

ORDINANCE NO. 2021-013

**BEING AN ORDINANCE TO AMEND THE TEXT OF THE DELAWARE COUNTY  
COMPREHENSIVE ZONING ORDINANCE REGARDING SOLAR ENERGY  
AS REVISED**

**WHEREAS,** the State enabling act for planning and zoning empowers the Board of Commissioners of Delaware County, Indiana to adopt a zoning ordinance and also provides for amendments to said ordinance as deemed necessary from time to time; and

**WHEREAS,** a zoning ordinance may establish one or more districts which may be for agricultural, commercial, industrial, residential, special, or unrestricted uses and any subdivision or combination of these uses and may, in each district, regulate how real property is developed, maintained, and used; and

**WHEREAS,** solar energy systems are an alternative energy source that produces electrical energy in an environmentally beneficial manner without the production of greenhouse gases and can offer economic development benefits to local government and residents such as increases to the tax base, revenue generation for landowners and the creation of temporary and permanent employment; and

**WHEREAS,** amending the zoning ordinance to regulate the location, construction and operation of solar energy systems is necessary and appropriate to achieve and secure the benefits and to avoid and/or minimize the impacts; and

**WHEREAS,** the Delaware-Muncie Metropolitan Plan Commission has given legal notice of a public hearing for consideration of the proposed amendment and, on motion duly made, seconded and unanimously approved, forwards a favorable recommendation regarding said amendment to the County, all as required by law; and

**WHEREAS,** the Board of County Commissioners of Delaware County, Indiana, has given reasonable regard to the comprehensive plan; current conditions and the character of current structures and uses in each district; the most desirable use for which the land in each district is adapted; the conservation of property values throughout the jurisdiction; and responsible growth and development.

**NOW, THEREFORE, BE IT ORDAINED** by the Board of Commissioners of Delaware County, Indiana that the text of the Delaware County Comprehensive Zoning Ordinance be amended, changed and supplemented as follows:

**SECTION 1.** That ARTICLE IX GENERAL PROVISIONS, Section 14 ACCESSORY USES AND STRUCTURES, Subsection 2.. TYPES OF ACCESSORY USES/STRUCTURES shall be supplemented by inserting a new listing, as follows:

h. Solar collectors, roof mounted or ground mounted.

**SECTION 2.** That ARTICLE XII F FARMING ZONE, Section 1 PERMITTED USES shall be supplemented by inserting a new permitted use, as follows:

21. Solar Farms. Solar farms are subject to the requirements set forth herein in Article XII, Section 10. Only photovoltaic and thermal solar energy systems may be installed; concentrated solar power systems are not permitted.

**SECTION 3.** That ARTICLE XII F FARMING ZONE shall be supplemented by inserting a new Section 10, as follows:

**Section 10. SOLAR FARM REQUIREMENTS**

These requirements are for the implementation of solar energy systems in Delaware County, Indiana. The County finds that it is in the public interest to encourage the use and development of renewable energy systems that enhance energy conservation efforts, reduce greenhouse gas emissions and promote sustainable development.

**A APPLICATION REQUIREMENTS**

Applications for solar farms must include a concept plan, a site plan, a maintenance plan, a decommission plan, and an emergency/fire safety plan. If the solar farm extends into the floodplain, that area of the project must comply with the Floodplain Management Ordinance. Prior to the issuance of any permits for the solar farm, verification of all agreements, bonds, and other required permits shall be provided including a drainage permit, a stormwater/erosion control permit, and driveway permits.

**1. Concept Plan.**

The Concept Plan is intended to be a one-page overview of the entire facility showing the requirements set forth herein. The facility shall be constructed and operated in substantial compliance with the approved concept plan, with allowances for changes required by any federal or state agency. The project shall be limited to the phases and conditions set forth in the concept plan that constitutes part of the application, notwithstanding any other state or federal requirements. No additional phasing or changes in facility size shall be permitted without obtaining approval of the changes from the staff. The concept plan shall include the subject parcels; the proposed general location of the solar panels and related facilities; the location of proposed fencing, the location and nature of proposed buffers, including vegetative and constructed buffers and berms; the location of points of ingress/egress; and any proposed construction phases. The concept plan shall be supplemented with: 1) all landowner agreements and/or recorded memorandums and waivers; 2) proof of correspondence and cooperation with wildlife agencies including the U.S. Fish and Wildlife Service and the Indiana Department of Natural Resources; 3) proof of compliance with applicable FAA regulations. Waivers may be provided on an on-going basis, however, waivers provided after the concept plan has been submitted will require a revised concept plan to be submitted along with a new site plan covering the area affected by a waiver

**2. Site Plan.**

A detailed plan, at a measurable scale, of all of the improvements to be placed on the site(s). Use of the Delaware County Geographic Information System (GIS) if recommended. Multiple site plans may need to be submitted to maintain a measurable scale in order to review and assess compliance with the requirements set forth herein. The site plan(s) must include:

- a. The location, number and spacing of all solar collectors and related structures;
- b. The location of fencing and buffer/screening areas;
- c. Property lines and setbacks;
- d. The location of easements, access roads and points of ingress/egress;
- e. The location of all above ground and underground utility lines

The site plan must include ALTA survey results and show easements of record, contours, floodplain boundaries, the location of any historic or heritage sites as recognized by the Division of Historic Preservation and Archeology of the Indiana Department of Natural Resources, the location of any wetlands based upon a delineation plan, and waterways (including regulated drains, mutual drainage tiles/facilities, retention areas, etc.). A separate landscape plan prepared by a professional landscape architect is to be provided to ensure readability along with an assessment form or score card from an approved source showing that the proposed landscape plan meets or exceeds accepted pollinator and habitat standards. Delaware County currently recognizes the Purdue University 2020 Solar Site Pollinator Habitat Planning Scorecard and the Michiana Area Council of Governments Technical Guide: Establishment and



Maintenance of Pollinator-Friendly Solar Projects and may consider other assessment forms as they are developed.

3. Maintenance Plan.

The developer shall submit a maintenance plan that includes how the solar farm will manage the following concerns:

- a. Maintenance of the Panels shall be repaired or replaced when either nonfunctional or in visible disrepair. Panels that are not so maintained shall be considered a public nuisance.
- b. Landscape requirements. Native grasses and perennials shall be used to stabilize the site for the duration of the facilities use.
- c. Wildlife protection. Detail strategies that will be utilized to reduce risks of “lake effect” and will maintain wildlife corridors.

4. Decommission and Restoration Plan and Agreement.

A Decommission and Restoration Plan shall be submitted and shall form the basis for a Decommissioning Agreement to be approved by the Delaware County Commissioners. The decommission plan shall include a reliable and detailed estimate of the costs of decommissioning prepared by a professional engineer or contractor who has expertise in the removal of solar facilities. The plan shall include a performance bond or other approved method of providing appropriate surety for the cost of decommissioning as set forth in the agreement.

Decommissioning shall include removal of all solar electric systems, buildings, cabling up to the depth of four feet, electrical components, security barriers, roads, foundations to a depth of four feet, pilings, and any other associated facilities, so that any agricultural ground upon which the facility or system was located is again tillable and suitable for agricultural uses. The site shall be graded and reseeded to restore it to as natural a condition as possible, unless the landowner requests in writing that the access roads or other land surface areas not be restored, and this request is approved by the County Commissioners.

Solar farms which have reached the end of their useful life or have not been in active and continuous service for twelve (12) months shall be removed within twelve (12) months at the owner’s or operator’s expense in accordance with the decommissioning agreement, except if the project is being repowered or a force majeure event has or is occurring requiring longer repairs. If the owner or operator of the solar facility fails to remove the installation in accordance with the agreement or within the proposed date of decommissioning, the County may collect the surety and staff or a hired third party may enter the property to physically remove the installation.

5. Road Use Agreement.

Prior to the use of any county roads for the purpose of transporting parts and/or equipment for construction, operation or maintenance of a solar farm, the owner and/or operator must provide proof of a signed road use agreement between the Delaware County Commissioners and the owner/operator. The Road Use Agreement should include identification of all public roads that will be used for construction and maintenance. The County Engineer/Highway Superintendent or a qualified consultant hired by the County Commissioners at the expense of the owner/operator of the solar farm should conduct a pre-construction base-line survey to determine existing road conditions for assessing potential future damage. Any road damage caused by the construction, installation and/or removal of the solar farm facilities must be repaired to the satisfaction of the County Engineer. The County may require surety bonds, at the expense of the owner/operator, to ensure that future repairs are completed to the satisfaction of the County.

6. Emergency/Fire Safety Plan.

An emergency and fire safety plan shall be provided to the Delaware County Emergency Management Agency and the local fire departments whose jurisdiction is included in whole or in part within the solar farm project area. Any specialized training shall be provided at the owner/operator’s expense. If entrances are locked, Knox boxes and keys shall be provided at all locked entrances to the applicable emergency

personnel. The names and phone numbers for the electric utility provider and the site operator, the 911 addresses and GPS coordinates shall be provided as a part of the plan and shall be posted at each entrance to the solar farm project.

7. Economic Development Agreement

Due to the complexity of solar farm projects, the Delaware County Commissioners may elect to enter into an Economic Development Agreement to address taxing, land use, assessments and other issues related to a solar farm project.

B HEIGHT

The height of the solar collector and any mounts shall not exceed 20 feet when oriented at maximum tilt.

C SETBACKS

1. A minimum fifty (50) foot setback shall be maintained from the solar farm structures to the road right-of-way line, existing or proposed, whichever is greater.

2. A minimum fifty (50) foot setback, which includes a screening buffer and other native vegetation as described below, shall be maintained from the solar farm structures to any non-participating owner's adjoining property line which is a perimeter boundary line for the project area.

3. A minimum two hundred fifty (250) foot setback shall be maintained from any non-participating dwelling to any solar farm structure, not including security fencing if applicable. A minimum one hundred (100) foot setback shall be maintained for all other dwellings.

The setbacks set forth in items 2. and 3. above may be reduced by up to 50% with a written waiver from the property owner(s).

D SIGNAGE

Each solar farm must include an informational sign, 1 per frontage, with the name of the facility owner and the phone number for a 24-hour emergency contact. The informational sign may not exceed 6 square feet.

E BUFFERS AND LANDSCAPE

The facilities, including fencing, shall be significantly screened from the viewshed of adjacent residential dwellings or commercial buildings by a buffer zone extending from the property line. A property owner may waive the buffer zone requirement in whole or in part. Existing vegetation or natural landforms on the site may provide such screening. Existing wooded areas of an acre or more of land may not be removed for the installation or operation of a solar farm. Large trees, greater than twelve (12) inches in diameter at breast height, outside of wooded areas, that are removed must be replaced with native trees at a 2 to 1 ratio on the solar farm site. In the event that existing vegetation or landforms providing the screening are disturbed, new plantings shall be provided which accomplish equivalent screening. Opaque architectural screening methods may be used to supplement other screening methods but shall not be the primary method.

1. Landscaping/Screening. A minimum 50-foot buffer zone, containing native plants including trees, shrubs and pollinators, shall be maintained. If there is no existing vegetation or if the existing vegetation is inadequate to serve as a screen, native plants shall be planted to create the visual screen. Remaining areas in the setbacks shall be maintained with pollinator-friendly plants as shown on the landscape plan. New plantings of trees shall be approximately 6 feet in height at time of planting. Blooming shrubs may be used in buffer areas as appropriate for visual screening.

2. Wildlife corridors. The concept plan shall identify an access corridor for wildlife to navigate through the Solar Farm project area. The proposed wildlife corridor shall be shown on the detailed site plan. To the extent it is reasonably practical, areas between and/or along fencing shall be kept open or contain openings to allow for the movement of migratory animals and other wildlife. Setbacks from county drain tiles, transmission lines, or natural gas lines are all valid wildlife corridors.

3. Landscape Plantings. The overall solar farm project area shall include pollinator-friendly plantings in an amount and configuration to meet or exceed pollinator-friendly standards.



## F FENCING

Facilities that are to be enclosed by security fencing shall have the fencing located on the interior of the buffer area. Solar farms that do not coincide with livestock shall use wildlife-permeable fence, fencing with larger holes than a traditional chain-link fence that allows for small- to medium-sized animals to move freely through the fence for at least ten (10) percent of the fence lines where the 10% shall be evenly distributed along each quarter mile section and at identified wildlife corridors. Substation locations identified on the site plans will be allowed to use traditional chain-link fencing around the entire structure. Fencing shall be maintained in good condition for the life of the solar farm operation.

## G GROUND COVER

The ground around and under solar arrays and in buffer areas that do not contain concurrent agricultural uses shall be planted and maintained in native perennial vegetated ground cover, and meet the following standards:

1. Top soil shall not be removed during development, unless part of a remediation effort.
2. Soil shall be planted and maintained in perennial vegetation to prevent erosion, manage run-off, and build soil. Seeds should include a mix of grasses and wildflowers, native to the region, that will result in short stature prairie with a diversity of forbs (flowering plants) that bloom throughout the growing season.
3. No pesticide use is permitted on the site, however, this provision does not apply to pesticide use around on-site buildings or other spot treatments for invasive species as may be deemed necessary to protect public health and safety. Plant material must not have been treated with systemic pesticides, particularly neonicotinoids.

## H LIGHTING

Lighting must meet the requirements in ARTICLE XXX, Section 5 DEVELOPMENT STANDARDS.

## I GLARE

Solar panel placement should be prioritized to minimize or negate any solar glare onto nearby properties or roadways, without unduly impacting the functionality or efficiency of the solar system. Exterior surfaces of the collectors and related surfaces shall have nonreflective finish.

## J NOISE

Sound attributable to the solar farm shall not exceed an hourly average sound level of sixty (60) A-weighted decibels as modeled at the property line adjacent to a dwelling or residence zone.

## K DRIVEWAY ACCESS

Driveways shall be paved with a hard surface material for the first fifty (50) feet from the edge of the public road pavement. Interior drives are not required to be paved.

## L CONCURRENT USES

Nothing will prevent a solar farm from coinciding with agricultural uses including but not limited to the grazing of livestock or apiculture.

## M POWER LINES

Power lines installed on the solar farm project sites that connect panel rows to inverters must be buried underground. Power lines between the solar farm project and the electric utility transmission system may be overhead.

## N GENERAL PROVISIONS

1. All solar facilities must meet or exceed the standards and regulations of the Federal Aviation Administration (FAA), the Federal Communications Commission (FCC), the Indiana Electrical Code and any other agency of the local, state, or federal government with the authority to regulate such facilities that are in force at the time of the application.

2. A solar collector shall not be considered an impermeable surface provided the ground underneath the collector is not compacted or of hard surface and contains a vegetated ground cover.
3. Installation of solar farm facilities must not interfere with existing drainage tiles unless mitigation measures are taken such as reconstruction, repairs, replacing tile, installing additional drainage features, or re-routing.

**SECTION 4.** That ARTICLE XXIII IL LIMITED INDUSTRIAL ZONE, Section 2 PERMITTED USES shall be supplemented by inserting a new item 32 as follows:

32. Solar Farms. Solar farms are subject to the requirements set forth herein in Article XII, Section 10.

**SECTION 5.** That ARTICLE XXXIII DEFINITIONS, Section 2 TERMS AND MEANING shall be supplemented by inserting the following new definitions with recodification as necessary to maintain the definitions in alphabetic order:

**Solar Collector:** A device, structure, or part of device, the substantial purpose of which is to transform solar energy into thermal, mechanical, chemical, or electrical energy.

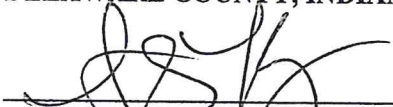
**Solar Array:** An accessory system or device that is roof-mounted or ground-mounted with poles or racks used to collect radiant energy directly from the sun for use in a solar collector's energy transformation process.

**Solar Farm:** A group of interconnected solar panels/arrays for the primary purpose of wholesale or retail sales of generated electricity, including all equipment and facilities necessary for the proper operation of the facility such as electrical collection and transmission lines, transformers, substations, energy storage containers, and operation or maintenance facilities, collectively referred to as solar farm structures.

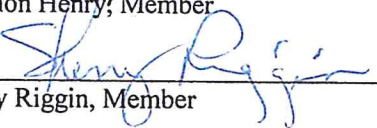
**SECTION 6.** That the Plan Commission shall establish a plan review fee similar to that used for primary approval of major subdivision plats and an amendment to the building permit fee schedule shall be prepared for adoption by the County Commissioners.

**SECTION 7.** That this Ordinance is hereby approved by the Board of Commissioners of Delaware County this 3 day of May, 2021.


**BOARD OF COMMISSIONERS  
DELAWARE COUNTY, INDIANA**

  
\_\_\_\_\_  
James King, President

  
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Shannon Henry, Member

  
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Sherry Riggins, Member

**ATTEST:**

  
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Steven Craycraft, Delaware County Auditor



## REVISIONS FOR MPC 04-21A (Ordinance 2021-013)

### REVISIONS PER PLAN COMMISSION ACTION and Incorporated into the Ordinance:

#### Section 10(C.2) SETBACKS

The setback was decreased from 100 feet to 50 feet.

#### Section 10(E) BUFFERS AND LANDSCAPING

A new second sentence was added as follows:

“Adjacent includes dwellings across the road from the solar farm.”

#### Section 10(N) GENERAL PROVISIONS

A new item 3 was added as follows:

“3. Installation of solar farm facilities must not interfere with existing drainage tiles unless mitigation measures are taken such as repairs, replacing tile, installing additional drainage features, or re-routing.”

### REVISIONS ADDED BY DELAWARE COUNTY COMMISSIONERS AND INCORPORATED INTO THE ORDINANCE (as recommended by staff and Purdue Extension Educator):

1. Add a new item 7 under A APPLICATION REQUIREMENTS that would support an economic development agreement, to read as follows:  
“7. Economic Development Agreement  
Due to the complexity of solar farm projects, the Delaware County Commissioners may elect to enter into an Economic Development Agreement to address taxing, land use, assessments and other issues related to a solar farm project.”
2. Revise the Ground Cover Section 10(G) to allow pesticide use around buildings so Item 3 reads as follows:  
“3. No pesticide use is permitted on the site, however, this provision does not apply to pesticide use around on-site buildings or other spot treatments for invasive species as may be deemed necessary to protect public health and safety. Plant material must not have been treated with systemic pesticides, particularly neonicotinoids.”
3. Section 10(E) BUFFERS AND LANDSCAPE, Item 1 Landscaping/Screening shall be revised to remove the specific requirement for tree plantings and for 3 rows of trees, 15 feet on center to more flexible language so that the first and second sentences would read as follows:  
“A minimum 50-foot buffer zone, containing native plants including trees, shrubs and pollinators, shall be maintained. If there is no existing vegetation or if the existing vegetation is inadequate to serve as a screen, native plants shall be planted to create the visual screen.”
4. With more flexibility for landscaping, the services of a professional landscape architect should be required so that the second to last sentence in Section 10(A) Item 2. Site Plan would read as follows:  
“A separate landscape plan prepared by a professional landscape architect is to be provided . . . “
5. Section 10(F) FENCING should be supplemented to clarify that the phrase “for at least ten (10) percent of the fence lines” must be evenly distributed throughout the fence lines and must coincide with identified wildlife corridors so that the second sentence would read as follows: “Solar farms that do not coincide with livestock shall use wildlife-permeable fence, fencing with larger holes than a traditional chain-link fence that allows for small- to medium-sized animals to move freely through the fence for at least ten (10) percent of the fence lines where the 10% shall be evenly distributed along each quarter mile section and at identified wildlife corridors.”
6. Section 10(G) Ground Cover is revised to remove the word “ideally” from the phrase “native to the region”.