I Construction phase activities –

The detailed schedule provided is very helpful in understanding construction phase activities. Here are some follow–up questions:

A. How many workers will be on site at any one time by task?

B. What is average and peak number of workers you will have on site each month during construction?

C. From the provided schedule, it appears that the peak period of activity might be the five-week period including July and early August 2022. Confirm if this is correct. **Construction phase activities—Generally, much more information was provided about the operational phase compared with the construction phase. HE is requesting more information about construction, summarized below and detailed in subsequent inquiry categories.**

Response:

1A. During the construction process, there will be up to 10-15 construction managers on site at any given time. In addition, by task, the approximate number of workers for the main installation tasks are: grading 25-40 people, post driving 40-50 people, panel installation 100 people, and electrical wiring 100 people. A 2.5 minute example video showing installation of a 20MW fixed-tilt solar project in Georgia can be found at https://www.youtube.com/watch?v=ENekbGF3MSQ. The video shows the panel installation and wiring process, as well as the installation of the inverter skids.

1B. The grading and post driving phases will take approximately 2-3 months total, during which time there will be an average of approximately 40 people on site each day. Panel installation and wiring will take approximately 3-6 months; this timing is largely dependent on weather, site conditions, and skill level of the installers. During that period there will be an average of approximately 150 people on site each day, depending on how much the panel installation and wiring phases overlap with each other.

1C. Based on the provided schedule, this is correct, however please note that the schedule is subject to change based on delays in receiving interconnection studies or other unexpected events.

See response to Data Request V (below) for detailed information on traffic questions.

WITNESS: Carson Harkrader

II Site development plan—

A. Location of the construction staging area – the response to the RFI #1 states that the construction staging area will be located near one of the two construction entrances. Which entrance should we assume for the purposes of the impact evaluation and the SAR review? Is a staging area off the entrance from SR 90 more likely since that is a more of a "main" road, as compared to SR 640?

B. Number of residences by distance from site boundaries and panels—RFI#1 provided more information about the site boundaries and surrounding area, but it is still unclear what the distance is between each of the nearby residences, the site boundary and the nearest solar panel. A table would help for residences, moving outward to 1,000 feet, i.e., number of residences within 100 feet from boundary, number within 100 feet from nearest panel, number of residences within 200 feet from boundary, number within 200 feet from nearest panel, etc.

C. Location of transformers/ inverters/ ESS – the response to RFI #1 indicates that the final locations of those facilities has not been determined, but that they will be at least 150 feet from the property boundary. The POND report states that the inverters will be located at least 2,000 feet from any homes. Does this mean that the nearest home to the property boundary is 1,850 feet? Please confirm those distances or resolve the differences. Does the site layout graphic provided in Exhibit D of RFI #1 provide a likely representation of those locations?

D. Possible panels on the northeastern most parcel – the response to RFI #1 suggests that panels may be located within that parcel. The impact evaluation must assume that panels are in that parcel or not. If this cannot be determined now, we will assume solar panels will be located in that area. Assuming panels will be located in that parcel, how far would those panels be from the nearest home? It appears that there is a residence off Eddie Harbinson Road that would be at a close distance. The Kirkland report does not indicate the distance between that home and panels. Please provide that distance.

E. Construction access--Will all three construction access points (from SR 90, SR 640 and Big Jack Road) be gated and locked at night and on weekends when no construction activities will take place?

F. Operations access--Please confirm that the locked access gate in place during operations would be located on Big Jack Road near the substation, or provide correct the correct location of the access gate.

G. Power source--Will any power from the Summer Shade – Patton Rd Jct 69kv transmission line be required during construction or operation? If not, what will be the power source on site during construction and operation?

H. Two project phases?—In the discussion of transmission, two phases of the project were mentioned. Please clarify or elaborate.

I. Legal site boundary – The response to RFI #1 indicates a total project site of about 560 acres (that acreage is also shown on page 129 of the SAR as part of the description of the legal boundaries of the proposed site). However, upon further inspection, it appears that one section of the project site as shown in the site plan layout on page 316 of the SAR is NOT included in that legal project boundary. It appears that the portion of the project site directly east of the preliminary substation location and east of Big Jack Road (with a zig zag edge on its east side) is not included in the legal project description. Please confirm if this is correct. If so, please provide a revised legal boundary description, including map, along with the full and complete calculation of the acreage of the proposed site.

Response:

IIA. The staging area is more likely to be off of SR 640, due to the constraints of the floodplain and stream crossing at SR 90.

IIB. Please see Exhibit C for a table of residences near the project in 100ft increments, and Exhibit D for a map showing the closest residences.

IIC. The Project is committed to placing inverters, transformers and ESS at least 150 feet away from the property boundary. The distance stated in the POND report of 2,000 feet away is incorrect. Please see Exhibit E for a corrected POND report. Please note that in addition to correcting the inverter setbacks, the updated POND report also includes updates to the traffic table – some new traffic data has been released since our original submittal. As described in the answer to Harvey Economics question IIF3 in RFI #1, finalizing the location of the inverters and energy storage systems will be part of the final site design process. The locations shown on the site layout in Exhibit D of RFI #1 are indicative.

IID. Yes, please assume there may be panels in the Northeastern most parcel. If the Northern area on the East side of SR 640 is used for panels, the solar panels placed in that area would be no closer than approximately 241 feet from the edge of the nearest residence.

IIE. Yes, all construction entrances will be gated and locked when no construction activities are taking place.

IIF. In our first round of responses, we stated that "Big Jack Road will serve as the primary access point for the construction and ongoing maintenance of the utility interconnection substation, and a secondary site access point for construction of the rest of the Project." The operations entrance for the substation will be immediately outside the substation fence which will surround the substation. There will be other operations entrances to the solar project itself, at the same locations as the construction entrances. During operations, all of these entrances will be used infrequently.

IIG. There will be no power drawn from the Summer Shade - Patton Rd 69kV transmission line during construction or operation of the Project. Local power supplied to the Project will come from the local utility, Farmers Rural Electric Cooperative Corporation (Farmers RECC).

IIH. Please reference PSC response #2.

III. The area of land East of Big Jack Road and South of Glover Creek was intentionally left out of the site plan layout, as it will not be used for the Project. The topography of that area is not suitable for solar. This section of land was also left out of the survey shown on page 129 of the Site Assessment Report, and our ALTA surveyor has confirmed that they also left it out of the legal descriptions included in the Site Assessment Report. Please refer to page 126 of the Site Assessment Report, where it says within the legal description "thence severing Mike and Elaine Wade Irrevocable Trust with 7 new lines". This severance separates that portion of the parcel out of the legal description, so that it is not included in our layout, the survey, or the legal descriptions.

WITNESS: Carson Harkrader

Exhibit C

Exhibit C
Response to Harvey Economics 2b

Distance from Solar Panels (feet)	# of Residences
< 100	0
100-200	2
200-300	3
300-400	2
400-500	1
500-600	3
600-700	1
700-800	3
800-900	6
900-1000	3

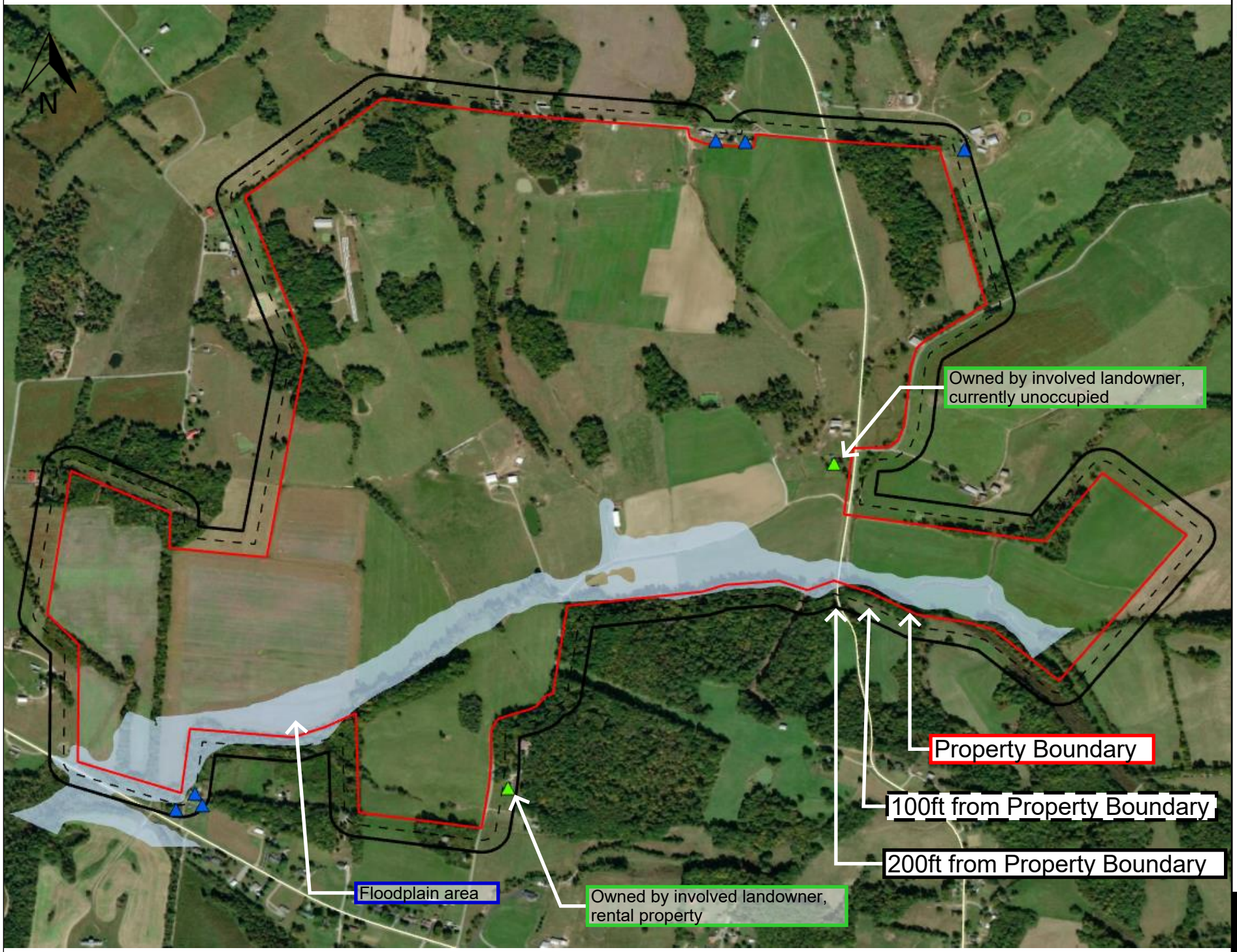
Distance from Parcel Boundary (feet)	# of Residences
< 100	4
100-200	4
200-300	1
300-400	0
400-500	5
500-600	0
600-700	4
700-800	4
800-900	3
900-1000	7

Notes:
The minimum distance from a solar panel to the site boundary will be 100ft. No solar panels can be placed within the floodplain as marked on the map in Exhibit D, and so some residences that are 100 feet (for example) from property lines are more than 200 feet from panels.

1 house within 100ft of the site boundary is unoccupied and owned by an involved landowner, and 1 house within 200ft of the site boundary is a rental home owned by an involved landowner. These homes are shown in green on the map in Exhibit D.

There are 3 homes in the SW corner of the map in Exhibit D which are near the site boundary. These 3 homes will be much farther from panels than 100 feet due to the floodplain in the area.

Exhibit D



CAROLINA SOLAR ENERGY

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

DESCRIPTION
Exhibit C:
Map of nearest residences

CLIENT
PSC RFI 2

DRAWN BY
TC

ISSUE
6.29.2020

PROJECT
Glover Creek

a

Exhibit D

Exhibit E

Noise and Traffic Assessment

Glover Creek Solar Facility

June 22, 2020

Prepared for:

Kentucky Siting and Licensing Board
Kentucky Public Service Commission

Prepared by:

Pond
3500 Parkway Lane, Suite 500
Peachtree Corners, GA 30092

On behalf of:

Glover Creek Solar, LLC
400 W. Main Street, Suite 503
Durham, NC 27701

Exhibit E

Table of Contents

Attachments:

Figures 1-4

Appendix A: Preliminary Site Plans

1. Introduction

1.1. Project Description

The proposed Glover Creek Solar Facility will be a 55-megawatt alternating current (MWac) photovoltaic electricity generation facility. The project site is located on an approximately 584-acre tract of land in Metcalfe County, approximately one mile northwest of Summer Shade, Kentucky (Figure 1). The project site is located in the northwest quadrant of the Kentucky State Route 90 (SR 90) and SR 640 intersection. The solar project will cover up to 400 acres of land and will consist of inverters, a battery-based energy storage system and a utility interconnection substation (Appendix 1). The power generated by the proposed solar facility will be connected to the existing power grid using the transmission line currently traversing the tract. The generating facility will sell power on the wholesale market as a merchant power plant or independent power producer. The solar facility will be enclosed by a six-foot chain-link fence topped with three strands of barbed wire, which will be generally located between 30 and 80 feet inside of any property boundary. Strategic placement of a vegetated buffer may be used on the project site. At the end of the project's life, the equipment and electrical infrastructure will be removed from the site, and land may return to farming or other development.

1.2. Existing Land Use and Site Conditions

According to the National Land Cover Database for Metcalfe County, the existing land use on the proposed project site is predominantly a mix of open pasture for cattle, hay production, and cultivated crops (i.e., corn and tobacco) (Figure 2). A 45-acre stand of mature hardwood forest is located on the southeastern portion of the project site. Aerial imagery shows isolated patches of forested and wooded corridors along streams, fence rows, and property boundaries scattered throughout the site (Figure 3). Additionally, there are seven farm ponds, numerous farm buildings (e.g., barns and sheds), and one single-family home within the proposed project site. Metcalfe County Property Valuation Administration assesses and values the surrounding land use as largely identical to that of the project site, with most properties being classified as farmland with residential parcels scattered throughout. A few commercial properties such as a gas station, bank, eateries, and a funeral home are present south of the project site along SR 90 near the community of Summer Shade, KY.

2. Noise Study

2.1. Existing Noise Conditions

2.1.1. Nearest Receptor Sites

The nearest noise receptors (i.e., homes, businesses, schools, etc.) are limited to scattered, low-density, single-family homes interspersed around the project site (Figure 4). No noise-sensitive facilities (i.e., schools and libraries) are in the vicinity

of the project site. The nearest dwelling is located approximately 55 feet from the proposed Glover Creek Solar Facility property boundary.

2.1.2. Existing Noise from Surrounding Areas

A comparison of typical decibel levels observed from different sources were described as seen in the table below.

Source	Typical Noise Level (dB)
Rock concerts	140
Car/motorcycle	120
Woodworking machinery	100
Lawn mower	90
Traffic noise	80
Whisper	20

The major roadways, SR 90 and SR 640, that traverse along the southern and eastern boundary of the project site are both two-lane, rural highways that receive local traffic noise typical of rural farming areas (i.e., cars, trucks, and tractor trucks with trailering equipment). Existing traffic contributes to noise within the assessment area.

The areas surrounding the project site are dominated by active farmland, which contributes to noise typical of active hay production, crop planting and harvesting, and transportation of agricultural products and equipment.

These noises typically range from 80 to 120 dB and peak during normal business hours.

2.1.3. Existing On-Site Noise

Existing noise conditions on the proposed project site consist of typical sounds produced from farming and agriculture activities. These noises include trucks, all-terrain vehicles (ATVs), tractors, and other farming equipment used during hay harvesting, bailing operations, crop planting and harvesting, as well as crop and livestock transportation. Other noises experienced on the project site include typical sounds of cattle farms (e.g., cattle bellows) and other rural areas (i.e., insects, birds, and frogs).

2.2. Construction Noise

2.2.1. Equipment and Machinery

Because the proposed site is primarily open farmland, the need for extensive tree removal and earthmoving is anticipated to be minimal. The construction of the solar facility will use equipment typical for site development (i.e., graders, bulldozers, excavators, dozers, and dump trucks). The U.S. Department of Transportation Federal Highway Administration (FHWA) publishes noise levels for typical construction equipment as shown in the table below.

Equipment	Typical Noise Level (dBA) 50 feet from Sources
Air Compressor	81
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Chainsaw	85
Compactor	82
Crane Derrick	88
Crane Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Pickup Truck	55
Pile Driver (Impact)	101
Pile Driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Rail Saw	90
Rock Drill	98
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Tractor	84
Truck	88
Welder/Torch	73

Source: FHWA Construction Noise Handbook, 2009. Table based on EPA Report and measured data. Exact noise levels may vary depending on manufacturer and model.

2.2.2. Roadway Noise During Construction

A temporary increase in traffic is anticipated during the construction phase. The increase in traffic is described in greater detail in Section 3. This increase in traffic noise (i.e., engine and tire noise) will begin at the start of construction through the mobilization of equipment and machinery to the project site and daily commutes of laborers. During the panel installation, increased traffic noise would be limited to additional passenger vehicles and pickup trucks transporting workers and solar equipment to and from the project site.

2.2.3. Assembly of Solar Array and Construction of Facilities

Assembly of the panel tracking system, the installation of solar panels, inverters, battery storage units, and other electrical equipment associated with the solar facility and substation will likely employ typical manual hand tools and power tools. These assembly operations will occur a hundred feet to thousands of feet inside the property boundary, will occur during normal business hours on weekdays, and any noise generated by power equipment would be short in duration.

2.3. Proposed Operational Noise Conditions

2.3.1. Solar Array and Tracking System

The solar array associated with this project includes single-axis tracking panels distributed evenly across the site. Tracking systems involve the panels being driven by small, 24-volt brushless DC motors to track the arc of the sun to maximize each panel's potential for solar absorption. Panels would turn no more than five (5) degrees every 15 minutes and would operate no more than one (1) minute out of every 15-minute period. These tracking motors are a potential source of mechanical noise and are included in this assessment. The sound typically produced by panel tracking motors (NexTracker or equivalent) is approximately 78 dB.

2.3.2. Inverters, Transformers, and Battery Storage

The solar facility will employ approximately 13 inverters scattered evenly across the project site. The inverters used for the Glover Creek Solar Facility will be SMA Sunny Central UP inverters (or similar), which includes a separate voltage supply and cooling system. According to the manufacturer's specifications, the noise emission produced by this inverter is rated at 67.0 dBA at a distance of 10 meters. This noise produced by the inverter is described as a hum and has roughly the same output of a household air-conditioning unit.

Transformers used for the proposed project are Eaton Cooper Power Series transformers that are self-cooling and produce noise emissions of 56-68 dB, depending on model unit and rating. This is roughly the noise produced from the household air conditioning unit.

Energy Storage Systems (ESS) will be co-located with the project inverters throughout the project site. Noise would be emitted from the air conditioning units used to condition the ESS enclosures. The level of noise is dependent upon manufacturer unit to be selected for the project; however, worst-case profile will be identical to a commercial, direct-expansion heat pump unit, 7 “tons” cooling capacity for each 2,000 kWh of storage capacity.

2.3.3. Site Operation and Maintenance

2.3.3.1. Vehicular traffic

The operation of the Glover Creek Solar Facility is expected to have a maximum of one (1) technician driving in and out 365 days a year and two or three technicians up to 70 days a year. Work is conducted at night up to 30 days a year. While dispatches are not anticipated on weekends, they remain a possibility in the event of a component outage that would require timely repair in order to limit production impact from the site. Employees will be in mid- or full-sized trucks and will contribute less to traffic noise than a typical single-family home. With the exception of the scenarios mentioned above, vehicular traffic on the project site will be limited to typical weekday work hours.

2.3.3.2. Maintenance activities

Typical maintenance activities on the solar facilities will be minor repair and maintenance on the solar panels, tracking systems, electrical wiring, or maintenance/inspections of the inverters. Grounds maintenance will be performed through an integrated land management approach, to include biological and mechanical control of vegetation, with herbicide applications as appropriate to control regulated noxious weeds per local, state, and federal regulations.

2.4. Noise Summary and Conclusions

Noise during the construction phase is expected to temporarily increase during daylight hours, and will be in the form of heavy equipment, passenger cars and trucks, and tool use during assembly of the solar facilities. Noise will be present on the project site during construction; however, due to the size of the project site and the distance to the nearest receptors, construction will not contribute to a significant noise increase compared to noise currently occurring on site (i.e., the operation of farming equipment, hay production, crop harvesting). In addition, periodic noise associated with solar panel tracking system and the relatively constant noise of inverters, transformers, and battery storage units will occur during operation. The noise produced by the inverters is 67.0 dBA, which is slightly above that of a typical person-to-person conversation (i.e., 60.0). Inverters may be located as close as 150 feet from the nearest noise receptor (i.e., single-family residences). However, this increase in noise is negligible and will not be a major contributor of noise to the nearest receptor. Site visits and maintenance activities, such as mowing, will take place during daylight hours and will not significantly contribute to noise. The noise associated with these activities is very similar to those currently generated onsite by farming activities and offsite by commercial and farm uses.

3. Traffic Study

3.1. Existing Road Network and Traffic Conditions

Two major roadways are present in the project vicinity: SR 90 and SR 640 (Figure 3). Both of these roadways are two-lane rural highways that provide access to the City of Summer Shade, Kentucky which is located immediately southeast of the project site. Big Jack Road, a single-lane unpaved road, runs through the project site and connects SR 90 and SR 640.

The Average Daily Traffic (ADT) is defined as the average number of vehicles traveling two-way passed a specific point or monitoring station in a 24-hour period. There are two ADT monitoring stations in the project vicinity; one along SR 640 and one along Hill Top View Road. The ADT information in the project vicinity are summarized in the table below.

Station ID	Roadway	Location and Distance (feet) and Direction from the Nearest Property Boundary	ADT (average number of vehicles / 24-period)	Year Assessed
085502	SR 640	Milepoint 1.62 10 feet East	358	2019
085746	Hill Top View Rd	Milepoint 0.14 1,180 feet South	106	2012

3.2. Construction Traffic

As proposed, Big Jack Road, an existing single-lane, unpaved road, will provide centralized access to the project site from both SR 90 and SR 640.

The construction of the proposed solar facility is expected to take up to eight to twelve months for completion. During construction, a temporary increase in traffic volume associated with travel of construction laborers, delivery of construction equipment and material, delivery of solar panel components and equipment is anticipated. Laborer commutes with passenger vehicles and trucks will occur daily with two traffic peaks (i.e., morning peak and afternoon peak), whereas deliveries of equipment will occur on trailers, flatbeds, or other large vehicles periodically throughout the construction process at various times of day.

3.2.1. Traffic Safety Precautions

Lane closures are not anticipated along SR 640 or 90 for the construction of the solar facility. However, the presence of signage, signaling, flagmen, and temporary lane closures may be employed to reduce risk of collision on the roadway. For instance, the presence of a flagmen to temporarily stop traffic to allow for a delivery truck and trailer to safely turn into the site may be necessary at times of equipment deliveries. Appropriate signage of trucks entering the highway or slow-moving vehicles will be used to warn oncoming traffic of potential risk.

The use of Big Jack Road may be limited to construction and local traffic only during the construction process. The temporary closure of this single-lane unpaved road will not impede or restrict the ability for vehicles to access SR 640, SR 90, neighborhoods, developments or places of business.

3.2.2. Impact on Road Infrastructure

Significant degradation to the existing roadways is not anticipated for the proposed project. The increase in localized traffic and the continued entry and exit of heavy trucks or equipment has potential to result in additional wear of the existing roadway or shoulders of SR 90 and 640. Damage resulting from project construction will be rectified.

Access drives and internal roads will be constructed or improved as needed to accommodate appropriate vehicles and equipment to construct the proposed solar facility. Internal roads will be compacted gravel, which may result in an increase in airborne dust particles. During construction, water may be applied to internal road system to reduce dust generation.

3.3. Operational and Maintenance Traffic

The operation of the Glover Creek Solar Facility will mostly be un-manned with approximately two employees making site visits a few times a week to inspect the site, ensure proper equipment operation, and note any maintenance needs. Maintenance will occur periodically with more frequent landscape maintenance occurring during the vegetative growing season. Employees will be in mid- or full-sized trucks and will contribute less to vehicle traffic than a typical single-family home. Vehicular traffic on the project site will be limited to typical weekday work hours and will not significantly contribute to additional traffic in the project vicinity.

3.4. Traffic Summary and Conclusions

Traffic in the project vicinity is predicted to increase temporarily during the construction phase of the project. This includes daily morning and evening peaks for construction laborers entering and exiting the project site and periodic delivery of construction materials and equipment. Appropriate signage and traffic directing will occur as necessary to increase driver safety and reduce risk of collisions for approaching traffic. There are no anticipated damages to the existing roadway infrastructure. For facility operation and maintenance, there is no significant increase in traffic (i.e., the expected traffic to be contributed to the area will be less than a typical single-family home).

4. Fugitive Dust Impacts

Land disturbing activities associated with the proposed project may temporarily contribute to airborne materials. To reduce wind erosion of recently disturbed areas, appropriate revegetation measures, application of water, or covering of spoil piles may occur. In addition, any open-bodied truck transporting dirt will be covered when the vehicle is in motion. The size of the project site and distance to nearby structures and roadways will aid in managing

off-site dust impacts. Internal roads will be compacted gravel, which may result in an increase in airborne dust particles during dry conditions with heavy internal road traffic. During construction activities water may be applied to internal road system to reduce dust generation. Water used for dust control is authorized under the Kentucky Pollutant Discharge Elimination System (KPDES) as a non-stormwater discharge activity, which will be required for the proposed project.

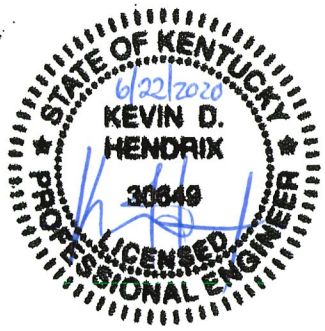
5. Impacts to Rail

The are no railroads, spurs, or other rail facilities in the project area. The proposed solar facility project will have no effect on rail.

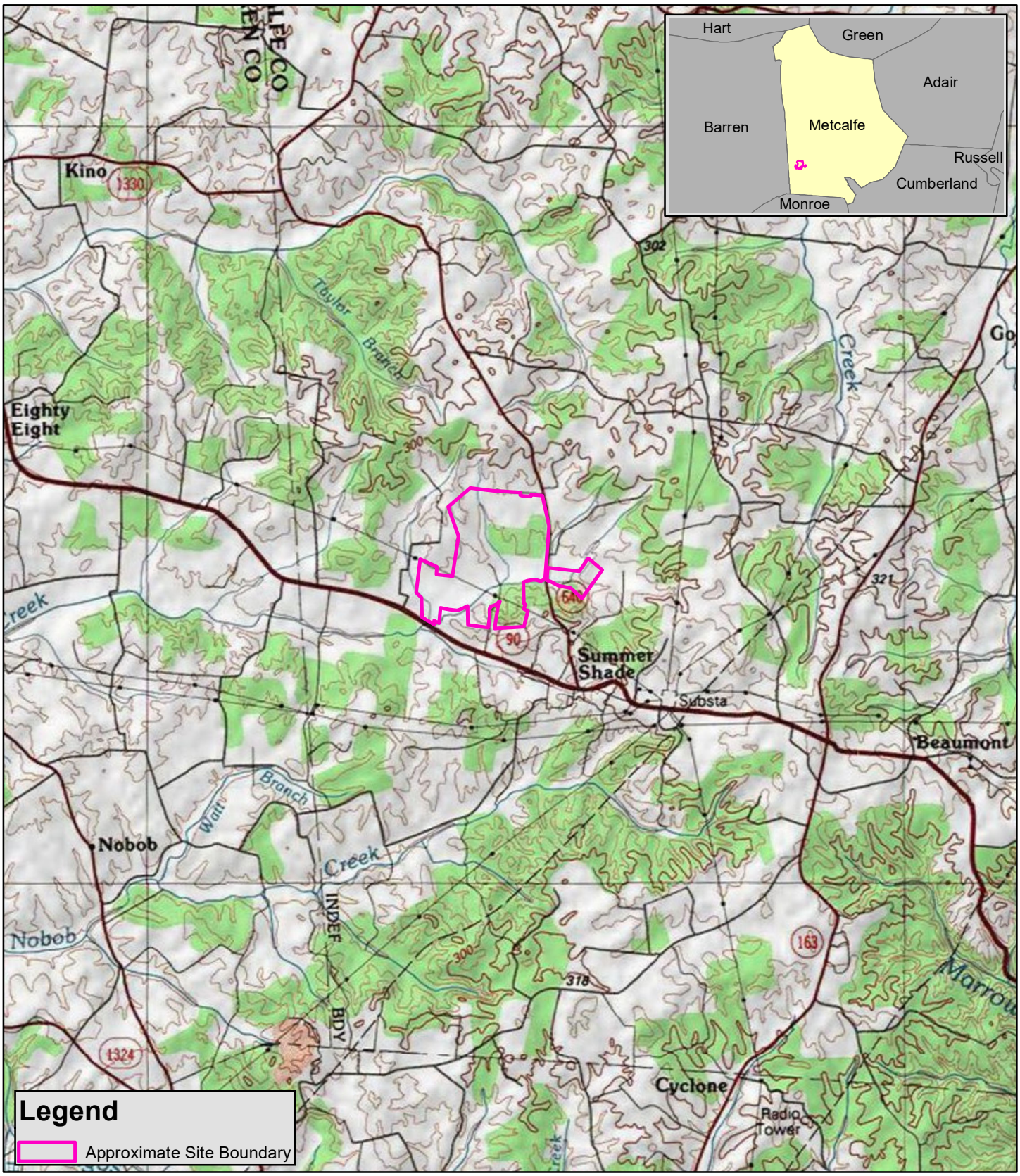
Signature of Professionals

Michael Savage
Environmental Services
Project Manager

Kevin Hendrix, PE, LEED AP
Civil Engineering
Discipline Director



Figures 1-4



Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

N

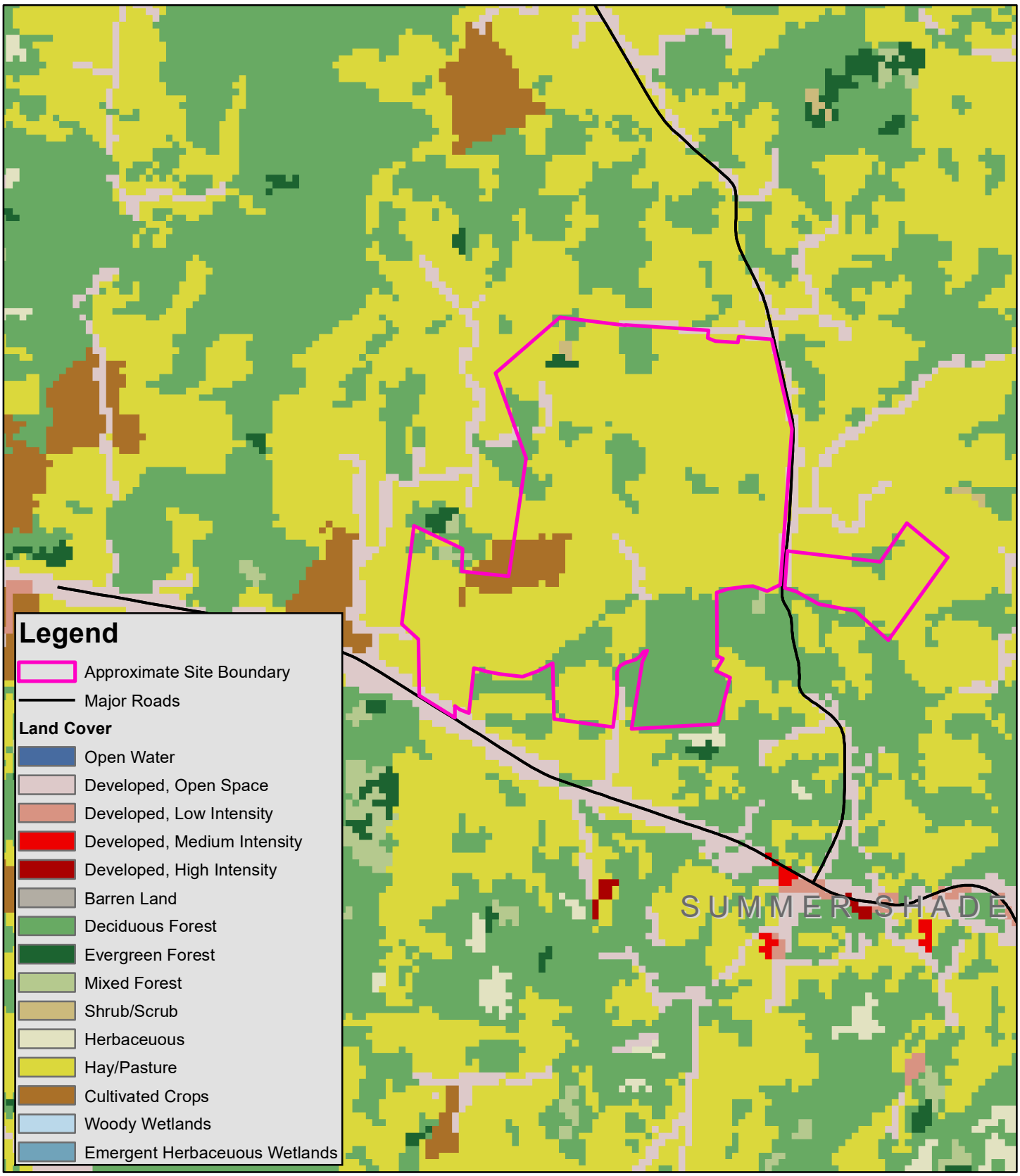
0 0.5 1 2 Miles

Figure 1

Project Location Map

POND

Glover Creek Solar Facility
Summer Shade, Kentucky
June 2020



Service Layer Credits: National Land Cover Dataset, Kentucky

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Figure 2

Land Use Map

POND

Glover Creek Solar Facility
Summer Shade, Kentucky
June 2020

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,

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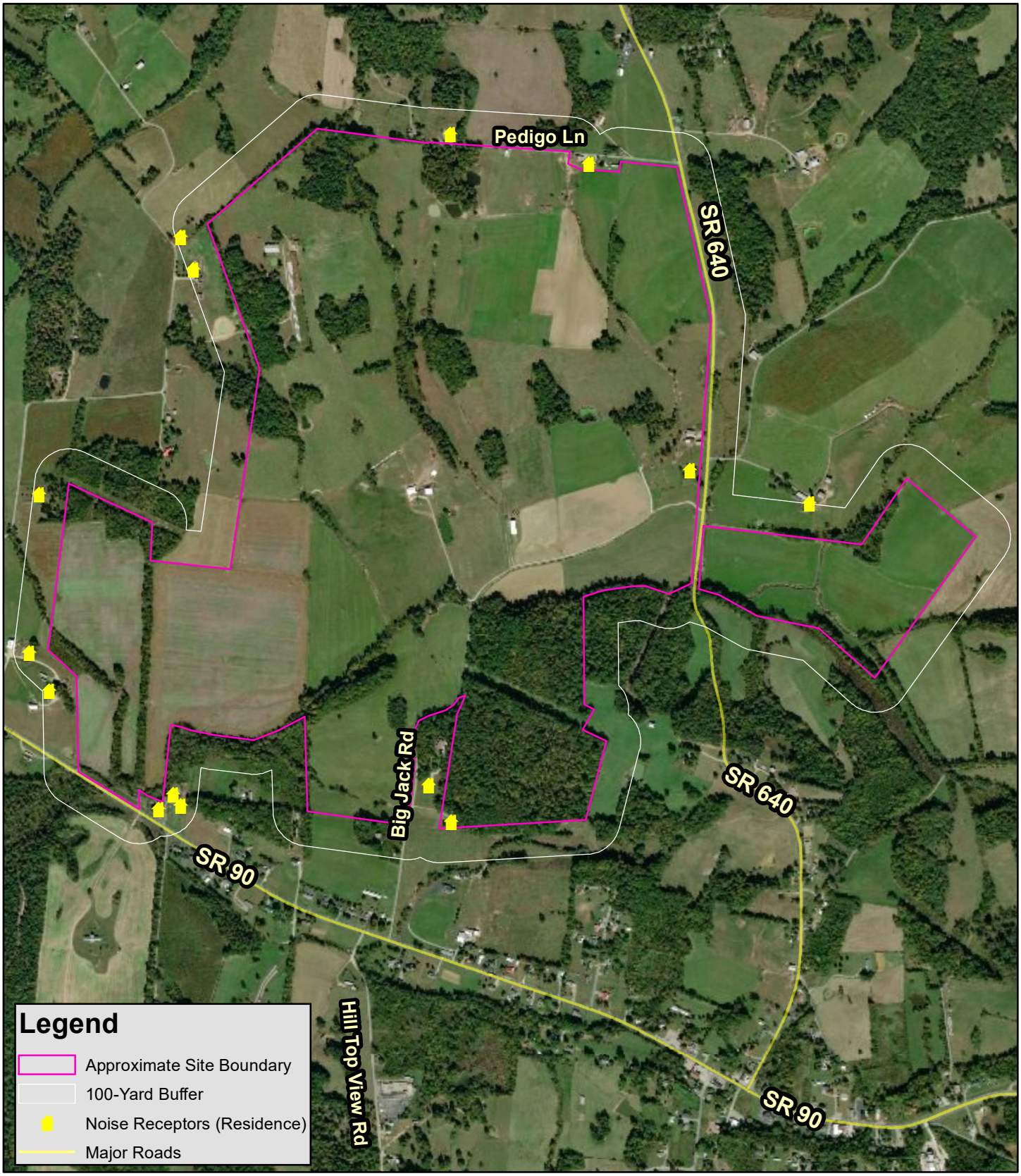
0 1,000 2,000 4,000 Feet

Figure 3
Aerial Map

POND

Glover Creek Solar Facility
Summer Shade, Kentucky
June 2020



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,

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0 1,000 2,000 4,000 Feet

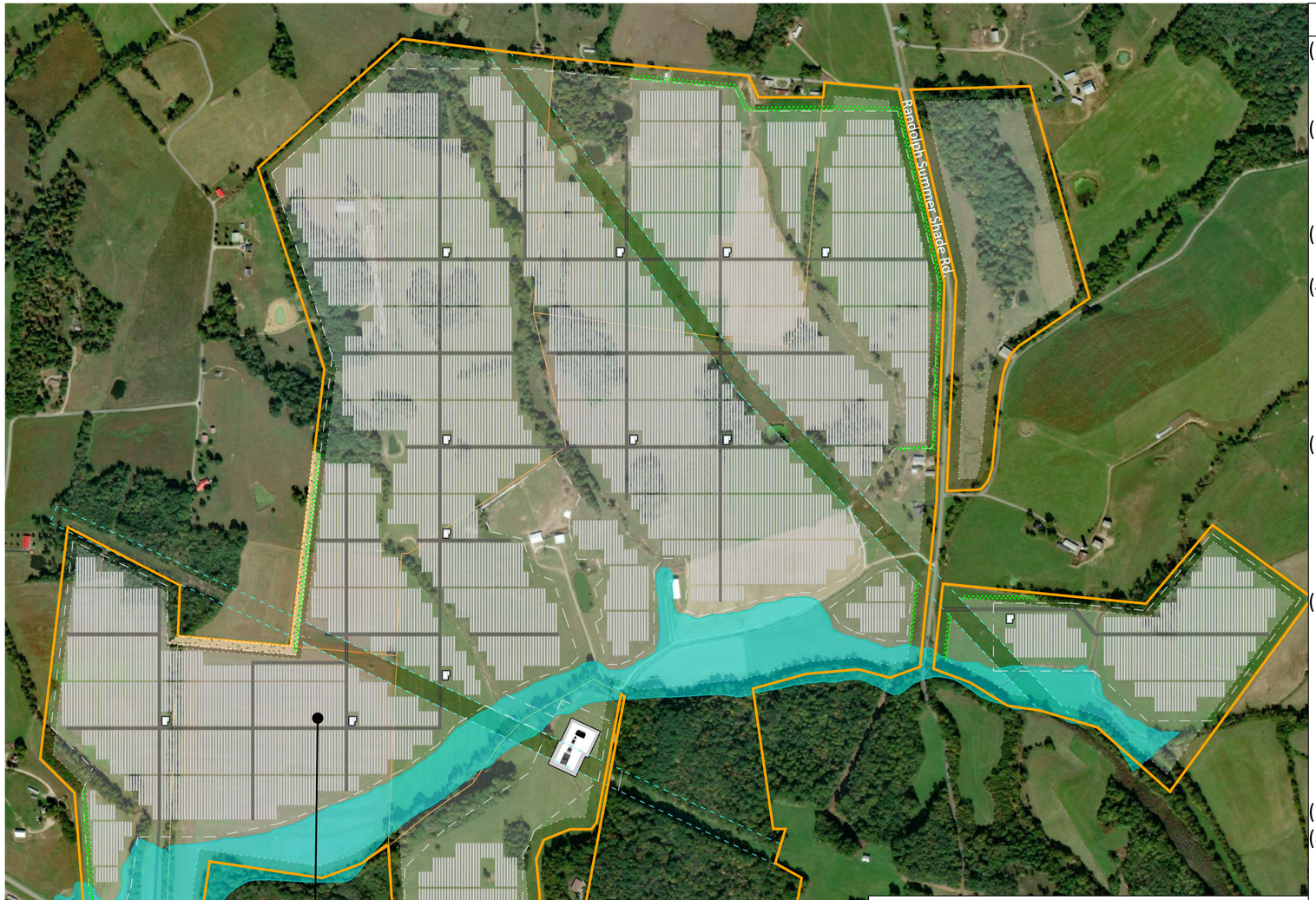
Figure 4

Noise Receptor Map

POND

Glover Creek Solar Facility
Summer Shade, Kentucky
June 2020

Appendix A – Preliminary Site Plans



Solar panel, equipment and road locations are indicative and may be adjusted within the shaded areas shown within the Project Footprint

Drawing Legend

- Potential Project Footprint (Solar Array & Equipment)
- Utility Easement
- Floodplain
- Preliminary Array Area
- Parcel Boundary
- Fence Boundary
- Access Roads
- Vegetative Buffer

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) The property lines, existing improvements, and topographic data shown hereon are not based on a field survey and have been completed from ArcGIS & Google Earth Imagry. No field evidence of property markers were located with this Exhibit.

(3) Wetlands and Streams are shown representative of a delineation received by Carolina Solar Energy.

(4) Project area will be cleared and grubbed as necessary, retaining pre-development drainage patterns as much as possible. Minor grading will occur around inverter areas to divert surface drainage. Areas subject to rutting during construction will be temporarily stabilized with gravel that will remain after construction. Soil conditions and equipment loads will determine final design.

(5) Proposed construction and temporary laydown yard/construction staging area to be used during site construction. A portion of this area will be covered with gravel to allow delivery of construction materials. Prior to construction, this area will be compacted by a smooth drum or sheepsfoot roller to reduce/prevent rutting. Following construction gravel laydown yard will be removed.

(6) Access aisles shown on this plan indicate construction and maintenance access points for ingress/egress. Prior to construction, these aisles are compacted by a smooth drum or sheepsfoot roller to reduce/prevent rutting. Gravel may be placed in high traffic or poorly draining areas during construction activites to improve access. Soil access aisle will be scarified, aerated, and re-seeded after construction. Access aisles to inverters may require gravel to support delivery equipment loads. Soil conditions and final equipment selection will determine if gravel access aisles will be required to inverter locations

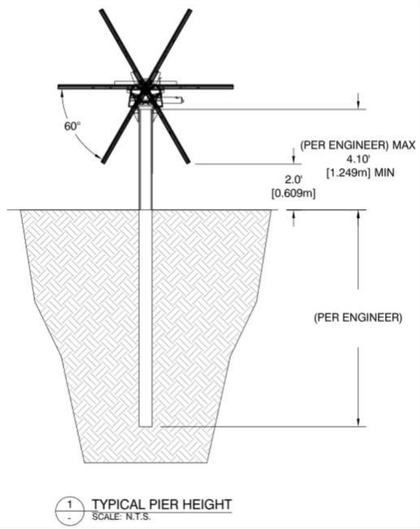
(7) All Right-Of-Ways are public unless noted otherwise.

(8) Utility lines and services shown hereon are approximate per aerial photography or as reported by various responsible parties. Location of underground utilities are not shown. Call appropriate authorities before digging.

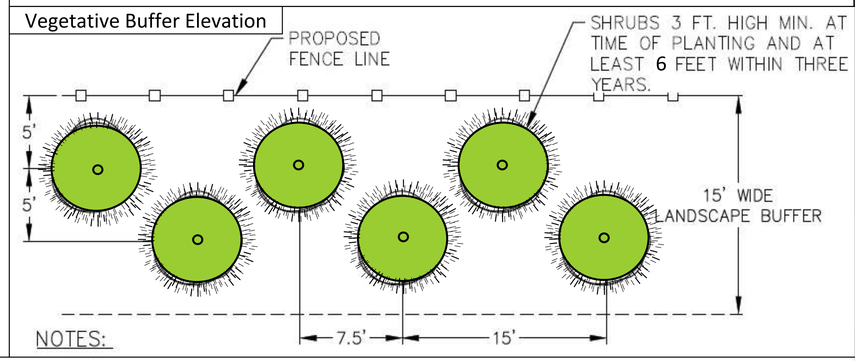
(9) No lighting is proposed for the array area. The Interconnection Substation will have some lighting.

(10) 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 will be locked with a standard keyed or combination lock. Emergency personnel will be provided a key or combination for access.

Typical Rack Elevations



Vegetative Buffer Elevation



CAROLINA SOLAR ENERGY

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

Glover Creek Farm
55 MWAC

ISSUE
12.02.19
12.05.19

PROJECT
Glover Creek

DRAWN BY
CJ

DESCRIPTION
Array Layout

a

III Property Values and land use

A. *Construction activities* – The response from Rich Kirkland in RFI #1 does not include any research or analysis regarding the topic of potential changes in property values due to construction activities, but it indicates that he does not believe there would be any impact during that period. Please substantiate that opinion or confirm that there is no additional support for that position.

Response:

IIIA. Please refer to the letter from Rich Kirkland dated June 18, 2020 attached as Exhibit F.

WITNESS: Carson Harkrader

Exhibit F

Kirkland Appraisals

Richard C. Kirkland, Jr., MAI
9408 Northfield Court
Raleigh, North Carolina 27603
Phone (919) 414-8142
rkirkland2@gmail.com
www.kirklandappraisals.com

June 18, 2020

Carson Harkrader
Carolina Solar Energy
400 West Main Street, Suite 503
Durham, NC 27701

RE: Glover Creek Solar Impact Study, Metcalfe County, KY

Ms. Harkrader

The purpose of this letter is to address a question from the Kentucky Siting Board related to the market impact analysis that I completed on this project on March 4, 2020.

I have received additional questions regarding the topic of potential changes in property values due to construction activities.

Construction activity is always a temporary function and measuring impacts during construction periods next to a solar farm would be comparable to impacts during construction periods next to a subdivision, school, or other similar facility.

More specifically I direct your attention to Page 32 of the original impact study. A home adjoining the Neal Hawkins Solar in Gastonia, NC sold after the project was approved with construction pending. This home had been on the market prior to approval or any announcement of the solar farm and went under contract and sold after it was approved. According to the broker, Jenniver Bouvier, the solar farm had no impact on the sales price.

I cite Pages 41 through 42 of the original impact study. The adjoining sale considered sold in 2018 after the solar farm was approved with construction pending and that property sold for more than the 2017 appraisal of that home without consideration of the solar farm came in at. During construction the broker for additional adjoining lots on Kristi Lane, Margaret Dabbs, indicated that they were marketing the properties adjoining the solar farm as a positive.

I cite Pages 55 through 56 of the original impact study. Courthouse Solar was approved and after that approval but prior to construction I considered a matched pair for a home and a matched pair for adjoining land showing no negative impact. The land matched pair showed no negative impact due to the solar farm.

I cite Pages 60 through 61 of the original impact study. Clarke County Solar in Virginia shows construction ongoing in 2017. I considered a matched pair of a home that sold in January 2017 showing a positive impact on property value.

I cite Pages 62 through 63 of the original impact study. Turner Solar in Virginia was approved in 2018 but had not yet been constructed when I considered the February 2019 adjoining home sales that showed no impact on property value.

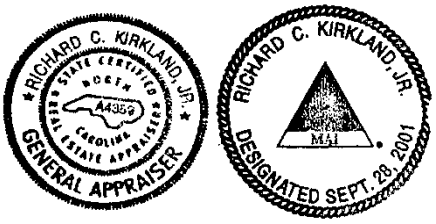
A number of the matched pairs noted above were prior to construction starting and one was during construction. Those that are prior to construction starting, but after approval is actually the period where the greatest impact would be detectable if there was an impact to

EXHIBIT F

identify. The fear of a project or the fear of the change in use is measurably greatest before the project where imaginations are greater than reality. This is well documented in numerous research studies on various adjoining uses. If there is a measurable impact it is typically most prominent after approval but before the facility has been built. Once a use is constructed any loss in value gradually restores either fully or partially over time depending on the use. The fact that the solar farm data shows no impact after approval but before construction is a strong indicator that the market accepts that use. The fact that I also have matched pairs considered during construction further supports that and more specifically addresses the question of valuation impacts during construction.

If you have any further questions please call me any time.

Sincerely,



Richard C. Kirkland, Jr., MAI
Kirkland Appraisals, LLC

IV Traffic—

A. According to responses from RFI #1, during the peak period, there would be 75 commuting worker vehicles (Class 2 and 3) traveling to and from the site per day and 15 Class 9 vehicles traveling to and from the site per day. Is that correct?

B. How many other Class 21 truck trips will be needed for delivery of the substation transformer? When will that occur in the construction schedule and over how many days?

C. How many other Class 21 truck trips will be required to deliver equipment to the site? When will those trips occur?

D. What is the expected weight of the Class 9 vehicles (including cargo)?

Response:

IVA. Correct, our responses to RFI #1 in questions VB1 and VB6 stated that there would be a peak of 75 commuting worker vehicles and 15 class 9 vehicles per day. If there is not enough on-site parking for 75 commuting worker vehicles, then appropriate and safe off-site parking will be established and shuttles will be used.

IV4B. The substation transformer is delivered on 1 truck over 1-2 days. The substation transformer is delivered at least six months prior to energization (i.e. 6 months prior to commissioning).

IVC. The lulls used to unload cargo will be delivered on Class 21 trucks (or similar). Approximately 8-10 lulls will be used at the site, with 1-2 lulls delivered per truck, for a maximum total of approximately 10 additional Class 21 trucks. These deliveries will occur at the end of the grading period, before the start of equipment delivery.

IVD. Approximately 40,000 pounds.

Witness: Carson Harkrader

V Dust—

A. The cumulative environmental assessment lists best management practices (BMPs) as the primary way of minimizing air impacts. Covered loads and watering down roads are listed as examples of best management practices. The POND report lists revegetation measures as an additional mitigation technique. Is the project committed to following BMPs for dust control and noise during construction?

Response: Yes. The Project will follow available best management practices for dust and noise control during construction.

Witness: Tyler Caron

VI Noise—

A. Construction phase

1. How loud is the equipment used to "push" the racking systems into the ground?

2. What is the frequency of "push" equipment use?

B. Operational phase

1. *Distance of solar panel motors to boundaries*—Please provide the distance from the nearest solar panel motor to the site boundary. Will that be typical for the solar panel motors around the perimeter of the solar project?

2. How far will the solar panel motors be spaced from one another?

Response:

VIA1. The table on page 3 of the POND Noise and Traffic Assessment included in the original application lists the noise generated by a Pile Driver (Impact) as 101 (dBA) 50 feet from the source (please refer to page 134 of the 316-page Site Assessment Report). At the source, pile drivers used on solar facilities generate 80-110 dBA. A report which calculates the cumulative effect of two pile drivers working in one area of the Project at the same time, as requested by Harvey Economics during our conference on June 24, 2020, is attached as Exhibit J.

VIA2. The pile drivers will be used to install posts for approximately 3-6 weeks during the construction phase. The post driving is a fairly fast process. The locations for each post are set out by laser, and most of the time required for post installation is spent marking the locations in the field and laying out the equipment; once the pile drivers start working, the post installation process moves very quickly. Depending on soil conditions, each post takes between 10-30 "hits" from the pile driver to be installed down to its approximate 7-foot depth (more hits are required if there is clay or rock). During use, the equipment will phase through the site, working on a few areas at a time. A video showing a pile driver at work can be found at https://www.youtube.com/watch?v=cOxNtSVeBqA. Please note that the project in the video is being installed in an arid location and therefore there is no grass groundcover on the site, as there would typically be on a project in Kentucky.

VI6B1. There will be approximately 1 motor at the end of each row of panels. They will be placed on the interior side of the rows where possible, with the closest motors being no closer than 100 feet from the property boundary. A video showing an example of one of these types of motors in operation can be found at https://www.youtube.com/watch?v=KfKrNlxBLZI. Only the first 1-2 minutes of the video are applicable.

VIB2. The rows of panels that the motors are mounted to will be between 12 and 18 feet apart.

Witness: Tyler Caron

Exhibit J

Construction Noise Assessment

Glover Creek Solar Facility

June 2020

Prepared for:

Kentucky Siting and Licensing Board
Kentucky Public Service Commission

Prepared by:

Pond
3500 Parkway Lane, Suite 500
Peachtree Corners, GA 30092

On behalf of:

Glover Creek Solar, LLC
400 W. Main Street, Suite 503
Durham, NC 27701

Introduction

The proposed Glover Creek Solar Facility is located on an approximately 561-acre tract of land in Metcalfe County, Kentucky. The operation of this facility will not be a major contributor to noise in the project vicinity. However, the largest contributor of noise within the proposed project site and surrounding areas will be noise produced during the construction phase (i.e., the use of heavy machinery and equipment). The nearest noise receptors in the project vicinity are limited to scattered, low-density, single-family homes interspersed around the project site. Construction activities may be located as close as 150 feet from the nearest noise receptor (i.e., a single-family residence).

Construction Noise

The construction of the solar facility will require the use of equipment and machinery typical for site development (i.e., graders, dozers, excavators, and dump trucks). The U.S. Department of Transportation Federal Highway Administration (FHWA) published noise levels for typical construction equipment as shown in the table below. The FHWA noise measurements in the table below are reported in the A-weighted decibel measurement (dBA). The dBA scale is a measurement of decibel levels that have been weighted to approximate the way human ears will receive the sound. In short, this is an expression of the relative loudness of sounds as perceived by human ears.

Equipment	**Typical Adjusted Noise Level** (dBA) **50 feet from Sources**	**Equipment**	**Typical Adjusted Noise Level** (dBA) **50 feet from Sources**
Air Compressor	81	Pneumatic Tool	85
Backhoe	80	Pump	76
Ballast Equalizer	82	Rail Saw	90
Ballast Tamper	83	Rock Drill	98
Chainsaw	85	Roller	74
Compactor	82	Saw	76
Crane Derrick	88	Scarifier	83
Crane Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Tractor	84
Pickup Truck	55	Truck	88
Pile Driver (Impact)	101	Welder/Torch	73
Pile Driver (Sonic)	96		

Source: FHWA Construction Noise Handbook, 2009. Table based on EPA Report and measured data. Exact noise levels may vary depending on manufacturer and model.

As shown in the table above, the equipment with the highest noise level is an impact pile driver, which produces approximately 101 dBA at 50 feet from the source. For the purposes of this report, the pile drivers will be used to assess the "worse-case" scenario regarding noise production within the project site during the construction phase.

In open areas free of obstructions, amplifiers, or objects causing reflection or reverberation, sound intensity follows the inverse square law of sound. The inverse square law states that in a free field, the intensity of an acoustic wave changes in inverse proportion to the square of the distance from the source. Decibels (dB, a measurement of sound pressure) is a common measurement of sound and are based on a logarithmic scale. In general, the inverse square law of sound suggests that the doubling of a distance from a noise source reduces the sound pressure level by approximately 6 dB. Although the project site contains vegetation than may dampen the sound received by noise receptor sites, the project site is relatively open, and sounds produced during construction are expected to closely follow the inverse square law. According to the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA)[1], a general rule for additive/cumulative noise is that the doubling of sound power increases the sound level by 3 dB. Essentially, if two noise sources of similar output are operating simultaneously, then a corresponding increase of 3 dB of sound will occur.

During the construction phase of the proposed project, we assume that no more than two pile drivers will be operating simultaneously in any specific portion of the project site. These pile drivers will be of similar make and model and will produce approximately the same level of noise. In addition, these two piledrivers will only be operated at a distance of greater than 100 feet from one another. Please see the table below for potential noise produced by piledrivers during the construction phase the project.

Distance of Noise Receptor from Impact Pile Driver (feet)	**Adjusted Noise Level** (dBA)	
	One Pile Driver	**Two Pile Drivers Operating Simultaneously**
50	101	104
100	95.0	98.0
150	91.5	94.5
200	89.0	92.0
500	81.0	84.0
1000	75.0	78.0
2000	69.0	72.0

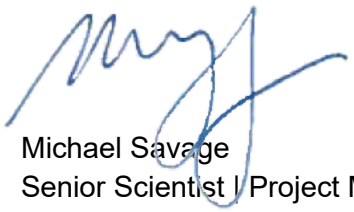
As mentioned above, construction activities may take place as close as 150 feet from the nearest noise receptor. In this loudest scenario possible, the potential decibel level experienced from two pile driver operating simultaneously will be approximately 94.5 dBA at the nearest noise receptor

[1] U.S. Department of Labor, Occupational Safety and Health Administration. *OSHA Technical Manual*, Section III: Chapter 5: Noise. (Section II. B. 7.). 2013.

This is the assumption that no obstructions or objects create reflection, reverberation, or dampen the noise level produced. The exact noise level experienced by the nearest noise receptor will vary depending on environmental conditions such as wind, humidity, vegetation, and other obstructions that may be located between the source and the receptor.

If you have any questions or comments regarding this construction noise assessment, please do not hesitate to contact Michael Savage at savagem@pondco.com.

Sincerely,



Michael Savage
Senior Scientist I / Project Manager

VII Topography/Scenery—

A. The response to RFI #1 included information on glare studies (Exhibit M). We would like to discuss that information with the Applicant or the consultant via a telephone conference to be scheduled in the immediate future to make sure we understand the work that was done and the results.

B. Will anti-glare panels be used in this Project?

Response:

VIIA. Completed during conference on June 24, 2020.

VIIB. It is likely that anti-glare panels will be used, however that has not been confirmed, and so panels without any glare treatment should be assumed. As described in the first responses, anti-glare panels significantly reduce "yellow" glare but do not have a material impact on "green" level glare. The anti-glare surfaces are designed to refract any light not absorbed by the solar panel into smaller particles.

Witness: Carson Harkrader

VIII Economic impact analysis—

A. The response to RFI #1 indicates that a report from the Bureau of Economic Analysis (BEA) was included as Exhibit M. However, Exhibit M is the glare information and the BEA report is missing from the response package. Please provide the cited BEA report.

B. Were the Metcalfe County multipliers from the BEA used in the economic impact analysis? Footnote 3 of Exhibit G states that a multiplier of 1.5 was used, based on a report from New Mexico State University.

C. The response to RFI #1 suggests that the majority of the economic benefits to Kentucky are related to employment and wages during the construction period. However, RFI #1 states the bulk of workers will come from the existing local labor force. Please explain how this is a benefit.

D. Can you tell us the total number of construction person-hours for the project?

E. The economic impact analysis assumes 300 direct construction jobs; however, the response to RFI #1 indicated an average of 50 worker vehicles commuting to the site each day. If most of the construction workers are hired from the local labor force, carpooling is likely to be minimal. Please explain the apparent contradiction in the construction job and worker commuting vehicles.

F. Under the heading Fiscal Impact: Operational Phase, the economic impact analysis states that the "Project will pay approximately $1 million in county property taxes over the first twenty years of operation, with on-going county tax payment continuing after the first twenty year." However, the response to RFI #1 discusses an approval from the Metcalfe County Fiscal Court with regard to an Industrial Revenue Bond and payments to Metcalfe County in lieu of property taxes. Please explain the agreement between the Applicant and Metcalfe County as it relates to property tax payments or other fiscal effects on the local jurisdictions.

Response:

VIIIA. Provided via docket filing on June 15, 2020.

VIIIB. Correct, the 1.5 multiplier suggested by New Mexico State University was used in our original application and was not changed in our response to the RFI #1. The Metcalfe County multipliers from the BEA show a multiplier of 1.1540 for the "electric power generation, transmission, and distribution" industry. Solar construction employment is quite different from fossil fuel plant employment, but this is the most relevant industry type that we could locate in the RIMS II Multipliers document. An updated page from the economic impact report, using the 1.1540 multiplier, is attached as Exhibit G.

VIIIC. According to the Associated General Contractors of America (see Exhibit H) the construction industry represents 4.1% of Kentucky's GDP, however most construction work is by its nature temporary work. Workers involved in the construction industry, including electrical contractors and laborers involved in the solar industry, move from site to site as construction of each project, home, building or subdivision is complete. The Glover Creek project will create hundreds of temporary local jobs during the 9-12 months of construction which will reduce unemployment or underemployment in the local area, bridge any gaps in local construction work for local construction workers, and bring in outside workers who will impact demand at local restaurants, for local housing, and other positive impacts as discussed in our application. The local workers trained at the Glover Creek site will have the opportunity to find work at other solar projects under construction in Kentucky following the end of construction at Glover Creek.

VIIID. A reasonable estimate of the total number of construction person-hours for the project is 260,000. This assumes minimal grading, and that there are minimal delays due to weather or supply chain issues.

VIIIE. It is likely that local workers will be encouraged to carpool, in order to reduce the number of cars parked at the site during construction.

VIIIF. Please see attached Exhibit B, which is the schedule attached to the Industrial Revenue Bond approved by Metcalfe County for the Glover Creek project. The PILOT agreement is for $1,000 per MWac per year for the first 20 years of operation, which totals over $1 million over the first 20 years of operation.

Witness: Carson Harkrader

Exhibit B

SCHEDULE A
to
PAYMENT IN LIEU OF TAXES AGREEMENT

PILOT PAYMENTS

CALENDAR YEAR	AMOUNT OF PILOT PAYMENT
Calendar years [2022] to [2041][*]	$1,000.00 per MWac (stated capacity)
Calendar years [2042] to [2051][**]	$200.00 per MWac (stated capacity)

TAXING AUTHORITIES

County of Metcalfe, Kentucky
Metcalfe County Extension Board
Metcalfe County Library District
Metcalfe County Soil Conservation District
Metcalfe County Ambulance District
Metcalfe County School District

[*]20 years starting in the calendar year in which the Project is placed in service, which is currently estimated to occur in calendar year 2022.
[**]10 years starting in the calendar year after the end of the preceding 20-year period.

Exhibit B

Exhibit G

Exhibit G

Section 4(2)(j)

An analysis of the proposed facility's economic impact on the affected region and the state

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The proposed facility will generate lasting and significant positive economic and fiscal impacts on the entire affected region and the state, both immediate impacts during the construction phase and impacts that present over time during the operational phase. The impacts include the creation of hundreds of construction jobs, meaningful expansion of the local tax base, and the benefits of having, for decades to come, a long-term employer and corporate citizen in the region that has a strong commitment to investing in the communities it serves. The investment in this facility brings a multiplier effect that magnifies each of these impacts. Moreover, the siting of the facility in a rural county that sits on the edge of an economically distressed region ranked among the poorest 10% of counties in the nation further amplifies the facility's positive impacts.

Economic Impact: Capital Investment

The Project will make a multi-million dollar capital investment in rural central Kentucky that will have direct, indirect, and induced impacts on a broad range of economic activities in the region and across the state and thus will have a widespread ripple effect on the economy at large. This injection of capital will lead to increased demand for products and services in the region, greater levels of income, and additional spending that directly benefit many local and regional businesses. This multiplier effect will cycle repeatedly and radiate out from the area where the money was spent, positively affecting broader regions as it spreads throughout the geographical area.

Economic Impact: Construction Phase

Construction of the facility is anticipated to create approximately 450 jobs -- 300 direct and 150 indirect and induced[1], the vast majority of which will be filled by local craft and contract workers. In addition to these skilled labor positions, there will be at least 30 highly paid construction management positions, including a project manager, assistant project manager, eight project engineers, two safety managers, and various support engineers, construction superintendents, and construction managers. These 450 jobs translate to a projected injection of approximately $15M[2] in new wages into the local economy, which will support local businesses, and a labor income multiplier impact of an additional $2.31M.[3] The **total construction phase economic impact of the facility (exclusive of the capital investment and tax revenues) is projected to be at least $17.31M**.

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[1] Based on studies of direct, indirect, and induced job creation associated with similar projects using the IMPLAN platform and databases

[2] A conservative estimate based on Bureau of Labor Statistics, Average annual income solar photovoltaic installer: $42,680, which does not account for higher income positions https://www.bls.gov/ooh/construction-and-extraction/solar-photovoltaic-installers.htm and United States Census Bureau, Quick Facts, Metcalfe County, Kentucky median income: $35,809https://www.census.gov/quickfacts/fact/table/metcalfecountykentucky/POP060210

[3] Based on an income multiplier of 1.1540, sourced from the U.S. Bureau of Economic Analysis (BEA) RIMS II Multipliers (2012/2017) for Metcalfe County, KY for the electric power generation, transmission, and distribution industry.

Exhibit H

The Economic Impact of Construction in the United States and Kentucky

Economic Impact of Construction:

- U.S. gross domestic product (GDP)—the value of all goods and services produced in the country—totaled $20.6 trillion in 2018; construction contributed $840 billion (4.1%). In Kentucky, construction contributed $8.5 billion (4.1%) of the state's GDP of $208 billion.
- Construction wages and salaries in 2018 totaled $468 billion in the United States, including $4.3 billion in Kentucky.

Construction Spending and Starts:

- Nonresidential spending in the U.S. totaled $761 billion in 2018 ($461 billion private, $301 billion public).
- Residential construction spending in the U.S. totaled $546 billion ($290 billion single family, $60 billion multifamily, $190 billion improvements, $7 billion public).
- Private nonresidential spending in Kentucky totaled $4.2 billion in 2018. State and local spending totaled $3.5 billion. (Totals are not available for residential or federal construction spending).
- Nonresidential (building and heavy/civil) starts in Kentucky totaled $6.3 billion in 2018, according to ConstructConnect.

Construction Employment (Seasonally Adjusted):

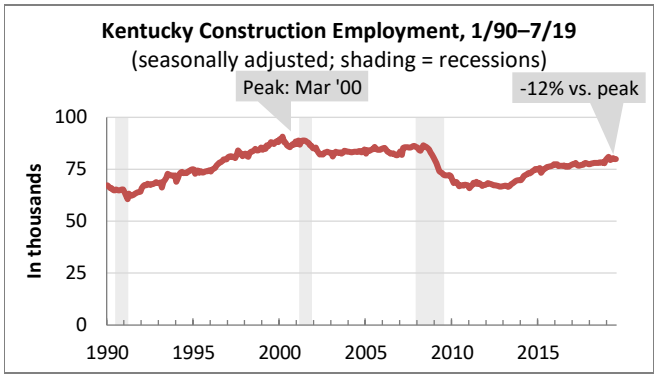
- Construction (residential + nonresidential) employed 7.5 million workers in July 2019, an increase of 177,000 (2.7%) from July 2018, but 3% less than in April 2006, when U.S. construction employment peaked.
- Construction employment in Kentucky in September 2019 totaled 79,900, an increase of 2.4% from July 2018, but 12% less than the state's peak in March 2000.
- Construction unemployment is near a series low. In the 2019 AGC-Autodesk Workforce Survey, 78% of firms in the U.S. and 85% in Kentucky reported difficulty filling hourly craft worker positions.

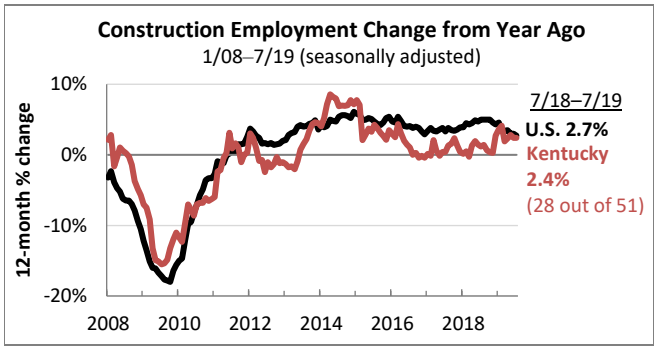
Construction Industry Pay:

- In 2018, pay for all construction *industry* employees in the U.S. averaged $62,727, 10% more than the average (mean) for all private-sector employees. Construction industry pay in Kentucky averaged $53,957 in 2018, 17% more than the state average for all private-sector employees.
- Four out of the five most numerous construction *occupations* in Kentucky had higher median pay than the median for all employees in the state. (Half of workers earn more than the median; half earn less.)

Small Business:

- The U.S. had 810,295 construction firms in 2016, of which 92% were small (1 to 19 employees). Kentucky had 9,466 construction firms in 2016, of which 90% were small.





Empl. Change by Metro (not seasonally adjusted)		Rank
Metro area or division	7/18–7/19	(out of 358)
Statewide (Construction)	2%	
Statewide (Mining, logging, and construction)*	2%	
Bowling Green*	3%	172
Elizabethtown-Fort Knox*	0%	256
Lexington-Fayette*	3%	172
Louisville/Jefferson County, KY-IN*	7%	54
Owensboro*	4%	128
*Clarksville, TN-KY**	*3%*	*172*
*Cincinnati, OH-KY-IN**	*3%*	*172*
*Evansville, IN-KY**	*-8%*	*352*
*Huntington-Ashland, WV-KY-OH**	*-6%*	*345*

*The Bureau of Labor Statistics combines construction, mining and logging employment for metro areas in which mining and logging have few employers. Construction-only employment change is shown for a metro if BLS posts that data.

5 most numerous construction jobs and median annual pay in Kentucky (2018 data)			
Occupation	Number of employees	Median annual pay	Pay relative to median
All occupations	1,889,870	$34,650	
Construction Laborers	10,710	$33,610	-3%
Electricians	9,550	$52,150	+51%
Carpenters	7,510	$43,050	+24%
First-Line Supervisors of Construction Trades and Extraction Workers	7,200	$60,150	+74%
Plumbers, Pipefitters, and Steamfitters	6,970	$53,210	+54%

Source: Ken Simonson, Chief Economist, AGC of America, ken.simonson@agc.org, from Bureau of Economic Analysis (GDP); Census Bureau (spending, small business); ConstructConnect (starts); Bureau of Labor Statistics (jobs, pay, occupations); AGC (rankings, workforce survey). September 17, 2019

EXHIBIT H

IX Decommissioning—

A. RFI #1 indicated that in the leases for certain lands, there was a commitment for decommissioning. Please provide a copy of those leases.

B. If the prices of metals (aluminum, copper, steel) or the costs of decommissioning 40 years from now are such that it costs more to remove materials than is returned by salvaging them, what is the guarantee that full decommissioning would occur, including all facility materials removed from the site and the site restored?

Response:

IXA. Please refer to Section 7 of the redacted leases attached as Exhibit A, submitted as Confidential Information.

IXB. In addition to the value of the materials within the solar facility, there will also be value in the point of interconnection ("POI") at the end of the lifetime of the Project. The substation transformer and interconnection rights at the POI will remain valuable assets of the Project. If the costs of decommissioning 40 years from now are such that it costs more to remove materials than is returned by salvaging them, there will still be a financial incentive for the owner of the solar facility to comply with its obligations to properly decommission the site, in order to repower the site with new technology and continue to utilize the POI. (Please note that for completeness, the decommissioning plan shows that the substation and substation equipment will be removed, but it is more likely that they will remain on the site and serve as the POI for a new project.)

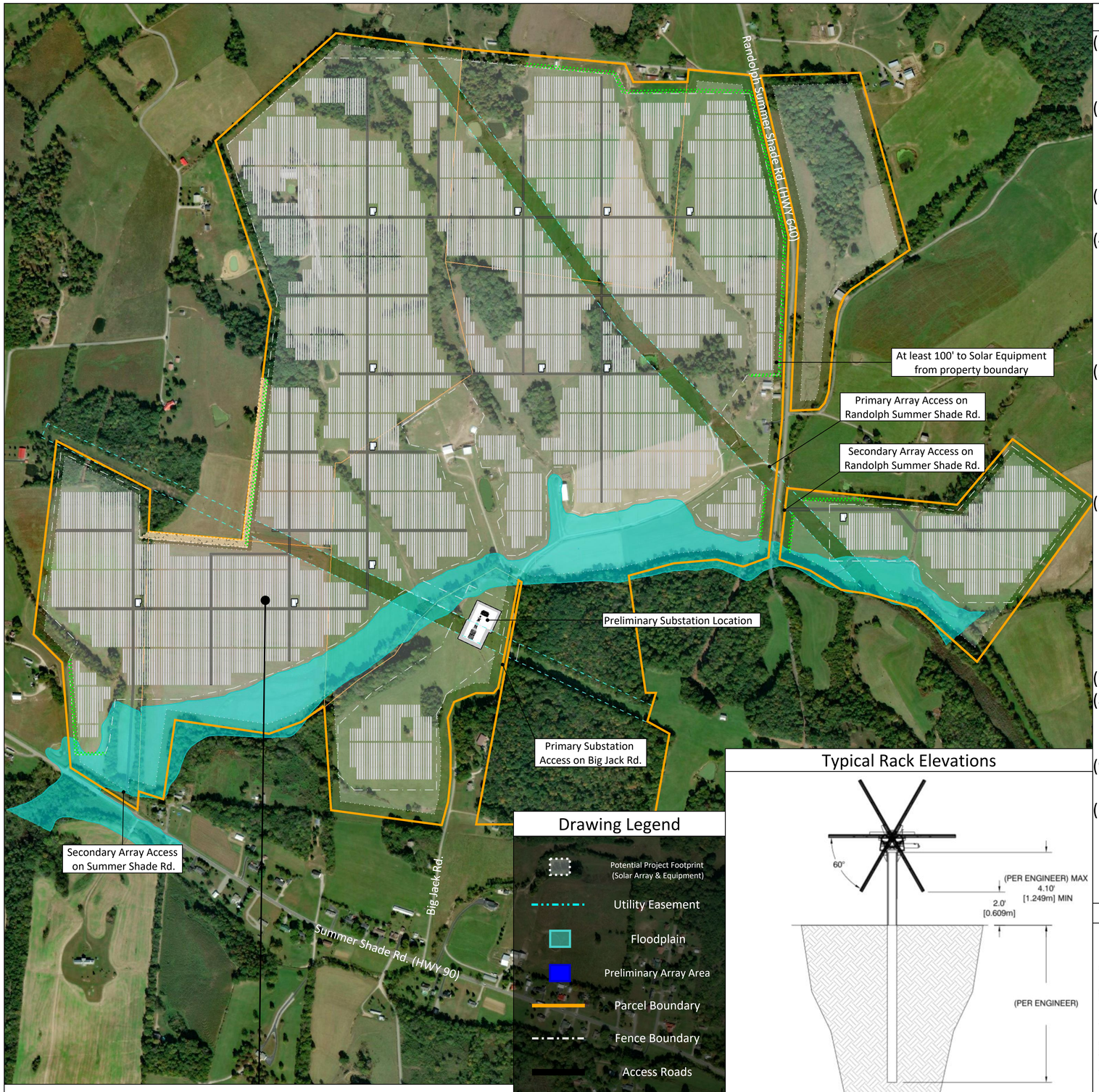
Please also note that an area of land (approximately 2 acres) at the POI for the substation will be purchased by the Project from the landowner. A portion of that land will be subdivided and owned by the East Kentucky Power Cooperative for their switching equipment. In order to repower the site after the end of the initial forty-year leases, the owner of the solar facility would need to sign new leases with the landowners around the POI for sufficient acreage to power the site with the type of technology available at that time, and may also need to apply for new permits.

Witness: Carson Harkrader

SUPPLEMENTAL ITEM: Note we failed to note mark one entrance on the layout map that we submitted with the first RFI answers. There was no entrance shown for the section of the Project east of Randolph-Summer Shade Road (SR 90). That area will need an entrance for both construction and maintenance, and one has been marked on Exhibit I.

Exhibit A
(confidential)

Exhibit I



Solar panel, equipment and road locations are indicative and may be adjusted within the shaded areas shown within the Project Footprint

Drawing Legend

- Potential Project Footprint (Solar Array & Equipment)
- Utility Easement
- Floodplain
- Preliminary Array Area
- Parcel Boundary
- Fence Boundary
- Access Roads
- Vegetative Buffer
- Pollinator Plantings

Typical Rack Elevations

1 TYPICAL PIER HEIGHT
SCALE: N.T.S.

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) The property lines, existing improvements, and topographic data shown hereon are not based on a field survey and have been completed from ArcGIS & Google Earth Imagry. No field evidence of property markers were located with this Exhibit.
(3) Wetlands and Streams are shown representative of a delineation received by Carolina Solar Energy.
(4) Project area will be cleared and grubbed as necessary, retaining pre-development drainage patterns as much as possible. Minor grading will occur around inverter areas to divert surface drainage. Areas subject to rutting during construction will be temporarily stabilized with gravel that will remain after construction. Soil conditions and equipment loads will determine final design.
(5) Proposed construction and temporary laydown yard/construction staging area to be used during site construction. A portion of this area will be covered with gravel to allow delivery of construction materials. Prior to construction, this area will be compacted by a smooth drum or sheepsfoot roller to reduce/prevent rutting. Following construction gravel laydown yard will be removed.
(6) Access aisles shown on this plan indicate construction and maintenance access points for ingress/egress. Prior to construction, these aisles are compacted by a smooth drum or sheepsfoot roller to reduce/prevent rutting. Gravel may be placed in high traffic or poorly draining areas during construction activites to improve access. Soil access aisle will be scarified, aerated, and re-seeded after construction. Access aisles to inverters may require gravel to support delivery equipment loads. Soil conditions and final equipment selection will determine if gravel access aisles will be required to inverter locations
(7) All Right-Of-Ways are public unless noted otherwise.
(8) Utility lines and services shown hereon are approximate per aerial photography or as reported by various responsible parties. Location of underground utilities are not shown. Call appropriate authorities before digging.
(9) No lighting is proposed for the array area. The Interconnection Substation will have some lighting.
(10) 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 will be locked with a standard keyed or combination lock. Emergency personnel will be provided a key or combination for access.

Vegetative Buffer Elevation

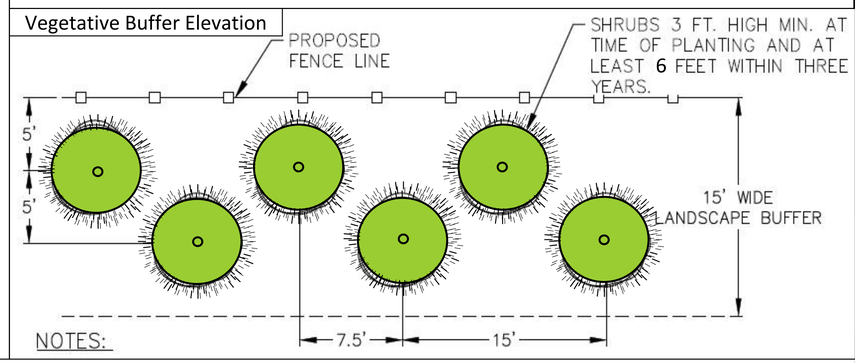


EXHIBIT I

CAROLINA SOLAR ENERGY

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

Glover Creek Farm
55 MWAC

ISSUE
06.17.20
05.26.20
12.02.19
12.05.19

PROJECT
Glover Creek

DRAWN BY
CJ

DESCRIPTION
Array Layout

a

01