

COUNTY OF ALBEMARLE
EXECUTIVE SUMMARY

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| <p>AGENDA TITLE: SP202400013 Secretary’s Sand Solar</p> <p>SUBJECT/PROPOSAL/REQUEST: Agricultural-Forestal Districts Advisory Committee review of a special use permit for a 96-acre solar site (approximately 32 fenced acres for panels and equipment) on a 366.6-acre parcel (Tax Map 120 Parcel 18A) in Green Mountain AFD.</p> <p>STAFF CONTACT: Scott Clark, Conservation Program Manager</p> | <p>AGENDA DATE: June 27, 2024</p> |
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BACKGROUND:

Tax Map 120 Parcel 18A (see map in Attachment A) has been part of the Green Mountain district since the district was created in 2015.

The requested special use permit (described in more detail in Attachment B) would allow construction of a solar energy system within a portion of the parcel that includes some hardwoods and a pine plantation. The lease area for the solar facility would include approximately 96 acres, of which 32 acres would be fenced and would include the solar panels and other equipment (see Attachment C for a proposed layout).

COMMITTEE REVIEW GUIDELINES:

Section 3-202(A)3(k) of the Albemarle County Code reads as follows:

- A. *Prohibition to develop to a more intensive use.* As a condition to creating a district, any parcel within the district shall not be developed to a more intensive use than that existing on the date the district was created, subject to the following:
 - 3. *Non-residential uses and other actions deemed not to be development to a more intensive use.* The following non-residential uses and other actions are deemed not to be developed to a more intensive use:
 - k. *Special uses and structures allowed in the Rural Areas zoning district.* Any proposed use or structure allowed by special use permit in the Rural Areas zoning district, provided that the Board of Supervisors determines that the use or structure allowed by the special use permit is consistent with the purposes of this chapter.

The County’s practice has been to consult with the Committee on any special use permit request that is located on land within or adjacent to an existing District.

Those purposes of the Agricultural-Forestal Districts chapter of the County Code are listed in Section 3-100, “Purpose and Intent”:

The purpose and intent of this chapter are as follows:

- A. *It is the policy of county to conserve and protect, and to encourage the development and improvement of, its agricultural and forestal lands for the production of food and other agricultural or forestal products. It is also the*

policy of the county to conserve and protect agricultural and forestal lands as valued natural and ecological resources which provide essential open spaces for clean airsheds, watershed protection, wildlife habitat, and for aesthetic purposes.

B. It is the purpose and intent of this chapter to provide means by which agricultural and forestal lands of either statewide or local significance may be protected and enhanced as a viable segment of state and local economies, and as important economic and environmental resources.

The Committee's role is to assist the Board of Supervisors by advising on the consistency of the proposed use with the purposes of the Districts. (Other aspects of the review, such as transportation impacts or effects on adjacent properties, will be addressed by staff in their report to the Planning Commission and the Board of Supervisors.)

The Committee's recommendation will be included in staff's reports to the Planning Commission and the Board of Supervisors when public hearings are held for this item. These public hearings have not been scheduled at this time.

DISCUSSION:

Section 3-101 of the County Code further explains the County policies that the Districts should promote. This proposal's impacts on each policy are outlined below:

A. Production of food and other agricultural and forestal products. It is the policy of the State and the County to conserve and protect and to encourage the development and improvement of the Commonwealth's agricultural and forestal lands for the production of food and other agricultural and forestal products.

The purpose of the requested special use is not related to the production of agricultural or silvicultural products. The character of the proposed use is the production of energy for off-site distribution.

While the applicants have stated that the project will "pursu[e] livestock grazing" (estimated to be 40-50 sheep, spring through fall) within the fenced panel area, that activity would be limited by and subordinate to the energy-production use in that area. Conversion of the site to livestock grazing could be achieved without the energy-production facility.

B. Provide essential open spaces. It is also the policy of the State and the County to conserve and protect agricultural and forestal lands as valued natural and ecological resources which provide essential open spaces for clean air sheds, watershed protection, wildlife habitat, as well as for aesthetic purposes.

The site is already forestal land, and needs no Zoning or District approvals to continue in silvicultural or agricultural use. Adding the proposed solar facility would not increase the site's usability for agriculture, forestry, or resource protection, but would remove the areas used for panel structures and other built infrastructure from those uses, except to the degree that some secondary, seasonal grazing could occur.

C. Strong agricultural and forestal economy. It is the policy of the County to support a strong agricultural and forestal economy.

The applicants state that the power production from the site could support agricultural businesses in the area, such as equestrian operations. However, as the power would flow to the local electrical distribution lines, it could be used by any connected users, and there is no dedicated connection to any specific agricultural or silvicultural use.

D. Protect and preserve natural resources and retain continuous and unfragmented land. It is the policy of the County to protect and preserve natural resources, which include mountains, hills, valleys, rivers, streams, groundwater, and retain continuous and unfragmented land for agriculture, forestry, biodiversity, and natural resource protection.

This project would, at least temporarily (for decades), reduce the land area available for agriculture, forestry, or natural-resource protection by converting the project area's primary use to energy generation. After decommissioning of the solar facility, the site could return to agricultural or silvicultural use, provided that soil compaction is minimized or avoided during construction, and that soil decompaction is carried out as part of the decommissioning of the site. The applicants have stated that mass grading will be minimized, which should limit the excavation and distribution of relatively infertile subsoils on the site.

RECOMMENDATION:

While the proposal may involve some livestock grazing, staff finds that on balance the impacted area would be primarily dedicated to energy generation rather than to any of the land uses or resource protections identified in the purposes of the Districts listed above. Therefore, staff recommends that the Committee advise the Planning Commission and the Board of Supervisors that the proposed use is not consistent with the purposes of the Districts.

ATTACHMENTS:

- A – Location Map
- B – Project Narrative
- C – Concept Plan



Special Use Permit Zoning Application

0 Secretarys Sand – Albemarle – VA DG

Applicant: Alberene Road Solar 1, LLC

Alberene Road Solar 1, LLC

For Activities At:

0 Secretarys Sand Road (TP# 12000-00-00-018A0)
Esmont, VA 01851

Prepared by:



New Leaf Energy, Inc. dba New Leaf Energy
Development, Inc.
55 Technology Drive, Suite 102
Lowell, MA 01851

Dated: March 18, 2024



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EXECUTIVE SUMMARY

Alberene Road Solar 1, LLC selected Tax Parcel 12000-00-00-018A0 on the lands of Alan S. Van Clief and Cyndra H. Van Clief within Albemarle County's Green Mountain Agricultural and Forestal District as the ideal location for a 4.5-MW Solar System. The entire parcel, consisting of ±366 acres consists of agricultural fields, wooded stream buffers and silvicultural areas that are moderately sloped throughout.

The leased area will be 96.69 acres. Existing forested / silviculture area with supplemental plantings will consist of 50.2 acres. The proposed facility will be situated near the northwestern portion of the parcel consisting of approximately 33.66 acres and the remaining property will remain unchanged. Native grasses and firebreaks will consist of 5.10 acres and 1.27 acres respectively. The area under panels with interrow pollinator vegetation will be 24.27 acres.

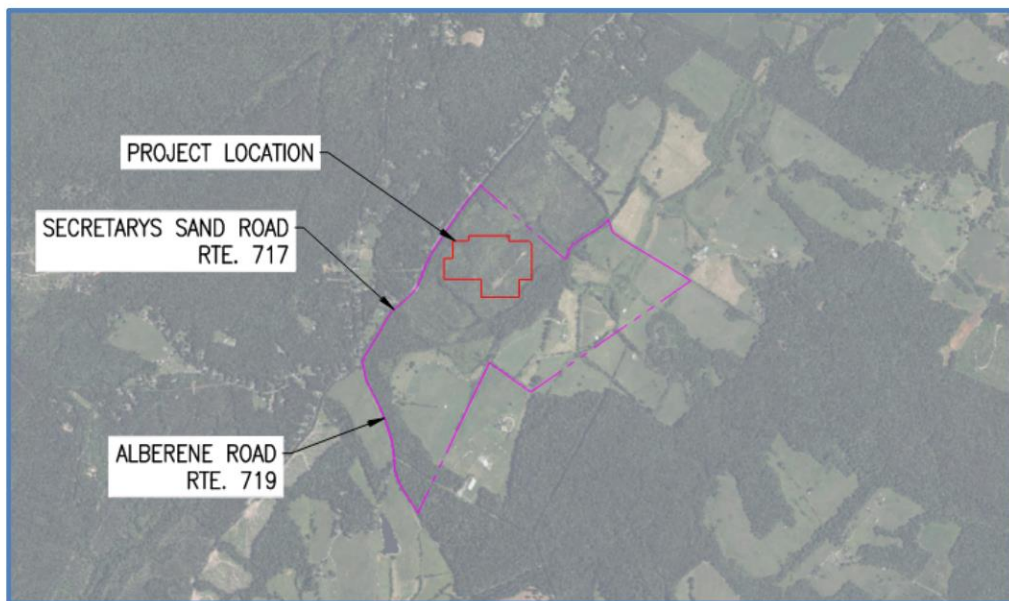


Figure 1. Project area as depicted in 2021 (Google Earth)

The project entrance is approximately 3,500 ft northeast of the intersection of Alberene Road and Secretarys Sand Road and utilizes a portion of an existing stabilized logging road.

The proposed interconnection is located near the entrance along Secretarys Sand Road in accordance with the applicable electrical code and Appalachian Power requirements.

A comprehensive environmental resource assessment was performed for the site, and LaBella delineated one PFO wetland, three PSS wetlands, and four PEM wetlands. They also identified six ephemeral streams, one intermittent/perennial stream, and one perennial stream within the Study Area.

The assessment also included a review of state and federal databases for threatened or endangered species. There are two known species sited within or close proximity to the



site that may require further coordination with USFWS. Tree clearing will be done outside of the Time of Year Restriction for bats to avoid adverse impacts to these species. This study is included in **Appendix H**.

Historic resources were evaluated and this study is included in **Appendix I**. H&P identified that 11 previously recorded and 8 newly identified historic architectural resources are located within 0.5 miles of the project area. Houses surveyed on Secretarys Sand Road, formerly known as Sand Road, date from 1900 to 1979. Houses surveyed on Alberene Road and its secondary roads, including Garden Path Lane and Solitude Lane, date from 1880 to 1974. The eight newly identified resources were constructed between 1972 and 1974 and fall outside of the Southern Albemarle Rural Historic District, whose western boundary in this area is defined by Alberene Road. None of the eight newly identified resources are eligible for the National Register of Historic Places.

According to the USDA Natural Resources Conservation - National Cooperative Soil Survey, the majority of the site is categorized as Farmland of Statewide Importance and Primary Farmland. While the project will involve the addition of solar panels, it is intended to be temporary land use for the term of its lease. Upon completion of its useful life, the solar farm will be decommissioned and the land restored to its original pre-project condition. This will provide the landowner with supplemental income needed without resorting to subdividing the property for future residential development, which would take away from the rural character. Refer to the section Decommissioning Plan below for additional information.

The project proposes an enhanced landscape buffer around the perimeter of the site. The existing forested areas will be enhanced with deciduous and coniferous species to screen under the loblolly pines. This buffer will mitigate the visual impact to the viewshed for surrounding homes.



SPECIAL USE PERMIT APPLICATION

The following pages contain the completed Special Use Permit Application (SUP) and permit fee in the amount of **\$2,460.64**. Refer to **Appendix A** for signature authority on behalf of the property owner.

Appendix B contains the Adjacent Property Owners List.

SPECIAL USE PERMIT CHECKLIST for

PREAPP202300052 Secretary's Sand Solar

After the mandatory pre-application meeting, county staff will mark this checklist appropriately so that it is clear to the applicant the information from Section 33.4 (c) that must be submitted with the official application



Staff Contact:

Rebecca Ragsdale

rragsdale@albemarle.org

| Required for application? (County Staff) | | Provided with application (Applicant) | SECTION 33.4(c) |
|---|----|--|---|
| YES | NO | | |
| X | | X | |
| X | | X | A narrative of the project proposal, including its public need or benefit; |
| X | | X | A narrative of the proposed project's consistency with the comprehensive plan, |
| X | | X | A narrative of the proposed project's impacts on environmental features. |
| X | | X | A narrative that addresses the impacts of the proposed development on public transportation facilities, public safety facilities, public school facilities, and public parks. |
| X | | X | One or more maps showing the proposed project's regional context and existing natural and manmade physical conditions; |
| X | | X | A conceptual plan showing, as applicable: |
| X | | X | 1) the street network, including circulation within the project and connections to existing and proposed or planned streets within and outside of the project; Application/ plan should distinguish between new permanent entrances/ access roads, temporary construction entrances, and existing access ways. |
| X | | X | 2) typical cross-sections to show proportions, scale and streetscape/cross-sections/circulation; For this project, show cross -sections or photo -simulations of ground -level views of the proposed solar facility, to demonstrate appearance in landscape and evaluate impacts to abutting properties and historic district. |
| | X | | 3) the general location of pedestrian and bicycle facilities as applicable |
| X | | X | 4) building envelopes; Location of solar facilities, accessory uses, etc. |

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| X | | X | 5) parking envelopes; |
| X | | X | 6) public spaces and amenities; |
| X | | X | 7) areas to be designated as conservation and/or preservation areas; clearly delineate stream buffers or critical slopes protections, limits of disturbance; comments were received from commissioners regarding if there are any undocumented streams on the property. |
| X | | X | 8) conceptual stormwater detention facility locations; |
| X | | X | 9) conceptual grading; |
| X | | X | <p>Other special studies or documentation, if applicable, and any other information identified as necessary by the county on the pre-application comment form.</p> <p>Narrative and images/ maps should address the location of historic resources within the historic district, along with visual impacts on any nearby properties.</p> <p>Information regarding potential noise from the facility.</p> <p>The property is in an <u>Agricultural and Forestal District</u>. Review by the AFD committee must take place prior to a public hearing with the Planning Commission. The AFD review is typically scheduled during the initial review period of the SP.</p> |

Please note: There are additional submittal requirements outlined on the official application for a Special Use Permit.

Read and Sign

I hereby state that, to the best of my knowledge, the official application submitted contains all information marked on this checklist as required for application.

Cyndra H. Van Clief
box SIGN 1878720N 13481V02

 Signature of person completing this checklist

Cyndra H. Van Clief

 Print Name

Alan S. Van Clief
box SIGN 19W5W220-1876YKMS

 Signature of person completing this checklist

Alan S. Van Clief

 Print Name

Mar 13, 2024

 Date

434.981.7007

 Daytime phone number of Signatory

Mar 18, 2024

 Date

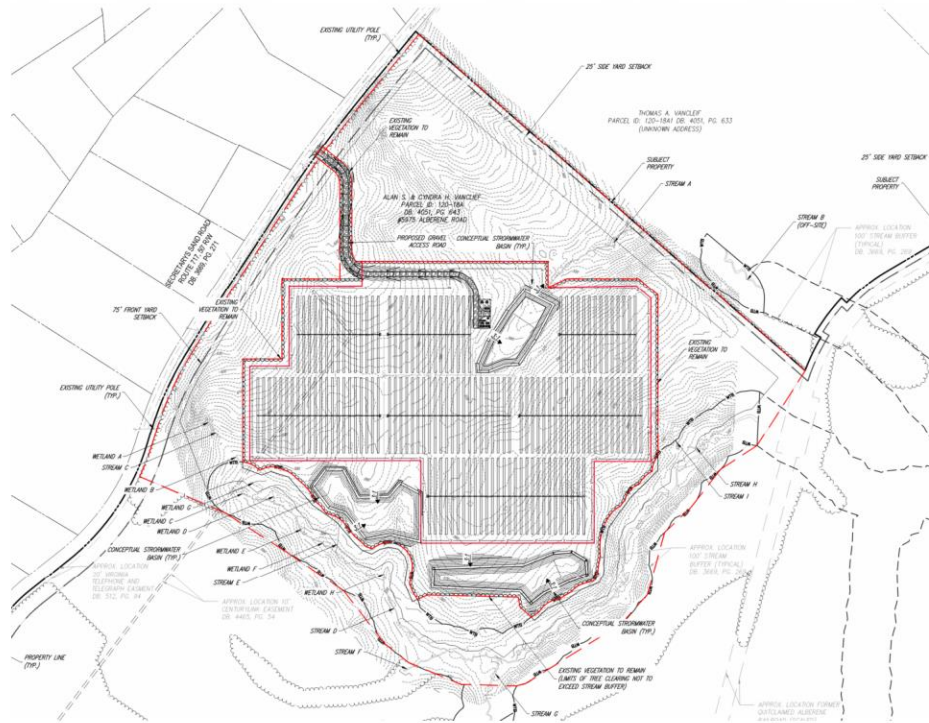
434-981-1656

 Daytime phone number of Signatory



SMALL SOLAR ENERGY SYSTEM – Application & Procedures

The following addresses criteria within Albemarle County's Zoning Ordinance for Solar Facilities.



Standards Applicable to Small Solar Energy Systems

The project is located off of Secretarys Sand Road. The project consists of the installation of solar modules and no energy storage equipment. Per Albemarle County Geographical Information System (GIS) website the parcel is approximately ±366 acres. The parcel (12000-00-00-018A0) is zoned Rural Area District (RA). The facility will capture and convert UV rays to electricity and convey the renewable electricity into the local utility system.

The site is setback at least 25ft (25 ft actual) from the side and 35ft (35 ft actual) from the rear with the front being setback at least 75ft (75 ft actual) from the property line/right-of-way. The maximum height of the panels will not exceed 15ft and the system will be designed in accordance with Virginia Uniform Statewide Building Code and any applicable Federal and State regulations/standards.

The site will be surrounded by a security fence and no signs or advertising will be posted unless required by the State and Federal agency. The solar panels are constructed with an anti-glare to mitigate glare from the panels to adjoining properties or roads that may create a nuisance or safety hazard The Glare Analysis has been included in [Appendix C](#) for review.

The project will be buffered utilizing a varying width landscape buffer from 100 ft minimum to 50 ft riparian buffer.



Environmental Inventory

A “Waters of the U.S. Study” (WOUS) was performed by LaBella Associates, D.P.C. (LaBella) dated July, 2023. The studies are included in **Appendix E**. LaBella delineated one PFO wetland, three PSS wetlands, and four PEM wetlands. They also identified six ephemeral streams, one intermittent/perennial stream, and one perennial within the Study Area. The Study Area contains approximately 0.163-acre of wetlands and approximately 3,719 linear feet of stream channel.

Additionally, LaBella has performed a Phase I Environmental Site Assessment dated July 25, 2023. The Subject Property, Portion of 5975 Alberene Road, Esmont, Virginia, includes 79.65-acres of densely wooded and overgrown land, used for timber harvesting and personal hunting activities. The Subject Property has consisted of vacant wooded land since at least 1929; no structures have been identified on-site. Based on the results of this assessment, no RECs, CRECs, HRECs, de minimis conditions, or significant data gaps have been identified in connection with the Subject Property. This report is included in **Appendix G**.

LaBella Associates, D.P.C. also performed a Threatened and Endangered (T&E) Species database review dated July 2023 for the site. Based on the IPaC Beta OSL and D-key there is potential USFWS will impose surveys or TOYR for northern long-eared bat due to suitable habitat. Based on the current project design, the D-key reached a determination of “may affect, but not likely to adversely affect”. The NLAA determination indicates a Consistency Letter would need to be submitted to USFWS for approval prior to Project activities. However, if the scope of the Project changes additional coordination with USFWS would be required. Alternatively, the project will utilize winter clearing when the species are within their hibernacula. This report is included in **Appendix H**.

Multiple DWR state-listed species’ observations were identified within a 2-mile radius of the Study Area. Northern long-eared bat and tri-colored bat are both terrestrial species with potential suitable habitat within the Study Area. The project will utilize winter clearing when the species are within their hibernacula. Additionally, the timber rattlesnake is a state-listed species however potential suitable habitat was not observed within the Study Area. The studies are included in **Appendix H**.

Federal Management Agency (FEMA) mapping indicates the site is located within Map ID 51003C0400D, 51003C0415D, 51003C0500D, and 51003C0525D. The map indicates that there are no FEMA 100-Year Flood Zones associated with the Study Area. The closest FEMA 100-Year Flood Zone is approximately 0.28 miles to the northeast of the Study Area and is associated with Eppes Creek. The map is included in **Appendix F**.



Cultural & Historic Resources

A Cultural and Historic Resources study was performed by Hurt and Proffitt (H&P) dated July, 2023. H&P identified 11 previously recorded and 8 newly identified historic architectural resources are located within 0.5 miles of the project area. Houses surveyed on Secretarys Sand Road, formerly known as Sand Road, date from 1900 to 1979. Houses surveyed on Alberene Road and its secondary roads, including Garden Path Lane and Solitude Lane, date from 1880 to 1974. The eight newly identified resources were constructed between 1972 and 1974 and fall outside of the Southern Albemarle Rural Historic District, whose western boundary in this area is defined by Alberene Road. None of the eight newly identified resources are eligible for the National Register of Historic Places. The study has been submitted for your review, see [Appendix I](#).

Overlay Districts and Comprehensive Plan

This property is in the Green Mountain Agricultural and Forestal District. There appears to be no Overlay District surrounding the Development. The proposed project is located on a 366-acre parcel that is within the Agricultural and Forest District and is located within the Comprehensive Plan's Rural Area.

The Rural Area identifies eight objectives. Below are the objectives and our opinion of how the project is in substantial accord with the applicable objectives:

Objective 1: Support a strong Agricultural and Forestal economy

The proposed project meets the intent of Objective 1 as the project will diversify agricultural activities by pursuing livestock grazing within the facility's fenced area. The areas outside of the fence will be reserved, similar to a conservation easement / County's Agricultural and Forestal District to maintain the mature vegetation while establishing additional native vegetation to ensure the rural character of the area remains intact. As part of establishing native vegetation and livestock grazing, the soil health will increase with decreased sediment laden runoff as a result from the previously forestal activities and incidental disturbance. The project will increase the resiliency of the local electric distribution line, improving the electrical demand required to establish the County's goal for expansion to the local equestrian industry and local distribution/support business. The project will lease this portion of the property for up to 40 years. After which the site will be decommissioned by removing the equipment, wiring and ancillary materials associated with the PV system. Any incidental disturbance will be stabilized and re-vegetated with native vegetation. Alternatively, the landowner may also resume forestal activities or pursue other agricultural activities.



Objective 2: Protect and preserve natural resources, which include mountains, hills, valleys, rivers, streams, groundwater, and continuous and unfragmented land for agriculture, forestry, biodiversity, and natural resource protection.

The project is sited within a previously timbered portion of the property, which has been fragmented from the mature woods surrounding it. One of the benefits to the project is a long-term (20-40 years) conservation of property with minimal development / infrastructure through preserving the surrounding landscape, reverting the silviculture area into a meadow that can sustain livestock grazing, promoting improved soil health and native vegetation. The aforementioned benefits will naturally increase infiltration and groundwater recharge, evapotranspiration, and naturally filter runoff to the stream by preserving and enhancing the stream's riparian buffers, versus the current use of continual timbering of the site. The project will avoid impact to streams and wetlands by utilizing best management practices through best available technologies. Additionally, all implemented practices on site will meet the local and state erosion and sedimentation / stormwater programs by minimizing land disturbance and promoting native vegetation. New Leaf worked with the third-party engineering company LaBella to conduct an Environmental Protected Resources Assessment for the project area to coordinate with the proper agencies and minimize any potential impact to threatened or endangered species on-site.

Objective 3: Protect the County's historic, archeological, and cultural resources.

The project area was evaluated for a cultural resource assessment. The evaluation included an initial walkthrough of the site and review of the Virginia Department of Historic Resources (DHR) Virginia Cultural Resource Information System (VCRIS). In general, no architectural structures are located within the project site. While our third-party consultant determined that there is potential for pre-contact and historic period sites, there is a low likelihood that the sites will remain intact due to recent logging and incidental disturbance over the years of silvicultural practices. In a good faith effort, an architectural and archeological study will be conducted as part of the permitting process, which will include a study of architectural structures within a 0.5 mile of the proposed project area. This additional historical research and documentation will provide additional information to the County's Historic Preservation Committee.

Objective 4: Promote rural and historic landscapes that enhance visitors' experience and give historic sites as authentic a setting as possible.

The project is situated approximately 200 feet back through mature woods along the public road and will utilize an existing logging road entrance. The proposed project is designed to utilize the existing vegetation to adequately screen the site and preserve the authentic setting for visitors and neighbors alike. Additionally, low growth / canopy vegetative seed mix will be utilized to supplement the existing buffer for additional dense low to mid growth screening. During operation of the facility, traffic will be minimal, similar to that of a single-



family residence or less. Through proper siting and screening, the project is unlikely to impact the visitors' experience and maintains an authentic setting of the historic site.

Objective 5: Recognize and support crossroads communities, which serve as rural-scale community meeting places and provide opportunities for residents to take part in community life.

As previously discussed, the project will improve the local electrical grid's resiliency through upgrades to the existing line and the existing substation equipment as required. These upgrades will allow for local residents to upgrade their electrical needs, including the potential for small stores or similar communities' base amenities at local crossroad communities.

Objective 6: Provide distinct boundaries between the Rural Area and Development Areas.

The project can meet or exceed the rural design standards and does not require extensive development for parking lots, signage, entrance requirements. The project utilizes natural vegetation to appropriately screen the site and does not require significant infrastructure to operate. The facility primarily operates remotely with bi-weekly to monthly site inspections and does not create a strain on the local roads.

Objective 7: Provide information to citizens so they are well-informed and understand the cultural, economic, and ecological aspects of the Rural Area.

The project does not propose traditional development, seeking to be kept out of the rural area. Instead, the solar project proposes long term preservation of the land through a lease. Upon the project's end of life/lease expiration, the site will be decommissioned and returned to the owner for their use, which may revert to silviculture, continued livestock grazing or agriculture. Since the facility is monitored remotely and there is no human habitation within the project facility, the biodiversity will slightly change as to the type of wildlife within the project's fenced area, but more so will remain unchanged.

Objective 8: Retain the character of Rural Area land located in Area B.

The project and parcel is not located within Area B.



Fiscal Impact Analysis

The goal is for the project to participate in the Shared Solar program. Shared Solar allows customers to subscribe to a project and receive credits on their bill for their share of the project's electricity production. In the Shared Solar program, customers with Appalachian Power bills will have the opportunity to subscribe to the solar project and receive bill savings on their utility bill that we're estimating at 10%-15%.

The proposed solar facility will be constructed using private funds and there is no public infrastructure required to support the facility. As such, there will be no capital, operations, maintenance, or replacement costs for public facilities needed to service the project.

The project will not displace/terminate any current employment directly associated with the installation of the project on the property. The remaining areas and abutting fields owned by the landowner will continue to operate. The project will generate some temporary employment within the region during construction and a few long term opportunities associated with operation and maintenance of the facility.

Visual Analysis

The project is intended to minimize visual impacts to the surrounding community. The solar farm has been sited off of Secretarys Sand Road. The visual impact from the public right-of-way will be minimized by the existing topography, the addition of landscaping and maintaining the existing mature forested area and proportions of the silviculture area along the right-of-way.

The project's landscape buffer will be designed in coordination with local guidelines and staff input utilizing native species. Pollinator species will be considered within buffering and ground cover beneath panels where feasible.

A Visual Analysis is included in **Appendix J**. GIS software was used to analyze the visual impact of the solar farm on surrounding public rights-of-way and private property. The images generated in this report show the analysis location, height of observation, and the areas that are visible from that observation point from 360 degrees. The analysis assumes no vegetation except for the landscape buffer depicted on the plans based on the current height of the trees varying from 15ft to 75ft and does not anticipate the future growth of the silviculture trees surrounding the site which commonly continues to grow at a rate of 2 ft / year. This is the most conservative analysis, since it does not consider any other forested areas/tree rows between the observation point and the project. In addition, the observation elevation was set an additional 1 foot higher than an average person's height.



The view from the public right-of-way (Secretarys Sand Road) from an elevation of 7 feet above the road, shows that a small portion of the solar field on the eastern side will be visible. The view from homes on the west side of Secretarys Sand Road from an elevation of 9 feet above existing ground may only see a very small portion of the northeast corner of the array. Please refer to Exhibits 1, 2 and 3 within the Viewshed Analysis.

Residences on the northeast of the solar farm at an elevation ranging from 10 to 20 above existing ground will have a view of the middle of the solar farm. Residences directly north of the development will have a view of very few, if any solar panels. Refer to Exhibits 4-7, 13 and 17 within the Viewshed Analysis.

The view from residences to the east, south, southwest, and west of the development will not have any view of the solar panels.

Analysis at an approximate radius of 2 miles shows that residences to the north east of the site will be able to view some of the solar panels from an elevations ranging from 7 to 20 feet above finished ground to represent ground and second story balcony / windows. Another residence, approximately 1.5 miles directly east of the site will have a view of some of the panels at an elevation of 7 feet above existing ground. Please refer to Exhibit 8 within the Viewshed Analysis..

Analysis at an approximate radius of 1 mile shows that residences to the south of the site will be able to view some of the solar panels from an elevations ranging from 7 to 10 feet above finished ground. Pleaser refer to Exhibits 21 and 22 within the Viewshed Analysis.

Transportation Analysis

The project will have minimal impacts to the County and surrounding roadways. Access to the project is off of Secretarys Sand Road (Rte 717). The primary route that will be utilized to access the project from Charlottesville, Virginia will be by Scottsville Road (Rte 20) and Plank Road (Rte 712). An alternate route that may be used for access would be by Highway 64, Highway 29 and Plank Roud (Rte 712). A map showing these routes is attached within **Appendix K**. There are no bridges on the route, therefore there is no weight or height restriction concern.

Construction transport activities will typically occur during the daytime hours, with the most common times being in the morning (around 7:00 AM - 9:00 AM) and the afternoon (2:00 PM - 4:00 PM). During these times, trucks and equipment arrive on-site for the day's work, deliveries of materials are made. The end of the workday (4:00 PM - 6:00 PM) also sees activity as trucks leave the site and materials are removed.



The site's trip generation will vary during the life cycle of the construction project, but the most common trip generation range is 5 to 20 trips per day. It is likely that construction crews will carpool as they are leaving from a common location.

The most common hauling vehicle used for the project to transport materials and equipment will most likely be flatbed trucks and trailers. Though the characteristics of these trucks can vary, they typically range from around 20 feet to 30 feet in length, 10 to 12 feet in height, and around 8 feet in width. Their curb weight can vary widely depending on the model and materials used, but they generally range from 18,000 to 30,000 pounds. These trucks have a maximum load capacity of around 40,000 to 50,000 pounds. Typically, a standard flatbed truck has 2-3 axles with a distance of 4-6 feet in between them.

Flatbed trailers can range from 48 feet to 53 feet for standard trailer, with an approximate height of 8 to 9 feet and a width of 8 feet. Depending on the types of materials used and construction the curb weight can range from 10,000 to 15,000 pounds or more. These trailers have a maximum load capacity of around 45,000 to 50,000 pounds. Typically, a standard Flatbed Trailer has 2 to 3 axles with a distance of 4-6 feet between them.

This project will not likely adversely impact transportation to public parks or schools since it is not in close proximity to either. It will also not impact pedestrian or bicycle facilities as none are in this area of the County.

Decommissioning Plan

Upon the project reaching the end of its life cycle/lease term, the project's improvements will be removed and the land will be reverted to its pre-construction condition/use. The landscape buffer within the field areas will be cut and stumps removed. The foundations, subsurface utility lines, poles, concrete pads, electrical lines, fencing and access road will be removed and recycled or disposed of in accordance with waste management regulations. Please refer to the attached Decommissioning Plan and Estimate within **Appendix L** for an analysis on the probable cost of decommissioning the site and restoring it to pre-construction conditions based on the current SUP plans.

Estimated Construction Schedule

If the Special Use Permit is granted by the County, Alberene Road Solar 1, LLC proposes to submit ministerial permit applications by Q3 2025, aiming to have permits in hand and starting construction by Q2 2026. The facility would be constructed and fully operational by Q1 2027.



NOT FOR CONSTRUCTION

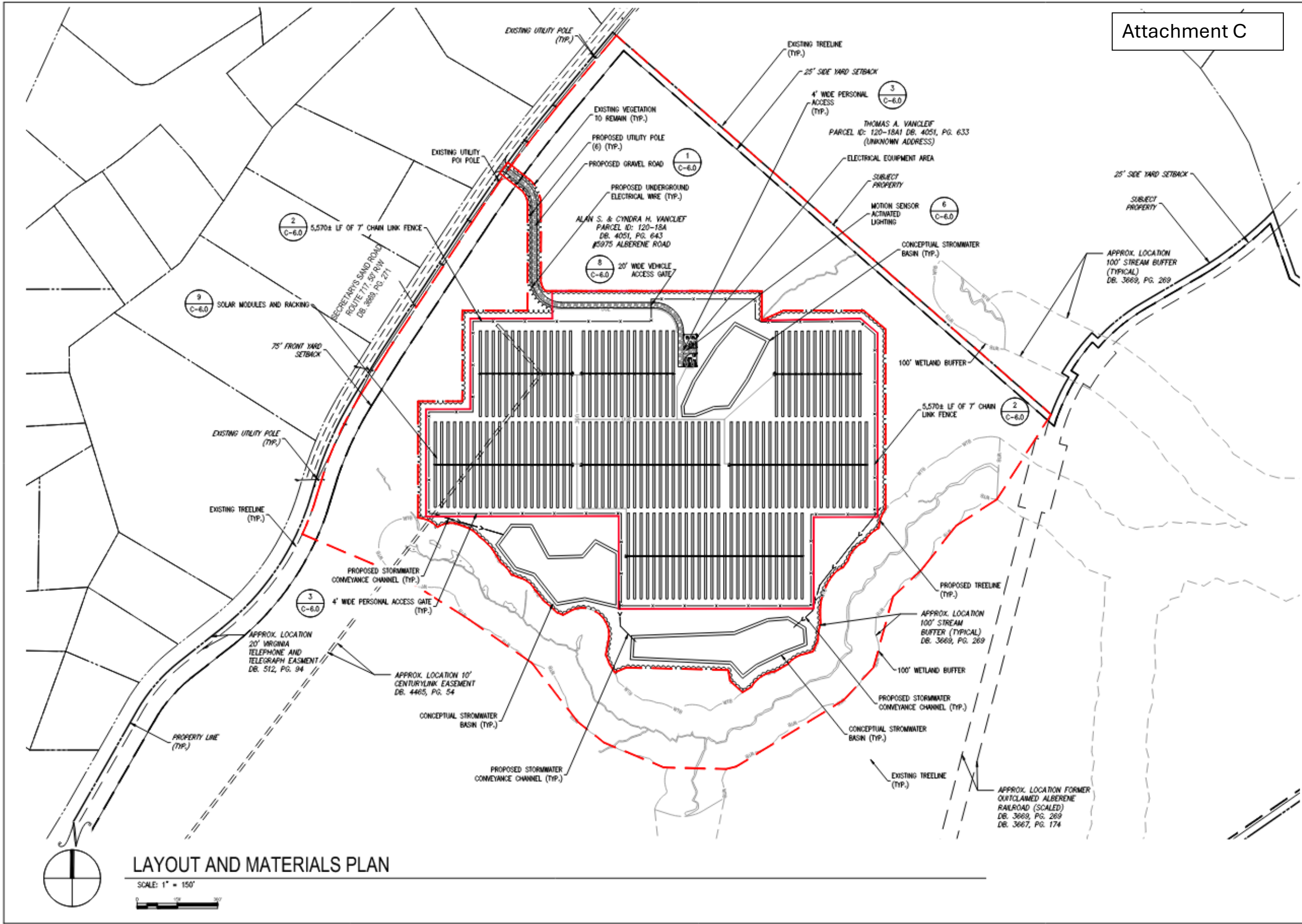
IF A VARIATION OF USE FOR ANY PORTION IS ALSO AN OUTLINED WORK AREA, THE USE OF A PROVISIONAL BUFFER ZONE MAY BE APPLIED BY AGREEMENT OF A LICENSED PROFESSIONAL ENGINEER.

SPECIAL USE PERMIT SET
SECRETARYS SAND ROAD
ESMONT, VA 22937

PROJECT NUMBER:
XXX-XXXX

| DATE | REVISION | CHECKED | RELEASE LEVEL |
|------|----------|---------|---------------|
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DATE PLOTTED: 11/11/2024
SCALE: 1" = 150'
C-3.0
LAYOUT AND MATERIALS
PLAN



LAYOUT AND MATERIALS PLAN

SCALE: 1" = 150'
0 150 300

