Zoning Compliance Application

Town of Biltmore Forest

Name Stanley Ezquerro

Property Address 22 Cedarcliff Rd

Phone (828) 357-7486 Email permits@sugarhollowsolar.com

Parcel ID/PIN Number 964762675600000

ZONING INFORMATION

Current Zoning R-1

Maximum Roof Coverage 5,500 square feet (Up to 1.5 acres) Proposed Roof Coverage Total 1012

Maximum Impervious Surface Coverage Up to 1 acre (27.5 percent of lot area) Proposed Impervious Surface Coverage 0

Front Yard Setback 60 feet (R-1 District)

Side Yard Setback 20 feet (R-1 District)

Rear Yard Setback 25 feet (R-1 District) Building Height 25

Description of the Proposed Project addition of 12 Solar PV modules to an existing system as well as adding battery backup

Estimated Start Date 5/1/2023

Estimated Completion Date 5/5/2023

Estimated Cost of Project \$10,000.00

Supporting Documentation (Site Plan, Drawings, Other Information) OLESKY.SAM.ONE.pdf

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Lot Size 1.25999999 acres

Gravitt Engineering, PLLC.

March 20, 2023

Mr. Harrison Sytz Sugar Hollow Solar 2 Miller Rd East Asheville, NC 28805 Re: Solar PV System at the OLESKY Residence 22 Cedarcliff Rd. Asheville, NC 28803

Dear Mr. Sytz,

Pursuant to your request, I have examined the structure at the address listed above regarding its suitability for the additional (12) solar photovoltaic (PV) panels specifically proposed by Sugar Hollow Solar. The (12) additional panels are to be installed on the shed-dormer of the house. I've observed that the roof structure of the shed-style dormer is composed of 2x10 stick-framed rafters at 2'-0" on center with an OSB roof deck and standing-seam metal roof. The roof is approximately 2 years old and appears to be in good condition.

It is my opinion that the existing roof structure will safely support the additional loading incurred by the additional (12) solar panels and racking system and that the structure will continue to meet the minimum live loading standards defined in the **2018 North Carolina Residential Building Code**. Opinion-supporting data is as follows:

Elevation

Elevation	2172 ft
ASCE 7-10 values: wind speed 115 mph, risk	II, exposure category B
Additional / Total rooftop system weight:	670 lb / 2184 lb
Additional / Total number of attachments:	24 / 88
Distributed weight:	2.6 psf

The modules, roof attachment feet, rail and associated hardware shall be installed in accordance with the manufacturer's instructions. Specifically, (24) Snapnrack Wide Base standing seam clamps shall be installed according to the manufacturer's instructions with a typical clamp spacing of 4'-0" and a maximum spacing of 6'-0".

The scope of this report is limited to the matters discussed herein. No opinion is offered, and none should be inferred regarding either the watertightness of the rooftop attachments, the functionality of electrical equipment, or the structure as a whole.

Please feel free to contact me with any questions.

Sincerely,

John Gravitt, P.E. Gravitt Engineering, PLLC 828.606.6963 jkgravit@gmail.com







