

ARTICLE XXX: HENDERSON COUNTY SOLAR ENERGY SYSTEM REGULATIONS

Section 30.01. Design Standards

The components and subsystems required to convert solar energy into electric energy are suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing. Solar energy systems are divided into two (2) classes for these zoning regulations.

a. Level 1 Solar Energy System. A roof-mounted system on any code-compliant structure or any ground-mounted system on an area of up to fifty (50) percent of the footprint of the primary structure on the parcel but not more than one (1) acre and not more than twenty-five (25) feet tall or any building integrated system (i.e., shingle, hanging solar, canopy, etc.)

b. Level 2 Solar Energy System. Any ground-mounted system not included in a Level 1 SES and meets the following area restrictions:

1. In an Agricultural zone, the area of the SES shall not exceed one acre in size and shall require a building permit issued by the Henderson County Codes Department.

2. In an Industrial zone, an SES of any size shall require a site plan approved by the Henderson City-County Planning Commission. If no building permit is issued within one year of the approved site plan, then the site plan is subject to another review by the Planning Commission. (Updated June 2023)

Section 30.02. Requirements

Solar Energy Systems (SES) shall comply with the following criteria:

a. The height of any ground-mounted SES shall not exceed twenty-five (25) feet as measured from the highest natural grade below each solar panel (excludes utility poles, substations and antennas constructed for the project).

b. Setback requirements for Level 1 shall comply with the parcel's zoning classification.

c. Setback requirements for Level 2 SES shall be as follows: (1) All equipment shall be at least twenty-five (25) feet from the perimeter property lines of the project area; (2) No interior property line setbacks shall be required if the project spans multiple contiguous properties;; (3) All equipment shall be located at least one hundred (100) feet from any residential structure and; the maximum height of any individual component will be 25 feet measured from the local ground level of the component.

d. All Level 2 SES shall be screened with a seven (7) foot-tall fence and, to the extent reasonably practicable, a visual buffer that provides reasonable screening to reduce the view of the SES from residential dwelling units on adjacent lots (including those lots located across a public right of way). A vegetation screening plan to reduce the view of the SES from residential dwelling units on adjacent lots will be submitted for approval of the Henderson City-County Planning Commission. The existing natural tree growth and natural land forms along the SES perimeter may create a sufficient buffer and shall be

preserved when reasonably practicable. When no alternative vegetation screening plan is approved by the Henderson City-County Planning Commission, a double row of staggered evergreen trees will be planted 15' on center from adjacent non-participating residential dwellings, including the outdoor living space immediately near residential dwellings. Parcel boundaries with no proximity to residential dwellings shall not require screening. The proposed evergreen trees shall be placed on the exterior of security fencing. The use of barbed wire or sharp pointed fences shall be prohibited in or along any boundary adjoining residential properties.

e. There shall be no signs permitted except those displaying emergency information, owner contact information, warning or safety instructions or signs that a federal, state, or local agency requires. Such signs shall not exceed 5 square feet in area.

f. Excessive lighting shall be prohibited except that federal or state regulations require.

g. Decommissioning of Level 2 SES shall be as follows:

1. The developer shall post a Surety Bond, or other form of Security acceptable to the County, for the site's abandonment and if the Commission must remove the facility. Abandonment shall be when the SES ceases to transfer energy continuous for twelve (12) months. The surety bond or other form of security, shall be two (2) percent of the total project cost re-calculated every three (3) years during the project life.

2. A decommissioning plan shall be submitted at the time of application by the developer responsible for decommissioning and must include the following: (1) Defined conditions upon which the decommissioning will be initiated. i.e. there has been no power production for 12 months, the land lease has ended, or succession of use of abandoned facility, etc.; (2) Removal of all non-utility owned equipment, conduit, structures, fencing, roads, and foundations to the depth of three (3) feet; (3) Restoration of the property to substantially similar physical condition that existed immediately before construction of the SES; (4) The time frame for completion of decommissioning activities; (5) the party currently responsible for decommissioning, and; (6) Plans for updating the decommissioning plan.

The components and subsystems required to convert solar energy into electric energy are suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing. Solar energy systems are divided into two (2) classes for zoning regulations.

A. Level 1 Solar Energy System. A roof-mounted system on any code-compliant structure.

1. Level 1 Solar Energy System are allowable in all zones other than those listed in subsections (1) and (2) above.

B. Level 2 Solar Energy System. Any ground-mounted system not included in a Level 1 SES and meets the following area restrictions and requirements:

1. Level 2 Solar Energy Systems are only allowed in Light Industrial (M-1) and Heavy Industrial (M-2) zones.

2. In an Agricultural zone, the area of the SES shall not exceed one acre in size and shall require a building permit issued by the Henderson County Codes Department.
3. The height of any ground-mounted SES shall be at most twenty-five (25) feet as measured from the highest natural grade below each solar panel (excludes utility poles and antennas constructed for the project).
4. Setback requirements for Level 1 shall comply with the parcel's zoning classification.
5. No signs are permitted on Level 2 SES except those displaying emergency information, owner contact information, warning or safety instructions or signs that a federal, state, or local agency requires. Such signs shall not exceed 5 square feet in area.
6. In an Industrial Zone, a Level 2 SES shall require a site plan approved by the Henderson City-County Planning Commission and a building permit by the Henderson County Codes Department.
7. Lighting on Level 2 SES shall be prohibited except that federal or state regulations require.

C. Level 2 Solar Energy System. Any ground-mounted system greater than one (1) acre for agricultural zone or exceeds ten acres in size for an industrial zone satisfies the parameters for a Level 2 SES and must meet the following restrictions and requirements.

1. Level 2 SES are only allowed in Light Industrial (M-1) and Heavy Industrial (M-2) zones.
2. The height of any ground-mounted Level 2 SES shall be at most twenty-five (25) feet as measured from the highest natural grade below each solar panel (excludes utility poles and antennas constructed for the project).
3. Setback requirements for Level 2 SES shall be as follows: (1) All equipment shall be at least fifty (50) feet from the perimeter property lines of the project area; (2) No interior property line setbacks shall be required if the project spans multiple contiguous properties; (3) All equipment shall be located at least one hundred (100) feet from any residential structure and; the maximum height of any individual component will be 25 feet measured from the local ground level of the component.
4. All Level 2 SES shall be screened with a 7' tall fence and a double row of staggered evergreens (minimum 8' height at planting) planted 15' on center from any public right-of-way or adjacent residential use. The evergreens shall be located outside of the fence. The use of barbed wire or sharp pointed fences shall be prohibited in or along any boundary adjoining residential properties.

5. No signs are permitted on Level 2 SES except those displaying emergency information, owner contact information, warning or safety instructions or signs that a federal, state, or local agency requires. Such signs shall not exceed 5 square feet in area.

6. Level 2 SES shall require a site plan approved by the Henderson City-County Planning Commission and a building permit by the Henderson County Codes Department.

7. Lighting on Level 2 SES shall be prohibited except that federal or state regulations require.

D. Decommissioning of Level 2 SES shall be as follows:

1. The developer shall post a Surety Bond with the Henderson City-County Planning Commission for the site's abandonment and if the Commission must remove the facility. Abandonment shall be when the SES ceases to transfer energy continuously for twelve (12) months. The surety bond shall be two (2) percent of the total cost of the installed SES.

2. A decommissioning plan shall be submitted at the time of application by the party responsible for decommissioning and the land owner and must include the following: (1) Defined conditions upon which the decommissioning will be initiated. i.e. there has been no power production for 12 months, the land lease has ended, or succession of use of abandoned facility, etc.; (2) Removal of all non-utility owned equipment, conduit, structures, fencing, roads, and foundations; (3) Restoration of the property to its original condition before the development of the SES; (4) The time frame for completion of decommissioning activities; (5) the party currently responsible for decommissioning, and; (6) Plans for updating the decommissioning plan.