CONDITIONAL USE PERMIT APPLICATION SUPPLEMENT

Heart Pine Solar
Marion County, GA

Prepared for:
Marion County Planning Commission
and
Marion County Board of Commissioners

February 16, 2024

0 Table of Contents

Figures

Appendices

1 Project & Application Summary

Heart Pine Solar, LLC, a subsidiary of AES Clean Energy Development, LLC (the "**Applicant**"), hereby supplements its Application for a Conditional Use Permit (CUP) (the "**Application**")[1] to construct, operate, and maintain the Heart Pine Solar Project, a proposed 150-megawatt (MW), alternating current (AC), photovoltaic (PV), utility-scale solar energy facility (the "**Project**") in unincorporated Marion County, Georgia.

The Project will be sited over approximately 1,391 acres of privately-owned property spanning fifteen (15) tax parcels that Applicant has under lease and/or easement (the "**Property**").[2] The Applicant has partnered with four landowners who collectively own the Property (see the owner and parcel summary- ***Appendix A)*** which will host the Project's infrastructure. The Project is located approximately one mile west of the Tazewell community located within the County's Agricultural zoned district. The Project is located south of Walter Wells Road, west of Hartage Ford Road, east and west of Harbuck Pond Road, and east and west of Morgan Ford Road which are shown on **Figure *2* (*Site Map*)**. The Property is zoned Agricultural pursuant to the County's zoning map, located within the "Rural" character area, and is an "other agricultural-related, religious, utility, institutional or governmental use", permitted as a conditional use within the Agricultural District (see Appendix B, Article XI, Section 11.03(G) of the Marion County Code of Ordinances, such Appendix B being the "***Zoning Ordinance***"). Accordingly, Applicant has filed the Application.

If the CUP is approved, the Project will interconnect to Georgia Power's transmission system at an existing transmission line (North Americus – Talbot County # 2, 230kv) via the proposed switchyard the location of which is shown on Applicant's **Conceptual Site Plan *(Figure 5)***.

The Applicant submits the Application and this Supplement in compliance with the Zoning Ordinance requirements and the Application, including this Supplement meets all requirements and standards set forth for the Board of Commissioners' consideration and approval.

1.1 Conditional Use Findings of Facts (Section 4.14, Marion County Zoning Ordinance)

Section 4.14(b) of the Zoning Ordinance sets forth five standards that the County shall review and which an Applicant shall meet to receive a grant of approval of a conditional use. These standards are set forth below together with Applicant's analysis of each for the County's consideration. Because this analysis and all supporting materials the Applicant has and is submitting reflects that each of the five standards have been met, the County should grant approval of the Application.[3]

[1] The Application, as being supplemented now, is reproduced in its entirety in Appendix A.
[2] The metes and bounds legal description of the Property are collectively in Appendix C.
[3] Please be advised that Owners and Applicant have constitutional objections to any action by the County that does not result in the approval of the Application (without conditions attached that are not approved by Owners and Applicant) and the issuance of the requested CUP for a solar energy facility as a utility use on the property including that such action would: (i) be an arbitrary and unreasonable use of the County's zoning and police powers; (ii) deprive Owners of their right and ability to use their property in accordance with its highest and best use; (iii) result in an unconstitutional taking of property rights; (iv) discriminate between Owners and other owners of similarly situated property in an arbitrary, capricious, unreasonable and unconstitutional manner; and (v) violate Owners' and Applicant's rights to substantive and procedural due process as guaranteed by the Georgia and United States Constitutions. We are confident that the County will consider and act upon the Application in a constitutional manner and raise these concerns out of an abundance of caution and without waiver of Applicant's and Owners' constitutional rights.

1. **The approval will not be detrimental to the health, safety, and general welfare of the county.**

The Zoning Ordinance allows for a utility as a conditional use in only the AG zoning district, reflecting a pre-determination of a limited area of the County in which a solar facility could be located - a limitation that serves to protect the health, safety, and general welfare of the County. Based on the evaluation of Georgia's natural, historical, and environmental resources, it has been determined that the Project will not have any significant adverse impact on these resources. This has been ensured through proper siting and due diligence to identify and minimize potential impacts during the design phase of the Project. This is supported by the Georgia Low Impact Solar Siting Tool (GA LISST) located in ***Appendix D (Environmental Impact Analysis Report)***, which was developed by the Georgia Department of Natural Resources, The Nature Conservancy, and the US Fish and Wildlife Service to quantify areas that may be preferred for low impact solar development. The Project will implement best management practices during construction and operations to further minimize impacts. This due diligence effort helps ensure that approval of the requested conditional use will not be detrimental to the health, safety, and general welfare of the county. Additional information regarding preservation of county health and welfare is included in ***Appendix D (Environmental Impact Analysis Report)*** of this application.

Initial planning for this Project commenced approximately 2 years ago, with initial diligence and analysis being to ensure compliance with County, state and federal guidelines using best management practices (BMPs) through design, construction, operating and ultimately decommissioning to ensure that the Project will not be detrimental to the health, safety and general welfare of the County. The Project, if approved, will provide energy sufficient to support approximately 30,000 households, and meet a state-wide need for energy production. Additional information regarding county welfare is included in ***Appendix B (Economic & Fiscal Impact Assessment)*** of the Application.

Additionally, the Project will have a significant economic benefit to Marion County as further described in **Section 6**.

2. **The proposed use shall not be detrimental to the use or development of adjacent properties or the general neighborhood, nor affect adversely the health and safety of residents and workers.**

The GA LISST indicates that the properties intended to be used for the Project are preferred for low impact solar development. The Project is sited in an optimal location for solar development compared to other locations. Adjacent properties are undeveloped wooded land, agricultural use land, rural residential use, and silviculture. Additionally, the Project's solar generating equipment will be enclosed by security fencing. The Project will meet or exceed all setbacks established by the County, and Applicant will incorporate these into its Project design. These design protections ensure reduction of any effect on neighboring property owners.

Instead of being a detriment, this Project will put agricultural land to an alternative land use which will benefit neighbors by ensuring the properties are not otherwise developed with a higher intensity use. Additional information regarding the proposed use not being detrimental to the use or development of adjacent properties or the general neighborhood, nor adversely affecting the health and safety of residents and workers is included in ***Section 5*** and ***Appendix D (Environmental Impact Analysis Report)*** of this Supplement.

3. **The proposed use shall not constitute a nuisance or hazard because of the number of persons who will attend or use such facility, vehicular movement noise or fume generation or type of physical activity.**

A solar energy facility is a generally passive use, that does not constitute a nuisance or hazard for any reason - attendance, use, noise, fume or physical activity or otherwise. There will be a temporary increase in noise and traffic associated with the construction phase of the Project. Project construction traffic will be mitigated through the implementation of an internal construction traffic management plan. Access to the Project will be via established curb cuts, which are sufficient for the minimal construction traffic generated by the Project. Once the Project is operational, the number of people who will visit the facility is limited to approximately two full-time employees to conduct regular daily checks and standard maintenance of the Project. Attendance and vehicular movement noise is exceptionally limited and considered negligible post-construction. Additional information regarding avoidance, minimization, and mitigation of potential nuisances and hazards is provided in ***Section 5*** of this Supplement.

4. **The proposed use shall not be affected adversely by the existing uses, and the proposed use will be placed on a lot of sufficient size to satisfy the space requirements of said use.**

The Project will not be affected adversely by the existing uses, and the proposed use will be placed on a lot of sufficient size to satisfy the space requirements of the said use. The Applicant has land agreements in place with the landowners whose property will house the solar facility to account for existing uses throughout design, construction, operation and decommissioning of the proposed Project. The Project's design utilizes setbacks that are compliant with Zoning Ordinance, and the Project will meet the vegetative buffering and screening requirements of the Zoning Ordinance to promote integration with the existing uses in the area. Additional information regarding Project proposed use and lot size are provided in ***Section 3*** and ***Figures 1-5*** of this Supplement.

5. **Parking and all development standards set forth for each particular use for which a permit may be granted have been met.**

As described above, the utility use of a solar facility simply is a passive use; post-construction of the Project. Any parking spaces for the operations and maintenance building would be in accordance with the Marion County ordinance and development standards. The Applicant looks forward to working with the County to ensure that all development standards are met or exceeded. Additional details on the proposed Project area and adjacent roads are provided in ***Section 2***. Additional information regarding Project development standards is provided in ***Section 3***, ***Section 4***, and ***Section 5*** of this application.

1.2 Project Need & Necessity

The approved Georgia Power 2022 Integrated Resource Plan (IRP) covers Renewable Expansion in Georgia Power's service area and reflects a capacity need in 2029. The IRP also states in Section 11.9 that the capacity need grows sizably into 2030-31 due to expiring Power Purchase Agreements (PPAs) and expected retirement of current energy producing facilities. Section 14.1 of the referenced IRP covers New Renewable Resources and identified locational reliability and resiliency challenges associated with future retirement of coal facilities.

The Project is an opportunity for Marion County to help address Georgia's need for new electricity generation and provide a diverse, reliable, and clean source of electricity for citizens within the county and across the state. Approval of the Application to meet this State-wide need supports a finding under Section 4.14(b)(1) that the Project will be beneficial, not detrimental to the health, safety and welfare of the County.

2 Proposed Project Area

The Project is located south of Walter Wells Road, west of Hartage Ford Road, east and west of Harbuck Pond Road, and east and west of Morgan Ford Road, in the unincorporated eastern portion of Marion County, Georgia, in the Agriculture Zoning District and approximately one-mile due west of the Tazewell community. ***Figure 1*** depicts the regional Project location within the state, ***Figure 2*** shows the local Project location within a more focused geographical area, and ***Figure 3*** depicts the Project location with an aerial photography base map. ***Figure 5*** is a conceptual site layout of the proposed Project facilities. The parcels included in the Project have frontage on the roads referenced in the Table included in ***Appendix A.*** The County Assessor's parcel numbers for the tracts of land that will be hosting the Project's referenced in the Table included in ***Appendix A.*** Legal descriptions of parcels in ***Table 2*** for the proposed Project are included in ***Appendix C (Property Legal Descriptions)***.

The Project site is 1,391 acres in total area before consideration of siting restrictions, with the actual Project fenced footprint being approximately 757 acres. Two parcels, 56-16A and 56-13, are only proposed to be used as easements for access and underground electric cables, and therefore, their acreage is not included in the total Project site acreage. The total Project fenced footprint would occupy approximately 54.40 percent of the total Project boundary. The acreages are based on the deeds, legal descriptions and 5% design completed in December 2023 which may be modified when the final design constraints are determined.

The properties that will host the Project's infrastructure have historically been used for agriculture. The area surrounding the Project site consists of pastures, livestock, row crops, silviculture, residential properties, and undeveloped forested land. The Project will not impact neighboring land uses in the area and supports a finding by the County that the standard set forth in Section 4.14(b)(2) (as described above), has been met.

3 Project Design

Project construction is anticipated to start as soon as 2026 or 2027 and last approximately 12 to 18 months, enabling the Project to reach commercial operation in 2028 or 2029. The Project is expected to be in operation for at least 30 years.

3.1 Project Design

The proposed Project will be a ground mounted solar energy system comprised of solar PV modules, a racking system, inverters, and underground electrical conduits connecting PV array blocks with inverters to a project substation and interconnection switchyard, and a small operations and maintenance building. Access roads with gated entrances will be located throughout the site for access and maintenance of

equipment during construction and operation of the site. A series of internal access roads will be used to provide access to facility equipment for future maintenance.

The Project is currently in the conceptual design phase and the conceptual site plan is included as ***Figure 5.*** The Project's layout will be finalized after field surveys are completed and in coordination with County, state, and federal agencies. Once finalized, Project plans will be submitted to the county. The current solar panel array layout, while conceptual and subject to adjustment as a result of field conditions, correctly reflects system size, general location, and Applicant's commitments to, among others noted, maintain CUP-approved perimeter buffers, avoid wetlands, minimize wetland impacts to the extent practicable.

The proposed Project's design utilizes setbacks that are compliant with Marion County zoning ordinances. There will be continuous fencing no less than seven feet in height installed around the perimeter of the entire solar arrays to prevent the public or unauthorized members from exposure to electrical hazards and equipment. The proposed Project includes wildlife corridors ***(Figure 5)*** and wildlife friendly strategies to allow access to onsite resources.

3.2 Vegetative Buffer & Screening Plan

Vegetative buffering will include existing vegetation and, where the existing vegetation is insufficient, additional vegetation will be planted to minimize the visibility from neighboring properties. The Project design shall abide by all setbacks established within the Zoning Ordinance and/or agreed upon by the Applicant and the County during the CUP process.

The Project area shall be enclosed by security fencing not less than seven feet in height and installed on the interior of the vegetative buffer and maintained throughout the life of the Project. The vegetative buffer will be 10 feet deep along the perimeter of developed Project parcels. The vegetative buffer will utilize existing vegetation where adequate to attain the 10-foot depth. Where existing vegetation is not adequate to attain the 10-foot depth, supplemental vegetation will be planted. Vegetation will only be supplemented in upland areas and no supplemental vegetation will be planted within 50 feet of Waters of the United States. Fencing and landscaping will be monitored, maintained, and fixed as needed.

The buffer will consist of a mixture of non-invasive plant species, pollinator-friendly and wildlife-friendly native plants, shrubs, trees grasses, forbs, wildflowers. All cleared areas on the interior of the Project will be stabilized with vegetation. Vegetative stabilization of the site will help prevent erosion and sediment transport as well as create habitat for small mammals and ground nesting birds. The Applicant will submit a landscaping plan for review and approval by the County Zoning Administrator in conjunction with the Building Permit application after the final Project design has been developed. The landscaping plan will specify vegetative buffer density, approved supplemental vegetative species, and requisite plant height of supplemental vegetation.

4 Natural & Cultural Resources Due Diligence

The following natural and cultural resource studies have been completed to date for the proposed site:

- Phase I Environmental Assessment
- Wetland Desktop Evaluation
- Wetland Delineation
- Threatened & Endangered Species (T&ES) Desktop Evaluation
- T&ES Habitat Suitability Survey
- Cultural Phase IA Survey

Prior to final design, any proposed impacts to natural or cultural resources will be coordinated, approved, and permitted through the appropriate regulatory agency. Natural and cultural resource studies are included in ***Appendix D (Environmental Impact Analysis Report)***.

5 Impact on Neighbors & General Public

The Project is designed to minimize impact on neighboring properties (Figure 5) and the general public. Solar panels will be set back from property lines, and vegetative buffers will be used to screen the view of the solar facility.

During construction, there will be a temporary increase in vehicular traffic and noise associated with construction activities at the Project site. The Applicant will follow all Georgia Department of Transportation (GDOT) and Marion County procedures for site entrance approval and nearby roadway traffic safety/mitigation during construction. The Applicant will work with GDOT on a Transportation and Construction Plan. All points of ingress and egress will adhere to the Marion County Code of Ordinances and will be designed in compliance with GDOT regulations. A Project email address will be provided to adjacent landowners to maintain communication with the local community regarding any issues associated with construction, as necessary.

Once operational, solar is a low-impact land use with minimal to no impact on the County's resources. Other forms of developments require additional services such as roads, utilities, schools, and law enforcement. The proposed Project will not place any material burden on the County's resources. The Project will not use any public water or sewer systems. The operational Project will be passive, avoiding and minimizing impacts on neighbors and the general public to the greatest extent practicable through the use of design, buffers, and BMPs. During operations, sound from this Project will not exceed the County noise requirements. At night, there will be no audible noise at the property line emanating from the solar facility components. The inverters produce a low-level humming only during daylight hours when the system is generating energy. This noise level has been described as roughly equivalent to that of a dishwasher. It is common practice to position inverters a substantial distance from the perimeter of the Property line to contain their minimal noise within the Project boundary.

The Applicant is committed to protecting receiving waters (e.g., streams and wetlands) and downstream properties from discharges of stormwater during and after construction that could pose water quality degradation and/or flooding risks in compliance with Georgia Environmental Protection Division (GA EPD) permit requirements.

6 Economic Impact

During the construction phase, the Project is expected to employ around 288 full-time equivalent workers, providing a one-time economic boost to the county, including 38 direct, indirect, and induced job years from the county, $1.7 million in wages and benefits, and $7.2 million in economic output. In its ongoing operational phase, the Project is anticipated to support approximately seven jobs, including a minimum of two full-time jobs on-site, with associated wages and benefits totaling $0.4 million and contributing $1.5 million in economic output. The Project is forecasted to generate significant fiscal contributions, with an estimated $18.1 million in cumulative local revenue over its 35-year operational life, surpassing the current use of the property by a substantial 72-fold increase. Over the same period, it is projected to generate approximately $5.3 million in cumulative Marion County tax revenue, $11.4 million in cumulative Marion School District M&O tax revenue, and $1.3 million in cumulative Marion County School bond revenue. On average, the Project is expected to contribute around $151,100 annually in Marion County M&O tax revenue and $326,700 annually in Marion County School District tax revenue, demonstrating a noteworthy financial impact on the county and its local school district. These figures provide valuable context, as the annual property tax revenue from the Project represents a significant portion of Marion County's general government fund and school district expenditures. The complete Heart Pine Solar economic assessment is located in ***Appendix B (Economic & Fiscal Impact Assessment)***.

7 Site Decommissioning

The proposed utility scale solar energy producing system is expected to be capable of operation for a minimum of thirty years, with decommissioning at a time to be agreed upon by the Applicant and the landowners leasing the land to the system owner. At the end of the Project's life, the system owner shall complete a list of activities to decommission the system.

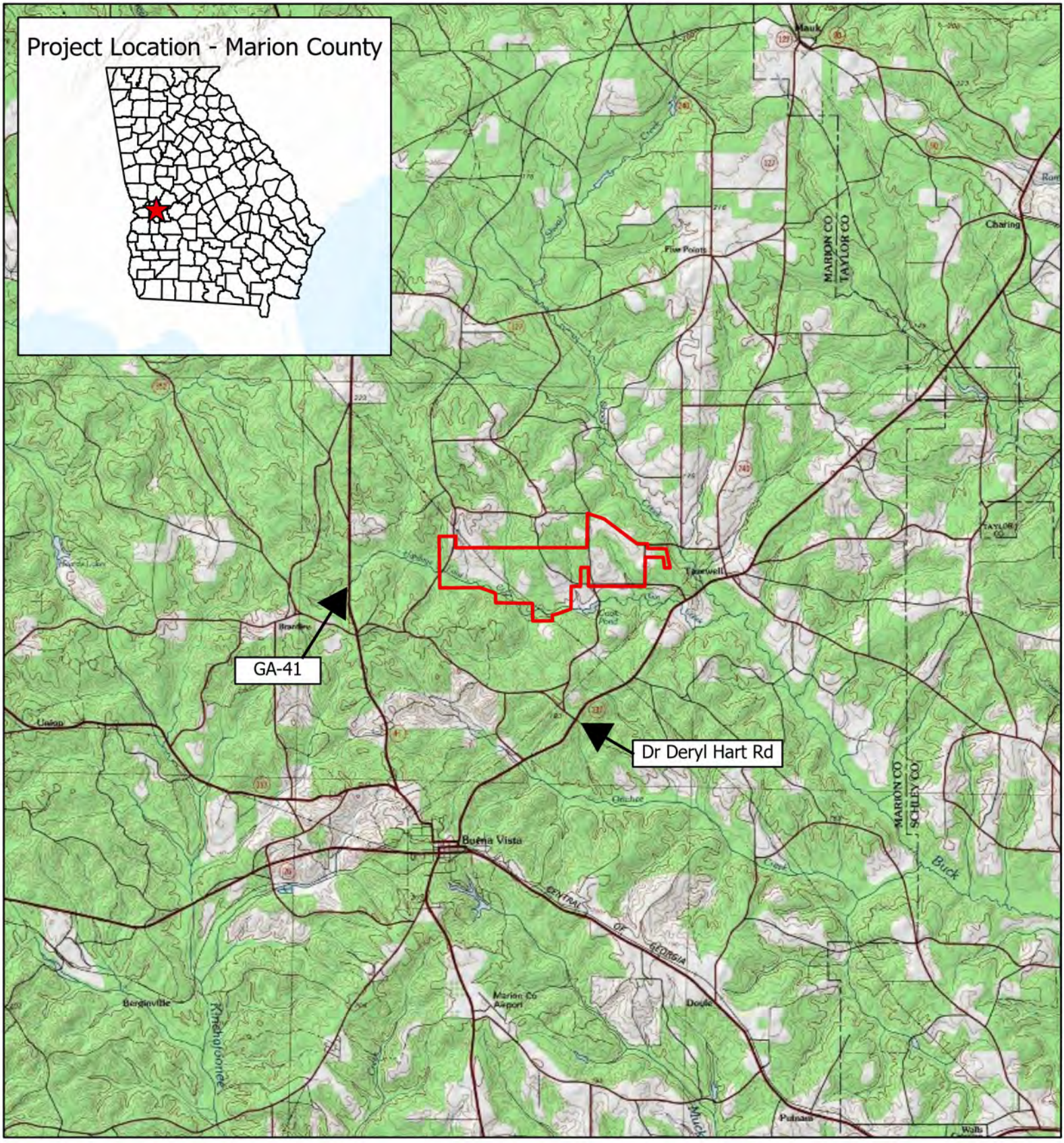
Decommissioning activities will be based on current procedures and experience, which will likely improve in the coming years as technology, construction processes and recycling infrastructures improve. Decommissioning activities standardly consist of the physical removal of all solar energy system structures and equipment from the site, disposal of all waste in accordance with local, state, and federal disposal regulations, and stabilization/re-vegetation of the site. Decommissioning plans are designed to outline specific activities and how they are to be carried out according to applicable regulations and industry best management practices, after obtaining any necessary permits for the decommissioning. Decommissioning Plans standardly include assurances that financial resources will be available to fully decommission the site to the agreed upon standard. A Conceptual Decommissioning Plan is located in ***Appendix E (Conceptual Decommissioning Plan)***. The Conceptual Decommissioning Plan is purely conceptual and is solely for illustrative purposes.

The Applicant will submit a final Decommissioning and Reclamation Plan for review and approval by the County Zoning Administrator in conjunction with the Building Permit application after the final Project design has been developed. Applicant shall include in its final Decommissioning and Reclamation Plan, a requirement to obtain and deliver to the County a bond, letter of credit or other similar financial assurance security to meet the Applicant's obligation to decommission and remove the Project from the Property (the "***Removal Bond***"). The Removal Bond shall be provided at the earlier of (i) any requirement in applicable state or federal law or (ii) one year following the commencement of commercial operations

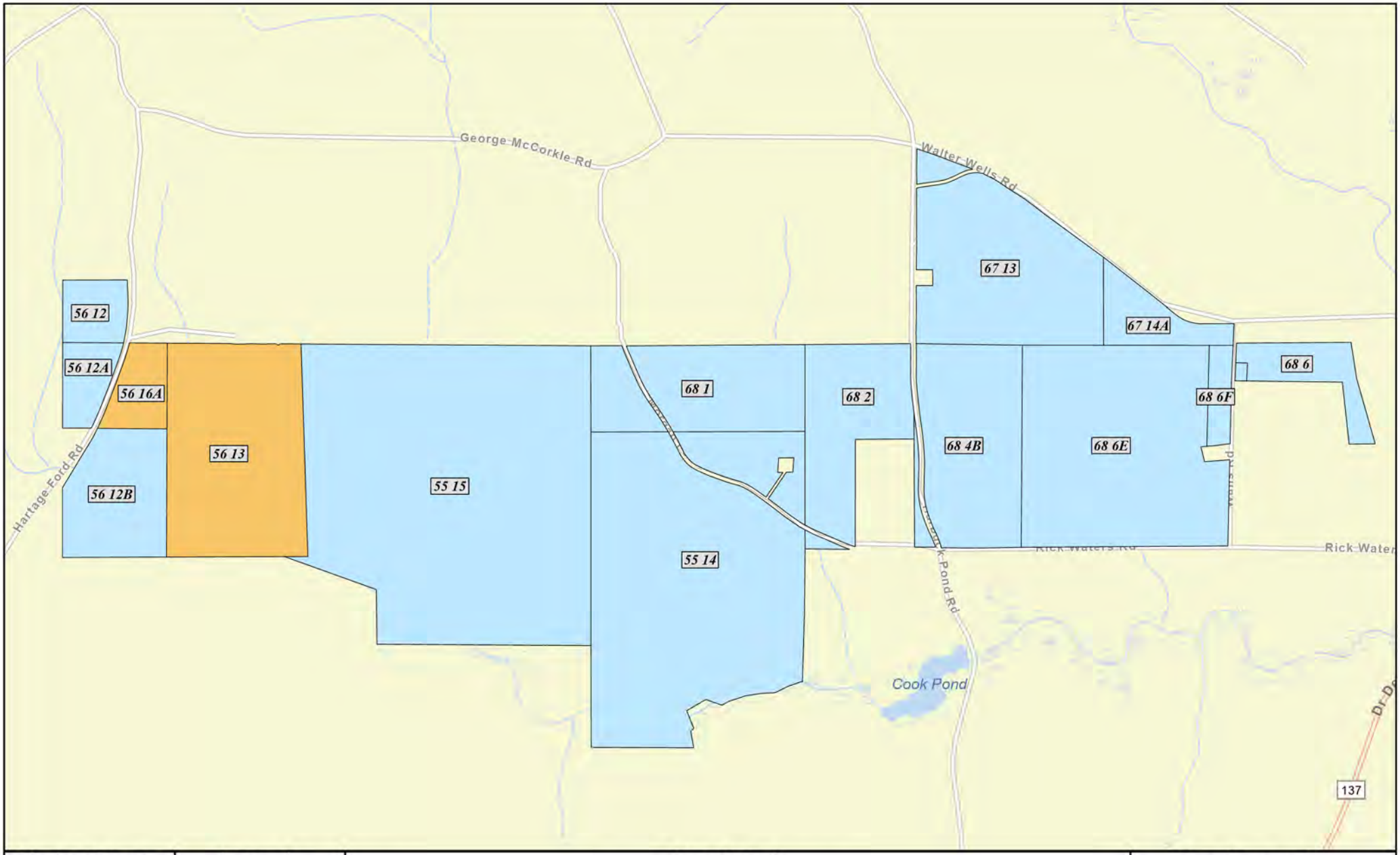
of the Project. The amount of such Removal Bond shall be equal to the estimated amount, if any, by which the costs of decommissioning or removal exceeds the net of salvage value of the Project, as estimated by a Georgia licensed engineer. Such final Decommissioning and Reclamation Plan shall include a requirement that every five (5) years thereafter, Applicant shall reevaluate the need for the Removal Bond and, if appropriate, provide a replacement therefore with the County.

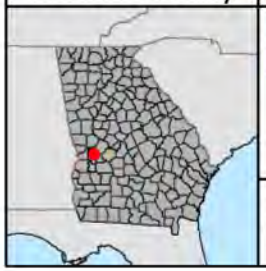
8 Conclusion

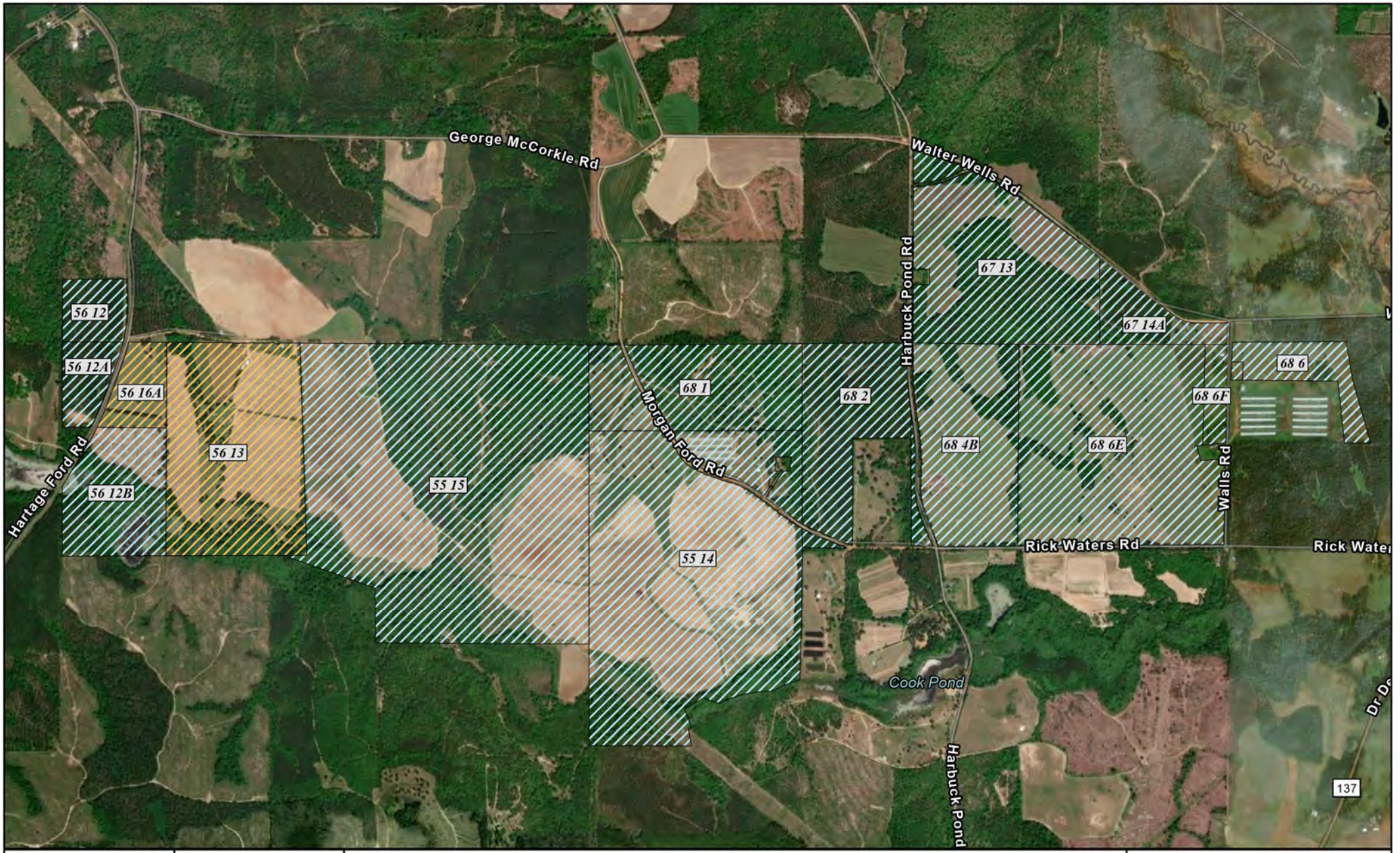
The Applicant has submitted the complete Application, as supplemented herein, in compliance with the Zoning Ordinance. Applicant respectfully requests approval of the Application by the Marion County Board of Commissioners. The Applicant will be happy to provide any additional supplementary information and address any inquiries that may arise from the Marion County Zoning Department, the Planning Commission, or Board of Commissioners and stakeholders.

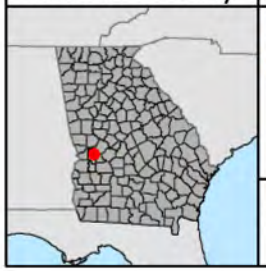


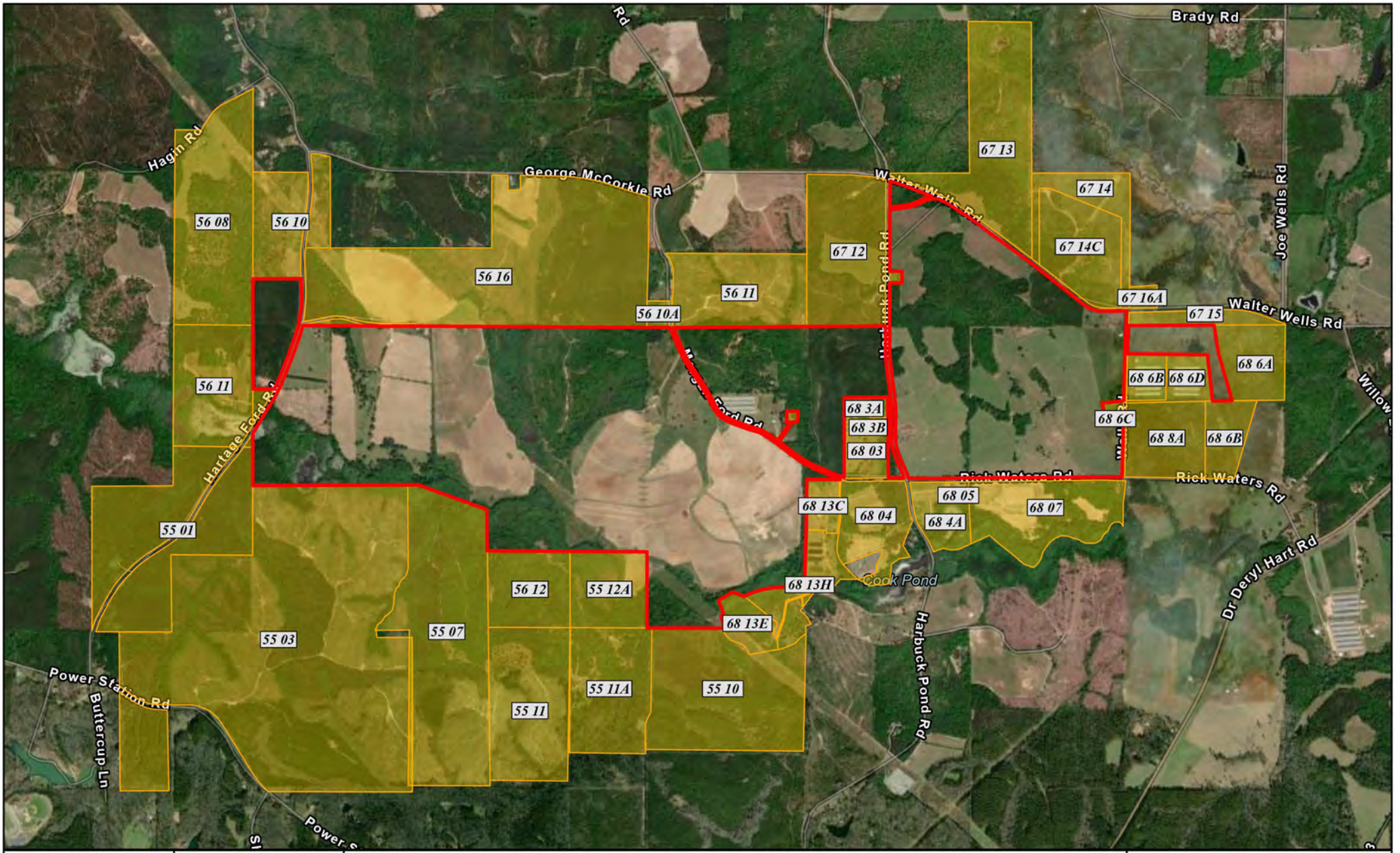
Legend	Map Details		Map Description
General Project Location	N	**General Location Map (Topo)** Heart Pine Solar AES Clean Energy Marion County, Georgia	Author: EH Date: 01/23/2024 Version: 1.0 Type: Figure 1
Basemap: USGS Topographic	0 10,000 20,000 40,000 Feet		aes

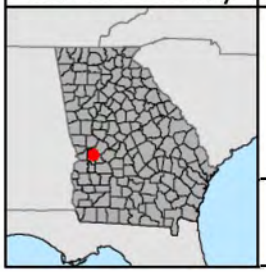


Marion County	Legend	Map Details	Map Description
	Solar Project Area Easement Parcels	N **Site Map (Roadway)** Heart Pine Solar AES Clean Energy Marion County, Georgia	Author: EH Date: 01/23/2024 Version: 1.0 Type: Figure 2
	Basemap: World Street Map	0 2,500 5,000 10,000 Feet	aes



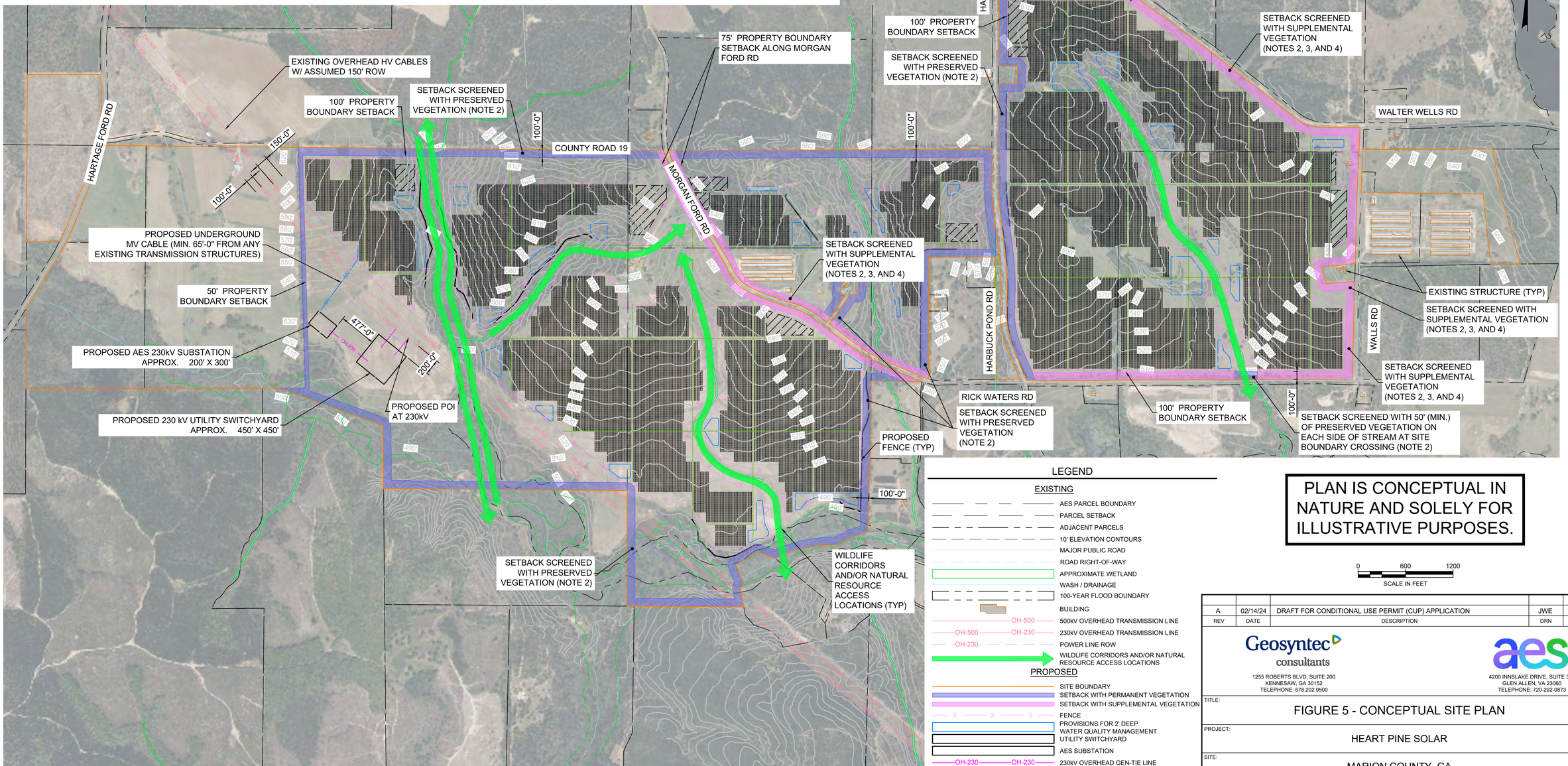
Marion County	Legend	Map Details	Map Description
	Solar Project Area Easement Parcels	N **Site Map (Aerial)** Heart Pine Solar AES Clean Energy Marion County, Georgia	Author: EH Date: 01/23/2024 Version: 1.0 Type: Figure 3
	Basemap: World Imagery (2019)	0 2,500 5,000 10,000 Feet	aes



Marion County	Legend	Map Details	Map Description
	Project Boundary Adjacent Parcels	N **Adjacent Parcels Map** Heart Pine Solar AES Clean Energy Marion County, Georgia	Author: EH Date: 02/13/2024 Version: 1.0 Type: Figure 4
	Basemap: World Imagery (2019)	0 3,500 7,000 14,000 Feet	aes

GENERAL NOTES:

1. CONCEPTUAL SITE PLAN IS IN THE EARLY STAGES OF DEVELOPMENT AND WILL BE ADVANCED AS PART OF THE FINAL DESIGN.
2. SITE WILL HAVE A UNIFORM 10-FOOT (MINIMUM) VEGETATIVE BUFFER/SCREENING WIDTH ALONG PROJECT PERIMETER.
3. VEGETATIVE BUFFER/SCREENING WILL UTILIZE EXISTING VEGETATION. WHERE EXISTING VEGETATION IS NOT ADEQUATE, ADDITIONAL VEGETATION WILL BE SUPPLEMENTED.
4. TYPE AND PLANT HEIGHT OF SUPPLEMENTAL VEGETATION SHALL BE IN ACCORDANCE WITH MARION COUNTY CODE OF ORDINANCES AND ZONING ADMINISTRATOR DIRECTION.



1/1 PLAN
CONCEPTUAL SITE PLAN
SCALE: 1" = 500'

LEGEND

EXISTING

- AES PARCEL BOUNDARY
- PARCEL SETBACK
- ADJACENT PARCELS
- 10' ELEVATION CONTOURS
- MAJOR PUBLIC ROAD
- ROAD RIGHT-OF-WAY
- APPROXIMATE WETLAND
- WASH / DRAINAGE
- 100-YEAR FLOOD BOUNDARY
- BUILDING
- OH-500 — 500kV OVERHEAD TRANSMISSION LINE
- OH-500 OH-230 — 230kV OVERHEAD TRANSMISSION LINE
- OH-230 — POWER LINE ROW
- WILDLIFE CORRIDORS AND/OR NATURAL RESOURCE ACCESS LOCATIONS

PROPOSED

- SITE BOUNDARY
- SETBACK WITH PERMANENT VEGETATION
- SETBACK WITH SUPPLEMENTAL VEGETATION
- FENCE
- PROVISIONS FOR 2' DEEP WATER QUALITY MANAGEMENT
- UTILITY SWITCHYARD
- AES SUBSTATION
- OH-230 OH-230 — 230kV OVERHEAD GEN-TIE LINE
- LAYDOWN AREA
- MV MV MV — UG MV FEEDER
- PV PANELS

PLAN IS CONCEPTUAL IN NATURE AND SOLELY FOR ILLUSTRATIVE PURPOSES.

0 600 1200
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
A	02/14/24	DRAFT FOR CONDITIONAL USE PERMIT (CUP) APPLICATION	JWE	BB

Geosyntec consultants
1255 ROBERTS BLVD, SUITE 200
KENNESAW, GA 30152
TELEPHONE: 678.202.9500

aes
4200 INNSLAKE DRIVE, SUITE 302
GLEN ALLEN, VA 23060
TELEPHONE: 720-292-0873

TITLE: FIGURE 5 - CONCEPTUAL SITE PLAN

PROJECT: HEART PINE SOLAR

SITE: MARION COUNTY, GA

DRAFT

DESIGN BY:	JWE	DATE:	FEBRUARY 2024
DRAWN BY:	JWE	PROJECT NO.:	GXE10300
CHECKED BY:	PL	FILE:	1
REVIEWED BY:	BB	DRAWING NO.:	1 OF 1
APPROVED BY:	BB		

CONCEPTUAL DRAWINGS - NOT FOR CONSTRUCTION

I:\RICHMOND-01\DATA\PROJECTS\AES CLEAN ENERGY\TAZEWELL SOLAR\TASK 9_DECOMMISSIONING PLAN\AES TAZEWELL_DECOMMISSIONING PLAN_2