



Zoning Board of Appeals
Gregory Koeppen
Chair

500 W. Winchester Road, Suite 101
Libertyville, Illinois 60048
Phone 847-377-2600
Email: pbdzoning@lakecountyil.gov

September 10, 2024

TO: Gregory Koeppen, Chair
Lake County Zoning Board of Appeals

FROM: Thomas Chefalo, Principal Planner
Lake County Department of Planning, Building and Development

CASE NO: CUP-000998-2024

REQUESTED ACTION: Conditional Use Permit to establish a Commercial Solar Energy System.

HEARING DATE: September 17, 2024

GENERAL INFORMATION

OWNERS: Daniel A. Beelow and the Donald Hertel Revocable Trust

OF PARCELS: Two

SIZE: 38.3 Acres, per Lake County Maps Online

LOCATION: 41125 N IL Route 83, Antioch, Illinois & 23150 W Lake Shore Dr.,
Antioch, Illinois

PIN: 0220200017 & 0217400027

EXISTING ZONING: Estate (E)

EXISTING LAND USE: Agricultural (field crops)

PROPOSED LAND USE: Commercial Solar Energy System

SURROUNDING ZONING / LAND USE

NORTH: Estate (E) / Lake County Forest Preserve
SOUTH: Residential-1 (R-1) / Residential
EAST: Estate (E) / Residential and Vacant
WEST: Incorporated Antioch/ Railroad Right-of-way and Electric Utility

COMPREHENSIVE PLANS

LAKE COUNTY: Residential Large Lot
MUNICIPALITIES
WITHIN 1 ½ MILES: Village of Antioch: None shown
Village of Lake Villa: None shown

DETAILS OF REQUEST

ACCESS: The subject property is accessed from N IL Route 83.
CONFORMING LOT: The subject property is a conforming zoning lot in the E zoning district.
WETLAND/FLOODPLAIN: The subject property has wetlands dispersed along the western edge of the property. There are also isolated farmed wetlands on the site. There is no mapped floodplain on the subject property.
SEWER AND WELL: The subject property does not have any water or sewer service. Neither service is necessary to support the proposed use.

LAKE COUNTY AND EXTERNAL AGENCY COMMENTS

McHenry – Lake County Soil & Water Conservation District (SWCD)

- The SWCD District Board of Directors recommends that areas between panels and within the buffers be planted with a native prairie mix to help increase water infiltration and reduce runoff from the site. It is recommended that a planting and maintenance plan be developed with the petitioner/landowner to ensure that noxious weeds are controlled, and native plantings are properly installed and managed. Further, the petitioner is encouraged to add pollinator species to this planting plan.
- Lake County Planning, Building and Development staff are in receipt of the applicant's Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.

Illinois Department of Agriculture

- The applicant has submitted a copy of an Agricultural Impact Mitigation Agreement executed August 2023.

Illinois Department of Natural Resources

- The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:
 - Black Tern (*Chlidonias niger*)
 - Blackchin shiner (*Notropis heterodon*)
 - Blacknose Shiner (*Notropis heterolepis*)
 - Grass-Leaved Pondweed (*Potamogeton gramineus*)
 - King Rail (*Rallus elegans*)
 - Least Bittern (*Lxobrychus exilis*)
 - Pugnose Shiner (*Notropis anogenus*)
 - Starheaded Topminnow (*Fundulus dispar*)
 - Western Banded Killifish (*Fundulus diaphanous menona*)
 - White Stemmed Pondweed (*Potamogeton praelongus*)
 - Little Silver Lake INAI Site
 - Loon Lake INAI Site
 - Sun Lake INIA Site
 - Sun Lake Nature Preserve
- The Illinois Department of Natural Resources provided the following commentary in a letter dated March 24, 2023:

“The natural resources reviewed provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and has concluded that adverse effects are unlikely.”

Lake County Engineering Division - Comments by Joel Krause

The Engineering Division has no objection to the requested Conditional Use Permit (CUP). Please be advised that there are remaining items from the Site Capacity/Site Plan review (including a Maintenance and Monitoring Plan for the native vegetation and a wetland impact permit from Lake County SMC) that will need to be addressed at the time of the Site Development Permit application.

Lake County Building Division – Comments by Ieva Donev

The Building Division has no objection to the requested Conditional Use Permit (CUP). Building permits will be required for the proposed use and the project shall be reviewed for compliance under currently adopted codes and amendments.

ADDITIONAL COMMENTS

- Lake County is subject to *Illinois State Statute 55 ILCS 5/5-12020*, which enumerates the most restrictive standards a county may require for the establishment of commercial solar and wind energy facilities. A County may elect not to adopt such standards but in no case shall a County adopt a standard more restrictive than those set forth in the statute. Further, per the statute, conditional use permit applications shall be approved if found to be in compliance with the statutory standards.
- *Illinois State Statute 55 ILCS 5/5-12020(h)* states that a county may not adopt zoning regulations that disallow, permanently or temporarily, commercial solar energy facilities from being developed or operated in any district zoned to allow agricultural or industrial uses. The Lake County, Illinois Code of Ordinances (LCC) allows for agricultural uses in any zoning district in the unincorporated area; therefore, the use of a commercial solar energy facility would be allowed on the subject property in the Estate zoning district.
- Pursuant to LCC Section 151.112(WW)(1), staff conducted a Site Capacity and Site Plan review and have determined the proposed project meets the standards required for the establishment of a Commercial Solar Energy System on the subject property.

RECOMMENDATION FOR CONDITIONAL USE PERMIT

Staff recommends approval of the proposed Conditional Use Permit. Staff finds the request will meet the criteria for a Conditional Use Permit (CUP) in the following manner:

Conditional Use Approval Criteria – Section 151.112 (WW)

Fencing

Commercial Solar Energy Systems shall be enclosed with an approved fence that restricts access to the public. Such fencing shall, at a minimum, encompass the entire system's facility, contain a locking mechanism, and be subject to the fence regulations of Lake County Code Section 151.113(L)(1). The maximum height of fences surrounding Commercial Solar Energy Systems shall be eight feet:

Comment:

The applicant will be enclosing the proposed Commercial Solar Energy System with an approved 7-foot fence.

Height

The total height of the panels shall not exceed 20 feet, as measured from grade to the highest point of the solar arrays when the Solar Energy Facility's arrays are at full tilt:

Comment:

The maximum height of the proposed solar arrays will not exceed 20 feet.

Location and Setbacks

Commercial solar energy systems must meet the setback requirements for a principal structure in the underlying zoning district or be waived by the written consent of the owner(s) of each affected nonparticipating property:

Comment:

The proposed Commercial Solar Energy System complies with all Lake County Code setback requirements.

Decommissioning Plan and Assurances

The applicant (or owner, if different from applicant) must submit a decommissioning plan with cost estimation to the County as part of the siting application and provide testimony supporting the calculation of costs provided in said plan during the public hearing on the application.

Comment:

A decommissioning plan and calculated costs have been provided by the applicants.