

**RICHMOND TOWNSHIP  
OSCEOLA COUNTY, MICHIGAN**

(Ordinance No. 64-22 of 2022)

At a regular meeting of the Township Board for Richmond Township held at the Township offices on Sept. 20, 2022, at 7:00 p.m., Township Board Member Ruppert made a motion to adopt the following Ordinance/ordinance amendment, which motion was seconded by Township Board Member Woods:

**AN ORDINANCE TO AMEND THE RICHMOND TOWNSHIP ZONING  
ORDINANCE, AS AMENDED, TO ADD REQUIREMENTS FOR SOLAR  
ENERGY SYSTEMS.**

THE TOWNSHIP OF RICHMOND ("Township") ORDAINS:

**ARTICLE I** – A new and additional Section 4.7 of the Richmond Township Zoning Ordinance is hereby added to the Zoning Ordinance to read as follows:

4.7 – Solar Energy Systems (SES)

A. Purpose. Richmond Township desires to promote the effective and efficient use of solar energy systems subject to reasonable regulations. It is the intent of the Township to permit these systems under certain circumstances by regulating the siting, design and installation of such systems to protect the public health, safety, and welfare, and to ensure compatibility of land uses in the vicinity of solar energy systems.

B. Definitions

1. Array: Any number of electrically connected photovoltaic (PV) modules providing a single electrical output.
2. Building Integrated Photovoltaic (BIPV) Systems: A solar energy system that consists of integrating photovoltaic modules into the building structure, such as the roof, wall or the façade, and which does not alter the relief of the roof.
3. Ground-Mounted Solar Energy System: A solar energy system that is installed directly in the ground and is not attached or affixed to an existing building or

similar structure.

4. Onsite Solar System: A solar energy system mounted on a building or on the ground and located on a parcel containing a principal use. An onsite solar system is considered an accessory use of the parcel and provides its electricity or heat only to buildings and uses on the parcel.

5. Photovoltaic (PV) Systems: A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells, which generate electricity whenever sunlight strikes them.

6. Rooftop Solar System: A solar energy system in which solar panels are mounted on top of a roof, either as a flush-mounted system or as modules fixed to frames which can be tilted.

7. Solar access: The right of a property owner to have sunlight shine onto the property owner's land.

8. Solar Collector: A solar photovoltaic cell, panel, or array, or solar hot air or water collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

9. Solar Energy System (SES): Solar collectors, controls, energy storage devices, heat pumps, heat exchangers, and other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation, and distributed. Solar systems include solar thermal, photovoltaic, and concentrated solar. This definition does not include small devices or equipment such as solar powered lawn or building lights which house both the solar energy generation system and the system which uses that energy to operate.

10. Solar Farm: A solar energy system which is the principal use of a parcel and which is designed and constructed to produce electrical energy for sale back into an electrical energy grid system and is not consumed on site.

11. Solar Panel: A device for the direct conversion of solar energy into electricity.

12. Solar-Thermal Systems: A system, which through the use of sunlight, heats water or other liquids for such purposes as space heating and cooling, domestic hot water or heating pool water.

13. Wall-mounted Solar Energy System: A solar energy system that is installed flush to the surface of the wall of a permanent building.

### C. General Requirements for Solar Energy Systems

1. This Section applies to all solar energy systems to be installed (or expanded) and constructed after the effective date this Section.

2. Lawful solar energy systems constructed prior to the effective date of this

Section shall not be required to meet the requirements of this Section; provided that any structural change, upgrade or modification to an existing solar energy system that materially alters the size, area, height, location or placement of such system shall comply with all of the provisions of this Section.

3. The granting of any permit for a solar energy system does not constitute solar access rights.
4. A solar energy system shall be constructed and placed so that it does not create a glare or noise for persons off site.
5. A solar energy system shall be properly maintained at all times. Such maintenance shall include measures to maintain the original appearance of each structure, ensuring that the solar panels do not leak and that the ground cover beneath the panels does not become a visual nuisance.
6. Solar energy systems shall be installed, maintained, and used only in accordance with the manufacturer's directions. A copy of such directions shall be submitted to the Township prior to installation.
7. Solar energy systems, and the installation, maintenance and use thereof, shall always comply with the Township building code and all federal and state laws and the landowner shall obtain all applicable County, State of Michigan and federal permits before installation.
8. Any SES that is not operated for a continuous period of 18 months as determined by the Township shall be considered abandoned or non-functional and subject for removal. Upon a determination by the Township that a SES should be decommissioned and within 90 days of receipt of written notification from the Township, the owner/operator shall begin to remove the SES from the site and shall proceed promptly toward completion in accordance with the approved decommissioning plan.
9. The noise emitted from any SES shall not exceed 55 decibels at any property line for the lot on which the SES is located.

#### D. Requirements for Rooftop and Wall Mounted SES

1. Roof and wall mounted SES are a permitted accessory use in all zoning districts and are subject to review and approval by the Township Building Official. Applicants shall submit an accurate sketch plan to the Building Official providing the location of the building, location of the SES, the height of the SES including a data sheet and installation instructions from the equipment manufacturer and any other information as requested by the Building Official. The applicant shall also provide information on the type of solar panel to be used and any hazardous chemicals contained in the solar panels and measures to prevent leakage.
2. A roof mounted SES shall not project more than five feet above the highest

point of the roof, and in any case, shall not exceed the maximum building height limitation for the zoning district in which it is located, and shall not project beyond the eaves of the roof.

3. Each roof and wall mounted SES shall be securely and safely attached to a building or structure. Proof of the safety and reliability of the means of such attachment shall be submitted to the Building Official prior to installation along with information that the roof is capable of supporting the equipment. Such proof shall be subject to the Building Official's approval.

4. Each wall-mounted SES shall not exceed the height of the building wall to which it is attached.

5. Each wall-mounted SES shall not be mounted on a building wall that faces upon a public or private street.

#### E. Level 1 Onsite Ground Mounted SES

1. A Level 1 Onsite Ground Mounted Solar Energy System is allowed in all zoning districts as a permitted accessory use subject to review and approval by the Building Official according to the following requirements.

2. A Level 1 Onsite Ground Mounted Solar Energy System shall not occupy an area greater than 5,000 square feet in size.

3. Applicants shall submit an accurate sketch plan to the Building Official illustrating property lines of the parcel, buildings on the parcel, the proposed setbacks and height of the SES including a data sheet from the equipment manufacturer and any other information as requested by the Building Official. The applicant shall also provide information on the type of solar panel to be used and any hazardous chemicals contained in the solar panels and measures to prevent leakage.

4. A ground mounted SES is an accessory structure. A ground mounted SES is permitted on the same lot as an accessory building but shall not count as one of the permitted accessory buildings allowed by this Ordinance.

The combined area of an accessory building and SES shall not exceed the total square footage allowed by this Ordinance. The area occupied by the SES shall be measured around the outside boundaries of the solar panels not the solar panel supports.

5. Setbacks. A ground mounted solar energy system shall only be located in the side and rear yards and shall be set back a minimum of 10 feet from all lot lines.

6. Height. The height of a SES shall not exceed 10 feet above natural grade. The height shall be measured from the highest point of the panel when oriented at its maximum tilt to the ground immediately below the panel.

F. Level 2 Onsite Ground Mounted SES

1. A Level 2 Onsite Ground Mounted Solar Energy System occupies an area greater than a Level 1 onsite solar energy system and is allowed in all zoning districts as an accessory use subject to review and approval of a Special Use Permit by the Planning Commission in accordance with the requirements and procedures of Chapter 7 herein and also the following requirements.
2. A Level 2 Ground Mounted SES shall not occupy an area greater than five (5) acres in size.
3. Setbacks. A ground mounted solar energy system shall only be located in the side and rear yards and shall comply with the setback requirements for principal buildings for the zoning district in which the SES is located. On a corner lot, the SES shall comply with the setback requirements for accessory buildings.
4. Height. A ground mounted SES shall not exceed a height of 14 feet above natural grade. The height shall be measured from the highest point of the panel when oriented at its maximum tilt to the ground immediately below the panel.
5. Electrical Interconnections All electrical interconnection or distribution lines shall comply with all applicable codes. The applicant shall provide evidence to the Township of approval from the applicable utility company.
6. The portion of the premises on which the array of collector panel structures is located shall not be paved with asphalt or any other surface material that is impervious to rainwater.
7. Plantings shall be installed around the perimeter of the parcel or parcels containing the SES. One deciduous or conifer tree for every 25 feet of property line length is required. The Planning Commission may modify the landscaping requirement depending upon the location of existing plant material on the site or if additional plantings are needed to buffer existing land uses. Trees shall be a minimum of four (4) feet tall when planted and remain in good condition for the life of the project.
8. Use of above ground transmission lines for the SES shall be prohibited within the site.
9. The applicant shall provide information to the Township on the type of solar panel to be used and any hazard chemicals contained in the solar panels and measures to prevent leakage.
10. A decommissioning plan shall be provided as required by Subsection G(4) herein.
11. Every SES must be kept and maintained in good repair and condition at all times and shall not pose a potential safety hazard. The applicant shall provide a

written description of the maintenance program to be used to maintain the SES.

For Level 2 SES located in commercial and industrial zones, the applicant shall keep a record of all maintenance performed and repairs made to and replacement of equipment and parts. On or about each anniversary date of the approval by the Planning Commission of the Special Use permit, the applicant shall provide a summary of this maintenance record to the Township Zoning Administrator.

12. Removal Cost Guarantee. The cost of removal and site restoration is the full responsibility of the landowner and the applicant and/or owner/operator. In order to provide the greatest possible financial assurance that there will be sufficient funds to remove the solar energy system and to restore the site, the following steps shall be followed:

- For each solar energy system, the applicant/owner/operator shall determine an amount of money equal to the estimated removal and restoration cost. The Planning Commission may require independent verification of the adequacy of this amount.
- Performance Guarantee for Decommissioning: To ensure proper removal of each solar structure when it is abandoned or non-operational, the application shall include proof of the financial security in effect before a permit is approved. The security shall be licensed in the State of Michigan and be in the form of 1) cash deposit or 2) performance (surety) bond approved by the Township Board and bonded by a top institution from the Department of the Treasury's Listing of Approved Sureties-Department Circular 570, T-list. The duration of the security shall be termed to the removal of any solar structure on site. Additionally, security shall be based on each lot and is to be backed by owner assets, operator assets, parent company assets, and leaseholder assets approved by the Township Board.
- The amount of each solar security guarantee (surety) shall be the average of at least two independent (i.e. independent of the applicant) demolition (removal) quotes, obtained by the Township and approved by the Board, plus 20%. If the quantity of quotes obtained is two, the formula shall be  $(\text{quote 1} + \text{quote 2})/2 \times 1.20$ . Quotes shall be based on removal and shall not group multiple solar simultaneous removals together. Quotes shall be ordered and obtained by the Township from established demolition/removal companies. The demolition/removal method shall be approved by the Township Board. Quotes shall not include salvage values. Security guarantee shall be updated every five (5) years at the rate of 1.5 times CPI (consumer price index) for each year.
- Such financial guarantee as set forth herein shall be deposited or filed with the Township Clerk after a Township permit has been

approved by the Township but before construction operations begin on the solar project. Failure to keep such financial security in full force and effect at all times while the structure exists shall constitute a material and significant violation of a Township approval and this Ordinance, and shall subject the applicant to all available remedies to the Township, including enforcement action, fines, revocation of the Township solar approvals and permits and solar facilities removal.

- The applicant shall be responsible for the payment of all attorney fees and other costs incurred by the Township in the event that the solar structure(s) is not voluntarily removed and the Township has to enforce removal.
- In the event the solar site owner, operator, parent company, or performance bond defaults on any or all of the previously outlined decommissioning requirements, the owner of any land upon which any solar site is located shall be responsible and liable for the removal of all solar structures. Failure of the owner to comply with the removal and decommissioning guidelines shall result in the Township having the solar structures removed at the expense of the owner. The owner as a condition of issuance of the permit is deemed to grant to the Township and its agents an irrevocable license to enforce such remedies in a manner otherwise consistent with this Ordinance. If funding is not available to cover the costs of removal by the owner, legal action to pursue the seizure of property(ies) will take place to cover such costs.
- The surety shall remain in effect with the Township until the lot, lots, parcel or parcels involved have been reclaimed, inspected and all equipment, machinery, materials, buildings and other operation related improvements associated with the solar site removed as required by this Ordinance and/or by the terms of the permit.

#### G. Solar Farms

1. Solar farms are only allowed in the AG-Agricultural and I-Industrial zoning districts subject to review and approval of a Special Use Permit by the Planning Commission in accordance with the requirements and procedures of Chapters 7 and 8 herein and also the following requirements.
2. The minimum lot size for a solar farm shall be 20 acres. A parcel containing a solar farm shall not require frontage on a public street.
3. Application Requirements. In addition to the site plan required by Chapter 8 of this Ordinance, the applicant shall also provide all of the following information to

the Township:

- a. Proof of a lease, deed or purchase agreement for the parcel for the proposed solar farm.
- b. Type of solar panel to be used and any hazardous chemicals contained in the solar panels and measures to prevent leakage.
- c. Name and address of the manufacturer, and model of the solar panels.
- d. Expected energy output and anticipated useful life of the system, development phases, likely markets for the generated energy, and possible future expansions.
- e. Information on the visual impact of the proposed solar farm using photos or computer-generated images of the project on the site to demonstrate the appearance of the project from off site.
- f. Maintenance and construction schedule. The applicant shall provide a written description of the maintenance program to be used to maintain the SES, and the anticipated construction schedule.
- g. Digital versions of all planning and construction documents required pursuant to Chapter 8, Site Plan Review. Digital submittals are in addition to paper plans and do not replace any current submission requirements. Digital versions shall be submitted in PDF (Adobe Acrobat/Portable Document File) format.
- h. A decommissioning plan as required by Subsection G(4) herein.
- i. Distance from the proposed solar farm to the nearest habitable dwelling unit on a parcel which does not contain the solar farm.
- j. A security plan detailing on-site security provisions which may include fencing, security guards, video surveillance, and similar measures.
- k. A landscaping plan illustrating the number, size, type and spacing of trees proposed to screen the solar farm from nearby roadways.
- l. Additional information as required by Chapter 8 of this Ordinance, or as may be required by the Planning Commission.
- m. The Planning Commission may waive or modify some of the above requirements at the request of the applicant if the Planning Commission determines that those items would not be needed to properly review the project.

4. Decommissioning:

The applicant shall submit a decommissioning plan to the Township which shall address all of the following:



- a. Defined conditions upon which decommissioning will be initiated (i.e., end of land lease, no power production for nine months, obsolete equipment and similar circumstances.)
- b. A description as to how the useful life of the system will be determined and who will make this determination.
- c. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, and building foundations to a depth of three feet below grade.
- d. Restoration of property to the condition prior to development of the solar farm including measures to ensure that soils are not contaminated during decommissioning.
- e. The timeframe for completion of decommissioning activities.
- f. An engineer's cost estimate for all aspects of the decommissioning plan.
- g. Description of any agreement with the landowner regarding decommissioning.
- h. Provisions for updating the decommissioning plan.
- i. A statement signed by the owner or operator that they take full responsibility for reclaiming the site in accordance with the decommissioning plan and the Special Use Permit upon cessation of use.
- j. The Planning Commission may require that the owner or operator provide a financial guarantee to cover the costs of decommissioning the site in accordance with Subsection G(7) herein.

5. Additional Requirements for Solar Farms

- a. Safety/Access: A security fence shall be placed and maintained around the perimeter of the solar farm with a locked gate. Knox boxes and keys shall be provided at locked entrances for emergency personnel access. The height and material of the fence shall be as approved by the Planning Commission depending upon the location of the facility.
- b. The facility shall be designed for interconnection to a public utility electrical power grid, and shall be operated with such interconnection. All electrical interconnection or distribution lines shall comply with all applicable codes. The applicant shall provide evidence to the Township of approval from the applicable utility company. Use of above-ground transmission lines for the SES shall be prohibited within the site.
- c. The portion of the premises on which the array of collector panel structures is located shall not be paved with asphalt or any other surface material that is impervious to rainwater.
- d. Plantings shall be installed around the perimeter of the parcel or parcels

containing the solar farm one deciduous or conifer tree for every 25 feet of property line length is required. The Planning Commission may modify the landscaping requirement depending upon the location of existing plant material on the site or if additional plantings are needed to buffer existing land uses. Trees shall be a minimum of four (4) feet tall when planted and remain in good condition for the life of the project.

e. Setbacks. Solar panels shall be setback a minimum of 50 feet from all road right-of-way or easement boundary lines and 10 feet from all other lot lines except solar panels shall not be placed closer than 100 from the lot line of another parcel containing a dwelling unit.

f. Height. A ground mounted SES shall not exceed a height of 20 feet above natural grade. The height shall be measured from the highest point of the panel when oriented at its maximum tilt to the ground immediately below the panel.

g. Electrical Interconnections All electrical interconnection or distribution lines shall comply with all applicable codes. The applicant shall provide evidence to the Township of approval of connection from the applicable utility company.

h. Use of above-ground transmission lines for the SES shall be prohibited within the site.

i. Maintenance and Annual Summary Report. Every solar farm must be kept and maintained in good repair and condition at all times and shall not pose a potential safety hazard. The applicant shall keep a record of all maintenance performed and repairs made to and replacement of equipment and parts. On or about each anniversary date of the approval by the Planning Commission of the Special Use permit, the applicant shall provide a summary of this maintenance record to the Township Zoning Administrator.

#### 6. Administration Costs Initial Application and Ongoing:

The following applies to solar farms:

a. For each solar energy system application, the applicant/owner/operator shall deposit into an escrow account with the Township the amount of \$5,000. The purpose of this escrow account is:

- i. To reimburse Richmond Township for its costs incurred to hire consultants and experts as the Township, at its sole discretion, deems desirable to examine, evaluate and verify the data and statements presented by the applicant/owner/operator; and
- ii. For the life of each solar energy system, to cover the administrative and legal costs incurred by Richmond Township in monitoring and enforcing the owner/operator's ongoing compliance with the Ordinance.

- b. The account shall be managed as follows:
- i. Funds can be withdrawn from this account only by the signature of a Township designee.
  - ii. If at any time the balance of this account shall fall below \$1,000, the applicant/owner/operator shall deposit additional funds to restore the account to a \$5,000 balance.
  - iii. If at any time the balance of this fund shall fall below \$1,000 for a continuous period of thirty days, the application shall be considered to have been withdrawn, or the Permit for the solar energy system may be terminated by the Township.
  - iv. A Township designee shall be charged with monitoring the escrow account and giving quarterly reports to the Planning Commission. After the solar energy system has been removed and site restoration has been completed, as defined in this Ordinance, any balance remaining in this account shall be returned to the applicant.

7. Removal Cost Guarantee. The cost of removal and site restoration is the full responsibility of the landowner and also the applicant and/or owner/operator. In order to provide the greatest possible financial assurance that there will be sufficient funds to remove the solar energy system and to restore the site, the following steps shall be followed:

(a) For each solar energy system, the applicant/owner/operator shall determine an amount of money equal to the estimated removal and restoration cost. The Planning Commission may require independent verification of the adequacy of this amount.

(b) Performance Guarantee for Decommissioning: To ensure proper removal of each solar structure when it is abandoned or non-operational, the application shall include proof of the financial security in effect before a permit is approved. The security shall be licensed in the State of Michigan and be in the form of 1) cash deposit or 2) performance (surety) bond approved by the Township Board and bonded by a top institution from the Department of the Treasury's Listing of Approved Sureties-Department Circular 570, T-list. The duration of the security shall be termed to the removal of any solar structure on site. Additionally, security shall be based on each lot and is to be backed by owner assets, operator assets, parent company assets, and leaseholder assets approved by the Township Board.

(i) The amount of each solar security guarantee (surety) shall be the average of at least two independent (i.e. independent of the applicant) demolition (removal) quotes, obtained by the Township and approved by the Board, plus 20%. If the quantity of quotes obtained is two, the formula shall be  $(\text{quote 1} + \text{quote 2})/2 \times 1.20$ . Quotes shall be based on removal and shall

not group multiple solar simultaneous removals together. Quotes shall be ordered and obtained by the Township from established demolition/removal companies. The demolition/removal method shall be approved by the Township Board. Quotes shall not include salvage values. Security guarantee shall be updated every five (5) years at the rate of 1.5 times CPI (consumer price index) for each year.

- (ii) Such financial guarantee as set forth herein shall be deposited or filed with the Township Clerk after a Township permit has been approved by the Township but before construction operations begin on the solar project. Failure to keep such financial security in full force and effect at all times while the structure exists shall constitute a material and significant violation of a Township approval and this Ordinance, and shall subject the applicant to all available remedies to the Township, including enforcement action, fines, revocation of the Township solar approvals and permits and solar facilities removal.
- (iii) The applicant shall be responsible for the payment of all attorney fees and other costs incurred by the Township in the event that the solar structure(s) is not voluntarily removed and the Township has to enforce removal.
- (iv) In the event the solar site owner, operator, parent company, or performance bond defaults on any or all of the previously outlined decommissioning requirements, the owner of any land upon which any solar site is located shall be responsible and liable for the removal of all solar structures. Failure of the owner to comply with the removal and decommissioning guidelines shall result in the Township having the solar structures removed at the expense of the owner. The owner as a condition of issuance of the permit is deemed to grant to the Township and its agents an irrevocable license to enforce such remedies in a manner otherwise consistent with this Ordinance. If funding is not available to cover the costs of removal by the owner, legal action to pursue the seizure of property(ies) will take place to cover such costs.
- (v) The surety shall remain in effect with the Township until the lot, lots, parcel or parcels involved have been reclaimed, inspected and all equipment, machinery, materials, buildings and other operation related improvements associated with the solar site removed as required by this Ordinance and/or by the terms of the permit.

**ARTICLE II** - A new and additional Subsection 7.2g(4) is hereby added to the Richmond Township Zoning Ordinance as follows:

The Planning Commission shall review the particular facts and circumstances of each proposed special use and in addition to the specific standards of consideration stated for each special use type within this

Ordinance, shall be guided in rendering a decision by all of the following general standards:

- The proposed special use shall be sufficiently designed and implemented to maintain adequate provision for the protection of the health, safety, conveniences, and social and economic welfare of those who will use the special use, residents and landowners adjacent to the special use, and the community as a whole.
- The proposed special use shall be consistent with the intent of this Ordinance and also the intent of the Master Plan.
- The special use shall not create or substantially add to traffic hazards in the area.
- Public services and facilities such as roads, police and fire protection, drainage structures, water and sewage facilities and schools shall be sufficiently available or extended to the proposed special use such that load capacities are not exceeded.
- The proposed special use shall not set precedents for development which could adversely affect the long term plans or policies of the Township.
- The proposed special use shall not have significant adverse environmental, ecological or natural resource impacts.
- The proposed special use shall not have significant adverse impacts upon adjoining or nearby properties or uses.

**ARTICLE III - Severability.** Should a court of competent jurisdiction ever declare that this Ordinance/ordinance amendment (or any portion hereof) is unconstitutional or invalid, that shall not affect the balance of this Ordinance/ordinance amendment, which shall remain in full force and effect.

**ARTICLE IV - The Remainder of the Zoning Ordinance is Unchanged.** Except as expressly amended by this Ordinance/ordinance amendment, the balance of the Richmond Township Zoning Ordinance, as amended, remains unchanged and in full force and effect.

**ARTICLE V - Effective date.** This Ordinance/ordinance amendment shall become effective upon the expiration of seven (7) days after this Ordinance/ordinance amendment or a summary thereof appears in the local newspaper as provided by law.

The vote to adopt this Ordinance/ordinance amendment was as follows:

YEAS: Bluhm, Stieg, Ruppert, Woods

NAYS: Galloup

ABSENT/ABSTAIN: 0

**ORDINANCE/ORDINANCE AMENDMENT DECLARED ADOPTED.**

**CERTIFICATION**

I hereby certify that the above is a true copy of an Ordinance/ordinance amendment adopted by the Township Board for Richmond Township at the time, date, and place specified above pursuant to the required statutory procedures.

Respectfully submitted by,

Linda Stieg  
Sept 20, 2022  
Linda Stieg  
Richmond Township Clerk