



Zoning Board of Appeals
Gregory Koeppen
Chair

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June 16, 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-001074-2025

REQUESTED ACTION: Conditional Use Permit (CUP) to allow an accessory small-scale solar energy system.

HEARING DATE: June 24, 2025

GENERAL INFORMATION

OWNER: Thomas Benson 2022 Trust

OF PARCELS: One

SIZE: 10.0 Acres, per Lake County Maps Online

LOCATION: 43233 N CRAWFORD RD ANTIOCH, IL.

PINs: 0306400003

EXISTING ZONING: Agricultural (AG)

EXISTING LAND USE: Single-family dwelling with one accessory structure.

PROPOSED LAND USE: Existing uses with an accessory small-scale solar energy system

SURROUNDING ZONING / LAND USE

NORTH and WEST: Agricultural (AG)/Open Space - Forest Preserve

SOUTH and EAST: Agricultural (AG)/Single-family residential

COMPREHENSIVE PLANS

LAKE COUNTY:	Agricultural
MUNICIPALITIES WITHIN 1 ½ MILES:	Village of Antioch: Open Space Village of Old Mill Creek: Unknown Village of Wadsworth: Not designated

DETAILS OF REQUEST

ACCESS:	The subject property is accessed from N. Crawford Rd.
CONFORMING LOT:	The subject property is a conforming zoning lot in the AG zoning district.
WETLAND/FLOODPLAIN:	The subject property contains mapped wetlands to the north and east of the existing single-family dwelling. There is no existing floodplain on the subject property.
SEWER AND WATER:	The property is currently served by a private septic system and water well. Neither service is necessary to support the proposed accessory use.

LAKE COUNTY AND EXTERNAL AGENCY COMMENTS

McHenry – Lake County Soil & Water Conservation District

- McHenry- Lake County Soil & Water Conservation District Natural Resource Information (NRI) Report finds that the proposed use is minimal for the purposes of the NRI report.

Lake County Engineering Division - Comments by Andrew Heuser

The Engineering Division has no objection to this CUP. A site permit will be required.

Lake County Building Division – Comments by Ieva Donev

- The Building Division has no objection to the CUP application. A building permit is required. Submittal shall show compliance with all unincorporated Lake County codes and amendments.

Lake County Health Department – Comments by Jeff Schrei

The Health Department has no objection.

ADDITIONAL COMMENTS

- Per Lake County, Illinois Code of Ordinances (LCC) Section 151.271 Terms Defined, a "solar energy system, accessory small scale" is defined as *"A ground-mounted solar energy system that occupies 1,750 square feet of surface area or less whose power generation is primarily for consumption on the property. An accessory small-scale solar energy system is considered accessory regardless of its size in relation to the principal use and/or building on the property"*.
- Per Lake County Code Section 151.111 Use Table, Accessory Small Scale Solar Energy Systems require a delegated Conditional Use Permit (CUP) in the RE zoning district. Only those systems that meet the exceptions of Lake County Code Section 151.113(U)(1)(c)(1) (systems that do not exceed 5% of the net buildable area of the lot, or 500 square feet, whichever is less), are exempt from the CUP requirement.
- The applicant is proposing a ground-mounted solar energy system with a panel area of 1,118 square feet to support the needs of the existing residential use. No roof-mounted panels are proposed as the existing roof of the single-family dwelling is not structurally sufficient to support the weight of all the solar panels.

RECOMMENDATION FOR CONDITIONAL USE PERMIT

Staff recommends approval of the proposed CUP subject to the Conditions of Approval on the final page of this report. Staff finds the request will meet the criteria for a CUP in the following manner:

Conditional Use Approval Criteria – Section 151.050 (F)(3)

1. The use in its proposed location will be consistent with the stated purpose and intent of Section 151.005:

Comment: The requested CUP for the subject property is consistent with the purpose and intent of the Ordinance to protect the health, safety, and general welfare of existing and future residents. In staff's opinion, the application complies with Lake County Code Sections 151.005 (D) *Regulating the intensity of uses and structures through density, intensity, dimensional, and open space standards*; (E) *Protecting landowners from any adverse impacts associated with development that occurs in unincorporated Lake County*; (F) *Implementing land use and open space policies that will preserve agricultural uses of land, including local food production, and the rural, open character of the unincorporated area of the county*; (G) *Controlling development in areas of sensitive natural resources, in order to reduce or eliminate adverse environmental impacts*; and (I) *Promoting sustainable development*.

2. The proposed use in its proposed location complies with all applicable standards of this Chapter, including any applicable use standards of Section 151.112: This proposed use is subject to the accessory use standards of Section 151.113(U)(1)(c), which is reflected in the comment below.

Comment: The application meets the location, setback, and height requirements for ground-mounted accessory solar energy systems and is not subject to impervious surface ratio calculations.

3. The proposed use in its proposed location will not have a substantial adverse impact on any of the following, either as they exist at the time of the application or as they may be developed in the future due to implementation of the Regional Framework Plan:

a) Adjacent property:

Comment: The ground-mounted system, which is comprised of solar panels that cover 1,118 square feet, is located at the in the north central portion of the 10-acre property. The ground-mounted system would not be visible from the residential properties located to the east and south of the applicant's parcel. However, the ground-mounted system is located 20 feet from the common property line between the Forest Preserve and the applicant's parcel

b) Character of the neighborhood:

Comment: The property is wooded except for a clearing located in the center of the property that includes the house and accessory structure. The property abuts Lake County Forest Preserve District property to its north. The ground-mounted system is proposed to be constructed in the northwest corner of that clearing. There are 2 large lot residential parcels, improved with single family homes, to the south and east of the applicant's parcel. The instillation of the ground-mounted system would have a negligible impact on the character of the neighborhood.

c) Natural resources:

Comment: The proposed solar panels will not affect any natural resources. The ground-mounted system is proposed to be in a portion of the property with fewest trees thus minimizing the amount of clearing necessary. The location of the ground-solar system is not located near the mapped wetland or floodplain.

d) Infrastructure:

Comment: There will not be an impact on infrastructure.

e) Public sites:

Comment: The proposed use will not have an impact on public sites.

f) Any other measures affecting the public health, safety, or general welfare.:

Comment: The proposed location of the solar panels meets the applicable setback and height requirements. Granting the CUP, with potential conditions, if necessary, will not have a substantial negative impact on public health, safety, or general welfare.

RECOMMENDED CONDITION FOR CUP-001074-2025

If the ZBA is inclined to grant approval of the delegated CUP request, staff suggests the following condition:

1. The location of the site improvements shall be consistent with the site plan accompanying ZBA application CUP-001074-2025.