

# SOLAR

## SOLAR PANELS

Solar Panels shall be allowed in all zoning districts either attached to permitted principal or accessory buildings or as accessory structures subject to the following regulations:

1. **Attached to a building.** Where attached to a building, the solar panels shall be subject to the same regulations as the building terms of height and setbacks. Solar panels may be attached to the roof or the building wall, but not both.
  - a. Roof mounted panels shall include solar panels integrated as the surface layer of the roof structure with no additional apparent change in relief of projection (the preferred installation), or separate flush-mounted solar panels attached to the roof surface.
    - (1) Solar panels integrated as the surface layer of the roof structure may be located on any part of the roof.
    - (2) Separate flush-mounted solar panels may be located on rear-or side-facing roof.
    - (3) Separate flush-mounted solar panels installed on a building or structure with a slope roof surface shall not project vertically above the peak of the roof to which it is attached.
    - (4) Solar panels mounted on a flat roof shall not project vertically higher than the height of the parapet wall surrounding the roof or shall be screened by architectural features.
  - b. Flush-mounted solar panels on the building wall may only be attached to one (1) side or rear building façade and shall not face a street.
2. **Free-standing.** Solar panels that are not attached to a building shall be permitted as accessory structures subject to the following regulations:
  - a. Free-standing solar panels shall be permitted in the rear yard only.
  - b. Free-standing solar panels shall conform with the minimum yard requirement for the zoning district.
  - c. Free-standing solar panels shall not exceed a height of four (4) feet.
  - d. The surface area covered by free-standing systems shall not exceed two percent (2%) of the lot or three hundred sixty (360) square feet, whichever is less. Area covered shall be included in the lot coverage calculations for the lot.
  - e. All power transmission lines shall be underground.
  - f. Free-standing solar panels shall not be visible from adjacent property and shall be screened by landscaping where necessary.

3. **Glare.** Solar panels shall be placed and arranged such that reflective solar radiation or glare shall not be directed onto adjacent buildings, properties or roadways.
4. **Building permit.** Solar energy systems shall conform to applicable industry standards. A building permit shall be obtained for a solar energy system in accordance with the Building and Electrical Codes.

**ALTERNATIVE ENERGY FARMS**

1. Compliance with Federal and State Regulations
  - a. Alternative energy farms shall comply at all time with applicable County, State and Federal requirements.
  - b. Facilities shall be constructed according to the adopted building code for the State of Michigan.
2. Minimum Lot Area: A minimum of twenty-five (25) acres shall be required.
3. Setback requirements. Setbacks for Alternative Energy Farms are listed in the table below. The Planning Commission may require additional setbacks as part of the conditional use permit approval.

Front	200 feet
Side	100 feet
Rear	100 feet
From Residential Districts or Sites Containing Residential Uses	100 feet
Setback from Residential Districts	200 feet
Distance from Non-Residential Districts	100 feet

4. Site Development Requirements
  - a. Maximum Height
    1. Freestanding solar collection devices shall not exceed fourteen (14) feet in height
    2. Roof mounted solar collection devices shall not extend more than ten (10) feet from the top of the roof. The total height of the building including the solar collection devices shall not exceed forty (40) feet.
  - b. Fencing and Storage
    1. Where needed for safety or security, the Planning Commission may require fencing around the entire perimeter of the farm.
    2. At a minimum, equipment and materials, whether temporary or permanent, used to maintain or operate the farm shall be housed in a completely enclosed building.
    3. The Planning Commission may allow outside equipment where it is necessary to the operation, or where no other feasible alternative exists, such as for solar panels. In such cases, equipment shall be fully enclosed with a fence at least six (6) feet in height.
    4. Where required, fencing shall be setback at least ten (10) feet from all property lines.
  - c. Landscaping.
    1. Farms shall be effectively screened to obscure views from adjacent residential uses and public right-of-way. In locations where the visual impact will be minimal or where existing vegetation or topography provide an effective natural screen or where the security requirements or the principal use prevent screening, such as for utility substation, the Planning Commission may modify this requirement.
    2. Solar Farms shall include screening capable of providing year round screening, shall be provided along the non-reflective axis of the solar collection device or collection of devices.

- d. Lighting: Lighting shall be prohibited, except as may be required by another regulating agency or where the Planning Commission finds it is necessary for security or safety purposes.
  - e. Accessory Buildings and Structures: All structures, including those accessory to the operation, shall be constructed in accordance with the requirements for principal structures.
  - f. Access/Driveways: Access to Alternative Energy Farms shall be paved with durable hard surface, such as asphalt or concrete. The Planning Commission may modify this requirement for driveways that are not expected to generate more than one service call per day.
5. Performance Standards
    1. Alternative Energy Farms shall be designed and located to avoid glare or reflection onto adjacent properties and adjacent roadways and shall not interfere with traffic or create a safety hazard. Where possible, rust-resistant, non-obtrusive color and finish shall be used on visible towers or equipment,
    2. The applicant shall demonstrate that an alternative energy farm will not unreasonably interfere with the use of or view from, sites of significant public interest, such as a park or civic building.
    3. Use of guide wires is prohibited.
    4. Alternative Energy Farm operations shall not exceed forty (40) dBA as measured at the property line.
  6. Removal of Abandoned Facilities.
    1. Alternative Energy Farms not operated for a continuous period of six (6) months shall be considered abandoned and the owner shall remove all equipment and materials associated with the operation within ninety (90) days of received an abandonment notification from the Township. Failure to remove an abandoned panels and/or equipment within ninety (90) days shall be grounds for the Township to remove said items at the owner's expense.
    2. The Planning Commission shall require the applicant to post a bond in an amount equal to the reasonable cost of removal for the tower panels and/or equipment. If the bond is to be required, the Planning Commission shall include the requirement as a condition or approval.
      - a. The amount shall include a mechanism for calculating increased removal costs due to inflation using a standardized index for inflation for the term of conditional use.
  7. Submittal Requirements: The following information shall be submitted to the Township, in addition to the information required for special land use and site plan review.
    1. Manufacturer's specification sheets, including specific engineering tests that verify the safety of proposed system.
    2. Elevation drawings showing the height, color and design of all buildings, structures and visible equipment.
    3. Engineering drawings showing compliance with the Building Code and certified by a licensed professional engineer.
    4. Siting elevations, existing photography, and a photo simulation of the proposed visual impacts.
    5. A narrative that explains how the site will not unreasonably interfere with the use of or view sites of significant public interest such as a public park or civic building.
    6. The Planning Commission may require a visual impact assessment to determine the visual impact of the Solar Energy Farm on scenic views.
    7. The name, address, and telephone number of the person to contact regarding site maintenance or other notification purposes. This information shall be periodically updated by the facility owner.
    8. Any additional information as may be required by the Planning Commission as appropriate, to demonstrate compliance with the regulations.
    9. Proof of liability coverage naming the Township of Clinton as a certificate holder.
    10. A sound pressure level modeling and analysis study.
    11. An environmental impact analysis.

12. An avian and wildlife impact analysis.

**REPEAL OF CONFLICTING ORDINANCES**

All ordinances and parts of ordinances in conflict herewith are hereby repealed. Any proceeding pending, including prosecutions for violations under any previous ordinance provision being repealed hereby, shall not be affected by this ordinance and may be continued pursuant to said previous ordinance provisions.

**EFFECTIVE DATE**

This ordinance shall take effect 30 days after publication following adoption.

This ordinance was offered for adoption by the Township Board Member Couture and was seconded by Township Board Member Murphy, the vote being as follows:

YEAS: ( 5 )

NAYS: ( 0 )

ABSENT: ( 0 )

A zoning regulating the development and use of land has been adopted by the legislative body of the township of Clinton to become effective September 24, 2017. A copy of the ordinance may be or inspected at the township hall during regular business hours.

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Basil Greenleaf  
Township Supervisor for the  
Township of Clinton

**CERTIFICATION OF ADOPTION AND PUBLICATION**

I, Cheryl Matzinger, duly elected Township Clerk, certify that the foregoing ordinance was properly enacted by the Township Board of the Township of Clinton, Lenawee County, Michigan on August 14, 2017 and that it was published in the Clinton Local on August 24, 2017.

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Cheryl Matzinger  
Township Clerk for the  
Township of Clinton