

September 5, 2024

Kane County Government 719 S. Batavia Ave, Bldg A Geneva, IL 60134

RE: Big Timber Solar Farm Big Timber Road Hampshire, IL 60140

To Whom it May Concern,

Kimley-Horn and Associates, Inc., serves as the engineering consultant for Surya Powered LLC. is seeking to rezone the current property from a farming zone to a special use zone, to build a commercial solar energy facility in Kane County, Illinois. The Project, Big Timber Solar Farm, is sited at the southeast corner of Higgins Road (Illinois RTE 72) and Big Timber Road (Kane County RTE 21). The Project is a proposed 7.5 MWAC commercial solar energy facility.

As required by the local ordinance, a structural engineer registered in the State of Illinois must certify that the soils and subsurface conditions at the site can support the apparatus, given local soil, subsurface and climate conditions. We are writing today to state that it is our professional opinion that the soil conditions at the site are satisfactory for development and construction of a typical ground-mount solar facility. The soils fall into the NRCS unified soil classifications of 67A, 134C2, 149A, 152A, 662A, 668A, and 668B which are mostly comprised of silt loam, clay loam, and silty clay loam.

The foundations at a solar facility are most often driven steel piles and concrete slabs. The piles are used to support the solar racking and solar modules and the slabs are used to support larger equipment such as inverters, transformers and other electrical equipment as required. The foundations will be designed per a site-specific geotechnical report that contains foundation requirements. For weaker soils, the piles are often larger and driven deeper than for strong soils. The slabs will be designed to avoid settlement and often require subgrade preparation such as replacement of soils near the surface, placing structural fill/gravel, and compaction. The subgrade recommendations will also be provided in the final geotechnical report. Kimley-Horn has provided engineering on over 1,500 solar projects across the country. Our experience from these projects suggests that the soils at the proposed solar site are satisfactory for construction of a solar facility. The final details of the foundations will be determined after the geotechnical investigation and after final engineering design.

If you have any questions based on the notes above, please let us know.

Sincerely,

Kimley-Horn and Associates, Inc.

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