

**CHARTER TOWNSHIP OF WATERTOWN
CLINTON COUNTY, MICHIGAN**

Ordinance No. 62

**AN ORDINANCE AMENDMENT TO CLARIFY REGULATIONS FOR
COMMERCIAL SOLAR ENERGY SYSTEMS.**

THE CHARTER TOWNSHIP OF WATERTOWN ORDAINS:

Article 3, Sec. 28-3.1.12. – Special Land Uses (LI – Light Industrial District) are hereby amended to add the use “solar energy systems;” Sec. 28-3.10 – B-1, B-2, and LI District Regulations is hereby amended to exempt accessory use solar energy systems in the LI zoning district from the requirement to be contained in a fully enclosed building and Article 4, Section 28-4.65 – Solar energy systems is hereby amended to clarify special land use specific regulations for solar energy systems. The aforementioned amendments are to Chapter 28 of the Code of Ordinances, Charter Township of Watertown, Clinton County, Michigan.

SEC. 28-3.1.12.C. SPECIAL LAND USES (LI LIGHT INDUSTRIAL DISTRICT)

- i. Truck and freight terminals, and maintenance facilities
- ii. Junkyards and salvage yards
- iii. Sanitary and hazardous waste landfills
- iv. Removal and processing of soil, sand, gravel, or other mineral resources
- v. Tool and die
- vi. Vehicle service stations
- vii. Industrial plants, manufacturing of fabricated products
- viii. Body shops and wrecker services, including storage yards
- ix. Vehicle repair
- x. Adult uses
- xi. Open air businesses
- xii. Assembly buildings
- xiii. Towers in excess of 50 feet
- xiv. **SOLAR ENERGY SYSTEMS AS AN ACCESSORY USE ONLY**

SEC. 28-3.10 B-1, B-2, AND LI DISTRICT REGULATIONS

- 1. In the B-1, B-2, and LI districts the following shall apply:

- A. No uses, activities, or parking or loading areas, within the first 25 feet of the required front yard, except for entry and exit driveways, shall be located within the required front yard. The front yard shall be landscaped.
- B. For side and rear yard setback areas, see Section 28-5.23 for buffer zone requirements.
- C. Parking lots shall be adequately lit to ensure security and safety and shall meet the following requirements:
 - i. Light fixtures shall be no higher than 20 feet and shall be provided with full cut-off luminaries that direct light downward.
 - ii. For parking lots serving a single building or groups of related commercial or office buildings in excess of 200 spaces, the Planning Commission may permit a higher light fixture in selected locations within the parking lot where existing or planned residential areas will not be affected.
 - iii. Lighting shall not be permitted to illuminate areas not within the parking lot or other areas related to the use for which the parking is intended.

- 2. All development proposed in these districts shall be required to be serviced by a public water supply and sanitary sewer system. ~~except for principal use solar energy systems in the li light industrial district where permitted~~. In the LI district the following shall apply:

- A. All permitted and special land uses, **EXCEPT FOR ACCESSORY USE SOLAR ENERGY SYSTEMS AND TOWERS IN EXCESS OF 50 FEET**, shall be conducted wholly within a completely enclosed building, except that outside storage of materials, equipment, or vehicles and loading and unloading operations are permitted, subject to the following:
 - i. Materials may be stored only in the side or rear yards, except that materials may not be stored on the street side of a corner lot or in any required yard.
 - ii. Loading areas, loading docks, and truck storage areas shall not face an AG, RR, R-1, R-2 or R-3 zoned district, except where the following conditions exist:
 - a. The distance from the loading area, loading dock, or truck storage area is more than 300 feet to AG, RR, R-1, R-2, or R-3 property line, which shall be measured parallel with the property line and from the nearest edge of the loading area, loading dock or truck storage area.
 - iii. All storage of materials shall be visually screened to a height of at least six feet above the highest elevation of the nearest adjacent road or property bordering the site.
 - iv. In no case shall the outside storage of materials be stacked higher than the height of the visual screen.

- v. One non-gated opening, no greater than 12 feet in width, shall be permitted in the screen for each 200 feet of public street frontage.

SEC. 28-4.65 SOLAR ENERGY SYSTEMS

1. Purpose and objectives. It is the intent of this section to regulate the safe, effective, and efficient use of solar energy systems in order to reduce or replace the consumption of electricity supplied by utility companies, subject to reasonable conditions intended to protect the public health, safety, and welfare.

2. SOLAR ENERGY SYSTEMS IN THE LI LIGHT INDUSTRIAL DISTRICT ARE PERMITTED BY SPECIAL LAND USE ONLY AS AN ACCESSORY USE TO A PRINCIPAL PERMITTED OR SPECIAL LAND USE WHICH PRINCIPAL USE CONSISTS OF A BUILDING NOT LESS THAN 20,000 SQUARE FEET THAT IS CONNECTED TO A PUBLIC WATER SUPPLY AND SANITARY SEWER SYSTEM. PANELS OF SOLAR ENERGY SYSTEMS, AS AN ACCESSORY USE, MAY ONLY BE PLACED ON THE ROOFS AND PARKING LOTS OF THE PRINCIPAL USE AND UP TO 20% OF ANY OTHERWISE UNUSED LAND. EXCESS ENERGY BEYOND THAT NEEDED FOR THE PRINCIPAL USE CREATED BY SUCH SYSTEMS MAY BE DIVERTED OFF SITE.

3. Site development requirements. In accordance with section 28.6.1.2., all applications for a special land use shall be accompanied by an application for final site plan review.

A. Zoning districts. All solar energy systems are subject to sec. 28-6.2, special land uses.

B. Minimum lot size. There is no minimum lot size. Solar energy systems are permitted by special land use permit, the process by which reviews and considers its compatibility with the surrounding area.

C. Height restrictions. All solar energy system components, including photovoltaic panels or other collection device(s) oriented at maximum tilt, support structures, and buildings shall not exceed 16 feet, except when placed on rooftops or over parking lots. Substation and electrical equipment are permitted at their usual and customary heights and are excluded from this maximum height requirement. Substation and electrical equipment must comply with all local, state and federal requirements, including but not limited to the Michigan Tall Structures Act and Federal Aviation Administration requirements, as applicable.

D. Setbacks.

- 1.) In the AG-Agricultural district, all solar energy systems components, excluding perimeter fencing, shall meet a minimum setback of 50 feet.
- 2.) In the LI-Light Industrial district, all solar energy systems, **whether principal or accessory uses**, shall meet the minimum setback requirements for the zoning district.
- 3.) All solar energy systems components, including perimeter fencing, shall be setback at least to the limit of any established county drain right-of-way or easement.

E. Maximum lot coverage. Solar energy systems are exempt from maximum lot coverage requirements. Any other regulated structures on the parcel are subject to the maximum lot coverage requirements for the zoning district.

F. Safety and access. All solar energy systems shall be completely enclosed by a perimeter security fence to restrict unauthorized access. The height and material of the fence shall be reviewed for appropriateness and compatibility during the special land use process. A lock box approved by the fire department serving the township shall be required.

G. Glare. All solar panels shall be located or placed so that concentrated solar glare shall not be directed toward or onto nearby properties or roadways at any time of day.

1. Airports. Solar energy systems may create a glare hazard for pilots. Applicants for solar energy systems shall comply with any Federal Aviation Administration siting requirements.

H. Landscaping.

All solar energy systems applications shall be accompanied by a landscaping plan prepared by a licensed landscape architect. When a major buffer zone as described in sec. 28-5.23.2.g is required as set forth below, the buffer zone shall contain exclusively evergreen trees at least six feet in height at the time of planting. Canopy trees are permitted only in addition to the minimum planting requirements. All trees shall remain in good condition during the life of the solar energy system.

- 1.) When the proposed solar energy system abuts a residential district or use, the landscaping plan shall meet the requirements of a major buffer zone as described in Sec. 28-5.23.2.g.
- 2.) For **principal or accessory** solar energy uses in the LI-Light Industrial zone, a major buffer shall only be required on any side abutting a residential zone or use.
- 3.) Sec. 28-5.23.4.2d shall not apply to any **principal or accessory** solar energy system use in the LI-Light Industrial zoning district. The minimum buffer requirements shall apply if a public road or street separates the zoning districts.
- 4.) The proposed landscape plan shall also include a revegetation plan for the installation and maintenance of the vegetative cover on the entire site. The

planting shall control site soil erosion and must be maintained throughout the life of the solar energy system. The primary purpose is control of erosion and maintenance of soil quality. The plan shall include the plant species and the rate of application or planting. Grazing, cropping and wildlife habitat are acceptable secondary uses in the AG-Agricultural district. Use of native plants is strongly encouraged. Invasive species listed by the Michigan Department of Environment, Great Lakes and Energy as restricted or that are on the watch list are prohibited. The plan shall address seedbed preparation, fertilization, mulching, and irrigation, if needed. The plan shall include maintenance schedules and methods (mowing, replanting, etc.). The site is subject to annual inspection including for maintenance of the vegetative cover and control of erosion.

I. Signage. No signage or graphics shall be on any part of the solar energy systems components or the perimeter fencing. This exclusion does not apply to the entrance gate(s) signage which shall be placed on the gate in a visible area and not exceed six square feet in size. Gate signage shall be weather-durable and include the name of the owner/operator, a phone number, and contact person for whom additional information may be obtained. Any required emergency information signage shall be permitted.

J. Lighting. Solar energy systems shall comply with Sec. 28-5.18 Outdoor lighting.

K. Transportation plan. The applicant shall provide a proposed access plan during construction and operational phases. This shall show proposed project service road ingress/egress locations on to adjacent roadways and the layout of the facility service road system. Due to infrequent access following construction, it is not required to pave or curb solar panel access drives, but they should be constructed so as to minimize dust conditions.

L. Distribution, transmission, and interconnection. All electrical interconnections or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements. All collection lines and interconnections from the solar array(s) to any electrical substations shall be located and maintained underground inside the solar energy system facility. This requirement shall exclude transmission equipment meant to connect the project substation to the local transmission system.

M. Environmental and safety impacts.

1. An environmental impact statement/study shall be provided at the time of application and shall include, but not be limited to, a review of the following factors:

- i. Water quality and supply.
- ii. Air quality.
- iii. Wildlife.
- iv. Floodplains and wetlands.
- v. Identification of solid and/or hazardous waste generated.
- vi. Any other environmental factors typically evaluated for the proposed use or as requested.

2. A public safety impact statement/study shall be provided at the time of application and shall include, but not be limited to, a review of the following factors:
 - i. Identification of emergency and normal shutdown procedures.
 - ii. Identify potential hazards to adjacent properties, public roadways and to the general public that may be created.
 - iii. Identify potential hazards to aviation and indicate how state and federal requirements will be met.

N. Abandonment and decommissioning. A solar energy system shall be decommissioned following the useful life or at which time it remains non-operational for six months and is considered abandoned. The applicant shall submit a decommissioning plan, prepared by a licensed professional engineer, at the time of application for a special land use permit. The decommissioning plan shall include, but not be limited to the following:

1. Steps to remove the system
2. Steps to dispose of or recycle system components
3. Restoration of land
4. Estimated cost schedule to meet the following requirements:
 - i. Removal of all equipment, conduit, structures, fencing, roads, building foundations, including any equipment or materials below grade, offsite for disposal.
 - ii. Restoration of ground to original condition.
 - iii. Revegetation of site to blend with existing surrounding vegetation within six months of decommissioning.
 - iv. For agricultural lands, restoration of soils to their original USDA classification, as confirmed by a soil survey conducted in accordance with the standards of the national cooperative soil survey.

O. Financial guarantees. To ensure proper removal of the project upon decommissioning or abandonment of the solar energy system, the applicant shall include a description of the financial security guaranteeing the removal of the system which shall be posted with the township within 15 days after the project is approved or

prior to issuance of a building permit for the project. The financial guarantee shall be in the form of a cash bond or an irrevocable bank letter of credit or a performance bond, in a form approved by the township board. The amount shall be reasonably sufficient to restore the property to its previous condition as agreed upon by the township board and the applicant. The amount may include a provision for inflationary cost adjustments. The estimate shall be prepared by the engineer for the applicant, and shall be subject to approval by the township **BOARD**, with guidance from the township's engineer. The financial guarantee shall be returned when all conditions of the special land use permit and the decommissioning/abandonment plan have been completed. There shall be no partial release of the financial guarantee. The financial guarantee shall be kept in full force and effect during the entire time the solar energy system exists or is in place, and it shall be irrevocable and non-cancelable.

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