

76 North Meadowbrook Drive Alpine, UT 84004 office (201) 874-3483 swyssling@wysslingconsulting.com

April 27, 2023

Top Tier Solar Solutions 1530 Center Park Drive Charlotte, NC 28217

> Re: Engineering Services Dixon-Thibodeaux Residence 60 Aaron Drive, Fuguay-Varina, NC 7.505 kW System

To Whom it May Concern,

Pursuant to your request, we have reviewed the following information regarding ground mount solar panel installation at the above referenced location:

- Structural drawings prepared by IronRidge identifying specific racking layout and components for the proposed ground mount system.
- Design drawings of the proposed system including a site plan, and details for the solar panels. This information was prepared by Top Tier Solar Solutions and will be utilized for approval and construction of the proposed system.

Based on our review of the Photovoltaic Array installed at 4 modules high and 5 modules wide, the PV arrays shall have a pier spacing of 9'-0" feet max north/south and 10'-1" max east/west. Based on a wind speed of 115 mph, Exposure C and a ground snow load of 10 PSF, it was determined that the minimum required footing depth is 48 inches below grade with a 18" diameter concrete footing. The footing size based upon the worst case loading due to horizontal and vertical wind loading.

Based on the above evaluation, it is the opinion of this office that with appropriate construction the footing and post assembly will adequately support the proposed solar array. This evaluation is in conformance with the North Carolina Building Code (2018), current industry standards, and is based on information supplied to us at the time of this report.

This certification is specific to the footing design for the solar system and does not include the racking system. Racking system and components designed and specified by the manufacturer (IronRidge).

Should you have any questions regarding the above or if you require further information do not hesitate to

contact me.

Scott E. Wyssling, PE North Carolina License

46546 COA #P-2308

THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY SCOTT WYSSLING, PE USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CO YGINES IT

Wyssling Consulting, PLLC 76 N Meadowbrook Drive Alpine UT 84004 COA # P-2308