

**Clinton County, Iowa**  
**Summary Only**

For full ordinance text, please find pdf below or visit county website.

**Date Passed/Amended:** October 3, 2016  
**Summary Written:** January 8, 2023

**Agricultural Use Table:**

**Eligible Zoning:** Commercial Wind Energy Conversion Systems (C-WECS) are allowed as a Special Exception in the following zoning districts: Prime Agricultural, Agriculture-Recreation, Highway Commercial, Rural Support Commercial, Limited Industrial, and General Industrial.

**Prohibition Language:** Concentrating solar power systems (CSP) shall be prohibited. CSP are systems that use lenses/mirrors and tracking systems to focus or reflect a large area of sunlight onto a small area. The concentrated energy is absorbed by a thermal medium, such as water, salt, or a permanently gaseous fluid, and used as a heat source for a conventional power plant, such as a steam power plant, or for a power conversion unit, such as a sterling engine.

**Required Information/Permits Required:** A site plan shall be submitted and reviewed as part of the approval of a Utility Scale Solar installation. A utility scale solar installation shall require a Special Exception Use Permit. The application shall include the following information:

- a. Number, location, and spacing of solar panels/arrays.
- b. Planned location of underground or overhead electric lines,
- c. Project development timeline.
- d. Interconnection agreement.
- e. Operation and maintenance plan.
- f. Decommissioning plan.
- g. Evidence of the applicant's ability and intention to establish the use within one (1) year after the effective date of the permit.
- h. Reasons for the special exception permit and a description of the impacts of the proposed use on surrounding properties and infrastructure.

**Request for Variance:** A Special Exception Use Permit must be approved by the Board of Adjustment.

**Site and Structure Requirements:**

- a) Compliance with all local, state, and federal regulations:
  - a. Utility scale solar installations shall comply with applicable local, state and federal regulations.

- b) Concentrating Solar Power Facilities:
- c) Fencing/Security:
  - a. A security fence must be installed along all exterior sides of the utility scale solar installation and be equipped with a minimum of one gate and locking mechanism on the primary access side.
  - b. Security fences, gates and warning signs must be maintained in good condition until the utility scale solar installation is dismantled and removed from the site.
- d) Glare minimization/Shadow Flicker:
  - a. All solar panels must be constructed to minimize glare or reflection onto adjacent properties and adjacent roadways and must not interfere with traffic, including air traffic, or create a safety hazard.
- e) Height:
  - a. All appurtenant structures shall be subject to bulk and height regulations of structures in the underlying zoning district:

<b>Zoning District</b>	<b>Maximum FAR</b>	<b>Maximum Height</b>
Prime Agricultural		35 feet or 2 ½ stories
Agricultural-Recreation		35 feet or 2 ½ stories
Highway Commercial	0.40	35 feet or 2 ½ stories
Rural Support Commercial	0.40	35 feet or 2 ½ stories
Limited Industrial	0.25	35 feet or 2 ½ stories
General Industrial	0.25	50 feet or 4 stories

- f) Lighting:

g) Minimum Lot Size:

<b>Zoning District</b>	<b>Minimum lot size</b>
Prime Agricultural	
Agricultural-Recreation	
Highway Commercial	1 net acre
Rural Support Commercial	1 net acre
Limited Industrial	5 net acres
General Industrial	5 net acres

h) Noise:

i) Outside storage:

j) Setbacks and Lot Coverage:

- a. Setbacks for all structures (including solar arrays) must adhere to the minimum principal setback standards for the zoning district where the project is located; greater setbacks may be required by the Board of Adjustment.

<b>Zoning District</b>	<b>Front Setback (feet)</b>	<b>Side Setback (feet)</b>	<b>Side Setback for Corner Lot (feet)</b>	<b>Rear Setback (feet)</b>
Prime Agricultural	50	15	30	40
Agricultural-Recreation	50	15	30	40
Highway Commercial	30	20	30	25
Rural Support Commercial	30	20	30	25
Limited Industrial	30	20	30	25

General Industrial	50	20	30	50
-----------------------	----	----	----	----

- k) Screening:
  - a. A landscape buffer may be required to be installed and maintained during the life of the operation.
  - b. Determination of screening requirements will be made by the Board of Adjustment and will be based on adjacent or nearby surrounding land uses and topography.
  
- l) Signage:
  - a. No signs other than appropriate warning signs, or standard manufacturer's, operator's or installer's identification signage, shall be displayed.
  
- m) Site Access/Emergency Response:
  
- n) Utility Connections:
  - a. Reasonable efforts shall be made to place all utility connections from the solar installations underground, depending on appropriate soil conditions, shape and topography of the site, distance to the connection, or other conditions or requirements.
  
- o) Waste:

Operation and Maintenance Plan:

- a) Monitoring and Maintenance:
  - a. The applicant shall submit a plan for the operation and maintenance of the solar installation, which shall include measures for maintaining safe access to the installation, stormwater and erosion controls, as well as general procedures for operation and maintenance of the installation.
  - b. During operation of the proposed installation, all chemicals or solvents used to clean photovoltaic panels should be low in volatile compounds and the operator should use recyclable or biodegradable products to the extent possible.
  - c. Any onsite storage of chemicals or solvents shall be referenced.
  - d. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to emergency response officials. Any retrofit, replacement or refurbishment of equipment shall adhere to all applicable local, state and federal requirements.
  
- b) Soil and Erosion and Sediment Control:

- a. A grading plan shall be submitted and shall include all proposed changes to the landscape of the site (e.g., clearing, grading, topographic changes, tree removal, etc.).
- b. The applicant agrees to conduct all roadwork and other site development work in compliance with a National Pollutant Discharge Elimination System (NPDES) permit as required by the Iowa Department of Natural Resources and comply with requirements as detailed by local jurisdictional authorities during the plan submittal.
- c. The plan must include both general “best management practices” for temporary erosion and sediment control both during and after construction and permanent drainage and erosion control measures to prevent damage to local roads or adjacent areas and to prevent sediment laden runoff into waterways.
- d. For the purposes of pollutant removal, stormwater rate and runoff management, flood reduction and associated impacts, the applicant shall provide a detailed analysis of pre-and post-development stormwater runoff rates for review by local jurisdictional authorities.
- e. Ground around and under solar arrays and in project site buffer areas shall be planted and maintained in perennial vegetated ground cover, and meet the following standards:
  - a) Top soil shall not be removed during the development, unless part of a remediation effort.
  - b) Soils shall be planted and maintained in perennial vegetation to prevent erosion, manage run off and build soil.
  - c) Seed mixes and maintenance practices should be consistent with recommendations made by qualified natural resource professionals.

#### Decommissioning and Site Reclamation:

- a. The decommissioning plan must describe: the anticipated life of the utility scale solar installation; the anticipated way the project will be decommissioned; the anticipated site restoration actions; the estimated decommissioning costs in current dollars; and the method for ensuring that funds will be available for decommissioning and restoration.
- b. The applicant shall provide the basis for estimates of net costs for decommissioning the site (decommissioning costs less salvage value). The cost basis shall include a mechanism for calculating adjusted costs over the life of the project.
- c. Restoration or reclamation activities shall include but not be limited to the following:
  - a) Restoration of the pre-construction surface grade and soil profile after removal of structures, equipment, graveled areas, and access roads.
  - b) Re-vegetation of restored soil areas with crops, native seed mixes, and plant species suitable to the area, consistent with the county’s weed control plan.

- c) For any part of the energy project on leased property, the plan may incorporate agreements with the landowner regarding leaving access roads, fences, gates, or repurposed buildings in place or regarding restoration of agricultural crops or forest resource land.