

**SECTION 1604. SOLAR FARM.**

1. Intent and Purpose: To regulate the use of Solar Energy within Richland Township as an alternative energy source and to provide for the land development, installation, and construction regulations for solar farm facilities subject to reasonable conditions that will protect the public health, safety, and welfare. These regulations establish minimum requirements and standards for the placement, construction, and modification of solar farm facilities, while allowing a renewable energy source for our community in a safe, effective, and efficient manner.
2. Definitions used in this section:
  - a. Residential Solar Array – A small electricity generating system consisting of solar panels and associated equipment sized primarily to meet the needs of the on-site consumers for the home, farm, or small business on whose property they are constructed. While not intended to distribute electricity to other consumers as a primary purpose they may be inter-connected to a public utility.
  - b. Solar Farm – An electricity generating system consisting of solar panels and associated equipment designed or intended to provide electricity to off-site customers.
  - c. Participating Property – a parcel or tract of parcels where the owner of said parcel(s) has entered a contractual arrangement with the solar farm developer to allow the parcel(s) to be part of the solar farm.
  - d. Non-Participating Property – a parcel or tract of parcels that is not a participating property.
3. Residential Solar Arrays are allowed as a permitted accessory use to any residence or business in any zoning district.
4. Solar Farms are allowed by special use permit in the A1-Agricultural, A2-Agricultural Disbursed Residential, C2-General Commercial and M1-Industrial districts. They are not permitted in other zoning districts.
5. Solar Farms require a site plan review and approval by the Township Planning Commission.
6. An applicant proposing a Solar Farm may use an overlay process and submit multiple parcels as a tract for examination for a special use permit and site plan review. The applicant must have legal authority to submit the application for each parcel. Fees for the site plan review and special use permits will be assessed per parcel.
7. Minimum Lot Size: Solar farm facilities shall not be constructed on parcels or tracts with a combined size of less than twenty (20) acres.
8. Height Restrictions: All photovoltaic panels located in a solar farm shall be restricted to a maximum height of twelve (12) feet.
9. Setbacks: All photovoltaic solar panels and support structures associated with such facilities, (including perimeter security fencing, shall comply with the following minimum setbacks:
  - a. Three hundred (300) feet from a side or rear property line abutting a non-participating residential parcel less than 10 acres in size.

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- b. Two hundred (200) feet from a side or rear property line abutting a non-participating residential parcel of 10 acres or larger in size.
  - c. One hundred (100) feet from a side or rear property line abutting a non-participating non-residential parcel.
  - d. Three hundred (300) feet from any road or highway right-of-way.
  - e. Sixty (60) feet from any structure on a participating parcel which is not used as a component of the solar farm.
10. Maximum Lot Coverage: Maximum lot coverage restrictions shall not apply to photovoltaic solar panels. Any other regulated structures on the parcel are subject to maximum lot coverage restrictions.
11. Safety/Access: A security fence not less than seven (7) feet in height shall be placed around the perimeter of the solar power plant and electrical equipment. All gates and access points shall be locked when not in use. Knox boxes and keys shall be provided at locked entrances for emergency personnel access. Damaged fences shall be immediately repaired.
12. Noise: No solar farm facilities shall exceed sixty-five (65) dBA as measured at the property line.
13. The exterior surfaces of all equipment shall be generally neutral in color and substantially non-reflective of light.
14. Landscaping: Solar farm facilities shall be required to install a perimeter landscaping buffer surrounding and on the exterior of the security fence, excluding access points. The Planning Commission may reduce or eliminate the buffer zone in areas not abutting residential uses or roadways. The buffer zone shall be not less than twenty-five (25) feet in width and shall be planted with assorted vegetation to provide a year-round visual buffer both at installation and in the future. Plantings shall be not less than four (4) feet in height at planting and shall be ten (10) feet in height within three (3) years. The number, species, and spacing of the plantings shall be sufficient to provide an adequate visual buffer as determined by the Planning Commission. Plantings must be maintained, and dead, diseased, or damaged vegetation should be replaced annually or more frequently. Grass and weeds must be controlled in the buffer areas during the entire growing season. Vegetation under and around the solar panels must be maintained with proper mowing and weed control. Land under PA116 has special requirements for the type of vegetation and maintenance.
15. Local, State and Federal Permits: Solar farm facilities shall be required to obtain all necessary permits from the U.S. Government, State of Michigan, and Richland Township, and comply with standards of the State of Michigan adopted codes.
16. Electrical Interconnections: All electrical interconnection or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements.
17. Solar Farms shall not create any radio frequency interference in violation of any State or Federal regulation.
18. Decommissioning: The project or equipment end-of-life is defined as 6 months after the site or equipment is no longer used to produce power. The equipment shall be decommissioned within 6 months of end-of-life. Decommissioning shall remove all equipment and materials, including roadways and fencing, not claimed for use by the

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property owner. The land should be returned to its previous use. The land must be in a condition suitable for use and must have a value equal to or greater than comparable land that was not used for the solar farm.

19. Bond: The Township shall require a bond in the amount of 150% of the expected decommissioning cost. The estimate of the decommissioning cost shall be updated and reviewed at a minimum of once each three (3) years. The required bond amount shall be adjusted as required by the change in decommissioning cost. The bond shall be through a US based company having a AAA rating from Moody's Investment service or equivalent rating. Bond shall list Richland Township as an additional party.
20. The operator of a solar farm shall provide a complaint resolution process to address any formal complaints filed with the Township Manager. The operator of the solar farm shall acknowledge the receipt of the complaint within 7 days of notification of the complaint and shall provide a resolution or resolution plan with 30 days of receipt of the complaint.
21. The operator of a solar farm shall provide the township Planning Commission with a written affidavit showing the output of the solar farm. The report shall be provided on an annual basis or as the Planning Commission shall require.
22. The operator of a solar farm shall provide the Township Planning Commission with formal notification of any change in ownership or contact information.
23. The Solar Farm Operator shall be required to provide 24 hour/7 days a week, direct contact number for emergency personnel to make contact. If this is a hotline, it must be staffed 24/7, otherwise a direct dial number to a focal point contact is required.
24. The solar farm operator shall provide annual training regarding their installation(s), first response safety, and mitigation to the Fire Department. The training shall include site walk-through's if requested by the Fire Department.
25. The solar farm operator is required to provide SDS sheets to the Fire Department.
26. The solar farm operator shall provide site safety plans to include electrical, fire, smoke and hazardous materials.
27. The solar farm operator is required to provide a copy to the fire department of the site/safety plan which will include any response for which there is an expectation that the Fire Department can safely mitigate.
28. The solar farm operator shall maintain an emergency access road to the site that is accessible to fire department response apparatus. This access road must be accessible throughout the year.
29. Additional Special Use Criteria: The following topics shall be addressed in a Special Use application for solar farm facilities in addition to the Special Use Review Criteria defined elsewhere in the zoning ordinance:
  - a. Project description and rationale: Identify the type, size, rated power output, performance, safety, and noise characteristics of the system, including the name and address of the manufacturer, and model. Identify time frame, project life, development phases, likely markets for the generated energy, and possible future expansions.
  - b. Analysis of onsite traffic: Estimated construction jobs, estimated permanent jobs associated with the development.

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- c. Visual impacts: Review and demonstrate the visual impact using photos or renditions of the project or similar projects with consideration given to tree plantings and setback requirements.
  - d. Wildlife: Review potential impact on wildlife on the site.
  - e. Environmental analysis: Identify impact on the water quality, water supply, potential ground contamination and changes to waterflow in the project area. Analysis must identify possible issues caused by construction, operation, and decommissioning.
  - f. Waste: Identify solid waste or hazardous waste generated by the project.
  - g. Lighting: Provide lighting plans showing all lighting within the facility. No light may adversely affect adjacent parcels. All lighting must be shielded from adjoining parcels, and light poles are restricted to eighteen (18) feet in height.
  - h. Transportation plan: Provide access plan during construction and operation phases. Show proposed project service road ingress and egress access onto primary and secondary routes, layout of the plant service road system. Due to infrequent access to such facilities after construction is completed, it is not required to pave or curb solar panel access drives. It will be necessary to pave and curb any driveway and parking lots used for occupied offices that are located on site.
  - i. Public safety: Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public roadways, and to the community in general that may be created.
  - j. Sound limitations and review: Identify noise levels at the property line of the project boundary when completed.
  - k. Telecommunications interference: Identify electromagnetic fields and potential radio frequency interference generated by the project and present plan to prevent such interference.
  - l. Life of the project and final reclamation: Describe the decommissioning and final land reclamation plan after anticipated useful life or abandonment or termination of the project, including evidence of an agreement with the property owner that ensures proper final removal of power generating equipment within six (6) to twelve (12) months of decommissioning.
30. The Planning Commission Review: Because of the ever-changing technical capabilities of photovoltaic solar panels and of new technology in general, the Planning Commission shall have the authority to review and consider alternatives in both dimensional requirements as well as physical development requirements found in this Section. The Planning Commission shall not have the authority to review or to allow solar farm facilities within any other zoning district.