subparagraph has been shown in previous sections of this Summary of Evidence.

- e. Subparagraph 6.1.5 U.(1)e. requires that the PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM as required by Section 6.1.5 B.(2)a.(b).
 - (a) The Petitioner emailed a copy of the Special Use Permit application to the Village of Pesotum Clerk on April 14, 2023.

- f. Subparagraph 6.1.5 U.(1)f. requires that a municipal resolution regarding the PV SOLAR FARM by any municipality located within one-and-one-half miles of the PV SOLAR FARM must be submitted to the ZONING ADMINISTRATOR prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board or, in the absence of such a resolution, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board as required by Section 6.1.5 B.(2)a.(c).
 - (a) No resolution from the Village of Pesotum has been received as of July 5, 2023.
 - (b) Notice of the July 13, 2023 public hearing was sent by P&Z Staff to the Village of Pesotum on June 28, 2023.

- g. Subparagraph 6.1.5 U.(1)g. requires that documentation of an executed interconnection agreement with the appropriate electric utility shall be

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provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM as required by Section 6.1.5 B.(3)b.

- (a) The petitioner included an application for an interconnection agreement with their Special Use Permit application received April 14, 2023.
 - (b) A special condition has been added to ensure compliance.
 - h. Subparagraph 6.1.5 U.(2) requires that the Applicant shall notify the COUNTY of any changes to the information provided above that occurs while the County Board SPECIAL USE permit application is pending.
 - (a) No new information has been provided to date.
 - i. Subparagraph 6.1.5 U.(2) requires that the Applicant shall include a copy of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture with the Zoning Use Permit Application to authorize construction.
 - (a) A special condition has been added to ensure compliance.
- C. Regarding compliance with the *Storm Water Management and Erosion Control Ordinance*:
- (1) The proposed Special Use is not exempt from the *Storm Water Management and Erosion Control Ordinance*. A Storm Water Drainage Plan and detention basin will be required if more than 16% of the subject property is impervious area, including gravel, buildings, and solar array rack posts.
 - (2) Regarding the SWMEC requirement to protect agricultural field tile, see the review of compliance with paragraph 6.1.5 F. that contains standard conditions to mitigate damage to farmland.
- D. Regarding the Special Flood Hazard Areas Ordinance, no part of the subject property is located within a Special Flood Hazard Area.
- E. Regarding the Subdivision Regulations, the subject property is located in Champaign County's subdivision jurisdiction and appears to be in compliance.
- F. Regarding the requirement that the Special Use preserve the essential character of the AG-1 Agriculture Zoning District:
- (1) The proposed use is a PV SOLAR FARM that is consistent with the essential character of the AG-1 Agriculture District because it is only authorized in the AG-1 and AG-2 Districts.
- G. The proposed Special Use must comply with the Illinois Accessibility Code, which is not a County ordinance or policy and the County cannot provide any flexibility regarding that Code. A Zoning Use Permit cannot be issued for any part of the proposed Special Use until full compliance with the Illinois Accessibility Code has been indicated in drawings.

PRELIMINARY DRAFT**Case 100-S-23**
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10. Regarding the *Zoning Ordinance* requirement that the proposed Special Use is in harmony with the general intent and purpose of the Ordinance:
- A. A PV SOLAR FARM may be authorized by the County Board in the AG-1 or AG-2 Agriculture Zoning Districts as a Special Use provided all other zoning requirements and standard conditions are met or waived.
- (1) A proposed Special Use that does not conform to the standard conditions requires only a waiver of that particular condition and does not require a variance. Waivers of standard conditions are subject to the following findings:
- a. that the waiver is in accordance with the general purpose and intent of the ordinance; and
- b. that the waiver will not be injurious to the neighborhood or to the public health, safety, and welfare.
- B. See Section 15 for a summary of evidence regarding whether any requested waiver of standard conditions will be in harmony with the general intent and purpose of the Ordinance.
- C. Regarding whether the proposed Special Use Permit is in harmony with the general intent of the Zoning Ordinance:
- (1) Subsection 5.1.1 of the Ordinance states the general intent of the AG-1 District and states as follows (capitalized words are defined in the Ordinance):
- The AG-1, Agriculture DISTRICT is intended to protect the areas of the COUNTY where soil and topographic conditions are best adapted to the pursuit of AGRICULTURAL USES and to prevent the admixture of urban and rural USES which would contribute to the premature termination of AGRICULTURE pursuits.
- (2) The types of uses authorized in the AG-1 District are in fact the types of uses that have been determined to be acceptable in the AG-1 District. Uses authorized by Special Use Permit are acceptable uses in the districts provided that they are determined by the ZBA to meet the criteria for Special Use Permits established in paragraph 9.1.11 B. of the Ordinance.
- (3) Paragraph 2.0(a) of the Ordinance states that one purpose of the Ordinance is securing adequate light, pure air, and safety from fire and other dangers.
- This purpose is directly related to the limits on building coverage and the minimum yard requirements in the Ordinance and the proposed site plan appears to be in compliance with those requirements.
- (4) Paragraph 2.0(b) of the Ordinance states that one purpose of the Ordinance is conserving the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY.

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- a. Regarding the value of nearby properties, it is not clear whether the proposed Special Use will have any impact on the value of nearby properties without a formal real estate appraisal, which has not been requested nor provided, and so any discussion of values is necessarily general.
 - b. Regarding the value of the subject property, it also is not clear if the requested Special Use Permit would have any effect.
 - (a) If the petitioner is denied the special use permit, the property can still be used for agricultural production.
 - c. Section 6.1.5 Q. of the PV SOLAR FARM text amendment approved on August 23, 2018, includes a standard condition requiring a Decommissioning and Site Reclamation Plan that is intended to ensure there is adequate financial assurance for removal of a PV SOLAR FARM at the end of its useful life. Ensuring adequate site reclamation is one method of protecting surrounding property values.
- (5) Paragraph 2.0(c) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding congestion in the public STREETS.
- Other than additional traffic during construction and/or decommissioning of the PV SOLAR FARM, no significant increase in traffic is anticipated.
- (6) Paragraph 2.0(d) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding the hazards to persons and damage to PROPERTY resulting from the accumulation of runoff from storm or flood waters.
 - a. The requested Special Use Permit is not in a Special Flood Hazard Area.
 - b. The proposed Special Use is not exempt from the *Storm Water Management and Erosion Control Ordinance*. A Storm Water Drainage Plan and detention basin will be required if more than 16% of the subject property is impervious area, including gravel, buildings, and solar array rack posts.
 - (7) Paragraph 2.0(e) of the Ordinance states that one purpose of the Ordinance is promoting the public health, safety, comfort, morals, and general welfare.
 - a. In regards to public safety, this purpose is similar to the purpose established in paragraph 2.0 (a) and is in harmony to the same degree.
 - b. In regards to public comfort and general welfare, this purpose is similar to the purpose of conserving property values established in paragraph 2.0 (b) and is in harmony to the same degree.
 - (8) Paragraph 2.0 (f) states that one purpose of the Ordinance is regulating and limiting the height and bulk of BUILDINGS and STRUCTURES hereafter to be erected; and paragraph 2.0 (g) states that one purpose is establishing, regulating, and limiting the BUILDING or SETBACK lines on or along any STREET, trafficway, drive or parkway; and paragraph 2.0 (h) states that one purpose is regulating and limiting the

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intensity of the USE of LOT AREAS, and regulating and determining the area of OPEN SPACES within and surrounding BUILDINGS and STRUCTURES.

These three purposes are directly related to the limits on building height and building coverage and the minimum setback and yard requirements in the Ordinance and the proposed site plan appears to be in compliance with those limits.

- (9) Paragraph 2.0(i) of the Ordinance states that one purpose of the Ordinance is classifying, regulating, and restricting the location of trades and industries and the location of BUILDINGS, STRUCTURES, and land designed for specified industrial, residential, and other land USES; and paragraph 2.0(j.) states that one purpose is dividing the entire COUNTY into DISTRICTS of such number, shape, area, and such different classes according to the USE of land, BUILDINGS, and STRUCTURES, intensity of the USE of LOT AREA, area of OPEN SPACES, and other classification as may be deemed best suited to carry out the purpose of the ordinance; and paragraph 2.0(k) states that one purpose is fixing regulations and standards to which BUILDINGS, STRUCTURES, or USES therein shall conform; and paragraph 2.0(l) states that one purpose is prohibiting USES, BUILDINGS, OR STRUCTURES incompatible with the character of such DISTRICT.

Harmony with these four purposes requires that the special conditions of approval sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate nonconforming conditions.

- (10) Paragraph 2.0(m) of the Ordinance states that one purpose of the Ordinance is preventing additions to and alteration or remodeling of existing BUILDINGS, STRUCTURES, or USES in such a way as to avoid the restrictions and limitations lawfully imposed under this ordinance.

This purpose is not relevant to the proposed Special Use Permit because it relates to nonconforming buildings, structures, or uses that existed on the date of the adoption of the Ordinance and no structures exist on the subject property.

- (11) Paragraph 2.0(n) of the Ordinance states that one purpose of the Ordinance is protecting the most productive AGRICULTURAL lands from haphazard and unplanned intrusions of urban USES.

The subject property is located in the AG-1 Agriculture District and is rural in use.

- (12) Paragraph 2.0(o) of the Ordinance states that one purpose of the Ordinance is protecting natural features such as forested areas and watercourses.

The petitioners requested a natural resource review from the Illinois Department of Natural Resources EcoCAT tool. The review identified no protected resources that might be in the vicinity of the proposed PV Solar Farm. No further action is required by IDNR regarding natural resources.

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- (13) Paragraph 2.0(p) of the Ordinance states that one purpose of the Ordinance is encouraging the compact development of urban areas to minimize the cost of development of public utilities and public transportation facilities.

The subject property is located in the AG-1 Agriculture District and is, by definition, rural in use.

- (14) Paragraph 2.0(q) of the Ordinance states that one purpose of the Ordinance is encouraging the preservation of AGRICULTURAL belts surrounding urban areas, to retain the AGRICULTURAL nature of the COUNTY, and the individual character of existing communities.

The subject property is located in the AG-1 Agriculture District and is, by definition, rural in use.

- (15) Paragraph 2.0(r) of the Ordinance states that one purpose of the Ordinance is to provide for the safe and efficient development of renewable energy sources in those parts of the COUNTY that are most suited to their development.

The entire project area is located in an Agriculture zoning district, which is the only zoning DISTRICT in which a PV SOLAR FARM is authorized.

GENERALLY REGARDING WHETHER THE SPECIAL USE IS AN EXISTING NONCONFORMING USE

11. The proposed Special Use is not an existing NONCONFORMING USE.

RELATED TO THE WAIVERS, GENERALLY REGARDING SPECIAL CONDITIONS THAT MAY BE PRESENT

12. Generally regarding the Zoning Ordinance requirement of a finding that special conditions and circumstances exist which are peculiar to the land or structure involved which are not applicable to other similarly situated land or structures elsewhere in the same district:
- A. Regarding Part A of the proposed waivers, for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles:
- (1) There is an interstate and interchange limiting visibility of the PV SOLAR FARM between the Village of Pesotum and the PV SOLAR FARM.
 - (2) The P&Z Department sent the Village of Pesotum Clerk notice of the ZBA hearing for this case on June 28, 2023.
- B. Regarding Part C of the proposed waivers, for inverters that are 10 feet from the PV SOLAR FARM fence in lieu of 275 feet:
- (1) The inverters have been placed as far away as possible from the nearest residences.
- C. Regarding Part C of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board:
- (1) The petitioner is working with Tuscola Township on either a waiver or a Roadway Upgrade and Maintenance Agreement.

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- (2) A special condition has been added requiring the applicant to submit a Roadway Upgrade and Maintenance Agreement or waiver therefrom and approved by ELUC at the time of application for a Zoning Use Permit from Tuscola Township.

RELATED TO THE WAIVERS, GENERALLY REGARDING ANY PRACTICAL DIFFICULTIES OR HARDSHIPS RELATED TO CARRYING OUT THE STRICT LETTER OF THE ORDINANCE

13. Generally regarding the Zoning Ordinance requirement of a finding that practical difficulties or hardships related to carrying out the strict letter of the regulations sought to be varied prevent reasonable and otherwise permitted use of the land or structures or construction on the lot:
- A. Without Part A of the proposed waivers, the PV SOLAR FARM could not be located on the subject property.
 - B. Without Part B of the proposed waivers, the inverters would have to be moved farther west, which is closer to the nearest residences.
 - C. Without Part C of the proposed waivers, the Special Use Permit process might have to be extended in order to have sufficient time to prepare these documents.

RELATED TO THE WAIVERS, GENERALLY PERTAINING TO WHETHER OR NOT THE PRACTICAL DIFFICULTIES OR HARDSHIPS RESULT FROM THE ACTIONS OF THE APPLICANT

14. Generally regarding the Zoning Ordinance requirement for a finding that the special conditions, circumstances, hardships, or practical difficulties do not result from the actions of the Applicant:
- A. Regarding Part A of the proposed waivers, for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles:
 - (1) The petitioners were not aware of this separation requirement when they leased the land for the PV SOLAR FARM.
 - B. Regarding Part B of the proposed waivers, for inverters that are 10 feet from the PV SOLAR FARM fence in lieu of 275 feet:
 - (1) The petitioners placed the inverters where they are in order to maintain the greatest distance from the nearest residences.
 - C. Regarding Part C of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board:
 - (1) The petitioner is working with Tuscola Township to receive either an agreement or a waiver from this requirement.

GENERALLY PERTAINING TO WHETHER OR NOT THE WAIVERS ARE IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ORDINANCE

15. Regarding the *Zoning Ordinance* requirement that the waivers of standard conditions of the Special Use will be in harmony with the general purpose and intent of the ordinance:
- A. Regarding Part A of the proposed waivers, for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, the requested waiver (variance) is 71.3% of the minimum required, for a variance of 28.7%.

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- B. Regarding Part B of the proposed waivers, for inverters that are 10 feet from the PV SOLAR FARM fence in lieu of 275 feet: the requested waiver (variance) is 3.6% of the minimum required, for a variance of 96.4%.
- C. Regarding Part C of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, the requested waiver (variance) is 0% of the minimum required, for a variance of 100%.

RELATED TO THE WAIVERS, GENERALLY PERTAINING TO THE EFFECTS OF THE REQUESTED WAIVERS ON THE NEIGHBORHOOD AND THE PUBLIC HEALTH, SAFETY, AND WELFARE

- 16. Regarding the Zoning Ordinance requirement for a finding that the granting of the waiver (variance) will not be injurious to the neighborhood, or otherwise detrimental to the public health, safety, or welfare:
 - A. Pesotum Township and Tuscola Township have been notified of this case, and no comments have been received.
 - B. The Pesotum Fire Protection District has been notified of this case, and no comments have been received.
 - C. Pesotum Consolidated Main Drainage District and Hayes Branch Drainage District have been notified of this case, and no comments have been received.
 - D. Considerations of public health, safety, and welfare for the proposed special use are discussed under Item 8 and are also applicable to the proposed waivers.

GENERALLY REGARDING PROPOSED SPECIAL CONDITIONS OF APPROVAL

- 17. Regarding proposed special conditions of approval:
 - A. **The approved site plan consists of the following documents:**
 - **Site Plan received April 14, 2023.**

The special condition stated above is required to ensure the following:
The constructed PV SOLAR FARM is consistent with the special use permit approval.
 - B. **The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

The special condition stated above is required to ensure the following:
That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.
 - C. **The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.**

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The special condition stated above is required to ensure the following:

That the proposed Special Use meets applicable state requirements for accessibility.

- D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**

The special condition stated above is required to ensure the following:

That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.

- E. **A signed Decommissioning and Site Reclamation Plan that has been approved by the Environment and Land Use Committee is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**

The special condition stated above is required to ensure the following:

The Special Use Permit complies with Ordinance requirements and as authorized by waiver.

- F. *(Note: not needed if a waiver is received)* **A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by Tuscola Township and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**

The special condition stated above is required to ensure the following:

To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.

- G. **The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
1. **Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
 2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
 3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution with a minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of "A" by S&P or a rating of "A2" by Moody's or a rating of "A-" by Kroll's within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**

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4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
6. *(Note: not needed if a waiver is received)* **A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
7. **The telephone number for the complaint hotline required by 6.1.5 S.**
8. **Any updates to the approved Site Plan from Case 100-S-23 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.

- H. **A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
 2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
 3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.

- I. **The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
1. **Maintain the pollinator plantings in perpetuity.**

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2. **Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
3. **Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
4. **Maintain a current general liability policy as required by 6.1.5 O.**
5. **Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
6. **Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
7. **Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The special condition stated above is required to ensure the following:

Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.

- J. **The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed in compliance with the Ordinance requirements.

- K. **The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

The special condition stated above is required to ensure the following:

Conformance with Policy 4.2.3 of the Land Resource Management Plan.

- L. **A 5 feet deep open trench shall extend for 30 feet on either side of any drainageway that is crossed with underground wiring and the relevant drainage district shall be provided 48 hours in which to inspect for tile and the positions of any tile lines that are discovered shall be recorded using Global Positioning System (GPS) technology.**

The special condition stated above is required to ensure the following:

That drainage district tiles are protected.

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- M. **The terms of approval are the requirements of the current Section 6.1.5 of the Zoning Ordinance as amended August 18, 2022.**

The special condition stated above is required to ensure the following:

That the current version of the Zoning Ordinance has been referenced.

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1. Special Use Permit Application received April 14, 2023, with attachments:
 - A Site Plan
 - B Supplemental Application Information, including:
 - Project Description
 - Erosion and Sedimentation Control Plan
 - Decommissioning and Site Reclamation Plan
 - Landscaping Plan

2. Natural Resource Report by the Champaign County Soil and Water Conservation District received January 24, 2023

3. Preliminary Memorandum dated July 5, 2023, with attachments:
 - A Case Maps (Location Map, Land Use, and Zoning)
 - B Site Plan received April 14, 2023
 - C Project Narrative received April 14, 2023
 - D Landscaping Plan received April 14, 2023
 - E Inverters spec sheet downloaded April 20, 2023
 - F Solar Module spec sheet downloaded April 20, 2023
 - G Interconnection application received April 14, 2023
 - H Complaint resolution received April 14, 2023
 - I1 Decommissioning and Site Reclamation Plan for Site 1 received April 28, 2023
 - I1b Decommissioning and Site Reclamation Plan for Site 1b received April 28, 2023
 - J Letter waiving screening requirement received April 14, 2023
 - K1 Natural Resource Report by the Champaign County Soil and Water Conservation District for Site 1 received January 24, 2023 (*on ZBA website*)
 - K1b Natural Resource Report by the Champaign County Soil and Water Conservation District for Site 1b received January 24, 2023 (*on ZBA website*)
 - L Site visit images taken April 12, 2023
 - M Summary of Evidence, Summary Finding of Fact and Final Determination dated July 13, 2023

PRELIMINARY DRAFT**FINDINGS OF FACT**

From the documents of record and the testimony and exhibits received at the public hearing for zoning case **100-S-23** held on **July 13, 2023**, the Zoning Board of Appeals of Champaign County finds that:

1. The requested Special Use Permit *{IS / IS NOT}* necessary for the public convenience at this location because:
 - a. *The State of Illinois has adopted a Renewable Portfolio Standard that established a goal of 25% of the State's energy coming from renewable sources by the year 2025.*
 - b. *The Illinois Future Energy Jobs Act requires installation of 3,000 MW of new solar capacity by the year 2030.*
 - c. *There is an existing power line along the south side of CR 0N.*

2. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}* is so designed, located, and proposed to be operated so that it *{WILL NOT / WILL}* be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare because:
 - a. The street has *{ADEQUATE / INADEQUATE}* traffic capacity and the entrance location has *{ADEQUATE / INADEQUATE}* visibility.
 - b. Emergency services availability is *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *The subject property is approximately 2.9 miles from the Pesotum fire station.*
 - b. *The Pesotum Fire Protection District was notified of this case and no comments have been received.*
 - c. The Special Use *{WILL / WILL NOT}* be compatible with adjacent uses *{because*}*:
 - a. *The proposed project is surrounded by land in agricultural production and the nearest residence is about 1,500 feet from the PV SOLAR FARM fenced area.*
 - d. Surface and subsurface drainage will be *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *No part of the subject property is in the Special Flood Hazard Area.*
 - b. *The proposed project must comply with the Storm Water Management and Erosion Control Ordinance.*
 - e. Public safety will be *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *Relevant jurisdictions were notified of this case, and no comments have been received.*
 - f. The provisions for parking will be *{ADEQUATE / INADEQUATE} {because*}*:
 - a. *No parking is required for a PV SOLAR FARM.*
 - g. The property *{IS/IS NOT}* WELL SUITED OVERALL for the proposed improvements *{because*}*:
 - a. *The site is reasonably well-suited in all respects and has no major defects.*

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- h. Existing public services *{ARE/ARE NOT}* available to support the proposed SPECIAL USE without undue public expense *{because*}*:
 - a. ***No additional public services are necessary for the proposed development.***
- i. Existing public infrastructure together with the proposed development *{IS/IS NOT}* adequate to support the proposed development effectively and safely without undue public expense *{because*}*:
 - a. ***No new public infrastructure is required for the proposed development.***

(Note the Board may include other relevant considerations as necessary or desirable in each case.)

*The Board may include additional justification if desired, but it is not required.

- 3a. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT}* conform to the applicable regulations and standards of the DISTRICT in which it is located, subject to approval of the requested waivers.
- 3b. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT}* preserve the essential character of the DISTRICT in which it is located because:
 - a. The Special Use will be designed to *{CONFORM / NOT CONFORM}* to all relevant County ordinances and codes.
 - b. The Special Use *{WILL / WILL NOT}* be compatible with adjacent uses.
 - c. Public safety will be *{ADEQUATE / INADEQUATE}*.
- 4. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {IS / IS NOT}* in harmony with the general purpose and intent of the Ordinance because:
 - a. The Special Use is authorized in the District.
 - b. The requested Special Use Permit *{IS/ IS NOT}* necessary for the public convenience at this location.
 - c. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}* is so designed, located, and proposed to be operated so that it *{WILL / WILL NOT}* be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare.
 - d. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT}* preserve the essential character of the DISTRICT in which it is located.
- 5. The requested Special Use **IS NOT** an existing nonconforming use.
- 6. Regarding necessary waivers of standard conditions:

Per Section 7.15 of the Champaign County ZBA Bylaws, “waivers may be approved individually or *en masse* by the affirmative vote of a majority of those members voting on the issue, and shall be incorporated into the Findings of Fact with the reason for granting each waiver described.”

- A. Regarding Part A of the proposed waivers, for a distance of 1.07 miles between a PV FARM and a municipality with zoning in lieu of the minimum required one and one-half miles:

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- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because:
 - a. *The requested waiver (variance) is 71.3% of the minimum required, for a variance of 28.7%.*
 - b. *Relevant jurisdictions have been notified of this case, and no comments have been received.*

 - (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
 - a. *There is an interstate and interchange limiting visibility of the PV SOLAR FARM between the Village of Pesotum and the PV SOLAR FARM.*
 - b. *Adjacent landowners within 250 feet of the subject property were sent notification of the proposed project on June 28, 2023, and no comments have been received.*

 - (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because:
 - a. *Without the proposed waiver, the PV SOLAR FARM could not be located on the subject property.*

 - (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because:
 - a. *The petitioners were not aware of this separation requirement when they leased the land for the PV SOLAR FARM.*

 - (5) The requested waiver *{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}* the minimum variation that will make possible the reasonable use of the land/structure because:
 - a. *The requested waiver (variance) is 3.6% of the minimum required, for a variance of 96.4%.*
 - b. *Relevant jurisdictions have been notified of this case, and no comments have been received.*
- B. Regarding Part B of the proposed waivers, for inverters that are 10 feet from the PV SOLAR FARM fence in lieu of 275 feet:
- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because:
 - a. *The requested waiver (variance) is 3.6% of the minimum required, for a variance of 96.4%.*
 - b. *Relevant jurisdictions have been notified of this case, and no comments have been received.*

 - (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
 - a. *The inverters have been placed as far away as possible from the nearest residences.*

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- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied **{WILL / WILL NOT}** prevent reasonable or otherwise permitted use of the land or structure or construction because:
 - a. ***The inverters would have to be moved farther west, which is closer to the nearest residences.***
 - (4) The special conditions, circumstances, hardships, or practical difficulties **{DO / DO NOT}** result from actions of the applicant because:
 - a. ***The petitioners placed the inverters where they are in order to maintain the greatest distance from the nearest residences.***
 - (5) The requested waiver **{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}** the minimum variation that will make possible the reasonable use of the land/structure because:
 - a. ***The requested waiver (variance) is 0% of the minimum required, for a variance of 100%.***
 - b. ***A special condition has been added requiring this information prior to approval of a Zoning Use Permit.***
- C. Regarding Part C of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board:
- (1) The waiver **{IS/ IS NOT}** in accordance with the general purpose and intent of the Zoning Ordinance and **{WILL/ WILL NOT}** be injurious to the neighborhood or to the public health, safety, and welfare because:
 - a. ***The requested waiver (variance) is 0% of the minimum required, for a variance of 100%.***
 - b. ***A special condition has been added requiring this information prior to approval of a Zoning Use Permit.***
 - (2) Special conditions and circumstances **{DO / DO NOT}** exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
 - a. ***The petitioner is working with Tuscola Township on either a waiver or a Roadway Upgrade and Maintenance Agreement.***
 - b. ***A special condition has been added requiring this information prior to approval of a Zoning Use Permit.***
 - (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied **{WILL / WILL NOT}** prevent reasonable or otherwise permitted use of the land or structure or construction because:
 - a. ***Without the proposed waiver, the Special Use Permit process might have to be extended in order to have sufficient time to prepare this document.***
 - (4) The special conditions, circumstances, hardships, or practical difficulties **{DO / DO NOT}** result from actions of the applicant because:
 - a. ***The petitioner is working with Tuscola Township to receive either an agreement or a waiver from this requirement.***
 - (5) The requested waiver **{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}** the minimum variation that will make possible the reasonable use of the land/structure because:
 - a. ***The requested waiver (variance) is 0% of the minimum required, for a variance of 100%.***
 - b. ***A special condition has been added requiring this information prior to approval of a Zoning Use Permit.***

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7. **{NO SPECIAL CONDITIONS ARE HEREBY IMPOSED / THE SPECIAL CONDITIONS IMPOSED HEREIN ARE REQUIRED TO ENSURE COMPLIANCE WITH THE CRITERIA FOR SPECIAL USE PERMITS AND FOR THE PARTICULAR PURPOSES DESCRIBED BELOW:**

- A. **The approved site plan consists of the following documents:**
- **Site Plan received April 14, 2023.**

The special condition stated above is required to ensure the following:

The constructed PV SOLAR FARM is consistent with the special use permit approval.

- B. **The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

The special condition stated above is required to ensure the following:

That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.

- C. **The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.**

The special condition stated above is required to ensure the following:

That the proposed Special Use meets applicable state requirements for accessibility.

- D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**

The special condition stated above is required to ensure the following:

That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.

- E. **A signed Decommissioning and Site Reclamation Plan that has been approved by the Environment and Land Use Committee is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**

The special condition stated above is required to ensure the following:

The Special Use Permit complies with Ordinance requirements and as authorized by waiver.

- F. **(Note: not needed if a waiver is received) A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by Tuscola Township and approved by the**

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Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.

The special condition stated above is required to ensure the following:

To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.

G. The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:

- 1. Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
- 2. Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
- 3. An irrevocable letter of credit to be drawn upon a federally insured financial institution with a minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of "A" by S&P or a rating of "A2" by Moody's or a rating of "A-" by Kroll's within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
- 4. A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
- 5. Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
- 6. (Note: not needed if a waiver is received) A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
- 7. The telephone number for the complaint hotline required by 6.1.5 S.**
- 8. Any updates to the approved Site Plan from Case 100-S-23 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.

H. A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:

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1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.

- I. **The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
 1. **Maintain the pollinator plantings in perpetuity.**
 2. **Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
 3. **Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
 4. **Maintain a current general liability policy as required by 6.1.5 O.**
 5. **Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
 6. **Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
 7. **Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The special condition stated above is required to ensure the following:

Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.

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- J. **The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

The special condition stated above is required to ensure the following:

The PV SOLAR FARM is constructed in compliance with the Ordinance requirements.

- K. **The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

The special condition stated above is required to ensure the following:

Conformance with Policy 4.2.3 of the Land Resource Management Plan.

- L. **A 5 feet deep open trench shall extend for 30 feet on either side of any drainageway that is crossed with underground wiring and the relevant drainage district shall be provided 48 hours in which to inspect for tile and the positions of any tile lines that are discovered shall be recorded using Global Positioning System (GPS) technology.**

The special condition stated above is required to ensure the following:

That drainage district tiles are protected.

- M. **The terms of approval are the requirements of the current Section 6.1.5 of the Zoning Ordinance as amended August 18, 2022.**

The special condition stated above is required to ensure the following:

That the current version of the Zoning Ordinance has been referenced.

PRELIMINARY DRAFT**FINAL DETERMINATION**

The Champaign County Zoning Board of Appeals finds that, based upon the application, testimony, and other evidence received in this case, that the requirements for approval of Section 9.1.11B. **{HAVE / HAVE NOT}** been met, and pursuant to the authority granted by Section 9.1.6 B. of the Champaign County Zoning Ordinance, recommends that:

The Special Use requested in Case **100-S-23** is hereby **{GRANTED/ GRANTED WITH SPECIAL CONDITIONS / DENIED}** to the applicant, **Champaign Solar 1b LLC**, to authorize the following as a Special Use on land in the AG-1 Agriculture Zoning District:

Authorize a Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, and

{SUBJECT TO THE FOLLOWING WAIVERS OF STANDARD CONDITIONS:}

Part A: A waiver for a separation distance of 1.07 miles from a municipality with a zoning ordinance in lieu of the minimum required 1.5 miles, per Section 6.1.5 B.(2)a.

Part B: A waiver for a separation distance of 10 feet between the solar inverters and the perimeter fence in lieu of the minimum required 275 feet, per Section 6.1.5 D.(6).

Part C: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.

{ SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS: }

- A. **The approved site plan consists of the following documents:**
 - **Site Plan received April 14, 2023.**
- B. **The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**
- C. **The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.**
- D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**
- E. **A signed Decommissioning and Site Reclamation Plan that has been approved by the Environment and Land Use Committee is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the**

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Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.

- F. *(Note: not needed if a waiver is received)* **A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by Tuscola Township and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**
- G. **The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
1. **Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
 2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
 3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution with a minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of "A" by S&P or a rating of "A2" by Moody's or a rating of "A-" by Kroll's within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
 4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
 5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
 6. *(Note: not needed if a waiver is received)* **A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
 7. **The telephone number for the complaint hotline required by 6.1.5 S.**
 8. **Any updates to the approved Site Plan from Case 100-S-23 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**
- H. **A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from**

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- the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
- 2. As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
 - 3. An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**
- I. The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
- 1. Maintain the pollinator plantings in perpetuity.**
 - 2. Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
 - 3. Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
 - 4. Maintain a current general liability policy as required by 6.1.5 O.**
 - 5. Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
 - 6. Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
 - 7. Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**
- J. The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**
- K. The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**
- L. A 5 feet deep open trench shall extend for 30 feet on either side of any drainageway that is crossed with underground wiring and the relevant drainage district shall be provided 48 hours in which to inspect for tile and the positions of any tile lines that are discovered shall be recorded using Global Positioning System (GPS) technology.**

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- M. **The terms of approval are the requirements of the current Section 6.1.5 of the Zoning Ordinance as amended August 18, 2022.**

The foregoing is an accurate and complete record of the Findings and Determination of the Zoning Board of Appeals of Champaign County.

SIGNED:

ATTEST:

Ryan Elwell, Chair
Champaign County Zoning Board of Appeals

Secretary to the Zoning Board of Appeals

Date