Accessory Solar Energy System Permitting Checklist

The checklist below contains the minimum information and details required to be submitted when applying to install an accessory solar energy system. An accessory solar energy system is designed to meet or offset energy demands of the principal use rather than for the purpose of supplying or distributing electrical energy to users, a customer or customers. Accessory solar energy systems are permissible in all zoning districts as an accessory use subject to the requirements of UDO Subsection 15.64 Solar Energy Systems, Accessory (A-28). The intent of using the checklist is to provide transparent and well-defined information to minimize the number of required revisions, improve permit application quality, and accelerate the application and review process.

Permit Required
Please note, a permit must be obtained prior to the start of any work. Within the Town of Boone, this single permit will cover the review of building, electrical, fire (commercial projects only) and zoning. Please see “Submittal” on page 2 for more information.

Additional Documents Required (Digital)

☐ Construction Drawings
Plans shall show PV array configuration, wiring system, overcurrent protection, inverter, disconnects, required signage, AC connection to building, and attachment detail for roof-mounted or footing details for ground-mounted. Additionally, commercial rooftop solar projects shall show fire access and pathways.

Note: A NC Registered Engineer will be required to seal the structural design at the time of application if:
☐ The weight of the PV system exceeds 4 pounds per square foot (4 psf)
☐ The roof already has more than a single layer of asphalt shingles
☐ The roofing material is something other than asphalt shingles or metal

☐ Specification Sheets & Installation Manuals
Provide one set of specification sheets and manuals for all manufactured components including, but not limited to, PV modules, inverter(s), combiner box, disconnects, and mounting system.

☐ Site Plan (Ground-Mounted Accessory Solar Energy Systems Only)
Site plan demonstrating location of the ground mounted accessory solar energy system and the distance of the system to all property lines and street rights-of-way. Please identify any required landscape street yards and buffers.

Note: All ground-mounted solar energy systems shall meet a street setback requirement of fifteen feet (15') from the street right-of-way line and seven feet (7') from any interior lot line, and are not allowed within any required landscape buffer.

Zoning Requirements

☐ Rooftop Solar Energy Systems: The highest point of the system shall be permitted to exceed the district height limit of up to fifteen feet (15') above the rooftop to which it is attached. Roof-mounted solar energy systems are not subject to the limitations in Subsection 14.03.07(G).

☐ Ground-mounted Solar Energy Systems:
☐ shall meet the building street setback requirement of fifteen feet (15') from the street right-of-way line and seven feet (7') from any interior lot line;
☐ maximum lot coverage shall not exceed ten percent (10%) of the lot;
☐ must be clearly subordinate to the principal structure in all dimensional aspects and shall not exceed fifteen feet (15') in height;
☐ applicant allowed five percent (5%) of additional impervious surface before additional stormwater requirements, set forth in UDO Article 21 Stormwater Management, are required;
are not allowed within any easement unless expressly allowed or within any required landscape buffer.

Permit Fees
There are no fees associated with the installation of an accessory solar energy system in order to facilitate online permitting with existing systems.

Contractor Requirements
Licensed electrical contractor per the applicable classification.

Note: NC General Statutes 87-43 states that no person, partnership, firm or corporation shall engage, or offer to engage, in the business of electrical contracting within the State of North Carolina without having received a license in the applicable classification described in G.S. 87-43.3 from the State Board of Examiners of Electrical Contractors. Electrical contracting shall be defined as engaging or offering to engage in the business of installing, maintaining, altering or repairing any electric work, wiring, devices, appliances or equipment.

Submittal
Online: The Town accepts applications for accessory solar energy systems online utilizing the following application link: Accessory Solar Energy System Application; or Paper Submittal: The Town also accepts paper applications submitted through the office for those not wishing to use the online application portal. Please use the following forms as applicable: Accessory Solar Energy System Permit Application (PDF), Contractor Regulation Sheet (PDF), Owner Exemption Affidavit (PDF). Note: Commercial project installations must comply with the 2018 NC Building Code and the 2018 NC Fire Code. Residential project installation installations must comply with the 2018 Residential Code.

Review Time
The Town of Boone is committed to providing a timely review of accessory solar energy system applications. Best efforts are made to review complete applications within the times prescribed below.

- Residential Projects: 3 business days
- Commercial Projects: 10 business days

Note: These review times are typical, not guaranteed. The Town of Boone has a staff of dedicated individuals, but workloads, vacations, and sick leave can cause unforeseen delays that may impact turnaround time. Certain circumstances can prolong the permit turnaround time including: applicant does not submit all required information; contractor applying for permit is not a licensed contractor; equipment is not fully listed

Permit Status
To check your permit status please call (828-268-6960) or email (planning@townofboone.net) the Town of Boone Planning and Inspections Department.

Permit Expiration
All permits expire six (6) months after date of issue. Failure to start the work authorized by a permit within this six-month period renders the permit invalid and a new permit must be obtained. Once work begins, noticeable progress must continue until completion.

Inspection Process
To schedule an inspection, call 828-268-6960. Typically, inspections are completed within 24 hours. If you wish to schedule a specific time with the inspector, please call the inspector the morning of your requested inspection. Generally, there is only a final inspection required for accessory solar energy systems where both building and electrical finals are completed. The Building Inspector will be verifying that the system was constructed in accordance with the approved plans and specifications.

Note 1: Any engineered systems will require a signed and sealed report from the NC licensed engineer. The report shall attest to the code compliance of installation of the structural support system. This report shall be made available prior to or at the final inspection.

Note 2: Once final inspections are completed; the Inspector turns over to the appropriate power provider (New River Light & Power or Blue Ridge Energy) a power connection slip notifying the power provider that the system has passed all required inspections.