

November 25, 2025

Lodi Township Planning Commission 3755 Pleasant Lake Road Ann Arbor, MI 48104

RE: Updated Solar Ordinance – Draft Language

## Dear Planning Commissioners:

Attached is the most recent draft of the ordinance language pertaining to medium commercial solar energy developments (those whose primary purpose is to generate electricity for off-site use through the grid or export to the wholesale market, but have a nameplate capacity of less than 50 MW). As discussed, these systems are not subject to the State's siting law, PA 233, and are within the Township's zoning jurisdiction.

This draft is very similar to the one previously seen, but has been updated to reflect comments and discussion from the September 2025 Planning Commission meeting.

The Planning Commission should review the draft language and discuss further as needed at the meeting. If the Planning Commission is comfortable with the language, it can set the public hearing for the next scheduled Planning Commission. The next meeting is scheduled for January 25, 2026.

We look forward to discussing further at the Planning Commission meeting.

Sincerely, OHM Advisors

Hannah Smith, Planner



## Draft Language:

## **DEFINITIONS**

**Solar Energy System (SES):** A photovoltaic system for generating electricity, including all above- and below-ground equipment or components required for the system to operate properly and to be secured to a roof surface, structure, or the ground. This does not include any operations or maintenance buildings, temporary construction offices, substation(s), or other transmission facilities between the SES and the point of interconnection to the grid.

- 1. **Building-Mounted Solar Energy System**: A solar energy system attached to the roof or wall of a building, or which serves as the roof, wall or window or other element, in whole or in part, of a building.
- **2. Ground-Mounted Solar Energy System:** A solar energy system mounted on support posts, like a rack or pole, that are attached to or rest on the ground.
- 3. Accessory Solar Energy System: A small-scale solar energy system with the <u>primary purpose of generating</u> electricity for the <u>principal use or building</u> on the site.
- **4. Commercial Solar Energy System:** A commercial-scale solar energy system, and associated facilities, with the primary purpose of off-site use through the electrical grid or export to the wholesale market. Commonly referred to as solar farms.
  - a. **Medium Commercial Solar Energy System**: A commercial solar energy system with a nameplate capacity of less than 50 MW AC.
  - b. **Large Commercial Solar Energy System**: A commercial solar energy system with a nameplate capacity of 50MW and more, any portion of which is on property regulated by this zoning ordinance.

**Solar Array:** A photovoltaic panel, solar thermal collector, or collection of panels or collectors in a solar energy system that collects solar radiation.

Photovoltaic (PV) Systems: A semiconductor material that generates electricity from sunlight.

**Maximum Tilt:** The maximum angle of a solar array (i.e. most vertical position) for capturing solar radiation as compared to the horizon line.

**Minimum Tilt:** The minimal angle of a solar array (i.e. most horizontal position) for capturing solar radiation as compared to the horizon line.

**Participating Property:** Land that either is owned by an applicant or is the subject of an agreement that provides for the payment by an applicant to a landowner of monetary compensation related to an SES regardless of whether any part of the SES is constructed on the property.

Non-Participating Property: Land that is not a participating property.

## MEDIUM COMMERCIAL SOLAR ENERGY SYSTEMS

**Purpose**. Lodi Township promotes the effective and efficient use of solar energy systems (SES) with the minimum regulations on the siting, design, and installation of SES so that the public health, safety, and welfare of neighboring property owners or occupants will not be jeopardized.

**Applicability.** Large Commercial SES are not subject to the provisions or procedures in this section and are not regulated by this zoning ordinance.

**Hybrid Energy Projects.** If a Commercial SES is to be established together with another energy facility, such as a wind or battery energy storage system, both land uses may be included in one application, and each component shall be reviewed for compliance with the appropriate standards.



**Standards for Commercial Solar Energy Systems**. The following standards shall apply to all commercial solar energy systems in the Township:

- 1. **Approval Required**. Except where noted in this Section, it shall be unlawful to construct, erect, install, alter, or locate any medium commercial SES project within the Township unless applicable approval has been obtained pursuant to this Ordinance. Medium commercial solar energy systems, as defined in *Article 2.0 Definitions*, are allowed by this Ordinance as a special use in the RC, AG, NR, C-1, PSP, and I-1 zoning districts. Medium commercial solar energy systems are subject to special use review and approval in accordance with *Article 43.0 Special Uses*, as well as site plan review and approval in accordance with *Article 44.0 Site Plan Review*, and additional standards listed below. Accessory solar energy systems, as defined in *Article 2.0 Definitions*, are not subject to these special use requirements.
- 2. **Height**. Medium commercial SES shall not exceed sixteen (16) feet measured from the ground at the base of such equipment to the top of the system when oriented at maximum tilt. The Planning Commission can permit up to twenty (20) feet in height systems as part of special use approval, to allow for grazing or other operations.
- 3. **Setbacks**. Setbacks shall be measured from the property line or road right-of-way to the closest point of the solar array at minimum tilt or any SES components. Medium commercial SES shall be setback in accordance with the setbacks for principal buildings or structures for the zoning district in which it is located. Medium commercial SES are not subject to property line setbacks for common property lines of two or more participating properties, except front yard setbacks shall still apply.
- 4. Fencing. Medium commercial solar energy systems shall be secured with perimeter fencing. Fencing shall be a minimum height of seven (7) feet and shall be chain link or woven wire fence with wooden or steel posts. Fencing shall not be subject to the fencing requirements in Section 55.18 Fences of this Zoning Ordinance. Fencing must meet all applicable standards, including National Electrical Code requirements. Barbed wire is prohibited. Fencing is not subject to setback requirements.
- 5. **Screening/Landscaping**. Landscape screening shall be provided to minimize visual impacts of the solar energy system to surrounding properties. Screening of a medium commercial SES shall be required in the form of a greenbelt buffer or evergreen screen in accordance with *Section 55.09(D) Method of Screening* where adjacent to a residential zoning district or use. Required screening shall be placed outside of the perimeter fencing.
- 6. **Lot Coverage**. The total area of a medium commercial SES shall not be included in the calculation of the maximum permitted lot coverage requirements for the property.
- 7. **Sound.** The sound pressure level of a medium commercial SES and all ancillary equipment shall not exceed 45 dB(A) (Leq (1-hour)) at the property line of adjacent non-participating properties or the exterior of any non-participating dwelling unit, whichever is closer. The site plan shall include modeled sound isolines extending from the sound source to the property lines to demonstrate compliance with this standard.
- 8. **Lighting**. Medium commercial SES lighting shall be limited to inverter and/or substation locations only. Any lighting shall be directed downward and be placed to keep light on-site and glare away from adjacent properties, bodies of water, and adjacent roadways. Flashing or intermittent lights are prohibited.
- 9. **Wiring**. Wiring, including communication and transmission lines, may be buried underground. Any above-ground wiring within the footprint of the SES shall not exceed the height of the solar array at maximum tilt.
- 10. **Groundcover**. A medium commercial SES shall include the installation of ground cover vegetation maintained for the duration of operation until the site is decommissioned. A ground cover vegetation establishment and management plan shall be submitted as part of the site plan.
  - a. Properties bound by a Farmland Development Rights Act (PA 116) Agreement must adhere to state laws and policies applicable to enrolled land.
  - b. Ground cover at properties not enrolled shall meet one or more of the following to promote ecological benefits:



- i. Ecovoltaics: Solar sites shall include pollinator habitat, designed to meet a score of 76 or more on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites. Alternatively, solar sites may utilize conservation cover, designed in consultation with the County Conservation District or other conservation organizations that focus on restoring native plants, grasses, and prairie with the aim of protecting specific species (e.g., bird habitat) or providing specific ecosystem services (e.g., carbon sequestration, soil health).
- ii. Agrivoltaics: Solar sites that have been intentionally planned and designed with agricultural producers and/or experts to achieve integrated and simultaneous production of both solar energy and marketable agricultural products throughout the life of the solar project. Agricultural products and activities may happen on land beneath and/or between rows of solar panels and can include crop production, grazing, or animal husbandry. Agricultural activities should commence as soon as agronomically feasible and optimal for the agricultural producer after the commercial solar operation date and continue until decommissioning. Pollinator habitat and apiaries (honey production) are excluded from the definition of agrivoltaics unless they are a temporary transition to another agricultural product.
- 11. **PA 116 Farmland and Open Space Preservation Program**. Per the Michigan Department of Agriculture and Rural Development (MDARD), land enrolled in the PA 116 program may be permitted to participate in solar energy development subject to MDARD policy and requirements. Per MDARD standards, this land must be able to be returned to agricultural uses following the end of the solar development agreement or if/when the solar development is decommissioned for any reason.
- 12. **Signage**. Signage shall be permitted in accordance with *Article 53.0 Sign Regulations*. Signage shall be required to provide a 24-hour emergency contact phone number.
- 13. **Decommissioning**. A decommissioning plan is required at the time of application to be reviewed and approved by the Planning Commission.
  - a. The decommissioning plan shall include:
    - i. The anticipated manner in which the project will be decommissioned, including a description of the process for removal of all structures and foundations, restoration of soil to a depth of four (4) feet and vegetation, and how all above-grade and below-grade improvements will be removed, retained, or restored for viable reuse of the property consistent with the zoning district.
    - ii. The project decommissioning costs for removal of the system (net salvage value in current dollars) and site restoration/soil stabilization, less the amount of the surety bond posted with the State of Michigan for decommissioning of panels installed on PA 116 land.
    - iii. The method of ensuring that funds will be available for site decommissioning and stabilization. A financial guarantee in an amount determined and approved by the Township Board, based off of the decommissioning cost estimate provided by the applicant, is required. This financial security guarantee shall be in the form of a cash bond, irrevocable bank letter of credit, or performance bond in a form approved by the Township. The financial security guarantee must be posted at the time of receiving a land use permit.
  - b. A review of the amount of the performance guarantee based on inflation, salvage value, and current removal costs shall be reviewed every three (3) years, for the life of the project, and approved by the Lodi Township Board. Updated cost estimates based on these conditions shall be provided by the applicant for review.
  - c. A medium commercial solar energy system owner may at any time:
    - Proceed with the decommissioning plan approved by the Planning Commission and remove the system as indicated in the most recent approved plan;



- ii. Amend the decommissioning plan with Planning Commission approval and proceed according to the revised plan.
- 14. **Abandonment**. In the event that a medium commercial solar energy system has not been in operation for a period of one year without a waiver from the Planning Commission, the system shall be considered abandoned and removed by the applicant or the property owner and the site shall be stabilized and re-vegetated, in compliance with the approved decommissioning plan. If the abandoned system is not removed or repaired, amongst other available remedies, the Township may pursue legal action against the applicant and property owner to have the system removed and assess its cost to the tax roll of the subject parcel. The applicant and the property owner shall be responsible for the payment of any costs and attorney's fees incurred by the Township in securing removal of the structure. The Township may utilize the benefit of any financial security being held under this Section to offset its cost. As a condition of approval, the applicant and property owner shall give permission to the Township to enter the parcel of land for this purpose.
- 15. **Compliance with construction and electrical codes**. Commercial solar energy systems, and the installation and use thereof, shall comply with all applicable construction codes and electric codes, including state construction codes and the National Electric Safety Code.
- 16. **Drainage**. Drainage on the site shall be maintained in a manner consistent with, or improved upon, natural drainage patterns. Any disturbance to drainage or water management practices must be managed within the property and on-site, in order to not negatively impact surrounding properties as a result of the development. The site shall be maintained in this manner for the duration of the operation and shall be able to be returned to natural patterns following decommissioning. Any drain tiles rendered non-functioning directly as a result of construction, operation, maintenance or decommissioning of the solar energy system will be replaced or repaired so as not to create any drainage issues on the site or on adjacent and surrounding properties.
- 17. **Agricultural Protection**. Medium commercial solar energy systems shall be sited to minimize impacts to agricultural production, including the following:
  - a. Systems shall be sited to minimize land disturbance or clearing except for minimally necessary. Topsoil shall be retained on-site.
  - b. Any access drives shall be designed to minimize extent of soil disturbance, water runoff, and soil compaction.
- 18. **Additional approvals and agency reviews**. The following approvals and agency reviews shall be required, as applicable:
  - a. Department of Environment, Great Lakes, and Energy (EGLE);
  - b. Federal Aviation Administration (FAA);
  - c. Washtenaw County Soil Erosion;
  - d. U.S. Fish and Wildlife Service (USFWS);
  - e. Washtenaw County Water Resources Commissioner;
  - f. Washtenaw County Building Department;
  - g. Saline Area Fire Department;
  - h. Local Airport Zoning (if applicable);
  - i. Tax Assessor
- 19. **Maintenance and Repair**. Repair, replacement, and maintenance of components is permitted without the need for a new special use permit. Proposals to change the project footprint of an existing system shall be considered a new application.



- 20. Annual Report. For a medium commercial solar energy system, a written annual report shall be submitted to the Township Board by a date determined at the time of special use approval. The annual report shall include an update on electricity generation by the project, as well as document all complaints received regarding the commercial solar energy system along with the status of complaint resolutions and the actions taken to mitigate the complaints.
- 21. **Indemnity/Insurance**. The Township shall be indemnified from all third-party claims for personal or property damage arising from the developer's negligent and/or intentional acts and/or omissions during construction, maintenance, and decommissioning of the commercial solar energy system and shall be listed as an additional insured on applicable insured on applicable insurance policies during the life of the project.
- 22. **Site Plan Requirements**. Medium commercial solar energy systems are subject to submittal and approval of a site plan meeting all requirements in *Section 44.08 Required Site Plan Information*, in addition to the following requirements:
  - a. Location of all solar arrays, including dimensions and layout of arrays, ancillary structures and equipment, utility connections, dwellings on the property and within one-hundred fifty (150) feet of the property lines, any existing and proposed structures, wiring locations, temporary and permanent access drives, fencing details, screening and landscaping details, and any signage;
  - b. Plans for land clearing and/or grading required for the installation and operation of the system;
  - c. Plan for ground cover establishment and management;
  - d. Anticipated construction schedule;
  - e. Sound modeling study including sound isolines extending from the sound source(s) to the property lines;
  - f. A decommissioning plan in accordance with Section XX;
  - g. The location of prime farmland, as defined by the U.S. Department of Agriculture, Natural Resources Conservation Service – Web Soil Survey;
  - h. Additional studies may be required by the Planning Commission if reasonably related to the standards of this Ordinance as applied to the application, including but not limited to:
    - i. Visual Impact Assessment: A technical analysis by a third party qualified professional of the visual impacts of the proposed project, including a description of the project, the existing visual landscape, and important scenic resources, plus visual simulations to show what the project will look like (including proposed landscape and other screening measures), a description of potential project impacts, and mitigation measures that would help to reduce the visual impacts created by the project and documented on the site plan.
    - ii. Environmental Analysis: An analysis by a third-party qualified professional to identify and assess any potential impacts on the natural environment including, but not limited to, wetlands and other fragile ecosystems, wildlife, endangered and threated species, and historical and cultural sites. If required, the analysis shall identify all appropriate measures to minimize, eliminate, or mitigate adverse impacts identified and show those measures on the site plan, where applicable.
    - iii. Stormwater Study: An analysis by a third-party qualified professional that takes into account the proposed layout of the SES and how the spacing, row separation, and slope affects stormwater infiltration, including calculations for a 100-year rain event (storm). Percolation tests or site-specific soil information shall be provided to demonstrate infiltration on-site without the use of engineered solutions.
    - iv. Glare Study: An analysis by a third-party qualified professional to determine if glare from the SES will be visible from nearby residents and roadways. If required, the analysis shall consider



the changing position of the sun throughout the day and year, and its influence on the solar energy system.