

**COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING**

**In the Matter of the Electronic Application of)
Horseshoe Bend Solar, LLC for a Certificate of) Case No. 2020-00190
Construction for an Approximately 60 Megawatt)
Merchant Electric Solar Generating Facility in Green)
County, Kentucky Pursuant to KRS 278.700 and 807)
KAR 5:110)**

**HORSESHOE BEND SOLAR, LLC'S
SUPPLEMENTAL INFORMATION**

Horseshoe Bend Solar, LLC (“Horseshoe Bend”), by counsel, hereby provides additional information to support its application in this matter.

I. Substation Location Change

In Section 1.4. of the Horseshoe Bend Siting Board Application, Volume 2 Site Assessment Report, the Project proposed that certain parts of the facility, including the Project substation location, not change without notice to the Siting Board. Since that filing, the interconnecting utility, East Kentucky Power Cooperative (EKPC), completed its site visit in Green County and recommended the Project move the substation to a new location approximately 0.3 miles Southwest of the original location.

The substation will connect to the same transmission line, and there are no changes in the interconnection studies based on this location shift. Attachment A contains a revised site plan, in which the substation has been relocated in accordance with EKPC’s recommendation. The relocation of the substation is the only change in this site plan from the site plan presented in Horseshoe Bend’s original Site Assessment Report.

Because the new substation location lies more towards the interior of the Project footprint than the original location, Horseshoe Bend does not anticipate material changes in the Project's impact on adjacent neighbors based on this change.

II. Noise

Horseshoe Bend has received information which requires an update the noise level of the energy storage system HVAC. A letter from GAI with information on this change is attached as Attachment B. The new noise level does not increase the overall noise generated by the Project during facility operation.

Additionally, Horseshoe Bend apologizes that there was an error in our response to the Siting Board's second request for information. In the table in the answer to the Siting Board's first question, the string inverter noise at 150 feet was noted as 31.5-37.5 dBA, which was an incorrect reference to GAI's noise study (Attachment F to Horseshoe Bend's Siting Board Application, Volume 2 Site Assessment Report). The string inverter noise level at 150 feet in GAI's report is 40.0 dBA. This does not change the overall noise level or recommended mitigation measure for noise proposed by Horseshoe Bend.

III. Traffic Maps

Attachment C provides additional information to supplement the Noise and Traffic Study provided in Attachment F of the Horseshoe Bend Siting Board Application, Volume 2 Site Assessment Report. Attachment C contains additional maps to help estimate and assess potential traffic conditions on nearby roads that may be caused by an influx of construction workers during the construction period. These maps are slight overestimates of the vehicle traffic for workers commuting to the Project site.

IV. Additional Proposed Mitigation Measures

Horseshoe Bend proposes the following mitigation measure for road damages, as described in Section 5 of the Site Assessment Report:

Horseshoe Bend or its contractors will fix or pay for damage resulting from any vehicle transport to the project site, as may be required by the applicable transportation permits obtained from State and local road authorities.

Horseshoe Bend proposes the following condition for changes to the site plan:

Upon its completion, a final site layout plan shall be submitted to the Siting Board. Material deviations from the preliminary site layout plan which formed the basis for the instant review shall be clearly indicated on the revised graphic. Material changes are defined as changes to the following:

- a. Potential Project Footprint (as defined in Section 1)*
- b. utility easement*
- c. Project setbacks from property lines and roads*
- d. Project setbacks from non-participating residential homes*
- e. vegetative buffer locations and specification*
- f. substation and interconnection equipment location*
- g. parcel boundaries*

The Siting Board shall determine whether any material changes are likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if that is the case, Horseshoe Bend shall support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

We apologize that we did not include these proposed mitigation measures and conditions in Section 6 of our Site Assessment Report. They were described in the Site Assessment report, but were not included in Section 6.

Respectfully submitted,
Sturgill, Turner, Barker, & Moloney, PLLC



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COUNSEL FOR HORSESHOE BEND



Solar panel equipment and road locations are indicative and may be adjusted within the Potential Project Footprint Area

Drawing Legend

- - - - - Utility Easement
- - - - - Array Setbacks
- - - - - Vegetative Buffer
- Potential Project Footprint Area
- Parcel Boundary

Preliminary Boundaries

- Fence Boundary
- Access Roads
- Array Area
- Construction Entrance
- Inverter, Battery, and Transformer Equipment Areas



Carolina Solar Energy
 400 W Main St
 Durham, NC 27701
 Suite 503

PROJECT
 Horseshoe Bend
 60 MWAC

ISSUE
 03.09.21
 11.17.20
 10.01.20
 06.26.20
 06.17.20

PROJECT
 Horseshoe Bend

DRAWN BY
 CJ

DESCRIPTION
 Array Layout

EXHIBIT
A

Standard Notes

- (1) The Purpose of this plan is for a Power Generation Permit for review and approval by the Kentucky State Siting Board to construct a solar energy system. All information shown is for planning purposes only.
- (2) No lighting is proposed for the array area. The Interconnection Substation will have some lighting.
- (3) Site will be surrounded by 6' tall chain link fence with three strands of barbed wire or similar to meet National Electric Code requirements. The proposed access gate will be locked with a standard keyed or combination lock. Emergency personnel will be provided a key or combination for access.



March 29, 2021

Project R200785.00, Task 002

Mr. Tyler Boquet-Caron
 Solar Developer
 Horseshoe Bend Solar, LLC
 400 West Main Street, Suite 503
 Durham, North Carolina 27701-3295

**Sound Evaluation-Supplemental Information
 Horseshoe Bend Solar Project
 Green County, Kentucky**

Dear Mr. Boquet-Caron:

GAI Consultants, Inc. (GAI) has prepared the following information to be deemed as supplemental to our previously submitted Sound and Traffic Evaluation Report dated December 14, 2020 to Horseshoe Bend Solar, LLC (Horseshoe Bend) for the Horseshoe Bend Solar Project (Project) located in Green County, Kentucky (KY). This letter serves to update the referenced report information found in Section 2.2 titled "Sound Level During Facility Operation" and in Section 2.3 titled "Sound Level Impact During Facility Operation".

This new information pertains to the Heating, Ventilation, and Air-Conditioning (HVAC) unit, which is now designated as a Battery Energy Storage System (BESS) HVAC Unit. New data received from Horseshoe Bend indicates that these units will have a measurable sound level of 75-80 dBA at one meter (three feet) from the unit. Previously, the HVAC unit was evaluated on a sound level of 67.0 dBA at the same distance.

Based on this new information provided by Horseshoe Bend on March 13th, 2021 regarding the potential sound levels for equipment to be utilized during the operation of the Project, GAI has revised the report Section 2.2 as follows.

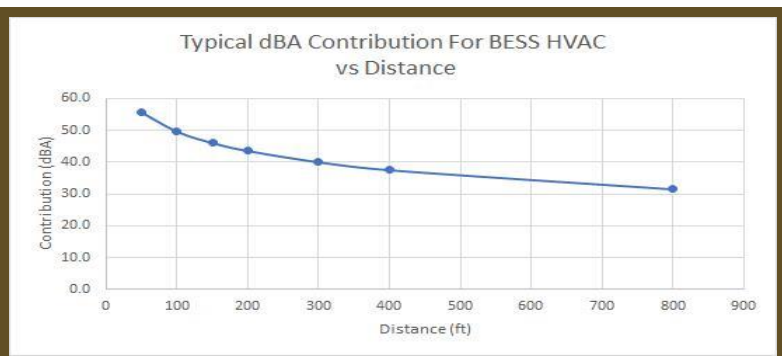
First, all references to a HVAC unit are to be regarded henceforth as a BESS HVAC Unit.

Second, due to an anticipated increase in a measurable sound level from this site-specific equipment, Table 3, previously related as the source designated as HVAC units, is amended as follows:

Table 3

Source: Battery Energy Storage System HVAC Unit

Distance (ft.)	dBA
3	80.0
50	55.6
100	49.5
150	46.0
200	43.5
400	37.5
800	31.5



Mr. Tyler Boquet-Caron
March 29, 2021
Project R200785.00, Task 002

In addition, GAI revises Section 2.3 of the referenced report. The second bullet point following Table 5 under Sound Level Impact During Facility Operation previously stated "HVAC Units: 27.0 dBA (10+ dBA difference and 0 dBA contribution)" (page 6) is amended to read "Battery Energy Storage System: 40.0 dBA (10 dBA difference and 0 dBA contribution)".

In conclusion, based on this updated and site-specific sound level data for the BESS HVAC Unit, it remains GAI's professional opinion that the impacts to the existing sound level environment will be minimal because the sound contribution at the new sound level is still 0 dBA.

If you have questions or wish to discuss this updated information, contact me at 859.795.3492 or s.dodson@gaiconsultants.com.

Sincerely,
GAI Consultants, Inc.

Sharon L. Dodson
Project Manager

Ryan P. Hurt, P.E., MBA
Senior Project Manager, Associate
KY P.E. No. 31014
SLD/RPH/lmf



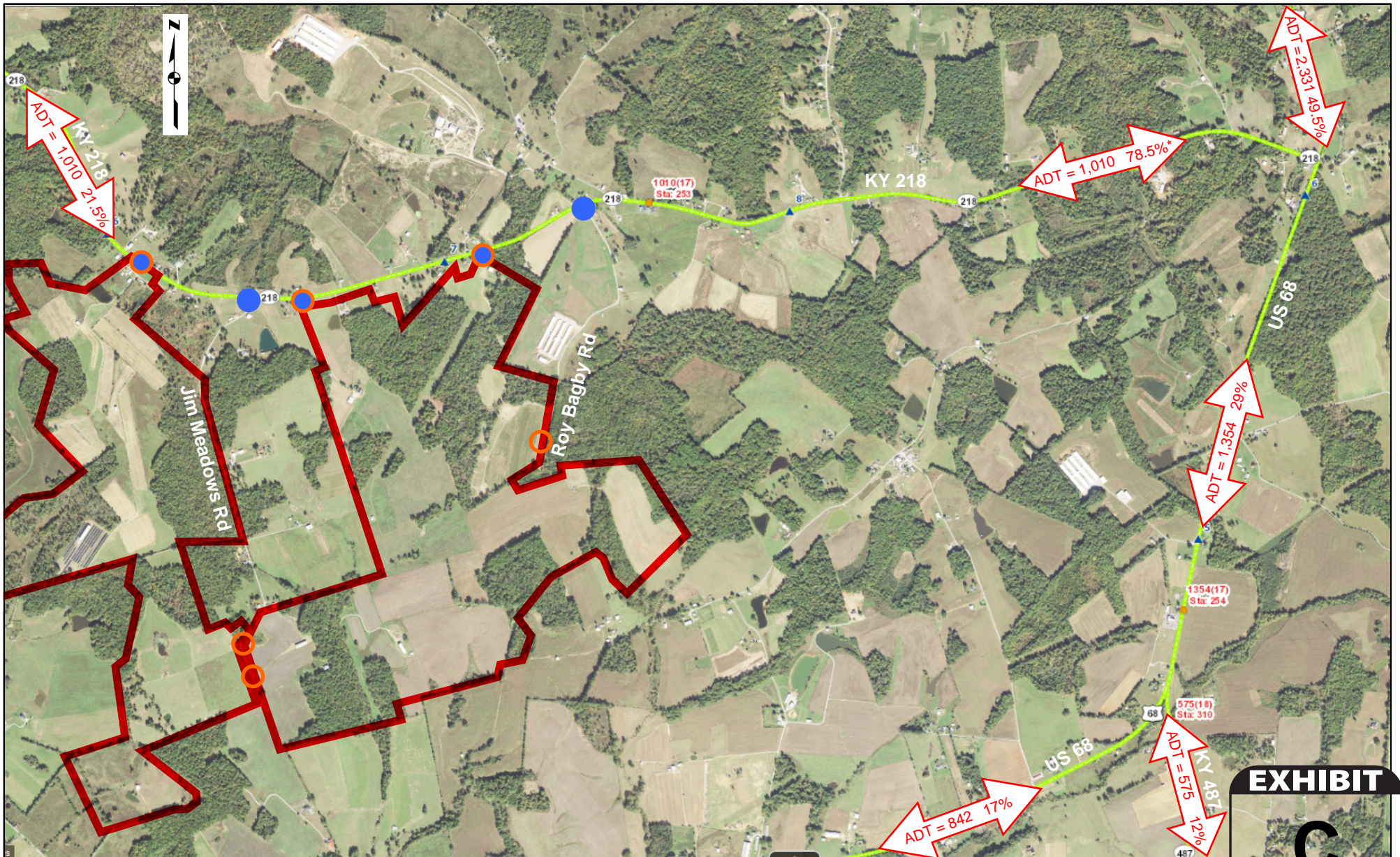
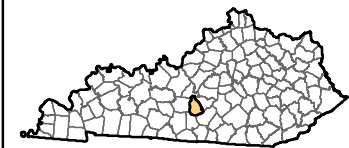


EXHIBIT
C

PROJECT LOCATION



GREEN COUNTY, KENTUCKY

REFERENCE:

© KY NAIP 2018
KYTC TRAFFIC COUNTS
* DISTRIBUTION BASED ON
US 68 TRAFFIC VOLUMES

SCALE: 0.2 MI

LEGEND

- PROJECT LOCATION BOUNDARY
- CONSTRUCTION ENTRANCE
- SITE ACCESS FROM KY 218
- ADT 400 - 1599
- ADT 1600 - 2399
- ↔ ADT AND DISTRIBUTION

FIGURE 5
BACKGROUND TRAFFIC DISTRIBUTION

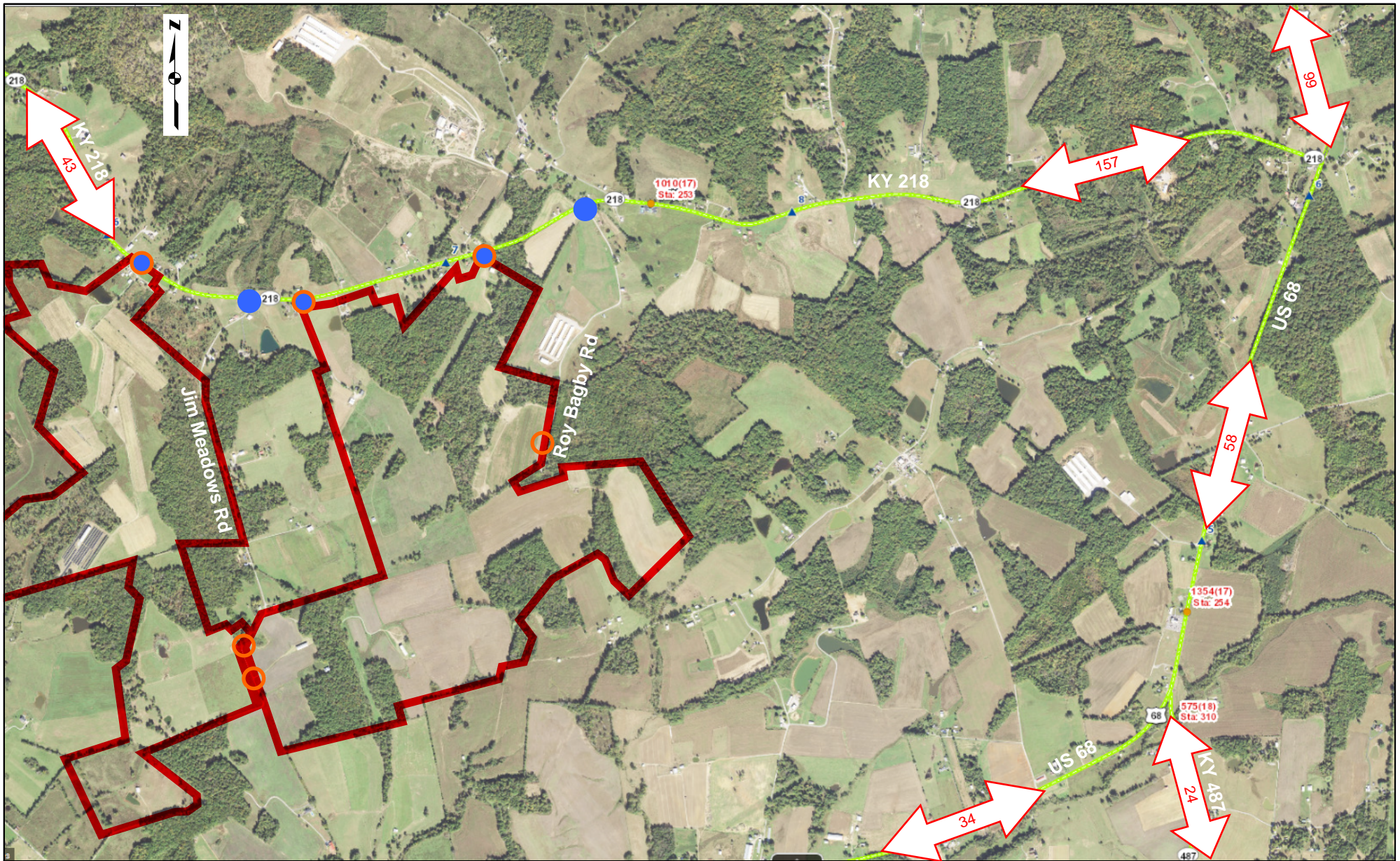


HORSESHOE BEND
CAROLINA SOLAR ENERGY

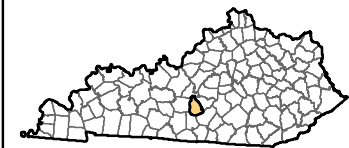


DRAWN BY: TMW
CHECKED: RAK

DATE: 3/5/2021
APPROVED: 3/8/2021



PROJECT LOCATION



GREEN COUNTY, KENTUCKY

REFERENCE:

© KY NAIP 2018
KYTC TRAFFIC COUNTS

*DAILY CONSTRUCTION VEHICLES BASED ON WORST-CASE 200 VEHICLES. (165 MAXIMUM DAILY VEHICLES ANTICIPATED).

SCALE: 0.2 MI

LEGEND

- PROJECT LOCATION BOUNDARY
- CONSTRUCTION ENTRANCE
- SITE ACCESS FROM KY 218
- ADT 400 - 1599
- ADT 1600 - 2399
- DAILY CONSTRUCTION VEHICLES*

FIGURE 6
DAILY CONSTRUCTION VEHICLES



HORSESHOE BEND
CAROLINA SOLAR ENERGY



DRAWN BY: TMW
CHECKED: RAK

DATE: 3/5/2021
APPROVED: 3/8/2021