

ORDINANCE NUMBER UDO-18-01

AN ORDINANCE AMENDING THE BRUNSWICK COUNTY
UNIFIED DEVELOPMENT ORDINANCE

The Brunswick County Board of Commissioners in regular session duly assembled does hereby ordain:

The Brunswick County Unified Development Ordinance is hereby amended as follows:

- 1). Amend Article 5, Section 5.2.3., Use Table as follows:

Use Grouping	Use	RR	R-7500	R-6000	CI	RU-I	IG	Standards
Utilities	Solar Farm	SUP			£ SUP	£ SUP	£ SUP	5.3.4.Q

- 2). Amend Article 5, Section 5.3.4.Q, Solar Farm as follows:

Q. Solar Farm

A Solar Farm ~~developed as a principal use~~ shall be permitted in accordance with Section 5.2., subject to the following:

1. Size

~~50 acres minimum.~~

2. Visibility Setbacks

Solar farms shall meet the minimum zoning setbacks for the zoning district in which located.

Solar farm equipment/structures, not including perimeter fencing, shall meet the following minimum setbacks:

- (a) ~~Solar farms with panels located at least 150 feet from an adjacent public street right of way, residentially-zoned property, or residential use shall not require screening.~~ Thoroughfare roads – 200 feet
- (b) ~~Solar farms with panels located less than 150 feet from an adjacent public street right of way must meet the requirements of Section 6.3.8, Street Buffers and Section 6.3.9, Project Boundary Buffers.~~ Residential district or residential uses – 100 feet
- (c) Institutional uses – 100 feet
- (d) Commercial districts or uses – 50 feet
- (e) Industrial districts – 25 feet
- (f) Minimum 500 feet from Scenic Byways

3. Height

20 feet maximum.

4. Screening & Buffering

- (a) Solar farms shall require screening and buffering as follows:

- (i) Street yard screening and buffer: Section 6.3.8. with Required Opacity 1.0 per Section 6.3.9.A.4.
- (ii) All other yard screening and buffers: Section 6.3.9. with Required Opacity 0.6 per Section 6.3.9.A.4.
- (iii) Where possible, existing vegetation should be utilized for screening and buffer.
- (b) Native evergreen shrubs and trees, such as wax myrtles, magnolias, red cedar, and holly species, should be used to reduce weed growth around the tree base and to control weeds in the screening area.
- (c) A buffer as wide as possible from areas managed for conservation purposes should be maintained to avoid conflict with controlled burning of such managed areas.

5. Installation and Design

- (a) Approved Solar Components – Electric solar energy system components must have a UL listing and must be designed with anti-reflective coating(s).
- (b) Compliance with Building and Electrical Code – All solar farms shall meet all requirements of the International Building Code with North Carolina Amendments.

Commentary: Compliance with the International Building Code with North Carolina Amendments includes meeting the wind load requirements for Brunswick County, which are 120 miles per hour on the western side of US 17 (Ocean Highway) and 130 miles per hour on the eastern side of US 17.

- (c) Grading and tree removal on the site should be minimized.
- (d) Natural Heritage Natural Areas should be avoided.
- (e) Minimum separation of 100 feet from named streams and rivers; and 50 feet from 404 wetlands is encouraged whenever possible.
- (f) Use of native, low-growing grasses and flowers either before (optimal) or after panel installation are strongly recommended.
- (g) Solar farms should be positioned such that they do not completely cut-off wildlife corridors.

Commentary: The N.C. Wildlife Resources Commission provides free, non-regulatory technical guidance regarding several solar farm designs. Suggestions include how to best establish low-growing native plant ground cover, security wildlife fencing and other solar farm features. Natural Heritage Natural Areas is a map layer available on the Brunswick County GIS website.

6. Application Requirements

- (a) A site plan denoting the dimensions of the parcel, proposed solar farm location (arrangement of panels), distance from the proposed area to all property lines and location of the driveway(s). No portion of the system area may encroach into the required setbacks and any buffer area(s).
- (b) The site plan should also show any street buffer(s) and any project boundary buffer(s).
- (c) Horizontal and vertical (elevation) to-scale drawings with dimensions. The drawings must show the location of the system on the property.
- (d) State and Local Stormwater permits may be required based upon ground cover.

- (e) If applicable, the applicant must apply and receive from the North Carolina Department of Transportation (NCDOT) a driveway permit, or submit documentation from NCDOT that the existing site access is acceptable for the required use prior to final project approval.
- (f) **Maintenance and Security Plan**
An approved Maintenance and Security Plan is required for all Solar Farm facilities. The Plan shall, at a minimum, include the following:
 - (i) Environmentally-friendly vegetative management practices to be employed; use of herbicides should be avoided; provided however, spot herbicide treatment may occasionally be needed to deter growth of new trees on the site.
 - (ii) Incorporate the elements and principles from N.C. Wildlife Resources Commission publication 'Recommendations for Establishing Native Pollinator Habitat on Solar Farms in North Carolina.'
 - (iii) Utilize security wildlife fencing as recommended by the N.C. Wildlife Commission; minimum seven feet in height with no barbed wire.
 - (iv) Landscape screening, fencing, gates, and warning signs shall be maintained in good condition until the facility is decommissioned.
- (g) **Decommissioning Plan**
An approved Decommissioning Plan is required for all Solar Farm facilities. The Plan shall, at minimum, include the following:
 - (i) The decommissioning obligation shall be part of the lease between the property owner and developer. The obligation shall be reviewed by County staff for compliance with standards listed below prior to signatures by party responsible for decommissioning and the landowner (if different) and recordation in the County's Registry of Deeds. Decommissioning Obligation shall include:
 - (1) Removal of solar panels, buildings, cabling, electrical components, roads, and any other associated facilities down to 36 inches below grade.
 - (2) Disturbed earth shall be re-seeded, unless the landowner requests in writing that the access roads or other land surface areas not be restored.
 - (3) Description of any agreement (e.g. lease) with landowner regarding decommissioning and acknowledgment by the land owner, that land owner shall be held ultimately responsible for decommissioning.
 - (4) List the type of panels, storage facilities and material specifications being utilized at the site.
 - (5) The identification of the party currently responsible for decommissioning.
 - (6) Estimated cost of removal prepared by a licensed engineer.
 - (7) Prior to issuance of the building permit, approved decommissioning obligation shall be recorded in the County Registry of Deeds and shall run with the land until decommissioning is completed.
 - (ii) Decommissioning Obligation shall be updated ~~every 3 years or~~ upon change of ownership and re-recorded in the County's Registry of Deeds.

- (iii) The County shall periodically require proof of the continuous operation of the solar farm from the applicant/owner.
- (iv) The solar farm shall have 12 months to complete decommissioning of the solar facility if no electricity is generated for a continuous period of 12 months. For the purpose of this section, this 12-month period shall not include delay resulting from force majeure. Failure to timely decommission the site in accordance with the obligation shall result in all actions available at law or in equity, including, but not limited to; Breach of contract, specific performance, mandatory injunctions, fines, abatement, nuisance, liens, assessments and judicial sale of the property.
- (v) ~~The decommission plan shall include a financial guarantee for the removal of the facility in an amount equal to 125% of the estimated cost as referenced in section 6.G.i. above, said guarantee to be in a form acceptable to the County Attorney's office. The financial guarantee shall remain in full force and effect until any necessary site restoration is completed to restore the site to a condition comparable to that which existed prior to the installation of the solar facility.~~