

STATE OF GEORGIA  
COFFEE COUNTY  
CITY OF DOUGLAS

ORDINANCE # 12282015

**“AN ORDINANCE TO AMEND THE UNIFIED LAND DEVELOPMENT CODE OF THE CITY OF DOUGLAS, GEORGIA, TO DESIGNATE PERMISSIBLE USES OF SOLAR ELECTRICAL SYSTEMS; TO REPEAL ALL ORDINANCES IN CONFLICT THEREWITH; AND FOR EFFECTIVE DATE AND FOR OTHER PURPOSES”**

BE IT ORDAINED by the Mayor and Board of Commissioners of the City of Douglas in regular meeting assembled and pursuant to lawful authority thereof, the Unified Development Code of the City of Douglas, Georgia, is amended and stands amended as follows:

Add Chapter 13, Sections 1- 7; Solar Electrical Systems

Section 1: Definitions:

**Glare:** The effects produced by light with intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility."

**Photovoltaic (PV) System:** A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells that generate electricity whenever light strikes them. Included in a PV system are the solar energy generation mechanisms (e.g., panels or other assemblies of solar electric cells), inverters (devices that convert Direct Current electricity produced by the system to usable Alternating Current), batteries and battery systems that store electrical energy from the PV system for future use, meters, and electric transmission wires and conduits that facilitate connections with users and/or the local power grid.

**Solar Array:** A number of photovoltaic modules or panels that generate solar electricity, assembled or connected together to provide a single electrical output.

**Solar Array, Tracking:** A solar array that follows the path of the sun to optimize the amount of solar radiation received by the device. A tracking solar array may be ground mounted or building mounted.

**Solar Access Easement:** A recorded easement, the purpose of which is to secure the right to receive sunlight across real property of another for continued access to sunlight necessary to operate a solar energy system.

**Solar Energy:** Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector or solar energy system.

***Solar Energy Facility:*** The area of land devoted to solar energy system installation. A solar energy facility may include an interconnection with the local utility power grid for distribution to more than one property or consumer in the electricity market as a commercial venture. This includes the term "solar farm."

***Solar Energy System:*** The components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The term applies, but is not limited to, photovoltaic (solar electric) systems and thermal solar energy systems.

***Solar Energy System, Building Mounted:*** A solar energy system, which may include solar thermal panels, solar hot water system panels, and photovoltaic panels, which are mounted to a building or structure, to provide energy primarily for on-site use. Building-mounted solar panels may be flush-mounted (i.e., flush to the surface of a building roof or building facade in a manner that the panel cannot be angled or raised), or as one or more modules fixed to frames which can be tilted or automatically adjusted at an optimal angle for sun exposure. A mounted solar energy system is accessory to the building or structure.

***Solar Energy System, Ground Mounted:*** A solar energy system that is directly installed on (mounted to) the ground and is not attached or affixed to any structure.

***Solar Energy System, Thermal:*** A solar energy system that directly heats water or other liquid using sunlight including the use of heated liquid for such purposes as space heating and cooling, domestic hot water, and heating pool water.

***Solar Farm:*** A solar energy facility, typically with multiple solar arrays, designed and used for the purpose of generating electric energy via a photovoltaic system.

## **Section 2.                      Solar Energy System, Building Mounted.**

A building-mounted solar energy system shall be subject to the following regulations:

- (a)    Location  
      Building mounted solar energy systems shall be allowed in all zoning districts.
- (b)    Placement.
  - 1.        No solar energy system shall be mounted or affixed to any freestanding wall or fence.
  - 2.        Panels and building mounts shall be installed per manufacturer's specifications.
  - 3.        In residential zoning districts, the townhouse developments, the office institutional district, the neighborhood business district, and in the central business district, a solar energy system for aesthetic reasons, shall not be located on the front slope of a pitched roof of a

principal residential structure unless no other location for the solar energy equipment is feasible. The city may require sun and shadow diagrams specific to the installation to ensure compliance with this provision.

4. Glare: All solar panel energy systems shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways.

(c) Height.

Building-mounted solar panels or systems shall not exceed four feet above the height of any principal building on the site.

(d) Permits and Code Compliance.

A building permit shall be required for installation of all building-mounted solar energy systems.

### **Section 3 Solar Energy System, Ground Mounted**

A ground-mounted solar energy system shall be subject to the following regulations:

(a) Location

**Permitted Districts:**

AG, Agricultural District

CG, Commercial District

M-1, M-2, Industrial District

**Prohibited Districts:**

R-15, Single Family Residential District

R-12, Single Family Residential District

R-M, One, Two and Multiple Family Residential District

P-D, Planned Unit Development

R-P, Residential Professional

T-C, Town Center

N-C, Neighborhood Commercial

H-D, Historic District

G-W, Gateway

(b) Placement.

1. A ground-mounted solar energy system shall not be located within the front yard set-back area. The ground mounted system shall not be located within 30 feet of the road fronting the piece of property.

2. A ground-mounted system shall not be located over a septic system, leach field area or identified reserve area unless approved by the Health Department.
3. If located in a floodplain or an area of known localized flooding, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located above the base flood elevation.
4. Panels and ground mounts shall be installed per manufacturer's specifications.
5. All ground-mounted solar energy systems shall be placed so that concentrated solar radiation or glare does not project onto nearby structures or roadways.

(c) Maximum Area Coverage.

A solar energy system shall not exceed 50% of the footprint of the principal building served. For residential properties located in agricultural districts, a ground-mounted solar energy system shall not exceed 25% of the footprint of the principal building served.

(d) Height.

The maximum height of a ground-mounted solar energy system shall not exceed 8 feet.

A building permit is required for any ground-mounted solar energy system and for the installation of any thermal solar energy system.

**Section 4. Solar Energy Facility or Solar Farm.**

In districts where permitted, a "solar energy facility" or "solar farm," as defined in Section 18.06, shall be subject to the following regulations:

(a) Location

**Permitted Districts:**

AG, Agriculture  
M-1, Light Industrial  
M-2, Industrial

**Prohibited Districts:**

R-15, Single Family Residential District  
R-12, Single Family Residential District  
R-M, Residential Mixed District

P-D, Planned Development  
R-P, Residential Professional  
T-C, Town Center District  
N-C, Neighborhood Commercial District  
H-D, Historic District  
G-W, Gateway

(b) Mounting.

1. Solar panels or solar arrays shall be mounted onto a pole, rack or suitable foundation, in accordance with manufacturer specifications, in order to ensure the safe operation and stability of the system. The mounting structure (fixed or tracking capable) shall be comprised of materials approved by the manufacturer, which are able to fully support the system components, in accordance with applicable building permit requirements. Electrical components of the facility shall meet applicable electrical code requirements, and all electrical wires and lines less than 100kV that are used in conjunction with the solar energy facility shall be installed underground.
2. Multiple mounting structures shall be spaced apart at the distance recommended by the manufacturer to ensure safety and maximum efficiency.

(c) Setbacks.

A solar energy facility and its appurtenant components and structures shall be set back a minimum of 50 feet from all property lines and 100 feet from any residence.

(d) Placement.

1. When located in agricultural zoning districts, the solar energy facility shall be located as much as possible to minimize impacts on prime agricultural soils.
2. If located in a floodplain or an area of known localized flooding, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located above the base flood elevation.
3. Components of the facility shall not be located over a septic system, leach field area or identified reserve area unless approved by the Health Department.

(e) Screening.

The facility shall be fully screened from adjoining properties and adjacent roads using the natural topography or by installation of an evergreen buffer capable of reaching a height of 6 feet within three years of planting, with at least 75% opacity at the time of planting.

(f) Height.

1. Freestanding solar panels or solar arrays shall not exceed 25 feet in height as measured from the grade at the base of the structure to the highest point.
2. Mounted solar panels or solar arrays shall not exceed eight feet above the apex of the structure on which it is mounted or the maximum height for buildings in the zoning district in which it is located.

(g) Security.

1. Unless 24-hour security guards and video surveillance is provided at the installation, the solar energy facility shall be enclosed by a security fence that is no less than 6 feet or greater than 8 feet in height. Such fence shall not be less than six feet in height which will be measured from the top of the fence to the ground and measured 6 feet at all points. This does not include barbed wire.
2. Access gates and equipment cabinets must be locked when not in use.

(h) Noise.

Inverter noise shall not exceed 40dBA, measured at the property line.

(i) Glare and Lighting.

1. The solar energy system components shall be designed with an anti-reflective coating or at least shall not produce glare that would constitute a nuisance to occupants of neighboring properties, aircraft, or persons traveling adjacent or nearby roads.
2. If lighting is required, it shall be activated by motion sensors, fully shielded and downcast type where the light does not spill onto any adjacent property or into the night sky.

- (j) Maintenance and Upkeep.

The operator of the facility shall maintain the facility, including all buffer screening, in compliance with the approved plans and shall keep the facility free from weeds, dust, trash and debris.

- (k) Site Plan Review and Development Permit.

A site plan reviewed and approved by the Planning Division shall be required prior to issuance of a development permit. In addition to requirements for site plans generally, the site plan submission shall include the following information: The proposed location and dimensions of all solar panels, inverters, existing and proposed structures, screening, fencing, property lines, parking, access driveways and turnout locations, ancillary equipment, transmission lines, vegetation, the location of any residences on site and within 100 feet of the perimeter of the facility, the location of any proposed solar access easements, and standard drawings of solar energy system components.

- (l) Additional Submission Requirements.

In addition to requirements for information to be provided during the site plan review and development permitting process, the facility shall not be approved for operation until the following are submitted:

1. Copy of all lease agreements and solar access easements.
2. Where interconnection to an electric utility grid is proposed, the applicant shall submit evidence that the electrical utility provider with appropriate jurisdiction has been informed of the customer's intent to install a solar energy facility. A copy of the approval from the local utility must also be provided before operation of an interconnected facility will be authorized.
3. A decommissioning plan for the anticipated service life of the facility or in the event that the facility is abandoned or has reached its life expectancy.
4. The City may require other studies, reports, certifications, and/or approvals be submitted by the applicant to ensure compliance with this section.

**Section 5. Decommissioning.**

- (a) The owner of a solar electrical system is required to notify the City of Douglas Building Inspector immediately upon cessation or the discontinuation of the

operation. The solar electrical system shall be perceived to be discontinued or abandoned if no electricity is generated by such system for a period of twelve continuous months.


- (b) The solar electrical system owner shall then have twelve months in which to dismantle and remove the system including all solar related equipment or apparatuses related thereto included but not limited to buildings, cabling, electrical components, roads, foundations and other facilities from the property. If the owner fails to dismantle and/or remove the solar electrical system within the established time frames, the municipality may complete the decommissioning at the owner's expense."

**Section 6.** Any and all ordinances or parts of ordinances in conflict herewith shall be and the same are hereby repealed to the extent of such conflict.

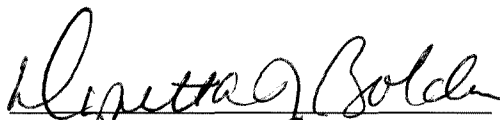
Section 7. Effective Date.

OFFERED AND READ FOR THE FIRST TIME at a regular meeting of the Mayor and Board of Commissioners of the City of Douglas, Georgia, on December 14, 2015, and read for the second time and passed and ordained at a regular meeting of the Mayor and Board of Commissioners, after properly advertising the caption as required under the Charter of the City of Douglas, Georgia, on December 28, 2015.

CITY OF DOUGLAS, GEORGIA

  
James H. Dennis, Mayor

ATTEST:

  
Wynetta J. Bolder