b. A tree-harvesting notification has been submitted to the Tax Commissioner, as required by State law;

c. There is a contract for delivery of the trees between the tree harvesting company and an end user, such as to a mill or wood pulp company;

d. Best Management Practices required by the Georgia Forestry Commission shall be followed. This can be evidenced by a contract between the tree harvesting company and the property owner (the seller) that is consistent with the form and content recommended by the Georgia Forestry Commission; and

e. The tree harvester is currently qualified as a Master Timber Harvester by the Georgia Forestry Commission at the time of the tree harvesting.

Sec. 342.02. **Restriction on clearance along streams.**

River and stream buffers required under the Environmental Protection Article of this Development Code shall be protected from all on-site activity and remain in their undisturbed natural state.

Sec. 342.03. **Restriction on development approval of recently cleared land.**

A preliminary plat for any type of subdivision or a site plan for any type of multi-family or nonresidential development shall not be approved if any portion of the property has been cleared of trees within 3 years prior to such approval request. This restriction may be waived by the Board of Commissioners upon a finding that:

a. The tree removal occurred as a bona fide agricultural activity; and,

b. A minimum basal area of at least 50 square feet per acre, distributed evenly throughout the property, was retained on the property at the time of tree removal, as certified by a qualified arborist or forester.

Sec. 343. Utility substations and solar energy systems.

Sec. 343.01. Static electric transformers and gas regulator stations.

Static electric transformers and gas regulator stations are subject to the following restrictions:

a. In the R-1 zoning district, the structures are placed not less than 50 feet from any property line (25 feet in the R-2 zoning district).

b. The structures are enclosed by a chain link security fence at least 8 feet high.

c. No vehicles or equipment are stored on the premises.

d. The lot is landscaped between the security fence and all property lines as follows:

(1) The front yard shall be heavily landscaped as defined in the Landscaping and Buffers Article of this Code; and either

(2) For any electrical power substation connected directly to a 115 kv transmission line (or greater), a landscape buffer meeting the requirements for an industrial use in the Landscaping and Buffers Article of this Code, must be planted and maintained along all side and rear property lines; or

(3) For all other utility substations, a buffer at least 10 feet wide meeting the requirements for a landscape buffer in the Landscaping and Buffers Article of this Code, must be planted and maintained along all side and rear property lines.

Sec. 343.02. **Definitions related to solar energy systems.**

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

Sec. 343.03. **Solar energy systems.**

It is the purpose of this regulation to promote the safe, effective and efficient use of solar energy development and operation. The installation and construction of solar systems shall be subject to the following development and design standards:

a. A solar energy system shall not be used to display advertising, including signage, streamers, pennants, spinners, reflectors, ribbons, tinsel, balloons, flags, banners or similar materials. The manufacturers' or installers' identification and appropriate warning signage shall be posted at the site in a clearly visible manner.

b. No solar energy system shall be mounted to a wall or fence.

c. No solar energy system or its components shall be located over a septic system leach field area or identified reserve area unless written approval is granted by the Environmental Health Department.

d. The solar energy system components shall be designed with an antireflective 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.

e. No solar energy system shall be installed until evidence has been presented to the Planning Department that the electric utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

f. Any solar energy system installed to be used by someone other than the owner of the property shall provide an affidavit or evidence of agreement between the lot owner and facility's owner or operator confirming the facility owner or operator has permission of the property owner to install and utilize solar panels.

Sec. 343.04. **Solar energy farms.**

The installation and construction of solar energy farms shall be subject to the following:

a. A solar farm installation shall be permitted as a Special Use in the Agricultural (AG) zoning district, and allowed by right in the Industrial (I) zoning district.

b. A solar farm installation shall be located on 10 or more acres.

Sec. 343.05. **Solar energy farm installation and construction.**

a. 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 which are able to fully support the system components and are approved by the manufacturer, 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.

b. Setbacks.

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

c. Placement.

No structure may be installed within a state or local state waters buffer or within conservation corridors. If located in a floodplain or an area of known localized flooding, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located 3 feet above the base flood elevation. All wiring or transmission points within the floodplain shall be NEMA 3R or watertight.

d. 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.

e. 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.

f. Security.

(1) Unless 24-hour security guards or video surveillance is provided at the installation, the solar energy facility shall be enclosed by a security fence no less than 6 feet and not greater than 8 feet in height.

(2) Access gates and equipment cabinets must be locked when not in use.

(3) Signs shall be installed on all gates, and every 50 feet of the security fencing stating, "**DO NOT ENTER – SOLAR POWER GENERATING FARM**."

g. Noise.

Inverter noise shall not exceed 40dBA, measured at the property line. Mitigation noise barriers may be approved on an individual basis by the Development Review Committee.

h. Lighting.

If lighting is required, it shall be activated by motion sensors. Lighting shall be fully shielded and downcast so that light does not spill onto any adjacent property or into the night sky.

i. Maintenance and upkeep.

Systems shall be maintained in accordance with manufacturer's specifications. 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.

j. Site Plan Review and Development Permit.

A site plan reviewed and approved by the Development Review Committee 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, including engineered drawings and documentations for footings and array structural supports.

k. 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 has been informed of the customer's intent to connect with the local electric utility grid. A copy of the approval from the utility company providing connection to the grid 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 County may require other studies, reports, certifications, and/or approvals be submitted by the applicant to ensure compliance with this section.

l. Removal of obsolete or unused systems.

(1) All obsolete or unused systems shall be removed. Any structure or equipment associated with the solar farm that is not operated for a continuous period of one year shall be considered an obsolete or unused system and decommissioned per the approved decommission plan.

(2) The site shall be restored to as natural a condition as possible within six (6) months of the removal.

Sec. 343.06. **Solar energy system, building mounted.**

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

a. Placement.

(1) Panels and building mounts shall be installed per manufacturer's specifications.

(2) Roof-mounted solar panels installed on a building or structure with a sloped roof shall not project vertically more than the height requirements for the district in which they are located. The panels shall not be located within three feet of any peak, eave, or valley of the roof to maintain pathways of accessibility.

(3) In residential zoning districts, 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 county may require sun and shadow diagrams specific to the installation to ensure compliance with this provision.

b. Height.

Building-mounted solar panels or systems shall not exceed the apex of the roof line or parapet on the building on which the system is mounted.

c. Permits and code compliance.

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

d. Signage.

All entry ways onto a roof on which a building mounted system is to be placed shall provide a notice that the roof contains solar panels.

Sec. 343.07. **Solar energy system, ground mounted.**

a. Placement.

(1) A ground-mounted solar energy system shall not be located within the required front yard of a lot but shall be located in the side or rear yards only. Side and rear setbacks shall meet the setbacks for principal buildings for the district in which they are located.

(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) Panels and ground mounts shall be installed per manufacturer's specifications.

b. Maximum area coverage.

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

c. Height.

The maximum height of a ground-mounted solar energy system shall not exceed 20 feet in height above the ground.

d. Permitting.

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

Sec. 344. Veterinary offices, clinics and animal hospitals.

a. All kennels, pens, cages, runs and other facilities for containment of animals shall be located within fully enclosed buildings with adequate provisions to insure that noise, insects and odors are completely contained within said buildings.