



ZONING MAP AMENDMENT and SPECIAL USE PERMIT APPLICATION

Applicant: Mountain Brook Solar, LLC

Project: Mountain Brook Solar

Submitted: February 1, 2023 to Franklin County



February 1, 2023

Lisa Cooper
Director of Planning, Franklin County
1255 Franklin Street, STE 103
Rocky Mount, Virginia 24152

Re: Special Use Permit Application for Mountain Brook Solar, LLC

Dear Ms. Cooper,

Our family has a long history in Franklin County and want to play an active role in upholding our agricultural roots, while still securing our financial security. The land that is proposed for Mountain Brook Solar has been in our family for over 100 years and we want to keep this land in our family as long as possible. We have been trying to figure out the best and most profitable ways to do this over the years and have struggled to do so. Although have been leasing it out for many years, it has not provided the financial security we wish it would. The land is currently being used for cattle grazing and while we appreciate the agricultural use, the land is being inundated with pesticides and it is not being properly maintained. We even tried to sell the land a few years back, but we were unsuccessful, and our ultimate preference is not to sell the land but keep it in the family.

We are strongly in support of leasing our land to Mountain Brook Solar for their proposed solar project because it enables us to preserve our family farm. We look to solar as an opportunity to keep our land in our family for many years to come. Solar is a temporary, low impact land use and it will not permanently alter the agricultural potential of the land. We are also pleased that Mountain Brook is committed to fulfilling the agricultural potential of the land during the life of the project by incorporating sheep grazing between and under the solar panels. This will not only keep the land in agricultural use but also support the local agriculture industry in Franklin County.

We urge you to support the development of Mountain Brook Solar and are excited about the prospect of having solar on our land. Mountain Brook has been incredibly transparent through every step of this process. They always keep me in the loop and respect my insights as a landowner and long term community member in Franklin County.

Best regards,

Sammy and Iris Robertson
P.O. Box 96
Wirtz, VA 24184



February 1, 2023

Lisa Cooper
Director of Planning, Franklin County
1255 Franklin Street, STE 103
Rocky Mount, Virginia 24152

Re: Special Use Permit Application for Mountain Brook Solar, LLC

Dear Ms. Cooper,

Please accept the enclosed application package submitted by Mountain Brook Solar, LLC to request a zoning map amendment from B2 to A1 and approve a special use permit for a proposed 20MWac solar generation project in Franklin County. This application is submitted following a pre-application meeting with Franklin County which took place on January 10th, 2023 on the Project site.

We are committed to being a responsible neighbor in the community. With that commitment, our application fully complies with the zoning ordinance. We appreciate the opportunity to submit this application and look forward to working with you.

Please contact me at 571-414-1442 or eliana.ginis@energixrenewables.com should you have any questions or require additional information.

Best regards,

A handwritten signature in black ink, appearing to read "Eliana Ginis".

Eliana Ginis
Senior Analyst, Project Development
Energix US, LLC
1201 Wilson Blvd. Ste. 2200
Arlington, VA 22209



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Exhibit B – Zoning Map Amendment Application

Exhibit C – Copy of Land Lease

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Exhibit G – Glint and Glare Study

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Exhibit J – Property Value Impact Study

Exhibit K – Decommissioning

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Exhibit M – Farmland Classification

1. Project and Applicant Overview

Mountain Brook Solar, LLC is proposing the development and construction of a 20MWac solar photovoltaic project in Franklin County, referred to as "Mountain Brook Solar" (the "Project"). **Mountain Brook Solar is committed to preserving the agricultural character of the County and is prioritizing dual uses on the site. Mountain Brook will partner with a local sheep farmer, Daniel Austin, who owns Lost Sheep Grazing Company, to have sheep graze between and under the solar panels.**

Mountain Brook will be located on three privately owned parcels, tax map numbers 0340003100, 0340003300, and 0340002300 (the "Property"), totaling approximately 258 acres. All parcels are owned by Carolyn Sue Robertson Dalton and Samuel Richard Robertson and are located north of the intersection of Burnt Chimney Road and Brooks Mill Road in Wirtz, Virginia. Two of the three parcels are zoned A-1. Parcel 0340002300 is zoned B-2 and Mountain Brook is requesting that it be rezoned to A-1. The limits of construction, which include all areas inside the fence line, as well as planted buffers, are approximately 184 acres. The area under just the panels, not including space in between rows, is approximately 37 acres. Designated areas of the Project will be reserved and used for setbacks, vegetative buffers, pollinator plantings and stream and wetland protection areas. Site control has been secured through a long-term lease and is enclosed as **Exhibit C** in this application. Mountain Brook Solar will deliver clean and cost-competitive energy to the Westlake Substation, owned by Appalachian Power, through a distribution circuit running along Burnt Chimney Road about 100 feet from the intersection of Brooks Mills Road and Burnt Chimney Road.

Mountain Brook Solar, LLC is a subsidiary of Energix US, LLC, one of the leading utility-scale solar developers in the Commonwealth. Headquartered in Arlington, VA, we leverage our financial strength and extensive industry experience to build sustainable, renewable energy projects that generate revenue for localities, deliver reliable electricity to customers, protect the environment and provide financial security to our landowner partners.

Energix is a long-term partner for the communities where we operate: we site, develop, construct, **own and operate projects throughout their entire life** and decommission projects at the end of their useful life. This business model makes Energix a vested and reliable partner to localities where the projects are located.

Beyond the ultimate environmental benefit of generating electrical energy without producing greenhouse gas emissions, solar projects have local environmental and financial benefits. Unlike many other industries and businesses, solar facility components are pollutant free and do not emit noise that is audible offsite. Solar projects do not permanently alter the future agricultural potential of the land, soil, or groundwater and require no harmful fertilizers, pesticides, or herbicides. **Many land use planners view solar facilities as "land banks," preserving the land for other future uses. After the Project is decommissioned and all of the equipment is removed, the land will be suitable for other types of development.**



Dual-use agricultural solar project that will have sheep grazing under and between panels.



Only 37 acres under panels. Remaining areas will be setbacks, vegetative buffers and wetland protection areas.



300-foot setbacks from all adjacent residences and **30-foot wide landscaping buffer** surrounding the Project.

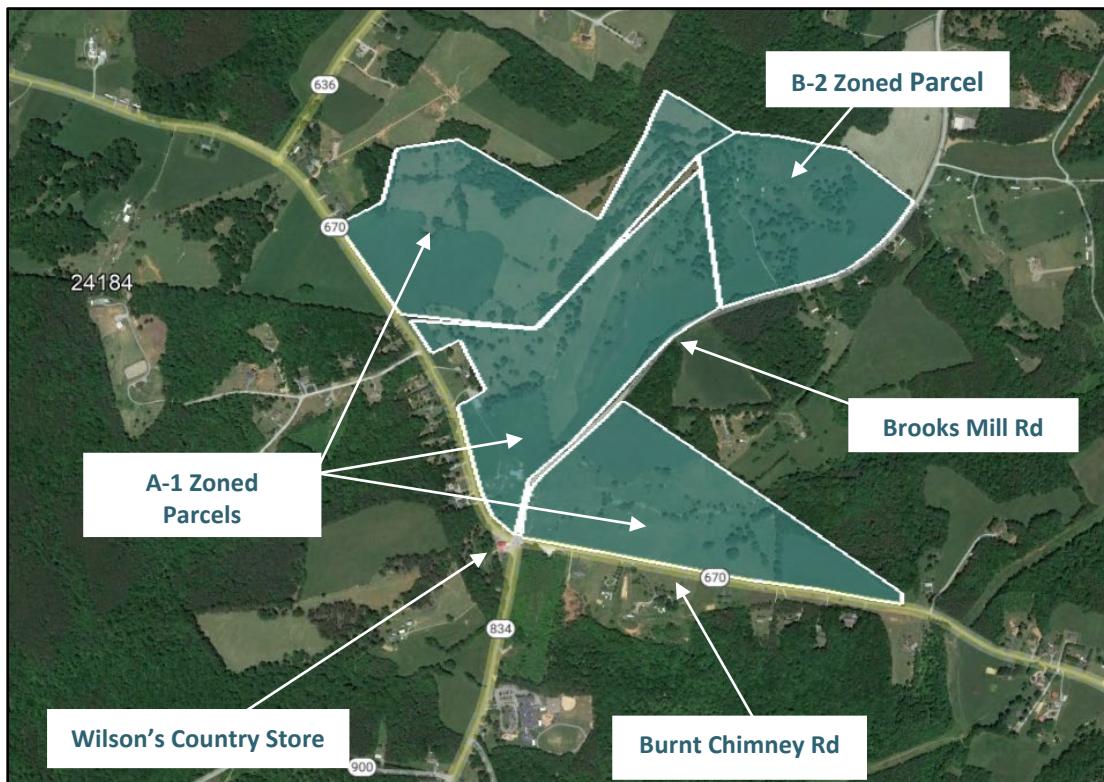
In addition, solar facilities generate tax revenue, allowing for increased investment in County services and infrastructure without any increased demand for public utilities, solid waste disposal, human services, or public education. **Under the Machinery and Tools taxation model and increased real estate taxes, Mountain Brook is estimated to generate a vast yearly tax base to Franklin County. This would amount to approximately \$2,364,495 over the Project's anticipated lifetime of 35 years.**

2. Project Details

a. Project Area

The Property is currently zoned for agricultural use (A-1) and general business use (B-2). Mountain Brook Solar is requesting to rezone parcel 0340002300 from B-2 to A-1, where utility scale solar is permitted with a Special Use Permit. After speaking with the landowner, we learned this parcel was zoned B-2 to accommodate bluegrass festivals and motorcycle races that the landowner's grandfather used to host on this land. This parcel hasn't been used for business in approximately 40 years and is currently used for cattle grazing.

The Project is generally located north of Burnt Chimney Road, east and west of Brooks Mill Road, and south of Pea Ridge Lane. Adjacent to the property is Wilson's County Store which is zoned B-2, and the remaining adjacent properties are zoned A-1. Within a 1-mile radius of the property, there is a mix of limited business district, agriculture, residential suburban subdivision, and residential combined subdivision. Currently, a portion of the Property is being leased for cattle grazing, which Mountain Brook Solar will replace with sheep grazing, and the rest is vacant land. The Project is depicted in detail on the site layout included in this application as **Exhibit D-Conceptual Site Plan.**



b. Technology and Design

Mountain Brook Solar will utilize Tier 1 equipment from bankable and reliable suppliers. For equipment to be categorized Tier 1, they must be used by 6 different projects and financed by 6 different banks. Tier 1 equipment are said to be more reliable, have robust warranties and are used by majority of the solar developers due to their quality. The system is expected to be configured as a tracker system with UL listed components, which will be installed in conformity with the National Electric Code. Given the proposed design, the structures will track the movement of the sun during the day, allowing for sufficient sunlight for vegetation to thrive underneath the panels. The height of racking and solar panels will not exceed 15 feet. Transformers, substation and tie-lines may exceed this height. Approximately 55,000 panels will be used. The facility will be enclosed by a security fence at least 8 feet in height and equipped with antclimbing device such as barbed wire.



The modules for the Project will use photovoltaic technology and will be [procured from an American module manufacturer, First Solar](#). First Solar is the largest U.S. solar panel manufacturer and has a 25+ year track record of product safety and reliability. Supporting the American manufacturing industry is an important part of our business model, which is why we have a [Buy American commitment](#). First Solar's cadmium telluride (CdTe) PV systems represent a breakthrough in large-scale renewable energy solutions. The thin layer of CdTe semiconductor material is the industry's leading eco-efficient technology due to their superior energy yield, competitive cost, and lowest environmental impact. These panels are proven to deliver more usable energy per watt than conventional silicon-based modules, resulting in a lower levelized cost of electricity. First Solar modules have been tested for safety during breakage, fire, flooding, and hail storms, and meet rigorous long-term durability and reliability testing standards. Additional information about First Solar's technology can be found in [Exhibit E](#) of this application.

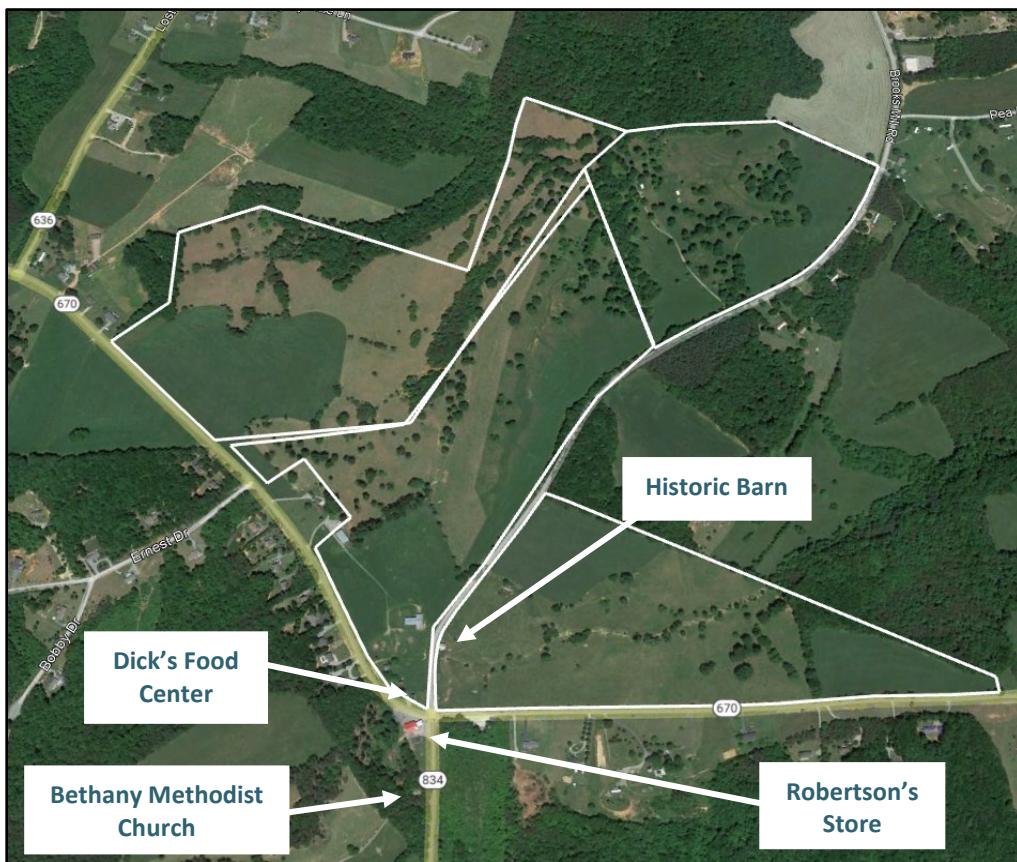
In addition, First Solar's technology meets the Environmental Protection Agency's Toxic Characteristic Leaching Procedure (TCLP). TCLP is a federal waste characterization test used to determine whether a waste is hazardous or non-hazardous. TCLP testing is done through an accredited test laboratory and tests for the 8 RCRA (Resource Conservation and Recovery Act) Metals including arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. In accordance with the U.S. federal waste characterization testing (TCLP) of new and aged thin-film solar panels conducted by Arizona State University's Photovoltaic Reliability Laboratory, First Solar end-of-life CdTe thin-film solar panels are characterized as a federal non-hazardous waste.

The Solar Facility will be remotely monitored 24 hours a day to maintain security and ensure proper operation of the facility, and regular inspections and service visits will be done in person. Regular grounds maintenance will be conducted in accordance with Franklin County Code. The Solar Facility will be secured by a perimeter fence constructed in accordance with the Franklin Zoning Ordinance and the National Electric Code (NEC).

c. Natural Resources

The project will minimize and mitigate any impact to wetlands, threatened and endangered species, natural resources or historically or culturally significant areas:

- **Wetlands and Streams-** On September 21st, 2022, environmental consultants conducted a field delineation to identify streams and wetlands on site. The wetland delineation was submitted to the U.S. Army Corps of Engineers for Preliminary Jurisdictional Determination (PJD). The proposed layout minimizes impacts to wetlands and employs setbacks for preservation of these resources. Once the PJD is obtained from the U.S. Army Corps of Engineers, the Project layout will be finalized and appropriate permits will be secured, if necessary.
- **Cultural Resources-** The Project underwent a Phase IA Cultural Resources Study in December 2022 and Mountain Brook is waiting for comments back from the Department of Historic Resources (DHR) and the Department of Environmental Quality (DEQ). Five previously recorded architectural resources were identified. Two of the resources, Robertson's Store (DHR #033-5439) and Barn, Route 834 (DHR #033-5440) are located within the Project parcels. Two resources, Dick's Food Center/Wilson's Country Store (DHR #033-5438) and Bethany Methodist Church (DHR #033-0407) are located adjacent to and south of the Project parcels at the intersection of Burnt Chimney and Brooks Mill roads. The fifth resource, Jefferson Place (DHR #033-0038) is located to the northwest of the Project approximately 1-mile away. None of these resources have been determined eligible for listing on the National Register of Historic Places (NRHP). A Phase I Cultural Resources Survey will take place and concurrence from the DEQ and the DHR will take place to implement any protection and mitigation measures if necessary.





- **Threatened and Endangered Species Habitat Assessment-** Desktop reviews from the Fish and Wildlife Service, Department of Conservation and Recreation, and Wildlife Environmental Review Map Service found no threatened or endangered species within two miles of the Project. As part of DEQ's Permit by Rule, coordination with the Department of Wildlife Resources, Department of Conservation and Recreation, and Department of Environmental Quality will take place. Should any protected, threatened, or endangered species be identified within the Project's limits, the Project will abide by the commonly used impact prevention practices that may be required by the Department of Environmental Quality during Permit by Rule Permitting.

d. Glint and Glare

Mountain Brook Solar used the Federal Aviation Administration's ("FAA") Notice Criteria Tool to determine the impact of the Project on airways. The notice criteria tool is a tool provided by the FAA to determine if the Project needs to be filed for a hazard study with the FAA. If the tool determines that the project is eligible, the FAA will further evaluate the project for its impact on the surroundings. If the Project is deemed ineligible by the criteria tool, no further steps are required by the FAA.

The tool determined that Mountain Brook Solar did not exceed the agency's criteria and the project does not need any further FAA study. The FAA determined that Mountain Brook Solar did not present a hazard to air traffic. The FAA notice criteria tool results is attached as **Exhibit F** in the application.

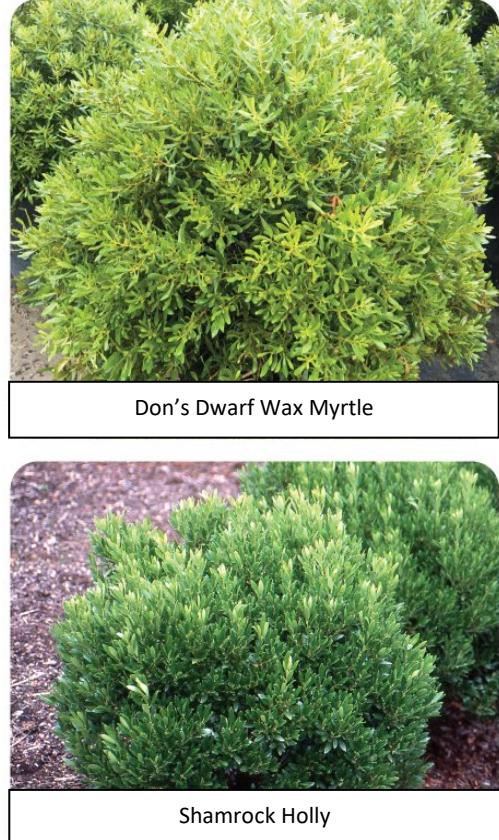
In general, solar does not produce any substantial glint and glare. Sunlight is absorbed into the panels to generate energy, not reflected. The site is designed with First Solar modules which use anti-reflective technology to prevent glint or glare. In addition, Mountain Brook Solar will implement vegetative buffering and setbacks from all property lines which eliminates the potential for glint or glare. Mountain Brook commissioned a glare impact study by a third-party professional engineer. The analysis uses the Forge Solar program to evaluate PV glare. Included in the analysis were 27 observation points for the existing residences adjacent to the Project and 1.4 miles each of the two public roads which border the site. The analysis found that there were zero minutes of glare visible at any of the analyzed locations at any time of the day during any season of the year. The full report can be found in **Exhibit G** of this application.

3. Visual Impacts & Landscaping Plan

Mountain Brook Solar is dedicated to preserving the rural and agricultural character of Franklin County. Mountain Brook has undertaken a visual impacts analysis with engineering consultants to identify the best screening methods for the Project. To mitigate visual impacts to nearby residences and roadways, the Project will maintain **a minimum of 300-foot setbacks from adjacent residences and 150-foot setbacks from public right of ways**. One adjacent residence is slightly less than 300 feet from the Project and it is owned by participating Project landowners. Our screening and landscaping plan focuses on maximizing the preservation of existing vegetation and proposing additional landscape buffering where needed. During our site visits, we drove the perimeter of the Project and identified which locations have existing vegetative screening and where additional vegetation is needed.

In areas where there is no existing vegetation or where it is insufficient, additional non-invasive and pollinator friendly plants, shrubs, and trees will be proposed in accordance with the Franklin County Zoning Ordinance. The landscape buffer will be maintained and supplemented as necessary throughout the life of the Project. The buffer will consist of a 30-foot landscaping strip and include multiple staggered rows of vegetation planted at least 6-feet tall. All fencing will be installed on the interior of the buffer.

Below are examples of trees that are contemplated or the vegetative buffer:





The photo below is the existing view from Brooks Mill Road looking west towards the Project. Vegetation similar to the photo is present along Brooks Mill Road. Additional evergreen trees will be planted to fully screen the Project in addition to implementing setbacks.



Mountain Brook identified locations where a vegetative buffer will need to be planted and had engineering consultants create landscaping renderings from three viewpoints to the Project. The renderings show the existing view, the view of the proposed landscape buffer at the time of planting, and the view after 3 years of growth and at 10 years of growth. The landscaping and screening plan can be found in **Exhibit H** of this application.

4. Pollinator Habitat

Following construction, the Project will be seeded with pollinator friendly vegetation to reduce invasive weed growth and trap sediment. At the beginning of the next planting season, Mountain Brook will establish pollinator gardens throughout the site to support local populations of critical pollinator species such as butterflies, bees, monarchs, hummingbirds and more. Pollinator friendly native plants, shrubs, trees, grasses, forbs and wildflowers will be used in the vegetative buffer and planted in accordance with Virginia Pollinator-Smart Solar program guidelines. The vegetation will be further maintained in accordance with the guidelines specified in the program.



5. Agricultural Preservation

The Mountain Brook site is currently in agricultural use with cattle grazing. Mountain Brook utilized the Web Soil Survey (WSS) through the U.S. Department of Agriculture to determine the farmland classification of the Project. The majority of the site, 95.1%, is classified as Farmland of Statewide Importance. Only 1.6% of the land is classified as Prime Farmland. The results can be found in [Exhibit M](#) of this application. Farmlands of statewide importance include those that may produce high yields of crop if conditions are favorable but may need considerable investment to produce yields as high as prime soils. The Project site is not used for crop production and has been used for cattle grazing for many years. Mountain Brook is fulfilling the land's farming potential by keep grazing activities on site and establishing pollinator gardens.

While cattle are not compatible with solar panels, Mountain Brook will be partnering with a local sheep farmer. Sheep will graze in the areas surrounding the panels and can successfully maintain vegetation between and under mounted solar arrays. Mountain Brook Solar will provide a predator free environment for the sheep. Thanks to secure fencing surrounding the Project, sheep will be protected from predators. This unique opportunity will help protect sheep populations in Franklin County in a way that a traditional agricultural setting cannot. In addition, the grazing area will be leased to the sheep farmer at no cost to further support agricultural activities in the area. Grazing sheep on solar projects bolsters direct on-farm jobs and increases opportunities for meat processing, restaurants, retail outlets, event venues and more indirectly. As the size of flocks increase across southwest Virginia, stores that supply equipment, mineral, feed, veterinary medications and other items will see increased revenue. A letter of intent between Mountain Brook Solar and Lost Sheep Grazing Company can be found in [Exhibit I](#) of this application.



6. Proposed Project Timeline

Mountain Brook anticipates going through the Virginia Department of Environmental Quality's Permit by Rule process in Quarters 3 and 4 of 2023. This will include reviews by agencies such as the Department of Wildlife Resources, Department of Conservation and Recreation, and the Department of Historic Resources. The Project will then secure Stormwater, Building, Electrical and other preconstruction permits and site plan review from the County and State. Mountain Brook is anticipated to begin construction in early 2024 and become operational in Quarter 3 of 2024. The Project is anticipated to operate for 35 years.

7. Stormwater Management and Erosion & Sediment Control

The Project will be designed to satisfy and exceed the requirements of Franklin County and Virginia Department of Environmental Quality (DEQ) stormwater management (SWM) and erosion & sediment control (ESC) regulations. ESC measures will be implemented to protect downstream properties and waterways from sediment-laden runoff during construction and SWM measures will be implemented to protect downstream properties and waterways from water volumes and flows after construction is complete and during operation for the life of the Project.

The SWM and ESC design will protect both the waterways during and following construction. During construction, ESC measures will be installed around the perimeter of the site and along streams to filter sediment from runoff prior to entering the waterways. ESC measures will include silt fencing, diversion dikes, and sediment basins. Throughout construction, dust control, straw mulching, and seeding immediately following grading activities and will be implemented to minimize exposed soils.

The following additional measures will be implemented, subject to final design approval by DEQ and/or Franklin County, which exceed current SWM and ESC design requirements:

- **Design of ditches upstream of ponds:** As a measure to help protect the ponds during construction and operations, additional ditches are proposed to be constructed immediately upstream of the ponds to capture the flow from the solar facility. These ditches will then be routed through an armored channel into the ponds.
- **Use of filter socks:** Through the gentle sloping/sheet flow areas of the project, filter socks will be applied as needed in order to help reduce the potential for erosion before water reaches the sediment ponds. The filter socks will be placed perpendicular to the slope of the land to interrupt the flow and act similar to a check dam, absorbing the energy in the water to allow it to flow over the filter sock and proceed down-slope till the next filter sock.
- **Ditching through panels:** In areas of the panels where concentrated flow is expected, engineered ditches will be proposed to help control and transport runoff from the panel areas into the sediment ponds. These ditches will be armored with a soft armoring erosion control matting. These ditches may include check dams to help reduce the energy in the water as it flows to the ponds, which will be included as necessary based on final engineering. These ditches will remain in place through the life of the project to also control concentrated flows during operations.
- **Soil Stabilization:** The Project shall be developed in three phases to ensure proper soil stabilization. Phase 1 will consist of construction of an entrance and laydown area to support the commencement of construction of the Project. Phase 2 will consist of establishment of required perimeter buffers and establishment of all temporary and permanent erosion and sediment and stormwater management measures. Phase 3 will consist of all clearing, grubbing and preparation of the panel



area. Logging activity which does not include removing stumps is permitted at any time during the project. All seeded areas should be mulched or blanketed to minimize the potential for failure to establish an adequate vegetative cover. Mulching may also be used as a temporary stabilization of some disturbed areas in non-germinating seasons. The final stabilization of each disturbed phase will be reviewed and approved by the SW/ESC Administrator or their designee. Once a phase has been stabilized and approved by the SW/ESC Administrator or their designee another section of the project may begin land disturbance activities. An updated site sketch will be provided by the project engineer to the SW/ESC Administrator or their designee every three months, or upon request, until the project is fully stabilized. The site sketch will clearly detail the areas currently disturbed, areas temporarily stabilized, and areas fully stabilized, and areas not under construction. All disturbed areas shall immediately receive temporary or permanent seeding according to the Virginia Erosion and Sediment Control Handbook. The site plan shall show a note for use of native Virginia grasses and plants. Prohibited are vegetation types classified by VADEQ or DCR as invasive.

- **On-Site SWM & ESC Manager:** The applicant will provide an individual responsible for performing daily inspections of stormwater and erosion and sediment control practices and devices installed throughout construction. This individual will provide the County a weekly status report and coordinate with the County Erosion and Sediment Control inspector, the local Soil and Water Conservation District, and the Virginia Department of Environmental Quality as necessary, to resolve any stormwater and erosion and sediment control issues that occur on site.

Throughout construction, Energix will oversee all construction activities by continuously monitoring and directing the function, maintenance, and repair of ESC installations. This will help ensure any mud tracked onto a public roadway is quickly removed or any damaged perimeter control is promptly repaired. SWM Quality requirements are anticipated to be met through preservation of forested/open space and nutrient credit purchases. These facilities will be maintained by Mountain Brook pursuant to an approved maintenance agreement for the life of the development.

8. Impact to Surrounding Property Values

Mountain Brook Solar commissioned an independent 3rd party report from Kirkland Appraisals. Kirkland Appraisals has [extensive experience with Virginia property value appraisals and analysis](#). Kirkland Appraisals specifically studied the impact of the Project on the surrounding community. The consultant reached the following conclusions regarding Mountain Brook Solar:

- The adjoining properties are well set back from the proposed solar panels and the majority of the Project Area is buffered with existing landscaping for screening the Project.
- Additional supplemental vegetation is proposed to supplement the areas where the existing trees are insufficient to provide a proper screen.
- The matched pair analysis using data from Virginia, North Carolina, South Carolina, Florida, New Jersey, and a few other states shows no impact on home values due to abutting or adjoining a solar farm as well as no impact to abutting or adjacent vacant residential or agricultural land where the solar farm is properly screened and buffered.
- The criteria that typically correlates with downward adjustments on property values such as noise, odor, and traffic all indicate that a solar farm is a compatible use for rural/residential transition areas and that it would function in a harmonious manner with this area.



- Data from independent third-party university studies, broker commentary, and other appraisal studies support a finding of no impact on property value adjoining a solar farm with proper setbacks and landscaped buffers.

The Kirkland Appraisals study is attached to this application as an [Exhibit J](#).

9. Decommissioning

The operating period for the Project is anticipated to be 35 years. At the end of the useful life cycle of the Project, Energix will be responsible for the removal of all above and below ground equipment, all roads, and the equipment pad foundations. Energix will also restore and reclaim the site to preconstruction condition and topsoil quality to the extent practical, including access roads. Decommissioning includes removing the solar panels, solar panel racking, steel foundation posts and beams, inverters, transformers, overhead cables and lines, equipment pads and foundations, equipment cabinets, and ancillary equipment. The civil facilities, access road, security fence, and any drainage structures are included in the scope.

Mountain Brook will submit a Decommissioning Plan including a decommissioning cost estimate prepared by a Virginia Licensed professional engineer during Site Plan Approval. The Plan will protect the interests of the property owner(s), adjacent property owners, and the County ensuring the removal of the solar facilities after the use is terminated with restoration of the land. To ensure the full completion of decommissioning requirements, Mountain Brook will place a decommissioning surety. The surety will be in a form acceptable to the County Attorney to ensure that such decommissioning or removal is completed expeditiously, and at no cost to the landowner or Franklin County. The decommissioning surety will be updated every five years.

Our panel manufacturer, First Solar, has the only panel recycling program in the U.S. First Solar has a long-standing leadership position in PV recycling with more than 15 years of experience in operating high-value PV recycling facilities on a global and industrial scale. First Solar's high-value recycling process recovers more than 90% of a PV module for reuse in new modules and glass and rubber products. More details about removal and disposal of site components, including First Solar's recycling program, and restoration/reclamation of the site can be found in [Exhibit K](#) of this application.

10. Economic Plan

a. Tax Revenue

Machinery and Tools Tax

Solar Facilities are subject to local machinery and tool taxes, with a complex set of exemptions contained in Va. Code § 58.1-3660. Factors in determining the level of exemption include the size of a solar facility and the date a facility applied an initial interconnection request with an electric utility or a regional transmission organization. For Mountain Brook Solar, because it is larger than five megawatts and it applied for interconnection after January 1, 2019, it would be subject to a stepdown exemption from local machinery and tools taxes and be subject to local depreciation of the solar equipment.



The current M&T tax rate in Franklin County is \$0.70/\$100.00. M&T revenue for Mountain Brook Solar is estimated to be approximately \$1,538,250 over 35-years.

Revenue Share

First passed by the 2020 General Assembly then modified and expanded in the 2021 General Assembly, the “Revenue Share” is a unique “capacity tax” revenue opportunity for localities that serves as an alternative to the traditional Machinery and Tools tax regime. Localities may adopt a revenue share ordinance and assess up to \$1,400 per megawatt of solar facility “nameplate capacity.” If they do so, the projects subject to revenue share are exempt from Machinery and Tool tax. For projects approved by a locality after January 1, 2021, the revenue share payment is subject to an escalator of 10% every 5 years, beginning in 2026, over the life of the project. It provides a meaningful and reliable revenue stream from the project to the localities where it is sited.

Revenue Share revenues from Mountain Brook Solar is estimated to be approximately \$1,407,896 over 35-years.

b. Change in Project Property Value

Mountain Brook anticipates the reassessment value to increase significantly under the proposed solar use. Under the current land use, the Property’s assessment value equals \$963,100.00 and brings \$892.44 in annual real estate revenues to Franklin County. Based on trends observed across Virginia, Energix estimates reassessment value to increase to approximately \$15,000 per acre, which would increase the Property’s assessment value to approximately between \$3,870,000. Anticipated annual revenue from the reassessed value would be approximately \$23,607 per year and increase based on changes to the County’s real estate tax rate.

c. Total Revenues for Franklin County

Over the anticipate life of the Project, Franklin County will receive approximately **\$2,862,686**. Mountain Brook will **voluntarily pay the greater sum between the M&T Tax and Revenue Share every year** to ensure that Franklin County is receiving the maximum benefit the Project can provide. Mountain Brook will also be offering a one-time voluntary contribution to Franklin County.

Estimated Revenue over 35 Years: Mountain Brook Solar



No Solar (Current Use) Revenue with M&T Tax, Increased Real Estate Taxes, + Voluntary Contribution Revenue with Revenue Share, Increased Real Estate Taxes, + Voluntary Contribution Revenue using annual greater sum of M&T Tax or Revenue Share, Increased Real Estate Taxes, + Voluntary Contribution



d. Economic Activity

In addition to bringing additional tax revenue to the community, solar projects directly stimulate local job markets by increasing the demand for labor. Mountain Brook anticipates creating approximately 75-100 well-paying jobs during the construction phase. Energix aims to source as much local labor as possible while maintaining the highest safety and quality standards. Virginia's solar industry has expanded significantly in the last few years which increases our ability to source labor locally and provide valuable workforce training and experience. For positions that cannot be filled locally, Energix houses non-local workers in local hotels and allocates per diem spending for food. Energix will use hotels in Franklin County to the greatest extent possible to ensure the local hospitality industry benefits directly from this Project. **Energix is a proud member of the Smith Mountain Lake Chamber of Commerce and we look forward to partnering with the Chamber to find local contractors for the construction, operation, and maintenance of Mountain Brook Solar.**

11. Community Outreach

As one of the leading utility-scale solar developers in the Commonwealth, Energix relies on community partnerships to ensure project success. We want to ensure Mountain Brook will be a harmonious neighbor to our agricultural and residential neighbors as well as the community as a whole. Since we become part of the community for the long term, community feedback is a vital component of our project design and development process. In August of 2021 and 2022, representatives of Mountain Brook Solar went door-to-door to adjoining residences to introduce the Project and answer any questions neighbors had. Mountain Brook Solar is holding a community meeting on February 7th, 2023 at the Franklin County Library, Westlake Branch. Invitations were mailed to all adjoining property owners. A list of property owners notified, a sign-in sheet from the meeting, and a summary of the meeting will be submitted to the County prior to the public hearing.



EXHIBIT A

SPECIAL USE PERMIT APPLICATION

**FRANKLIN COUNTY
SPECIAL USE PERMIT APPLICATION**

Consultation with planning staff is strongly recommended prior to filing of a special use permit application. The purpose of the consultation is to review the request, identify specific information that may need to be submitted, and discuss procedures and time frames.

Filing Deadline: Completed applications must be received by 4:30 P.M. on the deadline date listed on the schedule at the back of this packet to be processed and considered for public hearing. Applications must contain specific information, as detailed below and all fees paid by 4:30 P.M. on the advertised deadline date.

Incomplete applications will not be accepted nor advertised.

**APPLICANT MUST SUBMIT A COMPLETE
APPLICATION CONSISTING OF ONE (1) ORIGINAL,
AND ONE UNSTAPLED COPY OF APPLICATION FORM,
LETTER OF APPLICATION, CONCEPT PLAN, AND ANY
OTHER PERTINENT INFORMATION TO BE
CONSIDERED BY THE PLANNING COMMISSION AND
BOARD OF SUPERVISORS.**

Application Requirements:

1. **Completed application form**, typed or printed in ink and signed by applicant, including property owner's consent and signature.
2. **Letter of application** stating in general terms:
 - (a) the proposed use of the property,
 - (b) the reason for the request
 - (c) the effect of the changes on the surrounding area,
3. **Concept Plan** for property showing existing site features and any proposed development additions or improvements. See attached information for recommended contents of concept plans.

Payment of Fees:

Planned Developments	\$300.00 + \$5.00 per acre
Residential/Agricultural	\$250.00 +\$5.00 per acre
Commercial & Industrial	\$250.00 + \$5.00 per acre

ALL required application fees must be paid at the time of submittal of application.

Posting of the Subject Property prior to Public Hearings:

Franklin County Department of Planning and Community Development will prepare and post a "Notice of Public Hearing" sign along any road that is adjacent to the property for which a special use permit is requested. The notice will be posted by the county at least fourteen days prior to the scheduled Planning Commission and the Board of Supervisors public hearings. If no public road abuts the property, then notice signs shall be erected on at least 2 boundaries of the property abutting land not owned by the applicant.

The signs are property of Franklin County and must not be removed by the applicant.

Legal Advertisement Costs:

Each special use permit request must be legally advertised in a newspaper of general circulation in accordance with established state and local regulations. Franklin County advertises in the Franklin News Post. The Department of Planning and Community Development shall prepare the legal ad and shall send the ad to the newspaper for publication.:

The cost of publishing the legal ad is the responsibility of the special use permit applicant. The newspaper will send an invoice to the applicant. It is important that the invoice be paid upon receipt. If the invoice is not paid by the applicant prior to the newspaper's cut-off date for legal ad publication, the legal ad will not be published, and the scheduled public hearing will be delayed for approximately one month.

If an applicant requests that a public hearing be delayed after publication of a legal ad, the applicant shall be responsible for all costs of re-advertisement.

Considerations for Granting a Special Use Permit:

The Planning Commission and the Board of Supervisors consider the following in reviewing requests for special use permits:

- ▶ The effect of the proposed use on adjacent property
- ▶ The effect of the proposed use on the character of the existing zoning district
- ▶ The agreement of the proposed use with the purpose and intent of the zoning ordinance and other uses permitted by right in the district
- ▶ The effect of the proposed use on public health, safety and welfare

For Further Information Contact:

Department of Planning and Community Development
1255 Franklin Street, Suite 103
Rocky Mount, Virginia 24151

Phone: (540) 483-3027
FAX: (540) 483-3041

Office Hours: Monday through Friday, 8:00 A.M. to 4:30 P.M.

FRANKLIN COUNTY SPECIAL USE PERMIT PROCESS

STEP 1-PRE-APPLICATION MEETING

- Applicant meets with planning staff to discuss request, obtain forms, review process, and identify required materials to appropriately process and review the request. An application for a special use permit must be filed by the property owner or with the property owner's written consent.

STEP 2-APPLICATION

- Application: Applicant submits complete application packet to the Department of Planning and Community Development. Application and plans are available for public review.
- Posting of Property: The county shall post public notice signs on the property at least fourteen (14) days prior to the scheduled Planning Commission and Board of Supervisors public hearings.
- Notification of Property Owners: Planning staff notifies adjoining property owners of the special use permit request and the date of the public hearings.
- Public Notice/Legal Advertisement: Planning staff prepares required legal advertising and publishes in local newspaper. (Notification of requests and public hearing schedule must appear in a local newspaper two times in two consecutive weeks before each public hearing.) Applicant is responsible for cost of legal ad publication.

STEP3-STAFF REVIEW

- Staff visits site and coordinates application with other County departments, as well as public agencies that may be affected. Staff prepares a written report for the Planning Commission and Board of Supervisors that considers the proposed district regulations, and Section 25-2 through 25-4 of the Zoning Ordinance (Purpose and Intent; Relationship to Environment; and Relationship to Comprehensive Plan).

STEP 4 -PLANNING COMMISSION REVIEW AND RECOMMENDATION

- Planning Commission visits each site prior to the scheduled public hearing.
- The applicant or a designated agent must attend the public hearing.
- Public comment is received at the hearing.
- Planning Commission must make a recommendation to the Board of Supervisors within 100 days of its first meeting date. The recommendation may include conditions on the use of the property to address specific issues of concern. **Any conditions that are proposed by the developer must be submitted to the Planning Office no later than 4:30 pm six (6) days prior to the Board of Supervisors Meeting.**
- After action is taken by the Planning Commission, the request is scheduled for public hearing before the Board of Supervisors. Planning staff immediately prepares legal advertisements and proceeds with newspaper publication. Applicant is responsible for cost of legal ad publication.
- *Please note that any request to withdraw or postpone an application must be requested in writing within two (2) days after the Planning Commission hearing in order to coordinate public notice requirements.*

STEP 5 -BOARD OF SUPERVISORS DECISION

- Planning Commission recommendation is forwarded in writing to the Board of Supervisors
- Applicant or their agent must attend the public hearing
- Board of Supervisors can approve or deny the request, or refer it back to the Planning Commission for additional review
- The Board may impose conditions upon any special use permit, as provided for in Section 25-640 of the Zoning Ordinance and may require a bond or surety to ensure compliance with conditions.
- Special use permit is effective immediately after action by the Board of Supervisors
- Special use permits expire in 18 months if there is no commencement of the use or related activity

**FRANKLIN COUNTY
SPECIAL USE PERMIT APPLICATION**

(Type or Print)

I/We, Mountain Brook Solar LLC as Owner(s), Contract Purchasers, or Owner's Authorized Agent of the property described below, hereby apply to the Franklin County Board of Supervisors for a special use permit on the property as described below:

Petitioner's Name: Mountain Brook Solar LLC

1201 Wilson Blvd. Suite 2200, Arlington, VA 22209

Petitioner's Address: _____

571-414-1442

Petitioner's Phone Number: _____

Petitioner's E-mail: Eliana.Ginis@EnergixRenewables.com

Property Owner's Name: Carolyn Sue Robertson Dalton and Samuae Richard Robertson

Property Owner's Address: PO Box 165, Boones Mill, VA 24065

Property Owner's Phone Number: 540-537-0052

Property Owner's E-mail: IrisRobertson1960@gmail.com DeeDalton@cox.net

Directions to Property from Rocky Mount: Take State Route 655 and turn left onto State Route 834

Tax Map and Parcel Number: 034000230, 0340003100, and 0340003300

Magisterial District: Gills Creek and Union Hall

Property Information:

A. Size ~258 acres of Property:

B. Existing Zoning: A-1 and B-2

C. Existing Cattle Grazing Land Use:

D. Is property located within any of the following overlay zoning districts:

Corridor District Westlake Overlay District Smith Mountain Lake Surface District

E. Is any land submerged under water or part of a lake? Yes No If yes, explain.

N/A

Proposed Special Use Permit Information:

A. Proposed Land Use:

Utility Scale Solar Generation Facility

B. Size of Proposed Use: _____

C. Other Details of Proposed Use: _____

Checklist for completed items:

- Application Form
- Letter of Application
- Concept Plan
- Application Fee

****I certify that this application for a special use permit and the information submitted herein is correct and accurate.**

Mountain Brook Solar LLC

Petitioner's Name (Print): _____

Signature of Petitioner:  _____

Date: 01-03-2023

Mailing Address: 1201 Wilson Blvd. Ste 2200

Arlington, VA 22209

Telephone: 984-214-8945

Email Address: Dominika.Sink@EnergixRenewables.com

Owner's consent, if petitioner is not property owner:

Owner's Name (Print):  _____

Signature of Owner:  _____

Date: 1-4-23

Date Received by Planning Staff _____

Clerk's Initials: _____

CHECK#: _____

RECPT.#: _____

AMOUNT: _____

**CONCEPT PLANS
RESIDENTIAL, BUSINESS AND INDUSTRIAL DISTRICTS
NECESSARY CONTENTS**

Purpose of a Concept Plan:

A concept plan is necessary for all special use permit applications. The purpose of the concept plan is to provide information on site conditions and a general understanding of the proposed use of a property. Typically, a concept plan contains information on the property such as the property address, parcel boundaries, adjacent roads, natural features (including water courses) and neighboring properties. A concept plan also includes the locations of any proposed buildings, parking, streets, community facilities, buffering or screening, boat docks, signs, and lighting, as well as the proposed densities of development.

Concept Plan versus Site Development Plan:

A concept plan is not the same as a site development plan, which is more detailed to ensure compliance with development regulations and obtain construction permits. A concept plan may be the first step in creating a site development plan. It is important to note that approval of a special use permit with a concept plan does not mean that a site development plan is or will be approved.

Concept Plan Necessary Contents:

- ▶ Project title, name of applicant, project engineer/architect/surveyor/planner
- ▶ Plan date
- ▶ North arrow and graphic scale
- ▶ Size of entire parcel and, if applicable, size of portion of parcel requested for rezoning, accompanied by meets and bounds description
- ▶ Adjacent streets, railroads, natural features, historic sites, streams or bodies of water, floodplains, and other information that may help describe site conditions
- ▶ Locations, dimensions, and heights of all existing structures and those proposed
- ▶ Location and dimensions of proposed pedestrian and vehicular access points, driveways, parking areas/spaces and other facilities
- ▶ Natural areas or historic sites to be preserved
- ▶ Location and description of existing vegetation or any landscaping, screening or buffering proposed within the lot or along the perimeter of the development
- ▶ Location of proposed signs, including type, size and height
- ▶ Lighting information, if applicable

- ▶ Building elevations or renderings of the proposed development, if available
- ▶ Accessory use information such as the location of storage yards, recreation spaces, refuse collection areas, septic drain fields, wells or water tank locations, etc
- ▶ Number, type and size of dwellings proposed, and the residential density per acre
- ▶ Number and square footage of retail and office uses proposed
- ▶ Location, size and type of recreational amenities, parking facilities, and utility information
- ▶ Other items that may be recommended by staff
- ▶ Recommended plan size 8.5" x 11" minimum or 11" x 17" maximum. The plan must be legible. The applicant must provide 28 copies of the plan for distribution to Planning Commission and Board of Supervisors.

NOTE: IF YOU ARE PLANNING A PRESENTATION AT THE PUBLIC HEARINGS FOR THE PLANNING COMMISSION AND BOARD OF SUPERVISORS, EITHER BRING A 8 ½ X 11 SIZE PAGE OF YOUR PRESENTATION TO SHOW ON THE OVERHEAD PROJECTOR OR PUT ON A CD OR FLASH DRIVE TO SHOW ON THE POWERPOINT SYSTEM.



EXHIBIT B

ZONING MAP AMENDMENT APPLICATION

**FRANKLIN COUNTY
ZONING MAP AMENDMENT APPLICATION**

Consultation with planning staff is strongly recommended prior to filing a zoning map amendment application. The purpose of the consultation is to review the request, identify specific information that may need to be submitted, and discuss procedures and time frames.

Filing Deadline: Completed applications must be received by 4:30 P.M. on the deadline date listed on the schedule at the back of this packet in order to be processed and considered for public hearing. Applications must contain specific information, as detailed below and all fees paid by 4:30 P.M. on the advertised deadline date.

Incomplete applications will not be accepted nor advertised.

**APPLICANT MUST SUBMIT A COMPLETE
APPLICATION CONSISTING OF APPLICATION FORM,
LETTER OF APPLICATION, CONCEPT PLAN, AND ANY
OTHER PERTINENT INFORMATION TO BE
CONSIDERED BY THE PLANNING COMMISSION AND
BOARD OF SUPERVISORS.**

Application Requirements:

1. **Completed application form**, typed or printed in ink and signed by applicant, including property owner's consent and signature.
2. **Letter of application** stating in general terms:
 - (a) the proposed use of the property,
 - (b) the reason for the zoning map amendment request.
 - (c) the effect of the changes on the surrounding area,
3. **Concept Plan** for property showing existing site features and any proposed development additions or improvements. See attached information for recommended contents of concept plans.

Payment of Fees:

Planned Developments	\$300.00 + \$10.00 per acre
Residential/Agricultural	\$250.00 + \$5.00 per acre
Commercial & Industrial	\$250.00 + \$5.00 per acre

ALL required application fees must be paid at the time of submittal of application.

Posting of the Subject Property prior to Public Hearings:

Franklin County Department of Planning and Community Development will post a “Notice of Public Hearing” sign along any road that is adjacent to the property for which a zoning map amendment is requested. The notice will be posted by the county at least fourteen days prior to the scheduled Planning Commission and the Board of Supervisors public hearings. If no public road abuts the property, then notice signs shall be erected on at least 2 boundaries of the property abutting land not owned by the applicant.

The signs are property of Franklin County and must not be removed by the applicant.

Legal Advertisement Costs:

Each zoning map amendment request must be legally advertised in a newspaper of general circulation in accordance with established state and local regulations. Franklin County advertises in the Franklin News Post. The Department of Planning and Community Development shall prepare the legal ad and shall send the ad to the newspaper for publication.

The cost of publishing the legal ad is the responsibility of the special use permit applicant. The newspaper will send an invoice to the Planning Department and staff will forward the invoice to the applicant. It is important that the invoice be paid upon receipt. Payment should be made to the Franklin County Planning Department who will be charged for the cost of the ad. If the invoice is not paid by the applicant to the Planning Department prior to the date of the scheduled public hearing, the public hearing will be delayed for at least one month or until the cost of the ad is paid.

If an applicant requests that a public hearing be delayed after publication of a legal ad, the applicant shall be responsible for all costs of re-advertisement.

Considerations for Granting a zoning map amendment:

The Planning Commission and the Board of Supervisors consider the following in reviewing requests for zoning map amendments:

- The effect of the proposed zoning district on adjacent property
- The agreement of the proposed use with the purpose and intent of the zoning ordinance and other uses permitted by right in the requested zoning district
- The effect of the proposed use on public health, safety and welfare.

For Further Information Contact:

Department of Planning and Community Development
1255 Franklin Street, Suite 103
Rocky Mount, Virginia 24151

Phone: (540) 483-3027

Office Hours: Monday through Friday, 8:00 A.M. to 4:30 P.M.

FRANKLIN COUNTY ZONING MAP AMRENDMENT PROCESS
PRE-APPLICATION MEETING

- Applicant meets with planning staff to discuss request, obtain forms, review process, and identify required materials to appropriately process and review the request. An application for a zoning map amendment must be filed by the property owner or with the property owner's written consent.

STEP 2 – APPLICATION

- Application: Applicant submits complete application packet to the Department of Planning and Community Development. Application and plans are available for public review.
- Posting of Property: The county shall post public notice signs on the property at least fourteen (14) days prior to the scheduled Planning Commission and Board of Supervisors public hearings.
- Notification of Property Owners: Planning staff notifies adjoining property owners of the zoning map amendment request and the date of the public hearings.
- Public Notice/Legal Advertisement: Planning staff prepares required legal advertising and publishes in local newspaper. (Notification of requests and public hearing schedule must appear in a local newspaper two times in two consecutive weeks before each public hearing.) Applicant is responsible for cost of legal ad publication.

STEP 3 – STAFF REVIEW

- Staff visits site and coordinates application with other County departments, as well as public agencies that may be affected. Staff prepares a written report for the Planning Commission and Board of Supervisors that considers the proposed zoning map amendment and Section 25-2 through 25-4 of the Zoning Ordinance (Purpose and Intent; Relationship to Environment; and Relationship to Comprehensive Plan).

STEP 4 – PLANNING COMMISSION REVIEW AND RECOMMENDATION

- Planning Commission visits each site prior to the scheduled public hearing.
- The applicant or a designated agent must attend the public hearing.
- Public comment is received at the hearing.
- Planning Commission must make a recommendation to the Board of Supervisors within 100 days of its first meeting date. The recommendation may include the acceptance of proffers voluntarily offered to the county by the owner of the property, in writing, prior to the start of the Board's public hearing on the zoning map amendment. Accepted proffers must relate to the use and/or development of the property for which a map amendment is proposed. After action is taken by the Planning Commission, the request is scheduled for public hearing before the Board of Supervisors. Planning staff immediately prepares legal advertisements and proceeds with newspaper publication. Applicant is responsible for cost of legal ad publication.
- ***Please note that any request to withdraw or postpone an application must be requested in writing within two (2) days after the Planning Commission hearing in order to coordinate public notice requirements.***

STEP 5 – BOARD OF SUPERVISORS DECISION

- Planning Commission recommendation is forwarded in writing to the Board of Supervisors
- Applicant or their agent must attend the public hearing
- Board of Supervisors can approve or deny the request, or refer it back to the Planning Commission for additional review
- The Board may not impose conditions upon any zoning map amendment request, but may accept voluntarily offered written proffers and may require a bond or surety to ensure compliance with accepted proffers
- Map amendments are effective immediately after action by the Board of Supervisors

**FRANKLIN COUNTY
ZONING MAP AMENDMENT APPLICATION**

(Type or Print)

I/We, Mountain Brook Solar LLC, as Owner(s), Contract Purchasers, or Owner's Authorized Agent of the property described below, hereby apply to the Franklin County Board of Supervisors for a zoning map amendment on the property as described below:

Petitioner's Name: Mountain Brook Solar LLC

Petitioner's Address: 1201 Wilson Blvd. Suite 2200, Arlington, VA 22209

Petitioner's Phone Number: 571-414-1442

Petitioner's E-mail: Eliana.Ginis@EnergixRenewables.com

Property Owner's Name: Carolyn Sue Robertson Dalton and Samuel Richard Robertson

Property Owner's Address: PO Box 165, Boones Mill, VA 24065

Property Owner's Phone Number: 540-537-0052

Property Owner's E-mail IrisRobertson1960@gmail.com DeeDalton@cox.net

Physical Address of the Property 8135 Brooks Mill Road, Wirtz, VA 24184

Directions to Property from Rocky Mount: Take State Route 655 and turn left onto State Route 834

4. Tax Map and Parcel Number: 0340002300

5. Magisterial District: Gills Creek

6. Property Information:

A. Size of Property: 59 Acres

B. Existing Zoning: B2

C. Existing Land Use: Cattle Grazing

D. Is property located within any of the following overlay zoning districts: N/A

 Corridor District Westlake Overlay District Smith Mountain Lake Surface District

E. Is any land submerged under water or part of a lake? Yes No If yes, explain.

N/A

7. Proposed Zoning Map Amendment Information:

A. Proposed Land Use: A1 - Utility Scale Solar Generation Facility

B. Size of Proposed Use: _____

C. Other Details of Proposed Use: Please see attached narrative

Checklist for completed items:

Application Form

Letter of Application

Concept Plan

Application Fee

****I certify that this application for a zoning map amendment and the information submitted herein is correct and accurate. I authorize County staff to access this property for purposes related to the review and processing of this application.**

Petitioner's Name (Print): Mountain Brook Solar LLC

Signature of Petitioner: Dominika Sink

Date: 01-03-2023

Mailing Address: 1201 Wilson Blvd. Suite 2200

Arlington, VA 22209

Telephone: 984-214-8945

Email Address: Dominika.Sink@EnergixRenewables.com

Owner's consent, if petitioner is not property owner:

Owner's Name (Print): Sue Dalton

Signature of Owner: Sue Dalton

Date: 1-4-23

**CONCEPT PLANS
RESIDENTIAL, BUSINESS AND INDUSTRIAL DISTRICTS
NECESSARY CONTENTS**

Purpose of a Concept Plan:

A concept plan is necessary for all zoning map amendment applications. The purpose of the concept plan is to provide information on site conditions and a general understanding of the proposed use of a property. Typically, a concept plan contains information on the property such as the property address, parcel boundaries, adjacent roads, natural features (including water courses) and neighboring properties. A concept plan also includes the locations of any proposed buildings, parking, streets, community facilities, buffering or screening, boat docks, signs, and lighting, as well as the proposed densities of development.

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Concept Plan Necessary Contents:

- Project title, name of applicant, project engineer/architect/surveyor/planner
- Plan date
- North arrow and graphic scale
- Size of entire parcel and, if applicable, size of portion of parcel requested for rezoning, accompanied by meets and bounds description
- Adjacent streets, railroads, natural features, historic sites, streams or bodies of water, floodplains, and other information that may help describe site conditions
- Locations, dimensions, and heights of all existing structures and those proposed
- Location and dimensions of proposed pedestrian and vehicular access points, driveways, parking areas/spaces and other facilities.
- Natural areas or historic sites to be preserved.
- Location and description of existing vegetation or any landscaping, screening or buffering proposed within the lot or along the perimeter of the development
- Location of proposed signs, including type, size and height
- Lighting information, if applicable

- Building elevations or renderings of the proposed development, if available
- Accessory use information such as the location of storage yards, recreation spaces, refuse collection areas, septic drain fields, wells or water tank locations, etc
- Number, type and size of dwellings proposed, and the residential density per acre
- Number and square footage of retail and office uses proposed
- Location, size and type of recreational amenities, parking facilities, and utility information
- Other items that may be recommended by staff
- Recommended plan size 8.5" x 11" minimum or 11" x 17" maximum. The plan must be legible.

NOTE: IF YOU ARE PLANNING A PRESENTATION AT THE PUBLIC HEARINGS FOR THE PLANNING COMMISSION AND BOARD OF SUPERVISORS, EITHER BRING A 8 ½ X 11 SIZE PAGE OF YOUR PRESENTATION TO SHOW ON THE OVERHEAD PROJECTOR OR PUT ON A CD OR FLASH DRIVE TO SHOW ON THE POWERPOINT SYSTEM.

2020

PUBLIC HEARING SCHEDULE FOR FRANKLIN COUNTY

Planning Commission and Board of Supervisors Meeting Dates

<u>DEADLINE DATE</u>	<u>PLANNING COMMISSION</u>	<u>BOARD OF SUPERVISORS</u>
DECEMBER 2, 2019	JANUARY 14, 2020	FEBRUARY 18, 2020
JANUARY 6, 2020	FEBRUARY 11, 2020	MARCH 17, 2020
FEBRUARY 3, 2020	MARCH 10, 2020	APRIL 21, 2020
MARCH 2, 2020	APRIL 14, 2020	MAY 19, 2020
APRIL 6, 2020	MAY 12, 2020	JUNE 16, 2020
MAY 4, 2020	JUNE 9, 2020	JULY 21, 2020
JUNE 1, 2020	JULY 14, 2020	AUGUST 18, 2020
JULY 6, 2020	AUGUST 11, 2020	SEPTEMBER 15, 2020
AUGUST 3, 2020	SEPTEMBER 8, 2020	OCTOBER 20, 2020
SEPTEMBER 8, 2020	OCTOBER 13, 2020	NOVEMBER 17, 2020
OCTOBER 5, 2020	NOVEMBER 10, 2020	DECEMBER 15, 2020
NOVEMBER 2, 2020	DECEMBER 8, 2020	JANUARY 19, 2021
DECEMBER 7, 2020	JANUARY 12, 2021	FEBRUARY 16, 2021

****APPLICATION DEADLINES MAY CHANGE IF PUBLIC HEARING DATES ARE
CHANGED. PLEASE VERIFY APPLICATION DEADLINE DATE AND PUBLIC HEARING
DATES WITH THE DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
PRIOR TO SUBMITTING APPLICATION.**

All petitions, to be considered complete and accepted, must be submitted and reviewed by the Planning staff prior to the deadline date. For further details contact Planning staff.

All public hearings in front of the Planning Commission, unless otherwise advertised, are held the second (2nd) Tuesday of each month in the Board of Supervisors Meeting Room in the Franklin County Government Center, 1255 Franklin Street, Rocky Mount, Virginia, 24151, beginning at 6:00 pm. Petition requests will be heard by the Board of Supervisors at the following monthly meeting on the third (3rd) Tuesday of each month beginning at 6:00 pm, unless otherwise noted.

Regular meetings of the Commission shall be held on the second (2nd) Tuesday of each month at 6:00 p.m., unless otherwise designated. Due to inclement weather the regular meetings of the Franklin County Planning Commission may be continued to the following Thursday after the scheduled Planning Commission Meeting if the Chairman, or Vice Chairman if the Chairman is unable to act, finds and declares that weather or other conditions are such that it is hazardous for members to attend the meeting. Such findings shall be communicated to the member and the press as promptly as possible. All hearings and other matters previously advertised for such meeting shall be conducted at the continued meeting and no further advertisement is required.

APPLICANTS OR THEIR REPRESENTATIVE ARE REQUIRED TO ATTEND EACH MEETING.

Any person with a disability who needs accommodations to fully participate in these public hearings should notify the Franklin County Planning and Community Development Office, 1255 Franklin Street, Suite 103, Rocky Mount, Virginia, 24151, (540) 483-3027 at least seven (7) days prior to the hearings.

Submitted by Hannah Powell, Clerk

Updated July 16, 2020

Updated July 16, 2020



EXHIBIT C

COPY OF LAND LEASE

OPTION TO LEASE AND LEASE AGREEMENT

By and Between

Carolyn Sue Robertson Dalton &

Samuel Richard Robertson

As Owner

and

Energix US, LLC
or assignees

As Lessee

February 4, 2021

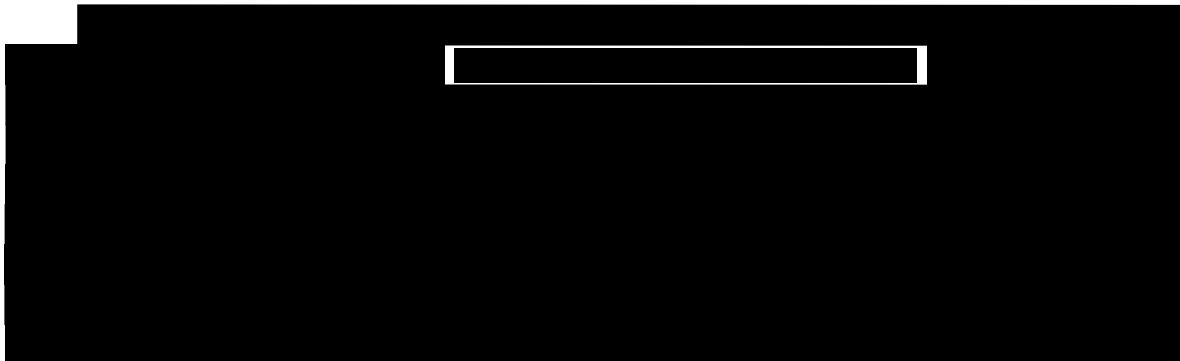
OPTION FOR LEASE AND LEASE AGREEMENT

This Option for Lease and Lease Agreement (this “**Agreement**” or “**Lease**”) is made, dated and effective as of February 4, 2021 (the “**Effective Date**”), between Carolyn Sue Robertson Dalton and Samuel Richard Robertson (collectively, “**Owner**”), and Energix US, LLC, or assignees’ (“**Lessee**”), and in connection herewith, Owner and Lessee agree, covenant and contract as set forth in this Agreement. Owner and Lessee are sometimes referred to in this Agreement as a “**Party**” or collectively as the “**Parties**”.

1. Option.

1.1. **Lease Option.** From the Effective Date, Owner grants to Lessee the exclusive, irrevocable right and option to lease (the “**Lease Option**”) a portion of or the full approximately 113 acres of the real property of Owner located in the County of , Commonwealth of Virginia and described on Exhibit A in order to utilize it for the purpose of developing, installing and maintaining a solar energy facility.

1.2. **Exercise of Option.** No later than thirty (30) days from the Effective Date, if the Lessee has not delivered a written notice terminating the Lease Option, then the Option Period (as defined below) shall commence. The Option Period shall last thirty-six (36) months or until Lessee exercises the Lease Option. The Option Period may be extended beyond the initial 36-month period at Lessee’s sole discretion up to an additional two (2), 6-month periods (for a total of up to 48 months) (the “**Option Period**”). The Option Period is intended to allow sufficient time for Lessee to perform whatever inspections, evaluations, permitting and financing of the project the Lessee deems fit for the purposes of the development of a photovoltaic solar project (the “**Project**”). Should the financing terms, any of the inspections, evaluations, permitting and/or other development activities, title report or commitment prove unsatisfactory to the Lessee for any reason determined solely at the Lessee’s discretion, Lessee reserves the right to terminate and declare this Agreement null and void by giving the Owner written notice of termination of this Agreement within the Option Period (and any extensions), and there shall be no further payment obligations thereunder.



1.4 Lessee Access to Property. The Lessee and his agents shall have the right to go upon the property at any time and to have performed such inspections and tests as the Lessee may desire. Copies of all title reports, environmental reports, surveys, soil tests, permits, contracts, agreements related to the property shall be provided to Owner upon Owner's request. Owner shall cooperate with Lessee and its representatives, agents and contractors to prevent competing usage of the property by third parties while such inspections and testing are being performed pursuant to this Agreement. Except for any existing operations, Owner shall not disturb the property in any form during the term of this Agreement without the express written consent of Lessee. Lessee shall provide usual insurance and indemnity for the benefit of Owner prior to access.

1.5 Usable Acres. Upon Lessee's exercise of the Lease Option, Owner shall lease to Lessee a parcel equal to the number acres identified in the notice of exercise of the Lease Option (the "Usable Acres"), together with any ingress, egress, and utility easements including those providing access to and from public road(s) and point(s) of utility interconnection. The Usable Acres shall mean areas of land to be used by Lessee for the construction and operation of the proposed Solar Facilities (as defined below), including utility and access easements, as determined at Lessee's sole discretion, and may be in a single, contiguous area or multiple areas within the property. Lessee shall provide the Owner a legal description of the Usable Acres within thirty (30) days of exercising the Lease Option. Acreage not used by the Lessee for solar construction will be available for use by the Owner outside the fenced area.

2. Grant of Lease. In consideration of the rents to be paid by Lessee and other covenants of Lessee contained herein, upon exercise by Lessee of Lease Option, Owner grants to Lessee an exclusive lease of the property, including all of Owner's right, title and interest in any rights, hereditaments and benefits appurtenant thereto and improvements thereon, including, any easements and rights-of-way benefiting such real property, any water rights, and the right to access and utilize all radiant energy emitted from the sun ("Solar Energy") upon, over and across said real property, together with the right to all rents, royalties, credits and profits derived therefrom (collectively, the "Property").

3. Basic Lease Rights.

3.1 Exclusive Use; Purpose of Lease. Lessee shall have the exclusive right to use the Property and the unobstructed flow of Solar Energy upon, over and across the Property for the generation of electric power and ancillary purposes ("Solar Energy Purposes") and to derive all profits therefrom. For purposes of this Agreement, the meaning of Solar Energy Purposes includes, without limitation, the right to convert the Solar Energy into electrical energy and to collect, store and transmit the electrical energy so converted, together with any and all activities

related thereto, including, without limitation, (a) determining the feasibility of Solar Energy conversion and power generation on the Property, including studies of the Solar Energy emitted upon, over and across the Property and other meteorological data and environmental studies and due diligence activities; (b) constructing, installing, using, replacing, relocating and removing from time to time, and maintaining and operating, Solar Energy collection, storage and electrical generating equipment of all types including, without limitation, any such equipment utilizing photovoltaic and/or solar thermal technology (collectively referred to herein as “**Solar Generating Equipment**”), overhead and underground electrical and communications lines, electric transformers, telecommunications equipment, roads, meteorological towers and Solar Energy measurement equipment, control buildings, operations and maintenance buildings, maintenance yards, substations, switch yards, and related facilities and equipment (the Solar Generating Equipment together with all of the other foregoing equipment and improvements, collectively “**Solar Facilities**”); and (c) undertaking any other activities, whether accomplished by Lessee or a third party authorized by Lessee, that Lessee reasonably determines are necessary, useful or appropriate to accomplish any of the foregoing, including without limitation, exercising the right of ingress to and egress from Solar Facilities (whether located on the Property, on adjacent property or elsewhere) over and across the Property by means of roads and lanes thereon if existing, or otherwise by such route or routes as Lessee may construct from time to time (“**Access Rights**”). Lessee shall have the right to make all siting decisions with respect to the Solar Facilities on the Property. Lessee’s rights with respect to the Property shall also include the following rights:

(a) **Right to Eliminate Obstructions Interfering with Solar Facilities.** Lessee may, as reasonably necessary, remove, trim, prune, top or otherwise control the growth of any tree, shrub, plant or other vegetation; dismantle, demolish and remove any improvement, structure, embankment, impediment, berm, wall, fence or other object, on or that intrudes into the Property that could obstruct, interfere with or impair the Solar Facilities or the use of the Property by Lessee hereunder.

(b) **Right to Control Access.** Subject to the terms of this Lease and applicable law, Lessee shall have the right under the Lease to control and restrict access onto and over the Property and exclude others, and Lessee may, at its sole expense, construct and maintain security devices on and surrounding the Property which Lessee deems appropriate and necessary for the protection of the Solar Facilities, including, but not limited to, any type of fencing, security monitoring or other security safeguards. Nothing in this Lease shall be construed to require Lessee to repair, maintain or replace any fence existing on the Property on the Effective Date or any other fences erected, with Lessee’s permission, by Owner on the Property thereafter. In addition, Lessee shall be permitted to remove and/or relocate any fencing previously installed on the Property, at Lessee’s cost and expense, as may be necessary to accommodate Lessee’s construction and/or operation of the Solar Facilities.

3.2 **Conveyances, Other Agreements, and Owner’s Cooperation.** In connection with the exercise of the rights of Lessee hereunder, Lessee, shall also have the right, without further

act or consent of Owner with respect to grants that do not extend beyond the expiration of the Term, and with Owner's prior written consent, which shall not be unreasonably withheld, conditioned, or delayed, with respect to grants that will extend beyond the expiration of the Term: (a) to grant directly or (b) cause Owner to promptly grant to any party (a "Grantee") such rights or interests in or to the Property that are reasonably necessary or convenient for the Lessee's use of the Property for the Solar Facilities as permitted pursuant to Section 3.1, including, without limitation, easements and similar associated rights to construct, operate, and maintain transmission, substation, collection, distribution, interconnection or switching lines or facilities pursuant to a standard form of easement or other similar agreement, lot line adjustments, lot line mergers, right-of-way dedications, or rights of abandonment (collectively, the "Additional Rights"). It is agreed that it would be unreasonable for Owner to withhold, condition, or delay its consent to any of the Additional Rights to the extent that the grant of the right or interest is necessary for the operation of the Solar Facilities.

3.3 Owner Access. During the Term (as defined below), Owner shall have access to the Property at reasonable intervals and at reasonable times and upon twenty-four hours prior advance written notice to Lessee to inspect the premises. Any such access shall not materially interfere with Lessee's use of the Property for Solar Energy Purposes and occupancy of the Property in any manner. Owner's foregoing right of inspection must be on an escorted basis with Lessee, its agents or employees in compliance with established site procedures and does not include the right to climb onto or into Solar Facilities or to come into physical contact with any transmission facilities without the prior written consent of Lessee.

4. Term. The initial term of this Agreement ("Original Term") shall commence upon the date of exercise of the Lease Option (the "Term Commencement Date") and continue until the twenty-sixth (26th) anniversary of such date unless terminated earlier pursuant to the terms hereof. Lessee shall also have the right, upon written notice to Owner at least one hundred eighty (180) days prior to the expiration of the Original Term, to extend the term for three (3) additional periods of five (5) years (the "Extended Term"). The Original Term together with the Extended Term shall be referred to herein collectively, as the "Term". Owner and Lessee shall execute in recordable form, and Lessee shall then record, a memorandum evidencing the Extended Term, satisfactory in form and substance to the Parties.

6. **Ownership of Solar Facilities.** Owner acknowledges and agrees that Lessee is the exclusive owner and operator of the Solar Facilities, and that all equipment comprising the Solar Facilities shall remain the personal property of the Lessee and shall not become fixtures, notwithstanding the manner in which the Solar Facilities are or may be affixed to any real property of Owner. Owner shall have no right, title or interest in the Solar Facilities or any component thereof, notwithstanding that the Solar Facilities may be physically mounted or affixed to the Property. Owner consents to the filing of a disclaimer of the Solar Facilities as a fixture of the Property in the office where real estate records are customarily filed in the jurisdiction of the Property. Except for the Rent payments described in Section 5 above, Owner shall not be entitled to any other payments or benefits accrued by or from the Solar Facilities, including renewable energy credits, environmental credits or tax credits and Owner agrees to waive any lien rights it might otherwise have over the equipment comprising the Solar Facilities.

7. **Taxes.** Lessee shall pay all of the real estate property taxes assessed against the Solar Facilities, including any increase in property tax resulting from a reassessment in value due to the Solar Facilities. Lessee may contest the assessed value of the Solar Facilities and the legal validity and amount of any such taxes for which it is responsible under this Agreement, and may institute such proceedings as it considers reasonable or necessary, provided that Lessee shall bear all expenses in pursuing such contest or proceeding. Owner shall submit to Lessee a copy of all notices and other correspondence Owner receives from any taxing authorities regarding the assessed value of the Property and/or the Solar Facilities within thirty (30) days after Owner receives same, but in no event later than thirty (30) days prior to the date an objection to such assessment or taxes must be filed. Owner agrees to cooperate and to provide to Lessee all reasonable assistance in contesting the validity or amount of any such taxes, including joining in the signing of any reasonable protests or pleading that Lessee may deem advisable to file; provided, however, that Lessee shall reimburse Owner for its reasonable out-of-pocket expenses, including reasonable attorneys' fees, incurred in connection with providing such assistance.

8. **Lessee's Representations, Warranties, and Covenants.** Lessee hereby represents, warrants, and covenants to Owner that:

8.1. Insurance. Throughout the term, the Lessee shall maintain and pay for (i) general liability insurance with limits of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate; (ii) excess liability insurance with a limit of not less than \$2,000,000 in the aggregate, in each case for injury to any person and for damage to property (insurance limits can be satisfied using stand-alone policies or a combination of general liability and excess liability policies); (iii) property insurance, insuring the improvements for the full replacement cost thereof and (iv) during all periods of construction, builder's risk insurance. Such insurance shall name Owner as an additional insured on a primary, non-contributing basis, except for claims arising out of Owner's negligence or willful misconduct, and shall cover all risks arising directly or indirectly out of Lessee's activities on the Property whether or not caused or contributed to by Lessee's negligence. All such policies of insurance shall waive the insurer's right of subrogation against Owner. Lessee shall provide to Owner a certificate evidencing such coverage (or the entire policy, if requested) prior to the commencement of the Term and evidence of renewal or replacement thereof at least thirty (30) days' prior to expiration. Lessee shall provide to Owner thirty (30) days' prior written notice if the applicable aforementioned policies will be cancelled.

8.2. Requirements of Governmental Agencies. Lessee, at its expense, shall comply in all material respects with valid laws, ordinances, statutes, orders, and regulations of any governmental agency applicable to the Solar Facilities. Lessee shall have the right, in its sole discretion, to contest by appropriate legal proceedings, the validity or applicability to the Property or Solar Facilities of any law, ordinance, statute, order, regulation, property assessment, or the like now or hereafter made or issued by any federal, state, county, local or other governmental agency or entity. Any such contest or proceeding shall be controlled and directed by Lessee.

8.3. Construction Liens. Lessee shall keep the Property free and clear of all liens and claims of liens for labor and services performed on, and materials, supplies, or equipment furnished to, the Property in connection with Lessee's use of the Property pursuant to the Agreement; provided, however, that if Lessee wishes to contest any such lien, Lessee shall, within sixty (60) days after it receives notice of the filing of such lien, remove or bond over such lien from the Property pursuant to applicable law.

8.4. Hazardous Materials. Lessee shall comply in all material respects with federal, state, and/or local law, and ordinances, and regulations promulgated thereunder relating to the generation, manufacture, production, use, storage, release, discharge, disposal, transportation or presence of any Hazardous Materials ("Environmental Laws") in, on, under, or about the

Property by Lessee. Lessee shall indemnify Owner against any claims arising from a violation of Environmental Laws that is caused by Lessee or Lessee's agents. Lessee shall promptly notify Owner after it becomes aware of any violation of Environmental Law caused by Lessee or Lessee's agents that could reasonably be expected to result in a claim against Owner and shall promptly take all reasonable actions, at its sole expense, as are required by applicable Environmental Laws to return the affected area(s) to the condition existing prior to the introduction of any such Hazardous Materials by Lessee or its agents, which may include, without limitation, any investigation or monitoring of site conditions or any clean up, remediation, response, removal, encapsulation, containment or restoration work required by Environmental Laws because of such violation. This provision shall survive termination of the Agreement. For purposes of this Agreement, "**Hazardous Materials**" means any flammable explosives, asbestos, asbestos containing materials, radioactive materials, hazardous wastes, petroleum, including crude oil or any fraction thereof, polychlorinated biphenyls, corrosive, reactive, ignitable, toxic, reproductive toxic, carcinogenic or any other substances, materials, wastes, products, chemicals or compounds which are controlled or regulated by any federal, state or local law, rule or regulation, regardless of quantity or levels and whether injurious by themselves or in combination with other materials.

8.5. Lessee's Authority. Lessee has the unrestricted right and authority to execute this Agreement. Each person signing this Agreement on behalf of Lessee is authorized to do so. When signed by Lessee, this Agreement constitutes a valid and binding agreement enforceable against Lessee in accordance with its terms.

9. Owner's Representations, Warranties, and Covenants. Owner hereby represents, warrants, and covenants as follow:

9.1. Owner's Authority. Owner is the sole owner of the Property and has the unrestricted right and authority to execute this Agreement and to grant to Lessee the rights granted hereunder. Each person signing this Agreement on behalf of Owner is authorized to do so. When signed by Owner, this Agreement constitutes a valid and binding agreement enforceable against Owner in accordance with its terms.

9.2. No Interference. Owner's activities and any grant of rights Owner makes to any person or entity, whether located on the Property or elsewhere, shall not, currently or prospectively, interfere with or hinder in any way: the construction, installation, maintenance, or operation of the Solar Facilities and/or access over the Property to such Solar Facilities and/or Lessee's rights granted hereunder to use the Property for any other Solar Energy Purposes. Without limiting the generality of the foregoing, Owner shall not

(and shall not allow any other party to) disturb or interfere with the unobstructed flow of Solar Energy upon, over and across the Property, whether by placing towers or antennas of any type, planting trees or constructing buildings or other structures or facilities, or by engaging in any other activity on the Property or elsewhere that might delay the installation of, disrupt, or otherwise cause a decrease in the output or efficiency of the Solar Facilities. Owner shall be entitled to grant a lien or otherwise encumber Owner's fee estate in the Property or interest in this Agreement (a "Fee Mortgage") to a Fee Mortgagee (as hereinafter defined); provided, said grant or encumbrance entered shall be subject to this Agreement, any modifications or extensions hereof or any new lease so made pursuant to Section 11.3 (collectively, "Modifications"), and all rights of Lessee under this Agreement (including any Leasehold Mortgagee, as hereinafter defined, sublessee or any other party claiming by and through Lessee). The Owner shall make all payments under any Fee Mortgage and keep such Fee Mortgage in good standing at all times. The grant of a lien or encumbrance by Owner in favor of Fee Mortgagee shall be subordinate to and shall not be a lien prior to this Agreement, any Modifications, or any Leasehold Mortgage placed thereon. Any encumbrance by Owner shall not be deemed to give any such assignee any greater rights than Owner hereunder or the right to cancel the Agreement or any Modifications unless there is an Event of Default on the part of Lessee (which remains uncured by either Lessee or the Leasehold Mortgagee) which, under the terms of this Agreement or any Modifications, gives Owner a right to cancel this Agreement or any Modifications, and withhold from such Leasehold Mortgagee a new lease pursuant to Section 11.3. As used herein, the term "Fee Mortgagee" collectively includes any financial institution or other person or entity that from time to time provides secured financing to Owner secured all or in part by the Property, and any agent, security agent, collateral agent, indenture trustee, loan trustee, loan participant or participating or syndicated lenders involved in whole or in part in such financing, and their respective representatives, successors and assigns. If Owner's interest in this Agreement is encumbered by a Fee Mortgage during the Term, the Owner shall obtain and deliver to Lessee a subordination and non-disturbance agreement from the applicable Fee Mortgagee in a form that is reasonably acceptable to Lessee, stating that such Fee Mortgagee or any purchaser in a foreclosure sale shall recognize and be bound by terms of this Agreement upon foreclosure or deed in lieu thereof.

9.3. Indemnity. Owner will indemnify, defend and hold harmless Lessee and Lessee's shareholders, directors, employees, successors and assigns (collectively, "Lessee's Indemnified Parties") against any and all losses, damages, claims, expenses and other liabilities, including without limitation, reasonable attorneys' fees, in each case to the extent resulting from or arising out of physical damage to property or physical injury to any person, and in each

case to the extent caused by Owner's negligence or willful misconduct on the Property. This indemnification shall survive the termination of this Agreement. This indemnification shall not apply to losses, damages, claims, expenses and other liabilities to the extent caused by the negligence or willful misconduct of Lessee or any of Lessee's Indemnified Parties.

9.4. Liens and Tenants. Except as may be disclosed in Lessee's title policy or otherwise disclosed by Owner in writing to Lessee on or prior to the Effective Date, Owner represents that there are no liens, encumbrances, leases, mortgages, deeds of trust, security interests, claims, disputes or other exceptions (collectively, "Liens") to Owner's fee title ownership of the Property or to Owner's right, title or interest in the Property. Owner shall fully cooperate and assist Lessee, at no out-of-pocket expense to Owner, in obtaining a subordination, non-disturbance agreement, relocation and/or other title curative agreement from each party that holds a Lien that Lessee determines in its discretion might interfere with Lessee's rights under this Agreement. Any required non-disturbance agreement shall (i) provide that the lienholder shall not disturb Lessee's possession or rights under this Agreement or terminate this Agreement so long as Owner is not entitled to terminate this Agreement under the provisions hereof and (ii) be otherwise reasonably acceptable to Lessee.

9.5. Requirements of Governmental Agencies. Owner shall assist and fully cooperate with Lessee, at no out-of-pocket expense to Owner, in complying with or obtaining any land use permits and approvals, building permits, environmental impact reviews or any other approvals required for the financing, construction, installation, monitoring, replacement relocation, maintenance, operation or removal of Solar Facilities, including execution of applications for such approvals, and including participating in any appeals or regulatory proceedings respecting the Solar Facilities. To the extent permitted by law, Owner hereby waives enforcement of any applicable setback requirements respecting the Solar Facilities to be placed on the Property or any such facilities to be placed upon property adjacent to Owner's Property.

9.6. Access/Gen-Tie. Upon the request of Lessee, Owner shall grant, for the term of the Agreement, for no additional consideration, an easement for rights for installing, operating and maintaining a transmission and communication facilities to be used in connection with the Solar Facilities and/or for the purpose of providing ingress and egress to public roads, over and across such reasonable portions of other real property interests (whether leasehold, fee or easement rights) owned by Owner or any Owner Affiliate (as defined below) that are contiguous, to or within the vicinity of the Property as may be reasonably required for the Solar Facilities ("Access/Gen-Tie Easement"). Any Access/Gen-Tie Easement shall be prepared in a document in

recordable and financeable form, shall include the right to improve existing roads and lanes, shall be appurtenant to the Property, and shall inure to the benefit of Lessee and be binding upon Owner or Owner Affiliate and each of their respective transferees, successors, and assigns, and all persons claiming under them. Owner or any Owner Affiliate, as applicable, agrees to execute and deliver to Lessee such Access/Gen-Tie Easement within ten (10) days following receipt thereof. For the purposes of this Agreement, an “**Owner Affiliate**” shall mean an entity that controls, is controlled by or is under common control with Owner and where “control” means either (i) ownership of at least fifty percent (50%) of the equity or voting rights of the entity or (ii) the power to otherwise direct the affairs of the entity.

9.7. Hazardous Materials. Owner shall not violate any Environmental Laws in, on or under the Property. Owner shall promptly investigate and remediate to Lessee’s reasonable satisfaction and indemnify Lessee against any such violations of Environmental Laws or Hazardous Materials on the Property that: (i) exist as of the Effective Date, or (ii) are caused by Owner or Owner’s agents and occurs after the Effective Date. The Owner shall promptly notify the Lessee of any such violations. This provision shall survive termination of the Agreement.

9.8. Environmental Laws. Owner represents and warrants that the Property, including, but not limited to, all improvements, facilities, structures and equipment thereon, and the soil and groundwater thereunder, is not in material violation of any Environmental Laws. No release or threatened release of any Hazardous Material has occurred, or is occurring, at, on, under, from or to the Property, and no Hazardous Material is present in, on, under or about, or, to Owner’s knowledge, migrating to or from the Property that could give rise to any claim under Environmental Law. Neither Owner nor, to Owner’s knowledge, any third party has used, generated, manufactured, produced, stored or disposed of on, under or about the Property, or transported to or from the Property any Hazardous Materials in violation of Environmental Laws or in such a manner as to require investigation or remediation of such Hazardous Materials. To Owner’s knowledge, there are no storage or other tanks or containers, or wells or other improvements, below the surface of the Property, nor have any storage or other tanks or containers, or wells or other improvements ever previously been located below the surface of the Property.

10. Assignment. Subject to Section 9.2 and Section 13.10, each Party shall have the right and authority to sell, convey, assign, sublease or otherwise transfer, and/or collaterally assign, mortgage or encumber to one or more persons any or all of its right, title and interest under this Agreement and/or any Access/Gen-Tie Easement to one or more persons (each, an “**Assignee**”), provided that the Assignee demonstrates its ability to perform its obligations,

covenants and conditions set forth in this Agreement, as determined in the commercially reasonable discretion the other Party, including the financial and technical capability to perform pursuant to this Agreement and to grant any easements or execute any documents required by Owner or any Affiliates of Owner as required in this Lease. The assigning Party shall notify the other Party in writing of any such assignment and the name and address of any Assignee.

11. Mortgagee Protection. In the event that any mortgage, deed of trust or other security interest in this Agreement or in any Solar Facilities is entered into by Lessee or any Assignee (a “**Leasehold Mortgage**”), then any person who is the mortgagee of a Leasehold Mortgage (a “**Leasehold Mortgagee**”) shall, for so long as its Leasehold Mortgage is in existence and until the lien thereof has been extinguished, be entitled to the protections set forth in this Section 11. Lessee or any Leasehold Mortgagee shall send written notice to Owner of the name and address of any such Leasehold Mortgagee, as well as any change of the name or address of any Leasehold Mortgagee.

11.1. Leasehold Mortgagee’s Right to Possession, Right to Acquire and Right to Assign. A Leasehold Mortgagee shall have the absolute right: (a) to assign its security interest; (b) to enforce its lien and acquire title to the leasehold estate by any lawful means; (c) to take possession of and operate the Solar Facilities or any portion thereof and to perform all obligations to be performed by Lessee hereunder, or to cause a receiver to be appointed to do so; and (d) to acquire the leasehold estate by foreclosure or by an assignment in lieu of foreclosure and thereafter to assign or transfer the leasehold estate to a third party. Owner’s consent shall not be required for the acquisition of the encumbered leasehold estate by a third party who acquires the same by foreclosure or assignment in lieu of foreclosure.

11.2. Notice of Default: Opportunity to Cure. As a precondition to exercising any rights or remedies as a result of any alleged default by Lessee, Owner shall give written notice of the default to each Leasehold Mortgagee of which Owner has notice concurrently with delivery of such notice to Lessee, specifying in detail the alleged event of default and the required remedy. In the event Owner gives such a written notice of default, the following provisions shall apply:

(a) A “**monetary default**” means failure to pay when due any rent, real property taxes, or other monetary obligation of Lessee under this Agreement. Any other event of default is a “**non-monetary default**.”

(b) The Leasehold Mortgagee shall have the same period after delivery of notice of default to remedy the default, or cause the same to be remedied, as is given to Lessee after delivery of notice of default, plus, in each instance, the following additional time periods: (i) thirty (30) days, for a total of forty (40) days after delivery of the notice of default in the event of any monetary default; and (ii) sixty (60) days, for a total of ninety (90)

days after delivery of the notice of default in the event of any non-monetary default; provided that such 90-day period shall be extended for a non-monetary default by the time reasonably required to complete such cure, including the time required for the Leasehold Mortgagee to perfect its right to cure such non-monetary default by obtaining possession of the Lessee's interest in the Property (including possession by a receiver) or by instituting foreclosure proceedings, provided the Leasehold Mortgagee acts with reasonable and continuous diligence. The Leasehold Mortgagee shall have the absolute right to substitute itself for the Lessee and perform the duties of Lessee hereunder for purposes of curing such defaults. Owner expressly consents to such substitution, agrees to accept such performance, and authorizes the Leasehold Mortgagee (or its employees, agents, representatives or contractors) to enter upon the Property to complete such performance with all the rights, privileges and obligations of the original Lessee hereunder. Owner shall not terminate the Agreement prior to expiration of the cure periods available to a Leasehold Mortgagee as set forth above.

(c) During any period of possession of the Property by a Leasehold Mortgagee (or a receiver requested by such Leasehold Mortgagee) and/or during the pendency of any foreclosure proceedings instituted by a Leasehold Mortgagee, the Leasehold Mortgagee shall pay or cause to be paid the Rent and all other monetary charges payable by Lessee hereunder which have accrued and are unpaid at the commencement of said period and those which accrue thereafter during said period. Following acquisition of Lessee's leasehold estate by the Leasehold Mortgagee or its assignee or designee as a result of either foreclosure or acceptance of an assignment in lieu of foreclosure, or by a purchaser at a foreclosure sale, the Agreement shall continue in full force and effect and the Leasehold Mortgagee or party acquiring title to Lessee's leasehold estate shall, as promptly as reasonably possible, commence the cure of all defaults which are reasonably susceptible to cure and thereafter diligently process such cure to completion, whereupon Owner's right to terminate this Agreement based upon such defaults shall be deemed waived.

(d) Any Leasehold Mortgagee or other party who acquires Lessee's leasehold interest pursuant to foreclosure or assignment in lieu of foreclosure shall be liable to perform the obligations imposed on Lessee by this Agreement so long as such Leasehold Mortgagee or other party has ownership of the leasehold estate or possession of the Property.

(e) Neither the bankruptcy nor the insolvency of Lessee shall be grounds for terminating this Agreement as long as all material obligations of Lessee under the terms of this Agreement are performed by the Leasehold Mortgagee in accordance with the terms of this Agreement.

(f) Nothing herein shall be construed to extend the Agreement beyond the Agreement term or to require a Leasehold Mortgagee to continue foreclosure proceedings after the default has been cured. If the default is cured and the Leasehold Mortgagee discontinues foreclosure proceedings, the Agreement shall continue in full force and effect.

11.3.New Lease to Mortgagee. If this Agreement terminates because of Lessee's default or if the leasehold estate is foreclosed, or if the Agreement is rejected or disaffirmed pursuant to bankruptcy law or other law affecting creditors' rights, the Owner shall, upon written request from any Leasehold Mortgagee within ninety (90) days after such event, enter into a new lease (the "New Lease") for the Property, on the following terms and conditions:

(a) The terms of the New Lease shall commence on the date of termination, foreclosure, rejection or disaffirmance and shall continue for the remainder of the term of this Agreement, subject to the same terms and conditions set forth in this Agreement, as if this Agreement had not been terminated.

(b) The New Lease shall be executed within thirty (30) days after receipt by Owner of written notice of the Leasehold Mortgagee's election to enter into a New Lease, provided said Leasehold Mortgagee: (i) pays to Owner all rent and other monetary charges payable by Lessee under the terms of the Agreement up to the date of execution of the New Lease, as if the Agreement had not been terminated, foreclosed, rejected or disaffirmed; (ii) performs all other obligations of Lessee under the terms of the Agreement, to the extent performance is then due and susceptible of being cured and performed by the Leasehold Mortgagee within 120 days of the termination, foreclosure, rejection, or disaffirmance; and (iii) agrees in writing to perform, or cause to be performed within a reasonable period of time, all non-monetary obligations which have not been performed by Lessee and which should have been performed under this Agreement up to the date of commencement of the New Lease, except those obligations which constitute non-monetary defaults not susceptible to cure, as described in (ii) above. Any New Lease granted to the Leasehold Mortgagee shall enjoy the same priority as this Agreement over any lien, encumbrances or other interest created by Owner.

(c) At the option of the Leasehold Mortgagee, the New Lease may be executed by a New Lessee designated by such Leasehold Mortgagee, without the Leasehold Mortgagee assuming the burdens and obligations of Lessee thereunder.

(d) If more than one Leasehold Mortgagee makes a written request for a New Lease pursuant hereto, the New Lease shall be delivered to the Leasehold Mortgagee requesting such New Lease whose Mortgage is prior in lien.

(e) The provisions of this Article 11 shall survive the termination, rejection or disaffirmance of the Agreement and shall continue in full force and effect thereafter to the same extent as if this Section were a separate and independent contract made by Owner, Lessee and such Leasehold Mortgagee, and, from the date of such termination, rejection or disaffirmation of the Agreement to the date of execution and delivery of such New Lease, such Leasehold Mortgagee may use and enjoy said Property without hindrance by Owner or any person claiming by, through or under Owner, provided that all of the conditions for a New Lease as set forth herein are complied with.

11.4. Leasehold Mortgagee's Consent to Amendment, Termination or Surrender. Notwithstanding any provision of this Agreement to the contrary, the parties agree that so long as there exists an unpaid Leasehold Mortgage, this Agreement shall not be modified or amended and Owner shall not accept a surrender of the Property or any part thereof or a cancellation, termination or release of this Agreement from Lessee prior to expiration of the term without the prior written consent of the Leasehold Mortgagee. This provision is for the express benefit of and shall be enforceable by such Leasehold Mortgagee.

11.5. Estoppel Certificates, Etc. Owner shall within ten (10) business days after written request therefor, execute and deliver such estoppel certificates (certifying as to such matters as Lessee may reasonably request, including without limitation that no default then exists under this Agreement, if such be the case) and/or consents to assignment (whether or not such consent is actually required) and/or non-disturbance agreements as Lessee, any Assignee or Leasehold Mortgagee may reasonably request from time to time.

12. Default.

12.1. Default. Subject to the rights of Leasehold Mortgagees as provided in Article 10, each of the following events shall constitute an "Event of Default" by a party and shall permit the non-defaulting party to terminate this Agreement and/or pursue all other appropriate remedies:

(a) Failure to Pay. The failure or omission by either party to pay amounts required to be paid thereby when due hereunder, and such failure or omission has continued for ten (10) days after receipt of written notice from the other party;

(b) Failure to Perform. The failure or omission by either party to observe, keep or perform any of the other terms, agreements or conditions set forth in this Agreement, and such failure or omission has continued for thirty (30) days (or such longer period as may reasonably be required to cure such failure or omission, provided that cure has commenced and such party is diligently proceeding to complete such cure) after written notice from the other party; or

(c) Bankruptcy. A party files for protection or liquidation under the bankruptcy laws of the United States or any other jurisdiction or has an involuntary petition in bankruptcy or a request for the appointment of a receiver filed against it, and such involuntary petition or request is not dismissed within one hundred twenty (120) days after filing.

(d) Upon the occurrence of an Event of Default by Lessee, subject to the rights of any Leasehold Mortgagees as set forth in Article 10, Owner may, at its option, and in addition to and cumulatively of any other rights Owner may have at law or in equity or

under this Agreement, (a) cure the Lessee Event of Default on Lessee's behalf, in which event Lessee shall reimburse Owner on demand for all reasonable sums so expended by Owner, (b) terminate this Agreement by written notice to Lessee and in conformity with procedures required hereby and by applicable law, or (c) enforce, by all proper and legal suits and other means, its rights hereunder, including the collection of sums due hereunder, in which event Owner shall have all remedies available at law or in equity.

12.2. Effect of Termination. Lessee shall remove any Solar Facilities, including foundations to a depth of 4 feet below grade, from the Property within six (6) months from the date the Agreement terminates. All Property shall be restored to pasture land planted with grass (the "**Land Condition**") (provided that Lessee shall not be required to restore any structures or improvements Lessee was authorized to remove and/or demolish pursuant to the Lease related to its use of the Property for the Solar Facilities). During the post-termination six month restoration period, or if Lessee fails to remove such Solar Facilities in any material respect and restore the Property to the Land Condition, beyond the six month period, Owner shall provide Lessee with written notice thereof, and if Lessee fails to provide reasonable grounds for its objection to Owner's finding within (10) days following receipt thereof, Lessee shall thereafter continue to pay Rent hereunder until such removal and restoration work is completed on a monthly basis in an amount equal to the annual Rent divided by 12 and multiplied by the percentage of the Property on which such removal and restoration work has not been completed as of the first day of each such month. If Lessee fails to remove such Solar Facilities and so restore the Property to the Land Condition (provided that Lessee shall not be required to restore any structures or improvements Lessee was authorized to remove and/or demolish pursuant to the Lease related to its use of the Property for the Solar Facilities) within twelve (12) months of termination of the Agreement, or such longer period as Owner may provide by extension, Owner may do so, in which case Lessee shall reimburse Owner for the reasonable and documented costs of removal and restoration incurred by Owner.

12.3. Reclamation Estimate and Bond. Prior to the Initial Term, Lessee shall retain an independent demolition contractor or engineer with solar experience to provide a good faith estimate of the total cost to restore the Property by Lessee to the Land Condition (the "**Reclamation Estimate**") and Lessee shall deliver to Owner and maintain for the Term a payment bond or a letter of credit issued by a credit worthy bonding company or financial institution, as applicable for the amount of the Reclamation Estimate; provided that if pursuant to applicable law, Lessee has provided to any governmental agency other financial assurance for restoration of the Property (the proceeds of which are required to be applied to the restoration of the Property in the event Lessee otherwise fails to do so), Lessee shall be obligated to provide to Owner a payment bond or letter of credit

only for the excess of the amount of the Reclamation Estimate over the amount of the financial assurance provided to such governmental agency. Any payment bond or letter of credit required to be issued to Owner shall be in the name of Owner and shall secure Lessee's obligation to restore the Property to the Land Condition.

13. Miscellaneous.

13.1. Force Majeure. If performance of the Agreement or of any obligation hereunder and/or Lessee's ability to operate the Solar Facilities and to transmit and sell power therefrom to a third party purchaser is prevented, interfered or hindered by reason of an event of "**Force Majeure**" (defined below), the affected Party, upon giving notice to the other Party, shall be excused from such performance, and/or with respect to an event preventing, interfering or hindering Lessee's ability to operate the Solar Facilities and/or to transmit and sell power, the Rent payment obligation shall be abated, to the extent of and for the duration of such prevention, restriction or interference. The affected Party shall use its reasonable efforts to avoid, remove or repair such causes of nonperformance and shall continue performance hereunder whenever such causes are removed. "**Force Majeure**" means fire, earthquake, flood, pandemic or other casualty or accident; strikes or labor disputes; war, civil strife or other violence; declaration of national or local state of emergency, any law, order, proclamation, regulation, ordinance, action, demand or requirement of any government agency; or any other act or condition beyond the reasonable control and without the fault or negligence of the Party claiming Force Majeure.

13.2. Condemnation. Should title or possession of all of the Property be taken in condemnation proceedings by a government agency or governmental body under the exercise of the right of eminent domain, or should a partial taking render the remaining portion of the Property unsuitable for Lessee's use, then, at Lessee's written election, this Lease shall terminate upon the vesting of title or taking of possession. All payments made on account of any taking by eminent domain shall be apportioned between the valuation given to Lessee's interest under this Lease and the Solar Facilities (collectively "**Lessee's Interest**") and the valuation given to Owner's interest in this Lease and its reversionary interest in the Property, valued as unimproved and unentitled land (collectively, "**Owner's Interest**"), and Lessee shall not be required to pursue a separate award from the condemning authority, nor shall Lessee's right to condemnation proceeds under this Section 13.2 be affected by the refusal of the condemning authority to make a separate award in favor of Lessee. The portion relating to Lessee's Interest shall be paid to Lessee, and the portion relating to the Owner's Interest shall be paid to Owner; provided that, to

the extent not already included as part of Lessee's Interest, Lessee shall also be entitled to any award made for the reasonable removal and relocation costs of any Solar Facilities that Lessee has the right to remove, and for the loss and damage to any such Solar Facilities that Lessee elects or is required not to remove, and for any loss of income from the Solar Facilities, and for the loss of use of the Property by Lessee to the extent of Lessee's interest as lessee, the loss in value of the Lessee's interest under the Lease, and loss of any goodwill. The balance of any award, including severance damage, if any, shall be payable to Owner. It is agreed that Lessee shall have the right to participate in any condemnation proceedings and settlement discussions and negotiations thereof and that Owner shall not enter into any binding settlement agreement without the prior written consent of Lessee, which consent shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, Lessee's share of the award shall be paid to the Leasehold Mortgagee, if any, if and to the extent required by the Leasehold Mortgage. Lessee's Rent obligations hereunder shall be reduced in proportion to the extent any condemnation of a portion of the Property adversely impacts Lessee's generation of revenue from the Solar Facilities as reasonably agreed by Owner and Lessee. If Owner and Lessee cannot reasonably agree within six (6) weeks of such taking, such adverse impact shall be determined by an independent engineer reasonably acceptable to both Owner and Lessee, and if Owner and Lessee do not agree upon an independent engineer within four (4) additional weeks, then one shall be appointed as promptly as reasonably possible by a court having jurisdiction as provided in Section 13.7 below.

13.3. Confidentiality. To the full extent allowed by law, Owner shall maintain in the strictest confidence, for the sole benefit of Lessee, all information pertaining to the financial terms of or payments under this Agreement, Lessee's site or product design, methods of operation, methods of construction, power production or availability of the Solar Facilities, and the like, whether disclosed by Lessee or discovered by Owner, unless such information either (i) is in the public domain by reason of prior publication through no act or omission of Owner or its employees or agents, or (ii) was already known to Owner, at the time of disclosure and which Owner is free to use or disclose without breach of any obligation to any person or entity. To the full extent permitted by law, Owner shall not use such information for its own benefit, publish or otherwise disclose it to others, or permit its use by others for their benefit or to the detriment of Lessee. Notwithstanding the foregoing, Owner may provide information as required or appropriate to attorneys, accountants, lenders, or third parties who may be assisting Owner or with whom Owner may be negotiating in connection with the Property, Owner's financial or other planning, provided such party is subject to a confidentiality agreement, or as may be necessary to enforce this Agreement.

13.4. Successors and Assigns/Runs with the Land. The Agreement shall inure to the benefit of and be binding upon Owner and Lessee and their respective heirs, transferees, successors and assigns with respect to the Property and the Agreement, and all persons claiming under them. The Property shall be held, conveyed, assigned, hypothecated, encumbered, used and occupied subject to the covenants, terms and provisions set forth in this Agreement, which covenants, terms and provisions shall run with the Property, and each portion thereof and interest therein, and shall be binding upon and inure to the benefit of the Parties and each other person and entity having any interest therein during their ownership thereof, and their respective grantees, heirs, executors, administrators, successors and assigns, and all persons claiming under them. References to Lessee in this Agreement shall be deemed to include Assignees that hold a direct ownership interest in the Agreement and actually are exercising rights under this Agreement to the extent consistent with such interest.

13.5. Notices. Unless otherwise specifically provided herein, any approval, disapproval, demand, notice or other like communication reasonably intended to provide notice (“Notice”) required or permitted to be given hereunder shall be in writing to the applicable party’s address specified below (as the same may be modified as provided below) and may be served (a) personally, or (b) by commercial delivery or private courier service, or (c) by Federal Express or other national overnight delivery service, or (d) by registered or certified mail (return receipt requested, postage prepaid), or (e) by email transmission, to the respective email addresses set forth below, which Notice shall be effective (i) upon personal delivery, (ii) upon the date of actual delivery if delivered by Federal Express or another nationally recognized or other commercial or private delivery service provided delivery is made during regular business hours or if receipt is acknowledged by a person reasonably believed by the delivering party to be the recipient, or a family member, member, principal or employee of the recipient, (iii) when received as indicated by the date on the return invoice or receipt showing delivery if delivered by the United States Postal Service, certified mail, return receipt requested, postage prepaid, or (iv) when sent by email with written confirmation of receipt by the other party (which shall expressly exclude any automatic “out of office” response from the recipient). Notice of change of any address, telephone or email address shall be given by written notice in the manner detailed in this Section. Rejection or other refusal to accept or, the inability to deliver because of changed address of which no Notice was given shall be deemed to constitute receipt of the Notice.

If to Owner:

If to Lessee:

Carolyn Sue Robertson Dalton
Samuel Richard Robertson
PO Box 165
Boones Mill, VA 24065

Energix US, LLC
Attn: David Richards
2311 Wilson Blvd., STE 640
Arlington, VA 22201
david@energix-us.com ;
itamar@energix-us.com

13.6. Entire Agreement; Amendments. This Agreement constitutes the entire agreement between Owner and Lessee respecting the leasehold rights and obligations of the parties pertaining to the Property. This Agreement shall not be modified or amended except in a writing signed by both parties. No purported modifications or amendments, including without limitation any oral agreement (even if supported by new consideration), course of conduct or absence of a response to a unilateral communication, shall be binding on either Party. Provided that no material default in the performance of Lessee's obligations under this Agreement shall have occurred and remain uncured, Owner shall cooperate with Lessee in amending this Agreement from time to time to include any provision that may be reasonably requested by Lessee for the purpose facilitating a financing related to its Solar Facilities.

13.7. Legal Matters. This Agreement shall be governed by and interpreted in accordance with the laws of the Commonwealth of Virginia. The parties' consent to the jurisdiction of the Federal courts located in the Western District of Virginia, or to the extent there is an issue over which a Federal court does not have jurisdiction, a Virginia State court in Franklin County. The parties agree that any rule of construction to the effect that ambiguities are to be resolved in favor of either Party shall not be employed in the interpretation of this Agreement and is hereby waived. The prevailing party in any action or proceeding for the enforcement, protection or establishment of any right or remedy under this Agreement shall be entitled to recover its reasonable attorneys' fees and costs in connection with such action or proceeding from the non-prevailing party.

13.8. Partial Invalidity. Should any provision of this Agreement be held, in a final and unappealable decision by a court of competent jurisdiction, to be either invalid, void or unenforceable, the remaining provisions hereof shall remain in full force and effect, unimpaired by the holding. Notwithstanding any other provision of this Agreement, the parties agree that in no event shall the term of this Agreement or any Access/Gen-Tie Easement be longer than the longest period permitted by applicable law.

13.9. Tax and Renewable Energy Credits. If under applicable law, the holder of a lease becomes ineligible for any tax credit, renewable energy credit, environmental credit or any other benefit or incentive for renewable energy established by any local, state or federal government, then, at Lessee's option, Owner and Lessee shall exercise good faith and negotiate an amendment to this Agreement or replace it with a different instrument so as to convert Lessee's interest in the Property to a substantially similar interest that makes Lessee eligible for such credit, benefit or incentive.

13.10. Right of First Offer in Favor of Lessee.

(a) If during the ROFO Period (as hereinafter defined) Owner intends to sell, assign, transfer or convey all or a portion of the Property or the direct owner of Owner proposes to sell a controlling interest in Owner (hereinafter, the "**ROFO Interests**") (any of the foregoing, a "**Disposition**") to any third party (which term shall exclude Affiliates, including, without limitation, persons related by blood or marriage to Owner), then, provided no monetary or material non-monetary Event of Default by Lessee then exists and is continuing which Lessee is not diligently proceeding to cure as permitted under the Agreement, Owner shall give notice of such contemplated Disposition (the "**Disposition Notice**") to Lessee. Lessee shall have the right of first offer (the "**ROFO**"), exercisable by notice (the "**Exercise Notice**") which may be given on or before the forty-fifth (45th) day after the Disposition Notice is given (the "**Exercise Period**"), which Exercise Notice shall set forth the material terms for Lessee's proposed purchase of the Property or the ROFO Interests, including the proposed purchase price, proposed feasibility period and proposed time period for closing. If Lessee fails to exercise its ROFO by delivering an Exercise Notice within the Exercise Period, then Owner shall have the right to effect a Disposition of the Property or ROFO Interests specified in the Disposition Notice on or before the 180th Day after the date the Disposition Notice was given (such period, the "**Disposition Period**"). If, however, the Owner fails to so dispose of the Property or ROFO Interests specified in the Disposition Notice during the Disposition Period, the proposed Disposition and/or any future contemplated Disposition shall again become subject to the ROFO.

(b) If Lessee delivers an Exercise Notice within the Exercise Period, Owner shall have thirty (30) days after the Exercise Notice is given (the "**Acceptance Period**") to notify Lessee whether or not Owner wishes to pursue negotiation of a purchase agreement with Lessee based upon the terms set forth in the Exercise Notice (the "**Response Notice**"). If Owner does not deliver a Response Notice within the Acceptance Period, or delivers a Response Notice indicating that Owner does not wish to pursue negotiation of a purchase agreement with Lessee based upon the terms set forth in the Exercise Notice, then Owner shall have the right to effect a Disposition of the Property or ROFO Interests specified in the Disposition Notice during the Disposition Period for substantially the same or higher price, on substantially the same or more favorable (to Owner) payment terms and on other terms and conditions that, taken as a whole, are substantially the same or more favorable to Owner

than those set forth in the Exercise Notice; provided, however, that prior to consummating any such sale, Owner shall provide Lessee with a concise summary of all commercial terms negotiated by Owner with the third party (a “**Notice of Proposed Third Party Sale**”). Owner shall be prohibited from effecting a Disposition on terms less favorable to Owner than those set forth in the Exercise Notice during the Disposition Period. If Owner fails to effect a Disposition of the Property or ROFO Interests specified in the Disposition Notice during the Disposition Period in accordance with the foregoing requirements, the proposed Disposition and/or any future contemplated Disposition shall again become subject to the ROFO.

(c) If Owner delivers a Response Notice indicating that Owner does wish to pursue negotiation of a purchase agreement with Lessee based upon the terms set forth in the Exercise Notice, the Parties shall proceed to negotiate in good faith on an exclusive basis for at least sixty (60) days following the delivery of such Response Notice (“**Negotiation Period**”), in order to finalize a mutually acceptable purchase agreement based upon the terms in the Exercise Notice. If the Parties are unable to agree upon the terms and conditions of a sale of the Property or ROFO Interests to Lessee during the Negotiation Period, then Owner shall have the right to effect a Disposition of the Property or ROFO Interests specified in the Disposition Notice on or before the 120th Day after the expiration of the Negotiation Period (the “**Post Negotiation Disposition Period**”) for substantially the same or higher price, on substantially the same or more favorable (to Owner) payment terms and on other terms and conditions that, taken as a whole, are substantially the same or more favorable to Owner than those set forth in the Exercise Notice; provided, however, that prior to consummating any such sale, Owner shall provide Lessee with a Notice of Proposed Third Party Sale. Owner shall be prohibited from effecting a Disposition on terms less favorable to Owner than set forth in the Exercise Notice during the Post Negotiation Disposition Period. If Owner fails to effect a Disposition of the Property or ROFO Interests specified in the Disposition Notice during the Post Negotiation Disposition Period in accordance with the foregoing requirements, the proposed Disposition and/or any future contemplated Disposition shall again become subject to the ROFO.

(d) For purposes hereof, “**ROFO Period**” means the Term (including any exercised Renewal Term) plus a period of ninety (90) days following the expiration or termination of the Term (“**ROFO Expiration Date**”). Lessee agrees to execute and deliver a quitclaim of Lessee’s rights under this Section 13.10 in recordable form at Owner’s request following the ROFO Expiration Date. The provisions of this Section 13.10 shall not apply to: (a) any sale or transfer of the Property or ROFO Interests to any Owner Affiliate; or (b) the granting of any Fee Mortgage, the foreclosure of any Fee Mortgage, or the execution and delivery by Owner of a deed in lieu in contemplation of foreclosure of any Fee Mortgage.

12.12 Waiver of Consequential Damages. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT TO THE CONTRARY, IN NO EVENT, WHETHER BASED IN CONTRACT, INDEMNITY, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL EITHER PARTY, OR ITS AFFILIATES OR ITS AND

THEIR RESPECTIVE DIRECTORS, MANAGERS, OFFICERS, SHAREHOLDERS, PARTNERS, MEMBERS, EMPLOYEES, CONTRACTORS, AGENTS AND REPRESENTATIVES, BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES THAT ARISE OUT OF, RELATE TO, OR ARE OTHERWISE ATTRIBUTABLE TO THIS AGREEMENT OR THE PERFORMANCE OR NON-PERFORMANCE OF DUTIES HEREUNDER.

12.13 Quiet Enjoyment. Owner covenants that so long as Lessee is in compliance with the covenants and conditions set forth in this Lease, Lessee shall have the right to quiet enjoyment of the Property without hindrance or interference from Owner or those claiming through Owner.

12.14 WAIVER OF JURY TRIAL. AS A MATERIAL INDUCEMENT TO OWNER AND LESSEE TO ENTER INTO THIS LEASE, BOTH PARTIES HEREBY WAIVE THEIR RIGHT TO A TRIAL BY JURY OF ANY ISSUES RELATING TO OR ARISING OUT OF THEIR OBLIGATIONS UNDER THIS LEASE. BOTH PARTIES ACKNOWLEDGE THAT THEY HAVE READ AND UNDERSTOOD THE FOREGOING PROVISION.

12.15 Counterparts. This Agreement may be executed in one or more counterparts (each of which shall be deemed an original, but all of which together shall constitute one and the same instrument) and shall be effective as of the Effective Date upon execution and delivery by the parties hereto, and such execution and delivery may be effectuated by facsimile transmission, transmission of an executed PDF copy via email, a third party electronic signature verification program or process, by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, or by combination of such means. Signatures of the Parties transmitted by any of the foregoing methods shall be deemed to be their original signatures for all purposes and signature pages may be detached from the counterparts and attached to a single copy of this Agreement to physically form one document.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, Owner and Lessee, individually or through duly authorized representatives, hereby, execute this Agreement and certify that they have read, understand and agree to the terms and conditions of this Agreement.

“Owner”

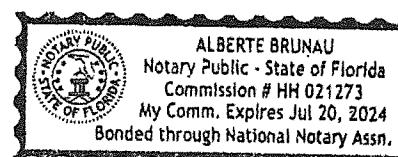
“Lessee”

Energix US, LLC

By: Samuel R Robertson (seal) By: _____ (seal)
Name: Samuel R Robertson
Its: Author Tech Signature

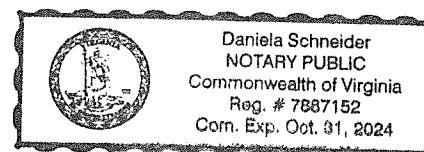
By: Carolyn Sue Dalton (seal)
Name: CAROLYN SUE DALTON
Its: _____

Samuel R Robertson
Subscribed and sworn to before me
this One day of Feb 2021
Notary Public



Itamar Sarussi
Subscribed and Sworn
to before me.

this 5th day of February 2021



Daniela Schneider

Exhibit A

+/- 113 ac. Tax Map Numbers: 0340003100. Franklin County, VA



AMENDMENT TO OPTION TO LEASE AND LEASE AGREEMENT

This AMENDMENT TO OPTION TO LEASE AND LEASE AGREEMENT (this “**Amendment**”) is entered into as of July 12, 2021, by and between Carolyn Sue Robertson Dalton and Samuel Richard Robertson (collectively, “**Owner**”) and Energix US, LLC (“**Lessee**”). Owner and Lessee together may sometimes be referred to as the “**Parties**”.

Background

- A. Owner and Lessee are parties to that certain Option to Lease and Lease Agreement dated February 4, 2021 (the “**Agreement**”), pursuant to which Owner has granted an option right to Lessee to lease certain real estate in Franklin County, Virginia, as described in the Agreement; and
- B. The Parties desire to increase the amount of real property of the Owner that is subject to the Agreement and that, upon exercise of the Lease Option, may be included as part of the Usable Acres.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and intending to be legally bound hereby, the Parties hereby agree as follows:

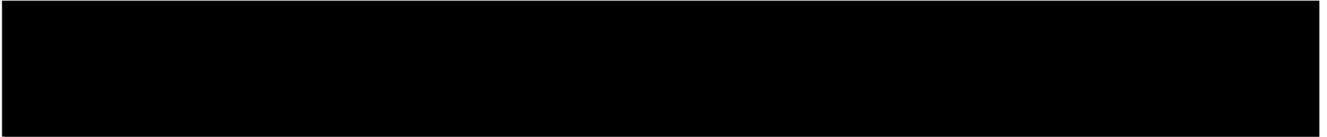
1. **Capitalized Terms.** All capitalized terms used herein shall have the same meaning as in the Agreement unless otherwise defined herein.
2. **Amendments.**

- a. Section 1.1 (Lease Option) of the Agreement is hereby deleted and replaced in its entirety with the following:

“From the Effective Date, Owner grants to Lessee the exclusive, irrevocable right and option to lease (the “**Lease Option**”) a portion of or the full approximately 224 acres of the real property of Owner located in Franklin County, Commonwealth of Virginia and described on Exhibit A in order to utilize it for the purpose of developing, installing and maintaining a solar energy facility.”



- c. Exhibit A of the Agreement is hereby deleted and replaced in its entirety by Attachment A of this Amendment.



4. **Full Force and Effect.** The Parties hereby (a) ratify the Agreement and affirm that, except as modified by this Amendment, the remaining provisions of the Agreement shall remain in full force and effect, (b) agree that neither Party is in default of any of its obligations under the Agreement, and (c) agree that if any of the terms of this Amendment shall be inconsistent or in conflict with any of the terms of the Agreement, the terms of this Amendment shall control.
5. **Binding Effect.** The Parties hereby acknowledge and agree that the Agreement and this Amendment shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties.
6. **Counterparts.** The Parties acknowledge that this Amendment may be executed in any number of counterparts, including by electronic (PDF) transmission, all of which when taken together shall constitute the agreement of the Parties.

[signature page follows]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first written above.

Owner

Carolyn Sue Robertson Dalton
Carolyn Sue Robertson Dalton

Samuel Richard Robertson
Samuel Richard Robertson

Lessee

Energix US, LLC

Name: Asa Levinger
Title: Authorized Signatory

Name: Itamar Sarussi
Title: Authorized Signatory

Attachment A

Exhibit A

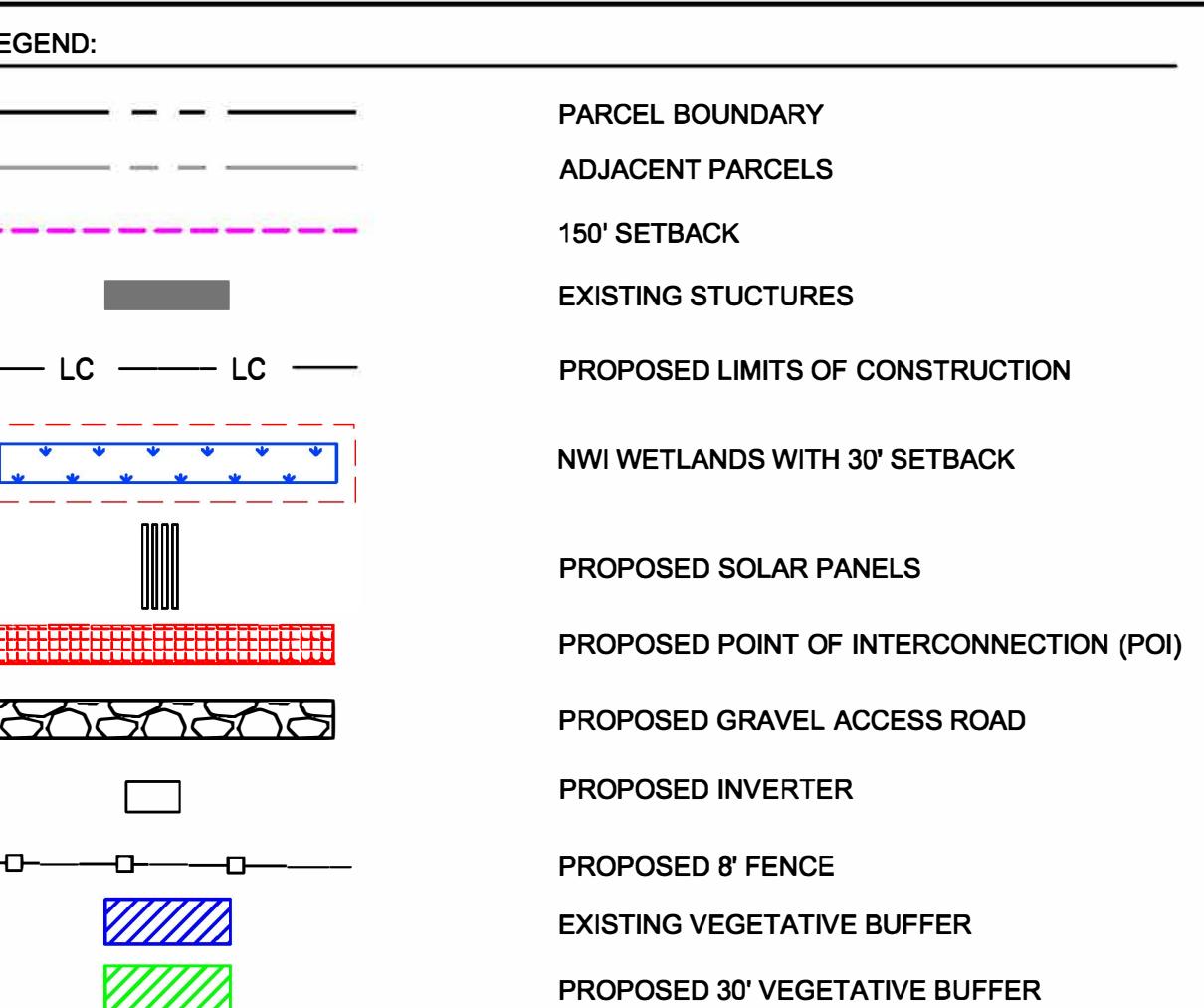
Approximately 224 acres comprised of Tax Map Numbers 0340003100, 0340003300, and 034000230 in Franklin County, VA, and as delineated in the image below.





EXHIBIT D

CONCEPTUAL SITE LAYOUT



PARCEL AREA	258.16 ACRES
LIMITS OF CONSTRUCTION	~184 ACRES
AREA UNDER PANELS	~37.31 ACRES

Kimley-Horn

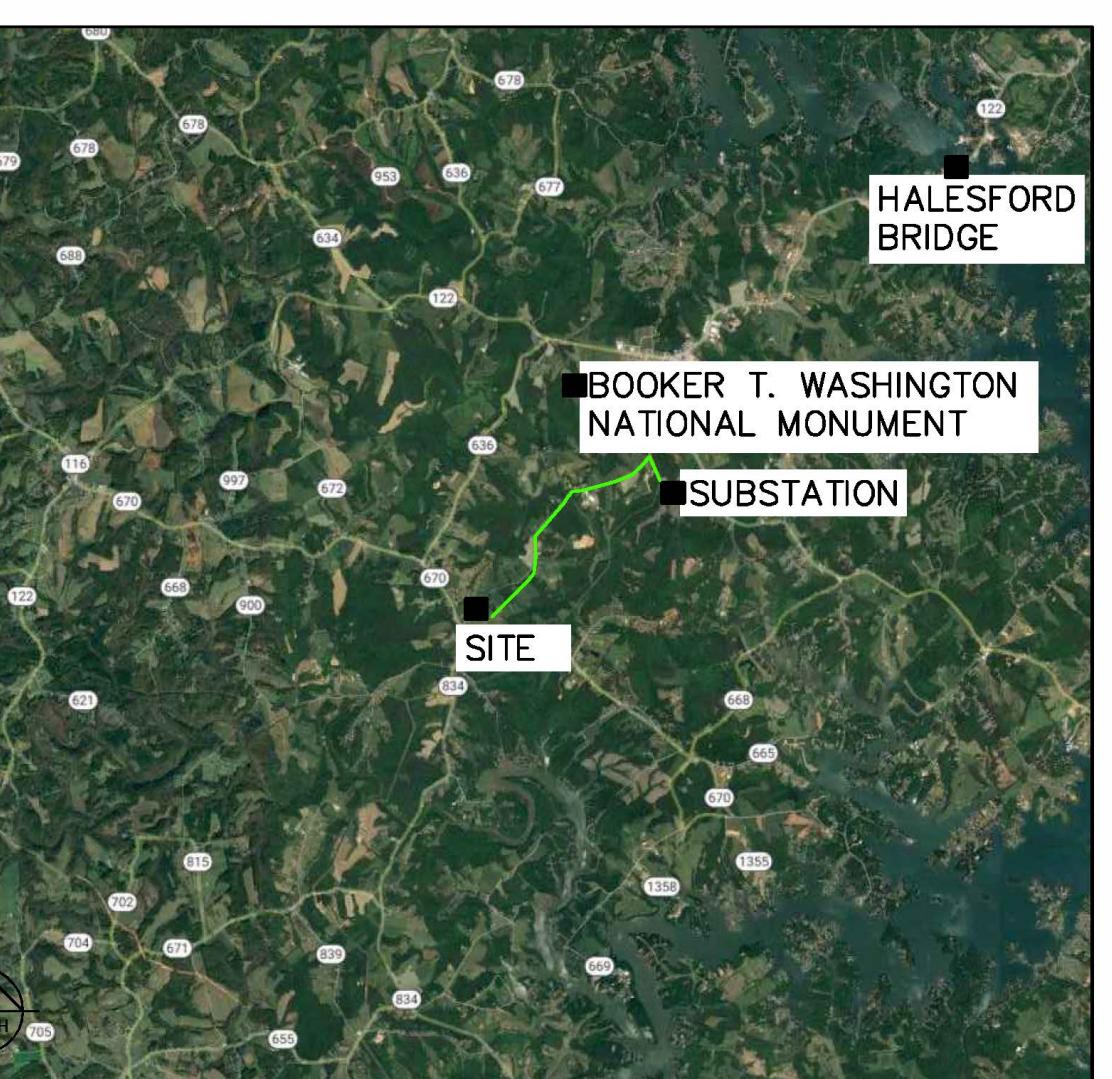
KIMLEY-HORN AND ASSOCIATES, INC.
1111 21ST ST, SUITE 200, RICHMOND, VA 23230
PHONE: 804-673-3882
WWW.KIMLEY-HORN.COM

DOCUMENTED, ELIGIBLE CULTURAL RESOURCES WERE IDENTIFIED ON THE VIRGINIA
ARTMENT OF HISTORIC RESOURCES' VIRGINIA CULTURAL RESOURCE INFORMATION
SYSTEM. FURTHER STUDIES WILL BE CONDUCTED IF WARRANTED.
DOCUMENTED WETLANDS WERE IDENTIFIED ON THE NATIONAL WETLANDS INVENTORY
SHOWN.
PROPERTY DOES NOT FALL WITHIN ANY FEMA DESIGNATED FLOOD PLAINS.
WILL BE SECURED WITH FENCING THAT IS EIGHT (8) FEET TALL.
UND-MOUNTED SOLAR PANELS WILL NOT EXCEED A HEIGHT OF FIFTEEN (15) FEET
N AT MAXIMUM TILT.

REPORT VICINITY MAP (1-MILE)
NOT TO SCALE



5-MILE VICINITY MAP
NOT TO SCALE



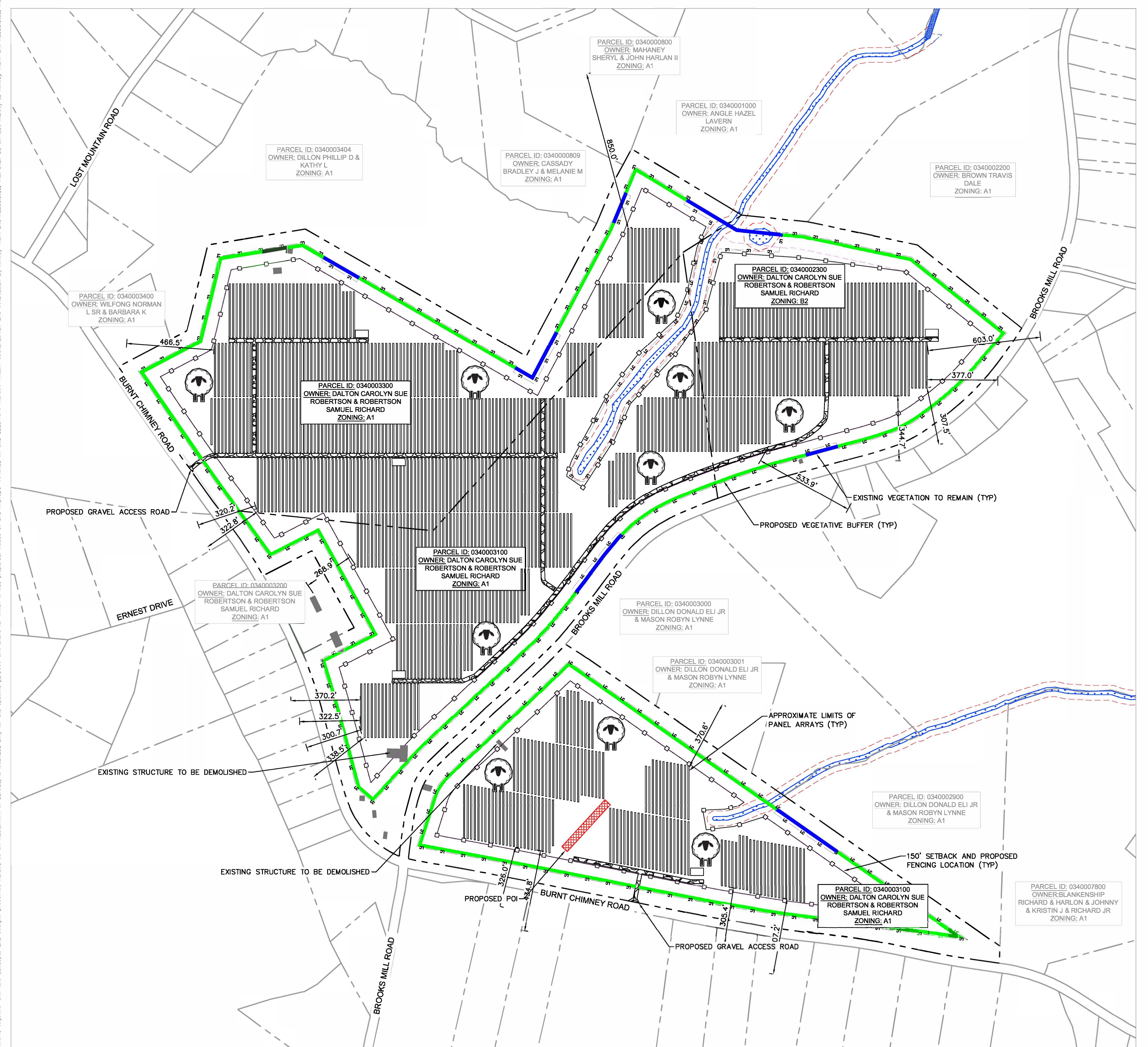
MOUNTAIN BROOK SOLAR

PREPARED FOR

SUP CONCEPT PLAN

SCI ID CONCERED DI AN

PREPARED FOR
MOUNTAIN BROOK SOLAR LLC

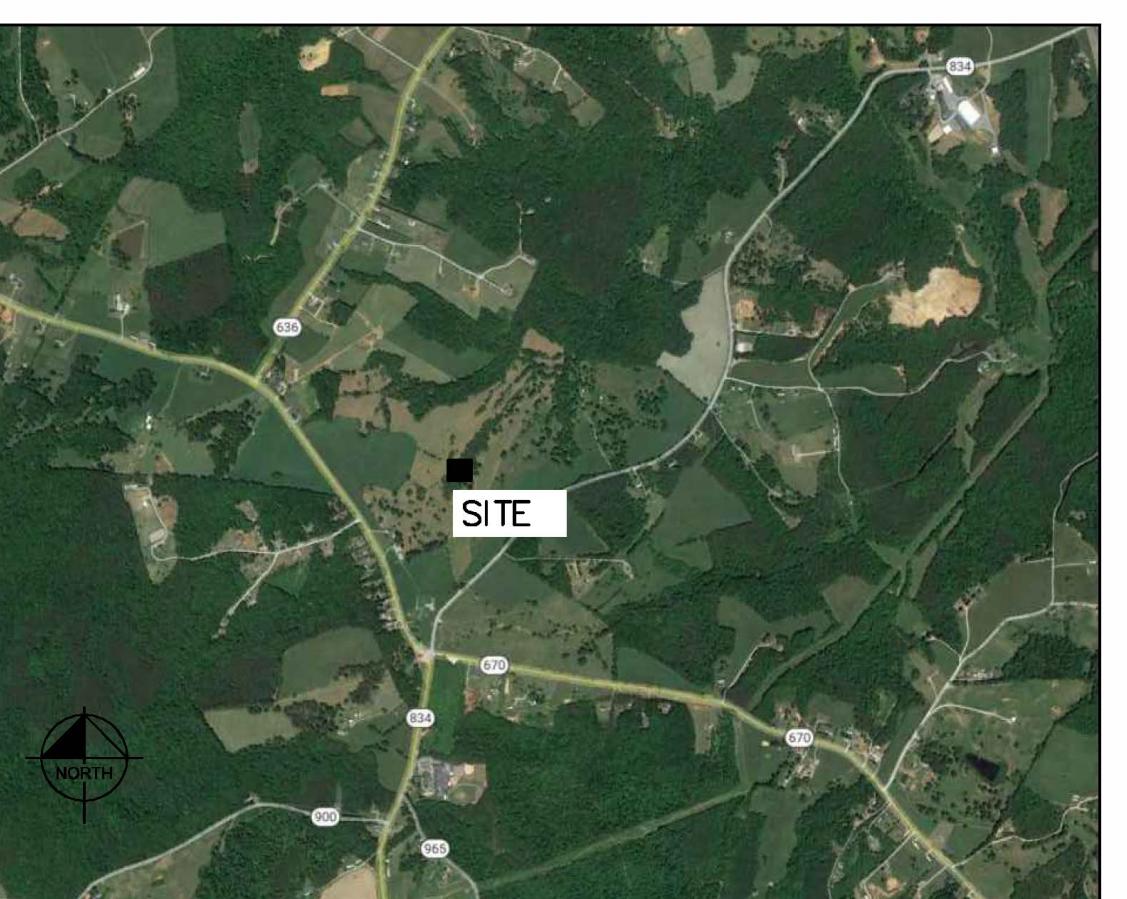


PARCEL AREA	258.16 ACRES
LIMITS OF CONSTRUCTION	~184 ACRES
AREA UNDER PANELS	~37.31 ACRES

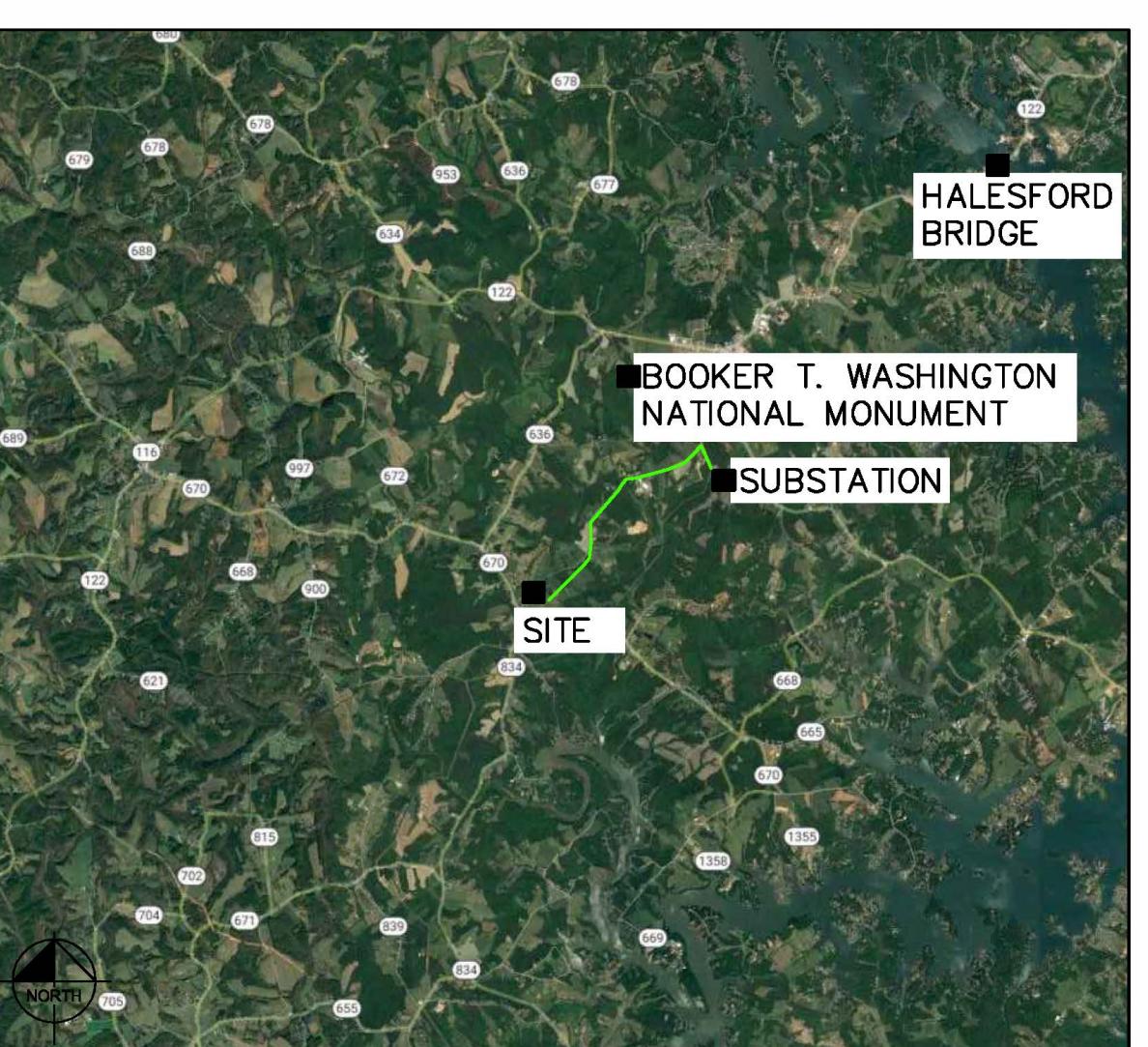
NOTES:

1. NO DOCUMENTED, ELIGIBLE CULTURAL RESOURCES WERE IDENTIFIED ON THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES' VIRGINIA CULTURAL RESOURCE INFORMATION SYSTEM. FURTHER STUDIES WILL BE CONDUCTED IF WARRANTED.
2. DOCUMENTED WETLANDS WERE IDENTIFIED ON THE NATIONAL WETLANDS INVENTORY AS SHOWN.
3. THE PROPERTY DOES NOT FALL WITHIN ANY FEMA DESIGNATED FLOOD PLAINS.
3. SITE WILL BE SECURED WITH FENCING THAT IS EIGHT (8) FEET TALL.
4. GROUND-MOUNTED SOLAR PANELS WILL NOT EXCEED A HEIGHT OF FIFTEEN (15) FEET WHEN AT MAXIMUM TILT.

AIRPORT VICINITY MAP (1-MILE)
NOT TO SCALE



5-MILE VICINITY MAP
NOT TO SCALE



A compass rose with a large circle containing a vertical line pointing upwards and a horizontal line pointing to the right. The word "NORTH" is written in capital letters at the bottom of the vertical line.

GRAPHIC SCALE IN FEET
0 125 250 500



EXHIBIT E

FIRST SOLAR PANEL TECHNOLOGY



First Solar Thin Film PV.

Proven Benefits of CdTe Technology

CONVERTING WASTE BYPRODUCTS INTO A STABLE CdTe COMPOUND

CdTe is sustainably sourced from byproducts of the zinc and copper industries. Cadmium, a waste byproduct of zinc refining, and tellurium, a byproduct of copper refining, are converted into a stable CdTe compound. Once encapsulated in First Solar modules, CdTe produces clean, affordable energy for 30+ years.

“CdTe PV systems that use cadmium as a raw material should be considered as one of the solutions for a sustainable use of cadmium.”⁴



OPTIMAL SEMICONDUCTOR MATERIAL

First Solar’s cadmium telluride (CdTe) photovoltaic (PV) systems represent a breakthrough in large-scale renewable energy solutions. The thin layer of CdTe semiconductor material used in First Solar PV modules is optimal for absorbing and converting sunlight into useful electricity, enables high-volume manufacturing and has amongst the highest efficiency potential of all PV semiconductor materials.¹ In addition, First Solar thin film PV modules have a proven performance advantage over conventional silicon modules in harsh operating environments due to their superior spectral response and low temperature coefficient.

First Solar’s advanced thin film PV solutions are the industry’s leading eco-efficient technology due to their superior energy yield, competitive cost and lowest environmental impacts.² On a life cycle basis, First Solar modules have the smallest carbon footprint, lowest water use and fastest energy payback time of any solar technology on the market. First Solar fully integrated manufacturing process uses less energy, water and semiconductor material than conventional silicon modules. First Solar’s thin film PV solutions are designed to meet today’s global energy demands by generating clean and reliable electricity, minimizing fuel price volatility, and boosting energy and water security.

LEADING ECO-EFFICIENT PV TECHNOLOGY

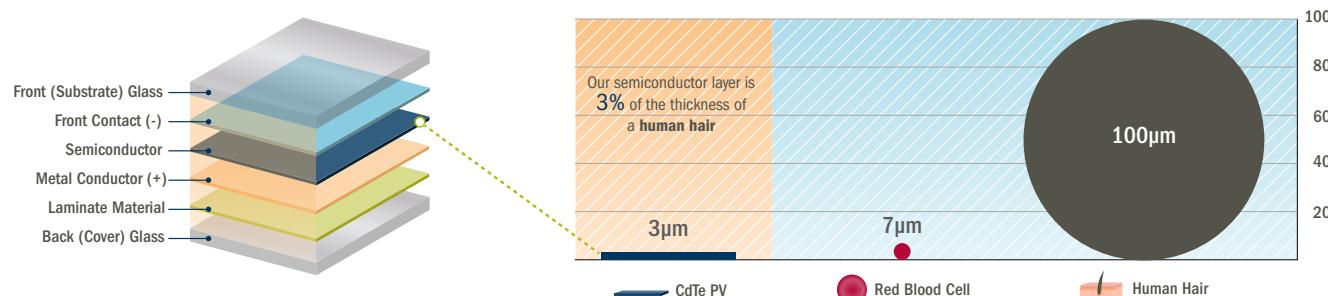
- Proven energy yield advantage over competing PV technologies in areas of high temperature and high humidity results in a lower levelized cost of electricity (LCOE)
- Cost competitive with conventional energy sources
- Fixed pricing and low operating costs reduces fuel price volatility risks and eliminates hedging costs
- Generates clean electricity for 30+ years with no carbon emissions or other air pollutants
- Requires no water to generate electricity and uses less water on a life cycle basis than other PV technologies (3X times less than crystalline silicon PV)
- Smallest carbon footprint and fastest energy payback time of all solar technologies on a life cycle basis

Energy payback time— is the amount of time a system must operate to recover the energy required to produce, install, operate and recycle it.

“CdTe PV technology can contribute to large-scale deployment of renewable energy solutions in an environmentally sustainable way addressing the increasing global demand for low-carbon energy.”³

DESIGNED FOR SAFETY AND DURABILITY

"In the exceptional case that an accident like fire or breakage occurs, the emission of cadmium has been proven to be negligible and do not represent a potential risk for human health nor for the environment."⁵



First Solar modules consist of a thin layer of CdTe, approximately 3 percent the thickness of a human hair or less than half the size of a red blood cell, that is encapsulated between two protective sheets of glass and sealed with an industrial laminate, resulting in a strongly bonded monolithic structure. The glass-on-glass design is more robust against fire and damage than the glass-on-backsheet design of other PV technologies.⁶ First Solar modules have been tested for safety during breakage, fire, flooding and hail storms and meet rigorous performance testing standards, demonstrating their long-term durability and reliability in real-world environments (UL 1703, IEC 61215, IEC 61730, Thresher test).

"CdTe differs from elemental Cd and other Cd compounds due to strong bonding that leads to an extremely high chemical and thermal stability"⁷

More than 50 researchers from leading international institutions have confirmed CdTe PV's safety over its entire life cycle during normal operation, foreseeable accidents such as fire or module breakage and through end-of-life recycling and disposal.

"Replacing existing grid electricity with large-scale CdTe PV arrays would result in a reduction of greenhouse gases, criteria air pollutants, heavy metals and radioactive species by 89 to 98 percent."⁸

COMMITMENT TO RESPONSIBLE LIFE CYCLE MANAGEMENT

Recycling is an integral part of responsible product life cycle management and is important to the whole PV sector as environmentally sensitive materials (e.g. lead, selenium, and cadmium compounds) are common in the industry.

First Solar provides a global industry-leading recycling service that recovers over 90% of the semiconductor material for reuse in new modules and ~90% of the glass for reuse in new glass products, setting the international standard for high-value recycling of PV panels. Our recycling facilities are scalable to accommodate high volume recycling as more modules reach the end of their 30+ year life.

1 Shockley, W., & Queisser, H. J. (1961). Detailed balance limit of efficiency of p - n junction solar cells. *Journal of applied physics*, 32(3), 510-519.

2 M. Seitz, M. Kroban, T. Pitschke, S. Kriebe, 2013, Eco-Efficiency Analysis of Photovoltaic Modules, Bifa Environmental Institute.

3 Study of the Environmental, Health, and Safety of Cadmium Telluride (CdTe) Photovoltaic Technology, King Saud University, Kuwait Institute for Scientific Research, Kuwait University, University of Jordan, King Abdullah University of Science and Technology, Masdar Institute of Science and Technology, 2012.

4 Scientific Review on the Environmental and Health Safety (EHS) aspects of CdTe photovoltaic (PV) systems over their entire life cycle, University of Tokyo and Yokohama National University, Japan, May 2012.

5 First Solar CdTe Photovoltaic Technology: Environmental, Health and Safety Assessment, National Renewable Energy Centre (CENER) and Fundación Chile, October 2013.

6 German Ministry of Economics and Technology, TUV Rheinland, and Fraunhofer ISE, Assessment of the Fire Risk in Photovoltaic Systems and Elaboration of Safety Concepts for Minimization of Risks, March 2015.

7 Executive Summary, Study of the Environmental, Health, and Safety of Cadmium Telluride (CdTe) Photovoltaic Technology, IIT-Delhi, India, July 2012.

8 Fthenakis, V.M., Kim H.C., and Alsema, E. 2008. Emissions from Photovoltaic Life Cycles. *Environ. Sci. Technol.* 2008, 42, 2168-2174.



THIN FILM PV TECHNOLOGY FAQ.



Q: WHAT MAKES FIRST SOLAR'S THIN FILM PV MODULES COMPETITIVE?

A: First Solar thin film modules are manufactured using a fully integrated and resource efficient process which enables affordable, high volume production with the lowest environmental impacts in the industry. In addition, First Solar's high efficiency thin film modules are proven to deliver more usable energy per watt than conventional silicon-based modules, resulting in a lower levelized cost of electricity (\$/MWh).

Source: Dirnberger et al., "On the impact of solar spectral irradiance on the yield of different PV technologies," *Solar Energy Materials & Solar Cells*, vol. 132 pp. 431–442, 2015.



Q: WHAT ARE THE ENVIRONMENTAL BENEFITS OF THIN FILM PV TECHNOLOGY?

A: First Solar's advanced thin film PV solutions are the industry's leading eco-efficient technology due to their superior energy yield, competitive cost and smallest life cycle environmental impacts. By using less grid electricity during manufacturing, First Solar modules have the smallest carbon footprint, fastest energy payback time and lowest life cycle water use and air pollutant emissions of any PV technology.

Sources: Louwen, Atse, Ruud E.I. Schropp, Wilfried G.J.H.M. van Sark, and André P.C. Faaij. "Geospatial Analysis of the Energy Yield and Environmental Footprint of Different Photovoltaic Module Technologies". *Solar Energy* 155 (October 2017): 1339–53. <https://doi.org/10.1016/j.solener.2017.07.056>.

Leccisi, Enrica, Marco Raugei, and Vasilis Fthenakis. "The Energy and Environmental Performance of Ground-Mounted Photovoltaic Systems—A Timely Update". *Energies* 9, Nr. 8 (08 August 2016): 622. <https://doi.org/10.3390/en9080622>.



Q: HOW DOES CdTe DIFFER FROM CADMIUM?

A: First Solar modules contain cadmium telluride (CdTe) which is a stable compound that is insoluble in water and has an extremely high chemical and thermal stability. These properties limit its bioavailability and potential for exposure. First Solar modules contain very little CdTe. The semiconductor layer in First Solar modules is a few microns thick, equivalent to 3% the thickness of a human hair. Additionally, the thin film semiconductor is encapsulated between two sheets of glass and sealed with an industrial amine, further limiting the potential for release into the environment in the event of fire or breakage.

Source: Kaczmar, "Evaluating the Read-Across Approach on CdTe Toxicity for CdTe Photovoltaics," in *SETAC North America 32nd Annual Meeting*, Boston, 2011..



Q: ARE THIN FILM MODULES DURABLE IN THE FIELD?

A: Yes. First Solar modules are tested for safety during breakage, fire, flooding and hail storms, and meet rigorous long-term durability and reliability testing standards. First Solar modules are the only PV module in the industry warranted against cell cracking and micro-cracking, which can be caused by excessive thermal and mechanical stress. First Solar modules have also consistently ranked as "Top Performer" in PVEL's reliability scorecard which evaluates long-term durability and performance.

Source: PVEL, *Cracking Down on PV Module Design: Results from Independent Testing*, 2020. https://www.pvel.com/wp-content/uploads/PVEL-White-Paper-Mechanical-Stress-Sequence_Cracking-Down-on-PV-Module-Design.pdf



Q: IS THIN FILM PV TECHNOLOGY SAFE FOR THE ENVIRONMENT?

A: Yes. More than 50 researchers from leading international institutions have confirmed the environmental benefits and safety of First Solar's thin film PV technology over its entire life cycle; during normal operation, exceptional accidents such as fire or module breakage, and through end-of-life recycling and disposal. First Solar provides the PV technology of choice for leading utilities and power buyers such as Southern Power Co., NRG Energy, and Capital Dynamics. With more than 40,000MW sold worldwide, First Solar modules have a proven record of safe and reliable performance.

Source: <http://www.firstsolar.com/Resources/Sustainability-Documents?ty=Peer+Reviews&re=&ln=>



Q: CAN FIRST SOLAR MODULES BE RECYCLED AT END-OF-LIFE?

A: Yes. First Solar offers global, competitively priced and flexible PV module recycling services. First Solar has a long-standing leadership position in PV recycling with more than 15 years of experience in operating high-value PV recycling facilities on a global and industrial scale. First Solar's high-value recycling process recovers more than 90% of a PV module for reuse in new modules and glass products.

Source: Sinha, Parikh, Sukhwant Raju, Karen Drozdiak, and Andreas Wade. "Life cycle management and recycling of PV systems". *PV Tech*, 19 December 2017. <https://www.pv-tech.org/technical-papers/life-cycle-management-and-recycling-of-pv-systems>.



America's Solar Company.

Founded in 1999, First Solar is unique among the world's ten largest solar manufacturers for being the only US-headquartered company and for producing advanced thin film solar panels designed and developed in America. Founded in 1999, the company has invested \$2.8 billion in its three-factory Ohio footprint and will invest approximately \$1.3 billion, including up to \$1.1 billion in a new factory in Alabama, in expanding its annual US manufacturing capacity to over 10 gigawatts (GW) by 2025.

Uniquely American Solar Technology.

Over the past two decades, First Solar has committed itself to delivering a high quality, responsibly-produced American solar product to a global marketplace. The result of over \$1.5 billion in cumulative R&D investment, First Solar's thin film PV solar technology was developed and designed in Ohio and California, and is uniquely American.

With a manufacturing process that has more in common with manufacturing flatscreen televisions than it does with conventional solar panels, it takes just four-and-a-half hours to convert a sheet of glass into a fully functioning PV module, ready to convert the photons in sunlight into clean, reliable solar electricity.

What's more is that, thanks to its unique manufacturing processes, First Solar's thin film technology has the lowest environmental footprint of any PV module available today.

First Solar by the Numbers

1 Only US company among the top 10 solar manufacturers globally

>10GW
US manufacturing capacity by 2025

>3,000
Employees in the US in 2024

\$4 Billion
Cumulative investment in US manufacturing by 2025

>\$1.5 Billion
Spent on research and development

15,000
Indirect and induced US jobs supported by 2025*

\$3.2 Billion
Estimated value added to the US economy from \$1.2 billion in manufacturing investments*

* Assuming five workers added in the overall US economy for every one manufacturing job and economic impact multiplier of \$2.68 per \$1.00 spent on manufacturing. Source: National Association of Manufacturers (NAM), using 2020 IMPLAN data.



Invested in America.

In 2019, First Solar became America's and the Western Hemisphere's largest solar module manufacturer. The company has two operating factories in Ohio, with a third expected to be commissioned in the state in the first half of 2023. The company is also investing approximately \$1.3 billion in expanding its Ohio footprint to over 7 GW by 2025, and building a new 3.5 GW factory, its fourth in the country, in North Alabama, which is also expected to come online in 2025.

Additionally, First Solar also announced plans to invest approximately \$270 million in a dedicated research and development (R&D) innovation center in Perrysburg, Ohio. The new facility is believed to be the first of its scale in the United States and is expected to accelerate American leadership in the development and production of advanced thin film PV.

First Solar's most recent investment is expected to add an estimated \$3.2 billion in value to the US economy, reflecting the impact of solar manufacturing on the country. Additionally, as the company continues to expand, it is expected to employ over 3,000 people in four states by 2025, which is believed to make it the largest employer in the American solar manufacturing sector. By 2025, First Solar is also expected to support an estimated 15,000 indirect and induced jobs as a result of its ongoing and future manufacturing operations.

Responsible Solar.

First Solar's solar technology embodies sustainability and a responsibility towards people and the planet. This is why we have a long history of establishing benchmarks in recycling, responsible supply chain management, transparency, and the carbon and water footprint of our technology.

Fueling American Prosperity.

First Solar's technology helps deliver the lifeblood of America: electricity.

From America's largest, most innovative companies, to shepherds grazing their flock, large-scale solar is helping fuel American prosperity. Large-scale solar power plants help communities around the nation make the most of their day. They also support the energy needs of data centers that form the backbone of social media networks and the cloud, which in turn directly create hi-tech jobs, while enabling hi-tech opportunities.



LEADING THE WORLD'S
SUSTAINABLE ENERGY FUTURE

**Find out more at
FirstSolar.com/AmericasSolarCompany**



EXHIBIT F

FEDERAL AVIATION ADMINISTRATION: NOTICE CRITERIA TOOL





Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

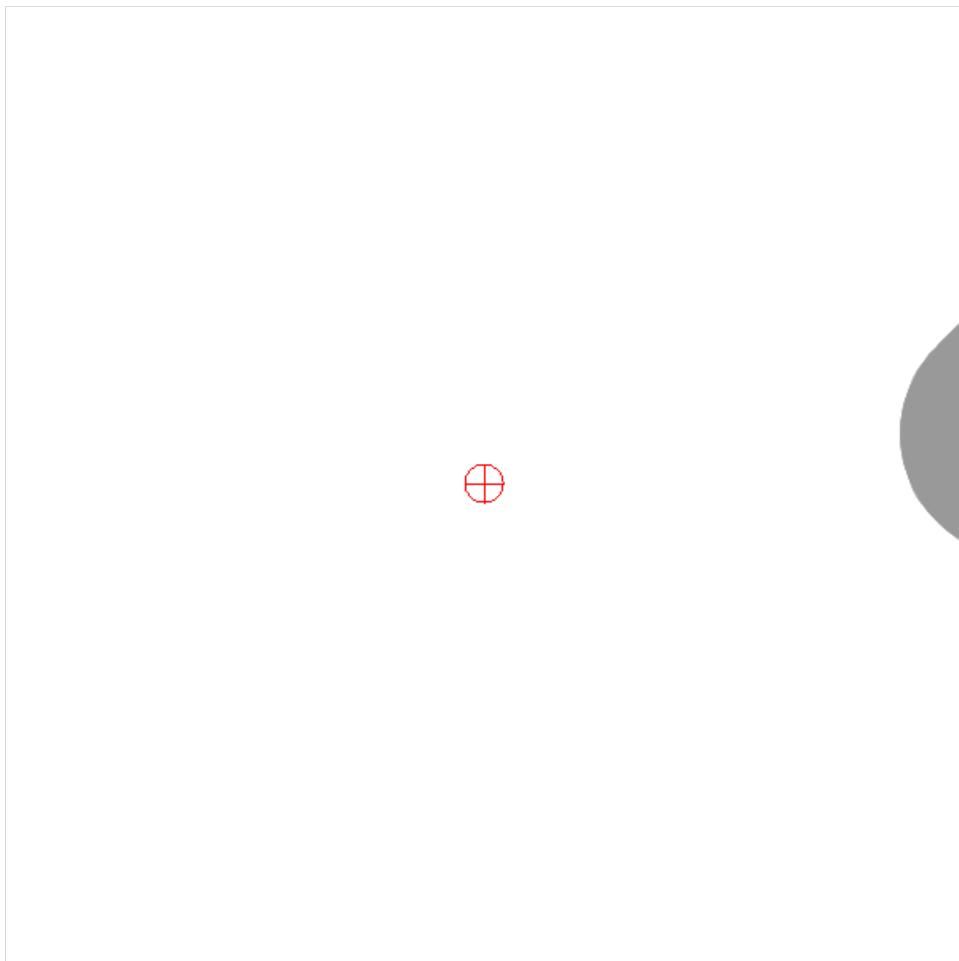
If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	5	M	36.47	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	44	M	47.58	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	968 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway						
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

You do not exceed Notice Criteria.





Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2018.2.0](#)

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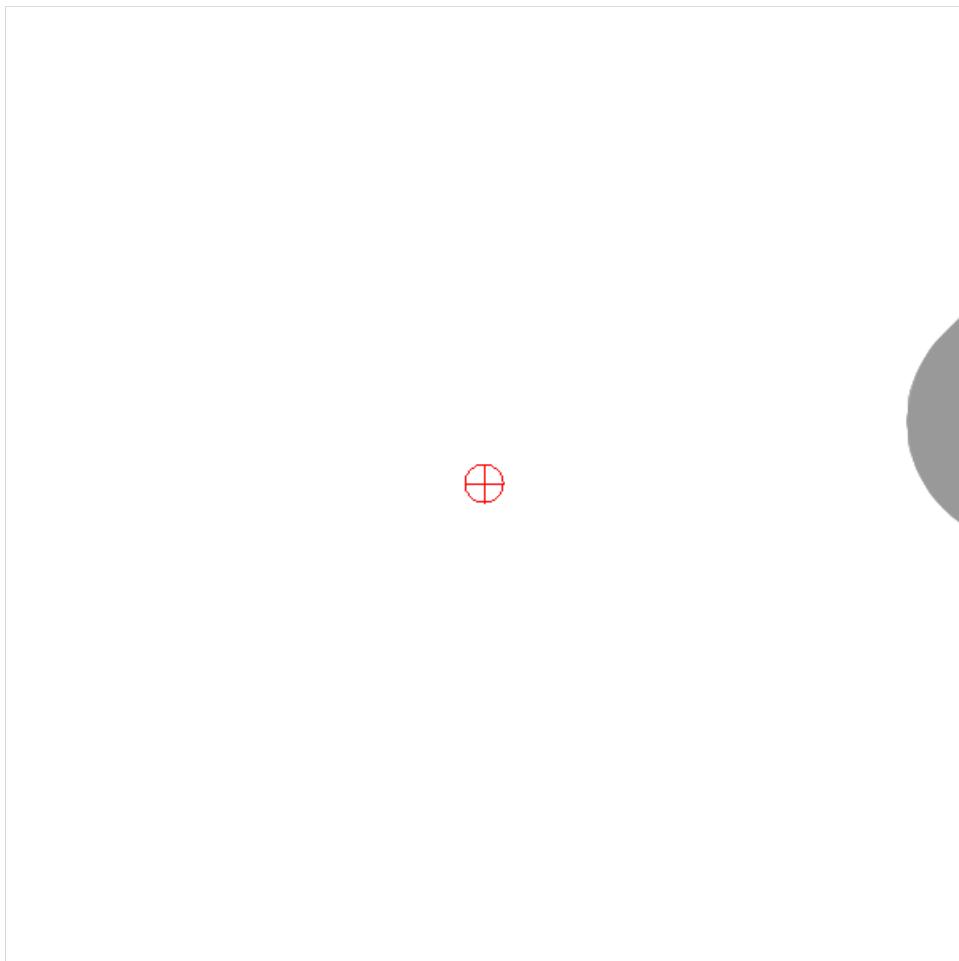
If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	5	M	26.28	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	44	M	54.45	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	961 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway						
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

You do not exceed Notice Criteria.





Notice Criteria Tool

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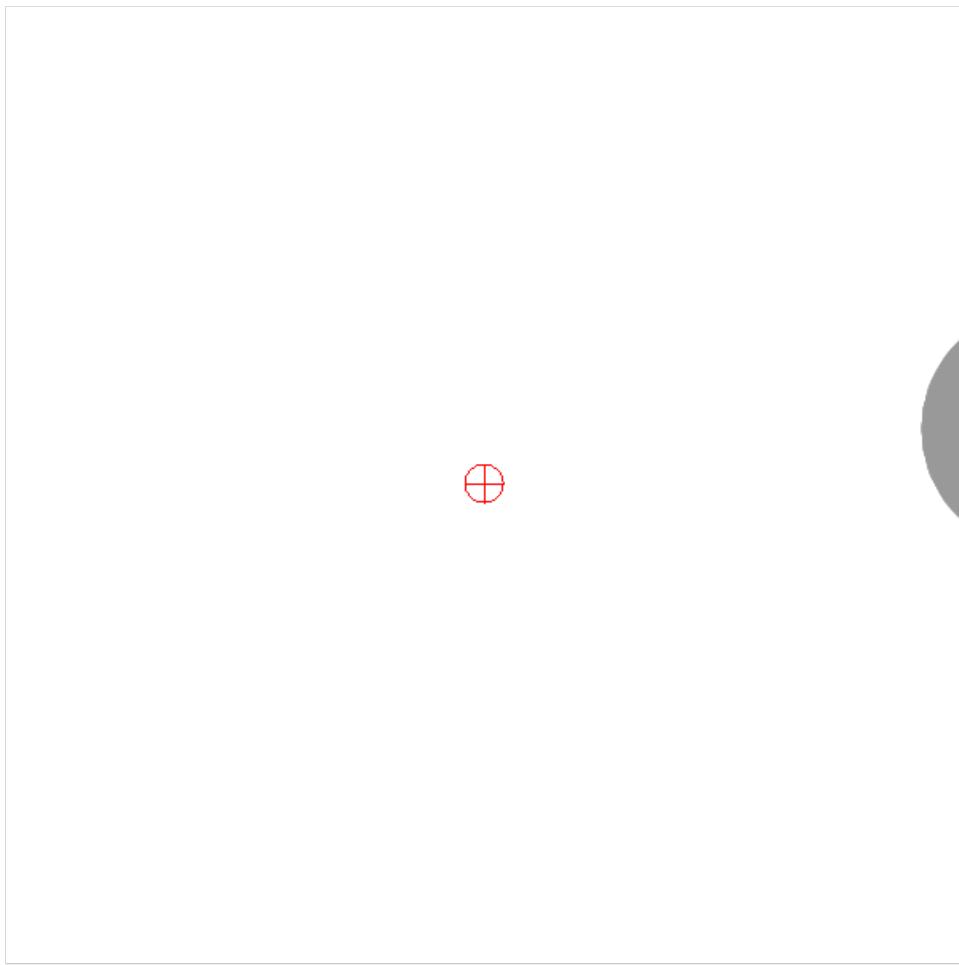
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The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	5	M	32.54	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	45	M	8.96	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	997 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway						
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

You do not exceed Notice Criteria.





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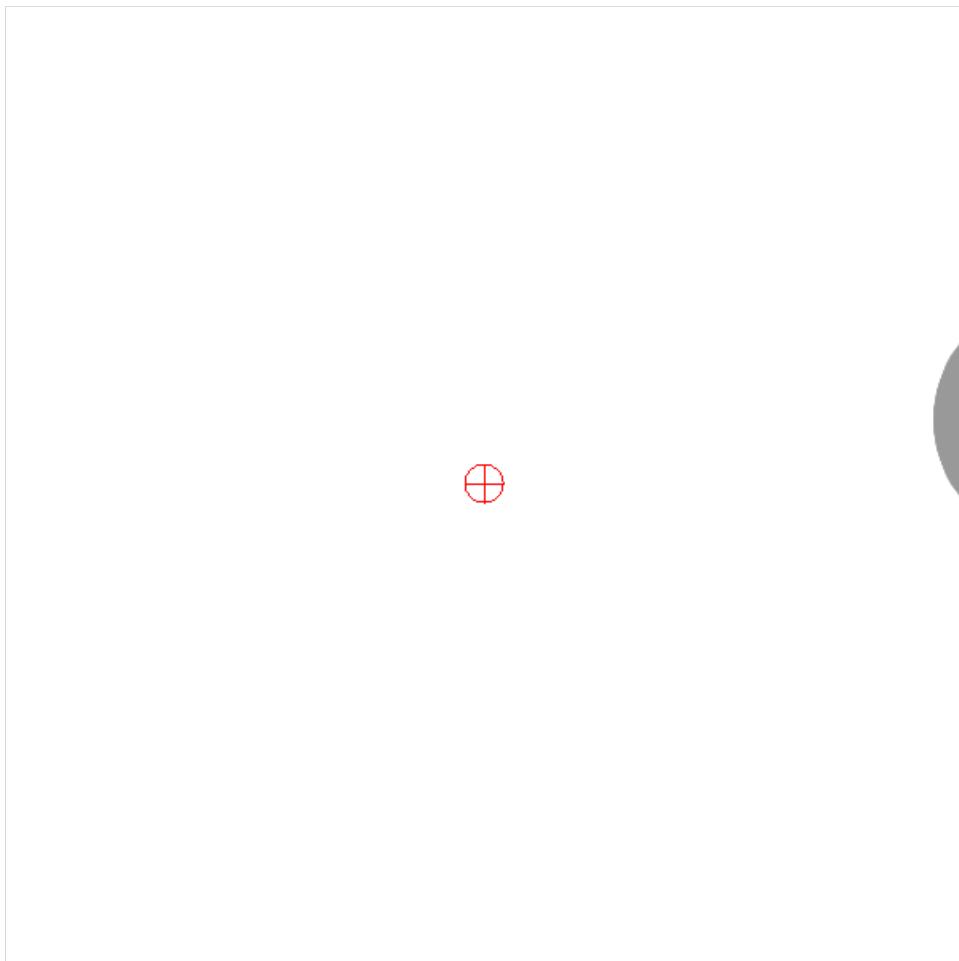
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The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	5	M	25.13	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	45	M	20.94	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	1061 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway						
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

You do not exceed Notice Criteria.





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- filing has been requested by the FAA

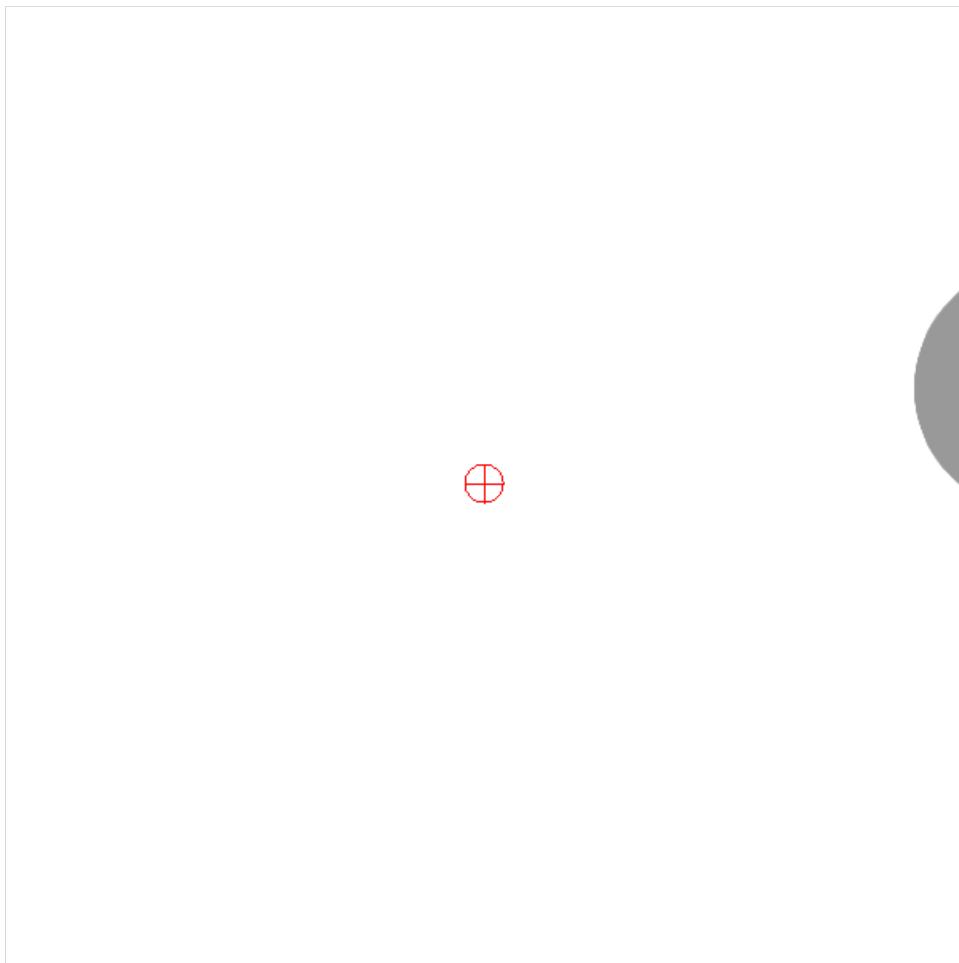
If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	4	M	59.79	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	45	M	1.62	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	1072 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway						
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

You do not exceed Notice Criteria.





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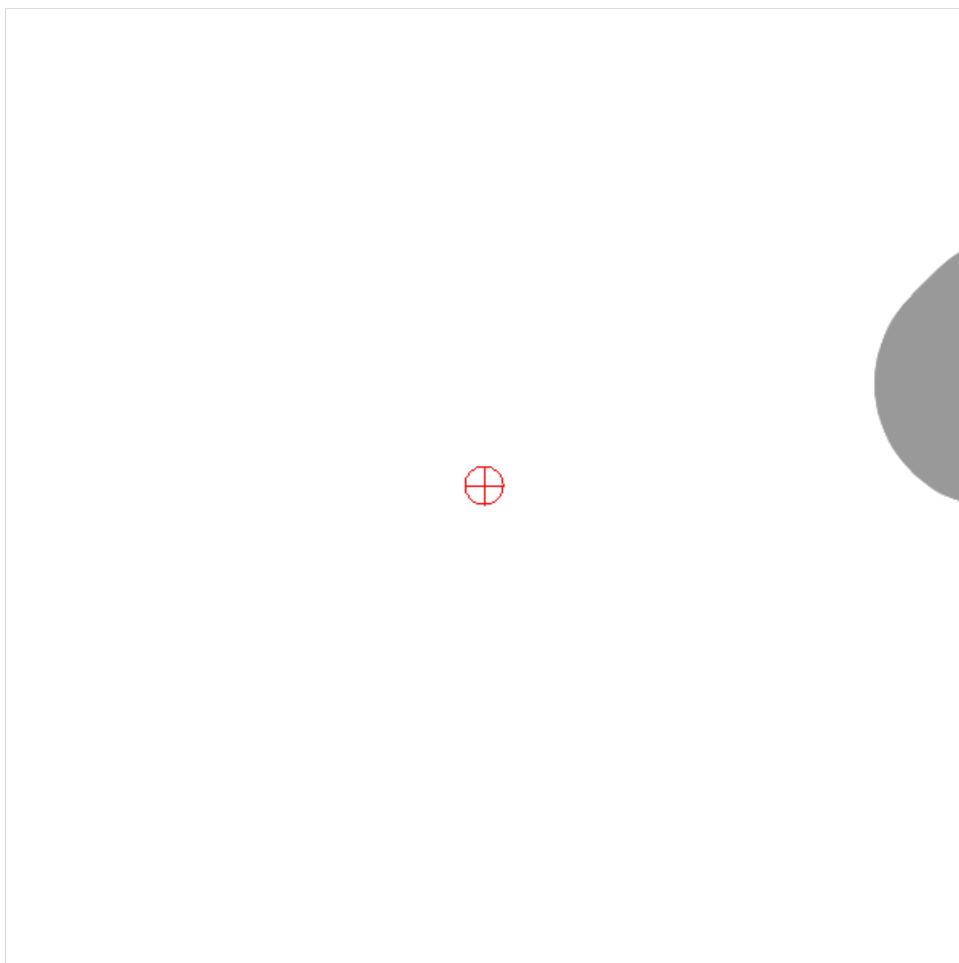
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The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	4	M	54.43	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	44	M	22.14	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	1007 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/>						
<small>(Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway</small>							
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

You do not exceed Notice Criteria.





Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2018.2.0](#)

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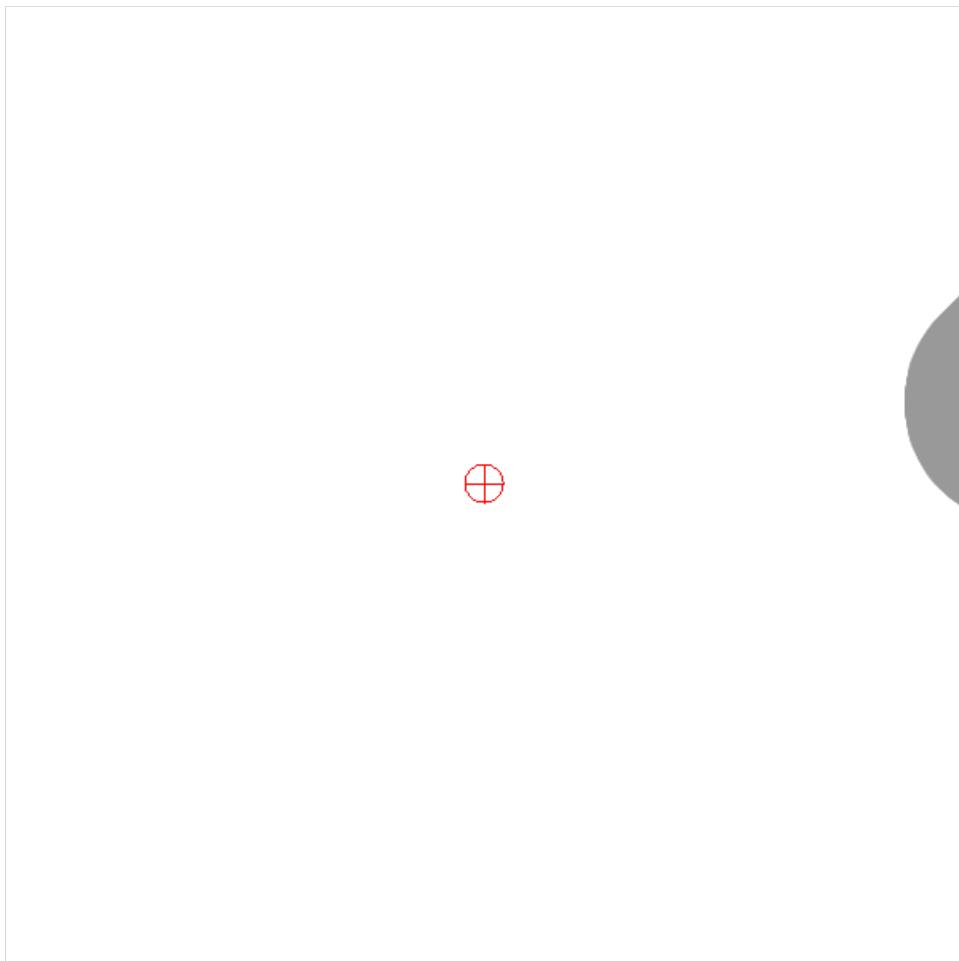
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The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	5	M	10.97	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	44	M	51.81	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	1038 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway						
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

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Notice Criteria Tool

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The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	37	Deg	5	M	18.29	S	N <input type="button" value="▼"/>
Longitude:	79	Deg	44	M	40.70	S	W <input type="button" value="▼"/>
Horizontal Datum:	NAD83 <input type="button" value="▼"/>						
Site Elevation (SE):	988 (nearest foot)						
Structure Height :	12 (nearest foot)						
Traverseway:	No Traverseway <input type="button" value="▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway						
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes						

Results

You do not exceed Notice Criteria.

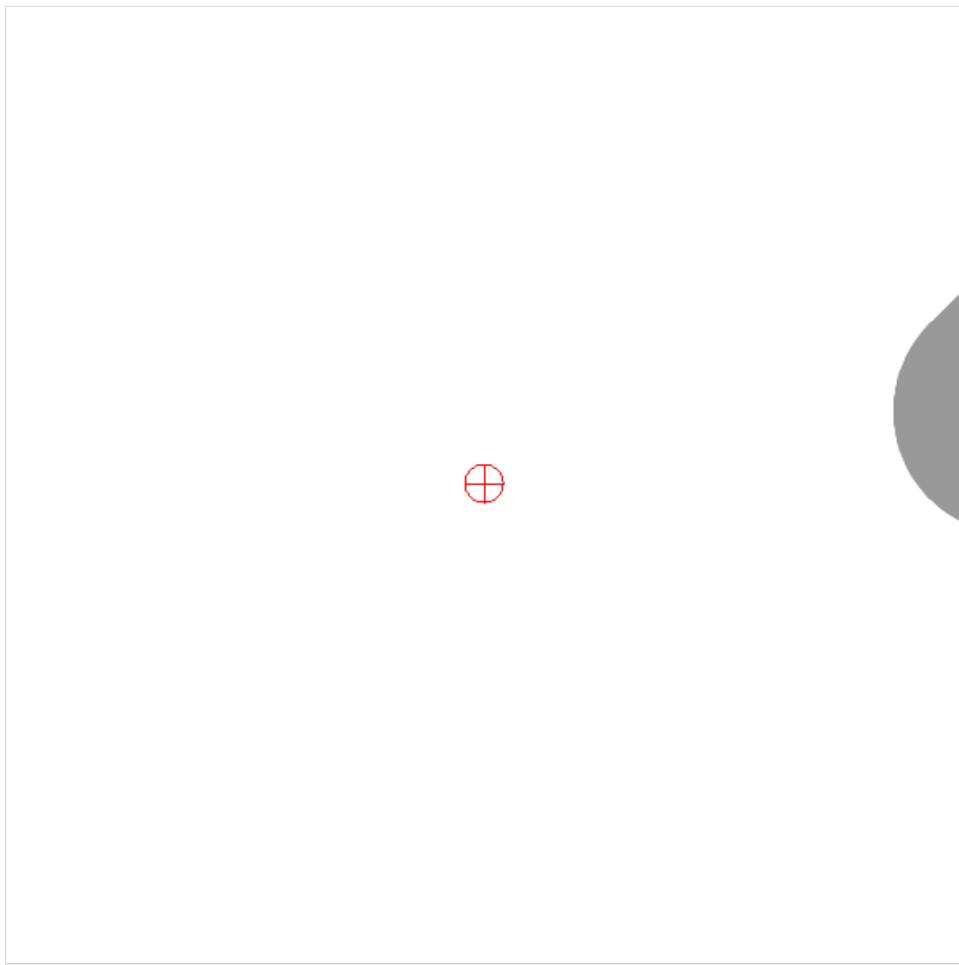




EXHIBIT G

GLINT AND GLARE STUDY

19 January 2023



Glare Impact Study for Mountain Brook Solar

Chris Sandifer, PE
Virginia License 0402062831
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Chris Sandifer PE

This glare analysis was prepared for Mountain Brook Solar for a 20 MW AC solar photovoltaic array located at the intersection Brooks Mill Road and Burnt Chimney Road in Franklin County VA. The Franklin County Parcel ID numbers are: 0340003300, 0340002300, 0340003100 and 0340003100. This project would utilize approximately ~184 acres of the ±258 acres in the parcels for the installation of the array.

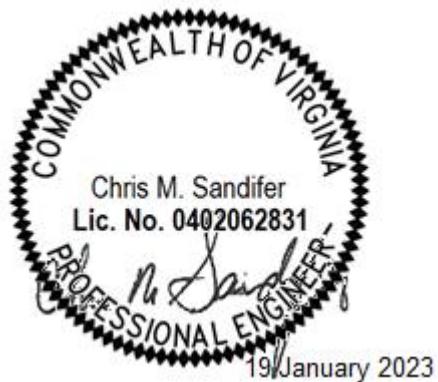
The array was modeled as a single axis tracking with maximum of a 60° tilt with no back tracking and the panels having an antireflective coating. Included in the analysis were 27 observations points for the existing residences adjacent to solar properties and 1.4 miles each of the two public roads which border the site.

The reflectance of the module surfaces is highly dependent on the incidence angle of the sunlight relative to the surface normal. In general, the reflectance of glass is relatively low (< 5%) at small incidence angles but increases rapidly above 60°. Higher reflectances increase the glare intensity, retinal irradiance, and potential for ocular impact. When the sun's angle is tracked, the rays are maintained very close to the surface normal and very little glare would normally be expected. For a person to experience glare from a panel, they would also have to be looking across the array in the direction of the sun as it was close to the horizon and the panel would also need a zero tilt angle east to west (abnormal for a tracking system except at the hour of high noon). Even in this rare incidence for a fixed tilt installation, the sun's glare often masks any glare contributions by the panels themselves. Airports and USAF bases are common locations for large solar farms.

The Forge Solar program (formally SGHAT) found that under normal operation, there were zero minutes of glare visible at any of the analyzed locations at any time of the day during any season of the year.

Appendix A Forge Solar Results

Appendix B: Sandifer Curricula Vitae



FORGESOLAR GLARE ANALYSIS

Project: **Mountain Brook**

20MW project located on approximately 258 acres in Franklin County, Virginia

Site configuration: **Mountain Brook Solar LLC no back tracking 600**

Client: Energix

Site description: 20 MW AC, single axis tracking, First Solar modules with antireflective coating located near the intersection of Brooks Mill Road and Burnt Chimney Road in Franklin County VA

Created 12 Jan, 2023

Updated 19 Jan, 2023

Time-step 1 minute

Timezone offset UTC-8

Site ID 82341.14569

Category 500 kW to 1 MW

DNI peaks at 1,000.0 W/m²

Ocular transmission coefficient 0.5

Pupil diameter 0.002 m

Eye focal length 0.017 m

Sun subtended angle 9.3 mrad

PV analysis methodology V2



Summary of Results

No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
			°	°	min	hr	
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

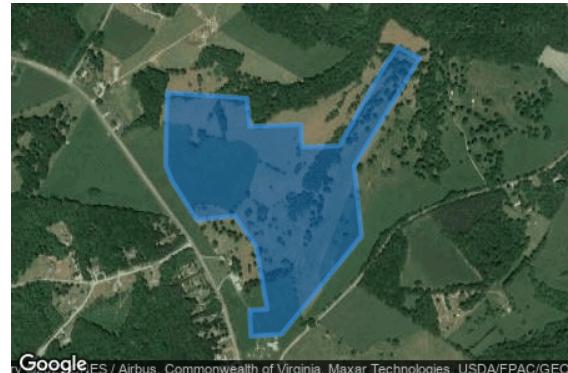
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Brooks Mill Road	0	0.0	0	0.0
Burnt Chimney Road	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0
OP 21	0	0.0	0	0.0
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0
OP 25	0	0.0	0	0.0
OP 26	0	0.0	0	0.0
OP 27	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV array 1
Axis tracking: Single-axis rotation
Backtracking: None
Tracking axis orientation: 180.0°
Tracking axis tilt: 0.0°
Tracking axis panel offset: 0.0°
Max tracking angle: 60.0°
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	37.084900	-79.750223	1069.65	0.00	1069.65
2	37.084849	-79.751274	1074.39	0.00	1074.39
3	37.085568	-79.751317	1066.58	0.00	1066.58
4	37.085594	-79.750716	1068.93	0.00	1068.93
5	37.087297	-79.751103	1023.71	0.00	1023.71
6	37.088144	-79.751832	1029.20	0.00	1029.20
7	37.088016	-79.753130	1058.03	0.00	1058.03
8	37.089103	-79.753999	1072.38	0.00	1072.38
9	37.089505	-79.754203	1071.09	0.00	1071.09
10	37.091508	-79.754160	1014.36	0.00	1014.36
11	37.091354	-79.751414	988.73	0.00	988.73
12	37.090583	-79.751307	1015.04	0.00	1015.04
13	37.090635	-79.749547	1005.17	0.00	1005.17
14	37.090018	-79.749526	984.37	0.00	984.37
15	37.090053	-79.748238	980.24	0.00	980.24
16	37.092141	-79.746758	924.06	0.00	924.06
17	37.092757	-79.746243	933.78	0.00	933.78
18	37.092449	-79.745470	920.57	0.00	920.57
19	37.089505	-79.747723	1005.67	0.00	1005.67
20	37.087586	-79.747469	1014.58	0.00	1014.58

Name: PV array 2
Axis tracking: Single-axis rotation
Backtracking: None
Tracking axis orientation: 180.0°
Tracking axis tilt: 0.0°
Tracking axis panel offset: 0.0°
Max tracking angle: 60.0°
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	37.088088	-79.746521	1019.54	0.00	1019.54
2	37.089312	-79.746854	973.94	0.00	973.94
3	37.091974	-79.744794	931.28	0.00	931.28
4	37.091845	-79.741092	992.32	0.00	992.32
5	37.090065	-79.740770	994.09	0.00	994.09
6	37.089834	-79.743388	977.31	0.00	977.31
7	37.089774	-79.743753	994.48	0.00	994.48

Name: PV array 3
Axis tracking: Single-axis rotation
Backtracking: None
Tracking axis orientation: 180.0°
Tracking axis tilt: 0.0°
Tracking axis panel offset: 0.0°
Max tracking angle: 60.0°
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



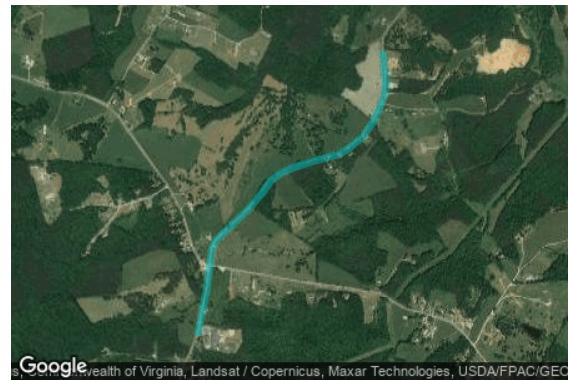
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	37.085890	-79.747658	1048.69	0.00	1048.69
2	37.084272	-79.749686	1058.98	0.00	1058.98
3	37.083305	-79.749911	1058.64	0.00	1058.64
4	37.082569	-79.744772	1011.50	0.00	1011.50
5	37.082270	-79.743131	1025.68	0.00	1025.68
6	37.083365	-79.743099	1004.12	0.00	1004.12
7	37.083836	-79.744279	963.23	0.00	963.23

Route Receptors

Name: Brooks Mill Road

Path type: Two-way

Observer view angle: 50.0°

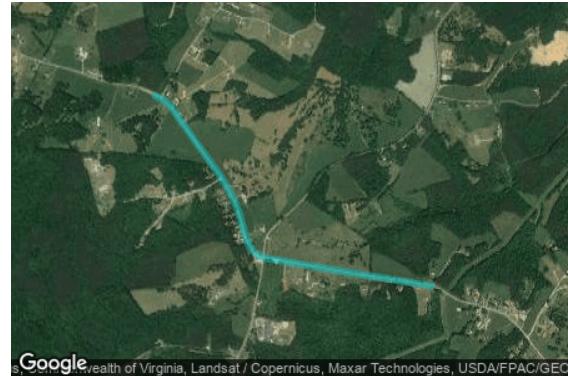


Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	37.079424	-79.751270	1055.83	10.00	1065.83
2	37.081709	-79.750702	1063.09	10.00	1073.09
3	37.083096	-79.750455	1073.80	10.00	1083.80
4	37.083815	-79.750358	1078.57	10.00	1088.57
5	37.084243	-79.750208	1068.01	10.00	1078.01
6	37.084585	-79.749908	1066.37	10.00	1076.37
7	37.086117	-79.747869	1047.85	10.00	1057.85
8	37.087020	-79.746903	1040.27	10.00	1050.27
9	37.087765	-79.746238	1024.89	10.00	1034.89
10	37.088090	-79.745691	1015.06	10.00	1025.06
11	37.088449	-79.744715	1004.07	10.00	1014.07
12	37.088869	-79.743019	995.26	10.00	1005.26
13	37.089143	-79.741732	1001.91	10.00	1011.91
14	37.089434	-79.741013	1006.97	10.00	1016.97
15	37.089904	-79.740294	1007.61	10.00	1017.61
16	37.090161	-79.739918	1005.62	10.00	1015.62
17	37.090563	-79.739575	1005.82	10.00	1015.82
18	37.091051	-79.739172	1006.22	10.00	1016.22
19	37.091654	-79.738821	996.53	10.00	1006.53
20	37.092338	-79.738489	983.50	10.00	993.50
21	37.092912	-79.738360	975.99	10.00	985.99
22	37.094649	-79.738553	951.65	10.00	961.65

Name: Burnt Chimney Road

Path type: Two-way

Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	37.081543	-79.738939	1010.41	10.00	1020.41
2	37.082022	-79.742512	1032.25	10.00	1042.25
3	37.082107	-79.743435	1026.39	10.00	1036.39
4	37.083058	-79.750285	1071.12	10.00	1081.12
5	37.083083	-79.750446	1073.60	10.00	1083.60
6	37.083182	-79.750784	1077.29	10.00	1087.29
7	37.083310	-79.750977	1079.12	10.00	1089.12
8	37.083507	-79.751261	1079.21	10.00	1089.21
9	37.083768	-79.751471	1078.22	10.00	1088.22
10	37.084354	-79.751734	1075.17	10.00	1085.17
11	37.085467	-79.752125	1064.13	10.00	1074.13
12	37.085878	-79.752307	1057.04	10.00	1067.04
13	37.086169	-79.752463	1055.83	10.00	1065.83
14	37.086511	-79.752678	1059.22	10.00	1069.22
15	37.087046	-79.753056	1068.69	10.00	1078.69
16	37.087414	-79.753319	1072.09	10.00	1082.09
17	37.087581	-79.753467	1072.79	10.00	1082.79
18	37.087777	-79.753636	1071.89	10.00	1081.89
19	37.089454	-79.755163	1066.25	10.00	1076.25
20	37.090580	-79.756172	1063.95	10.00	1073.95
21	37.090900	-79.756435	1066.65	10.00	1076.65
22	37.091097	-79.756607	1071.65	10.00	1081.65
23	37.091277	-79.756767	1074.35	10.00	1084.35
24	37.091457	-79.756982	1077.09	10.00	1087.09
25	37.091615	-79.757240	1079.34	10.00	1089.34
26	37.091752	-79.757476	1082.32	10.00	1092.32
27	37.091919	-79.757915	1088.21	10.00	1098.21

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	37.085284	-79.744597	1010.12	10.00
OP 2	2	37.082066	-79.738809	1015.22	10.00
OP 3	3	37.091021	-79.738940	1007.45	10.00
OP 4	4	37.094467	-79.747340	998.21	10.00
OP 5	5	37.094651	-79.748703	991.61	10.00
OP 6	6	37.094159	-79.755180	1038.35	10.00
OP 7	7	37.091547	-79.756340	1070.45	10.00
OP 8	8	37.090646	-79.755549	1058.11	10.00
OP 9	9	37.086826	-79.751970	1069.02	10.00
OP 10	10	37.086295	-79.751557	1062.07	10.00
OP 11	11	37.081439	-79.742689	1038.50	0.00
OP 12	12	37.081486	-79.743494	1019.99	0.00
OP 13	13	37.081931	-79.744556	1023.65	0.00
OP 14	14	37.081833	-79.746133	1035.34	0.00
OP 15	15	37.081700	-79.746884	1038.34	0.00
OP 16	16	37.082436	-79.748676	1061.62	0.00
OP 17	17	37.083925	-79.751975	1078.16	0.00
OP 18	18	37.084336	-79.752141	1074.75	0.00
OP 19	19	37.084580	-79.752222	1075.73	0.00
OP 20	20	37.084935	-79.752356	1067.91	0.00
OP 21	21	37.085363	-79.752479	1058.71	0.00
OP 22	22	37.085654	-79.752769	1046.93	0.00
OP 23	23	37.085941	-79.752930	1042.98	0.00
OP 24	24	37.086382	-79.753032	1054.07	0.00
OP 25	25	37.086660	-79.753236	1067.04	0.00
OP 26	26	37.087520	-79.753938	1086.23	0.00
OP 27	27	37.087828	-79.754207	1085.11	0.00

Glare Analysis Results

Summary of Results

No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Brooks Mill Road	0	0.0	0	0.0
Burnt Chimney Road	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0
OP 21	0	0.0	0	0.0
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0
OP 25	0	0.0	0	0.0
OP 26	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 27	0	0.0	0	0.0

PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Brooks Mill Road	0	0.0	0	0.0
Burnt Chimney Road	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0
OP 21	0	0.0	0	0.0
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0
OP 25	0	0.0	0	0.0
OP 26	0	0.0	0	0.0
OP 27	0	0.0	0	0.0

PV array 1 and Brooks Mill

Road

Receptor type: Route
No glare found

PV array 1 and OP 1

Receptor type: Observation Point
No glare found

PV array 1 and OP 3

Receptor type: Observation Point
No glare found

PV array 1 and OP 5

Receptor type: Observation Point
No glare found

PV array 1 and OP 7

Receptor type: Observation Point
No glare found

PV array 1 and OP 9

Receptor type: Observation Point
No glare found

PV array 1 and OP 11

Receptor type: Observation Point
No glare found

PV array 1 and OP 13

Receptor type: Observation Point
No glare found

PV array 1 and OP 15

Receptor type: Observation Point
No glare found

PV array 1 and OP 17

Receptor type: Observation Point
No glare found

PV array 1 and Burnt Chimney

Road

Receptor type: Route
No glare found

PV array 1 and OP 2

Receptor type: Observation Point
No glare found

PV array 1 and OP 4

Receptor type: Observation Point
No glare found

PV array 1 and OP 6

Receptor type: Observation Point
No glare found

PV array 1 and OP 8

Receptor type: Observation Point
No glare found

PV array 1 and OP 10

Receptor type: Observation Point
No glare found

PV array 1 and OP 12

Receptor type: Observation Point
No glare found

PV array 1 and OP 14

Receptor type: Observation Point
No glare found

PV array 1 and OP 16

Receptor type: Observation Point
No glare found

PV array 1 and OP 18

Receptor type: Observation Point
No glare found

PV array 1 and OP 19

Receptor type: Observation Point

No glare found

PV array 1 and OP 21

Receptor type: Observation Point

No glare found

PV array 1 and OP 23

Receptor type: Observation Point

No glare found

PV array 1 and OP 25

Receptor type: Observation Point

No glare found

PV array 1 and OP 27

Receptor type: Observation Point

No glare found

PV array 1 and OP 20

Receptor type: Observation Point

No glare found

PV array 1 and OP 22

Receptor type: Observation Point

No glare found

PV array 1 and OP 24

Receptor type: Observation Point

No glare found

PV array 1 and OP 26

Receptor type: Observation Point

No glare found

PV: PV array 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Brooks Mill Road	0	0.0	0	0.0
Burnt Chimney Road	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0
OP 21	0	0.0	0	0.0
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0
OP 25	0	0.0	0	0.0
OP 26	0	0.0	0	0.0
OP 27	0	0.0	0	0.0

PV array 2 and Brooks Mill Road

Receptor type: Route
No glare found

PV array 2 and Burnt Chimney Road

Receptor type: Route
No glare found

PV array 2 and OP 1

Receptor type: Observation Point

No glare found

PV array 2 and OP 3

Receptor type: Observation Point

No glare found

PV array 2 and OP 5

Receptor type: Observation Point

No glare found

PV array 2 and OP 7

Receptor type: Observation Point

No glare found

PV array 2 and OP 9

Receptor type: Observation Point

No glare found

PV array 2 and OP 11

Receptor type: Observation Point

No glare found

PV array 2 and OP 13

Receptor type: Observation Point

No glare found

PV array 2 and OP 15

Receptor type: Observation Point

No glare found

PV array 2 and OP 17

Receptor type: Observation Point

No glare found

PV array 2 and OP 19

Receptor type: Observation Point

No glare found

PV array 2 and OP 2

Receptor type: Observation Point

No glare found

PV array 2 and OP 4

Receptor type: Observation Point

No glare found

PV array 2 and OP 6

Receptor type: Observation Point

No glare found

PV array 2 and OP 8

Receptor type: Observation Point

No glare found

PV array 2 and OP 10

Receptor type: Observation Point

No glare found

PV array 2 and OP 12

Receptor type: Observation Point

No glare found

PV array 2 and OP 14

Receptor type: Observation Point

No glare found

PV array 2 and OP 16

Receptor type: Observation Point

No glare found

PV array 2 and OP 18

Receptor type: Observation Point

No glare found

PV array 2 and OP 20

Receptor type: Observation Point

No glare found

PV array 2 and OP 21

Receptor type: Observation Point

No glare found

PV array 2 and OP 22

Receptor type: Observation Point

No glare found

PV array 2 and OP 23

Receptor type: Observation Point

No glare found

PV array 2 and OP 24

Receptor type: Observation Point

No glare found

PV array 2 and OP 25

Receptor type: Observation Point

No glare found

PV array 2 and OP 26

Receptor type: Observation Point

No glare found

PV array 2 and OP 27

Receptor type: Observation Point

No glare found

PV: PV array 3 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Brooks Mill Road	0	0.0	0	0.0
Burnt Chimney Road	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0
OP 21	0	0.0	0	0.0
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0
OP 25	0	0.0	0	0.0
OP 26	0	0.0	0	0.0
OP 27	0	0.0	0	0.0

PV array 3 and Brooks Mill Road

Receptor type: Route
No glare found

PV array 3 and Burnt Chimney Road

Receptor type: Route
No glare found

PV array 3 and OP 1

Receptor type: Observation Point

No glare found

PV array 3 and OP 3

Receptor type: Observation Point

No glare found

PV array 3 and OP 5

Receptor type: Observation Point

No glare found

PV array 3 and OP 7

Receptor type: Observation Point

No glare found

PV array 3 and OP 9

Receptor type: Observation Point

No glare found

PV array 3 and OP 11

Receptor type: Observation Point

No glare found

PV array 3 and OP 13

Receptor type: Observation Point

No glare found

PV array 3 and OP 15

Receptor type: Observation Point

No glare found

PV array 3 and OP 17

Receptor type: Observation Point

No glare found

PV array 3 and OP 19

Receptor type: Observation Point

No glare found

PV array 3 and OP 2

Receptor type: Observation Point

No glare found

PV array 3 and OP 4

Receptor type: Observation Point

No glare found

PV array 3 and OP 6

Receptor type: Observation Point

No glare found

PV array 3 and OP 8

Receptor type: Observation Point

No glare found

PV array 3 and OP 10

Receptor type: Observation Point

No glare found

PV array 3 and OP 12

Receptor type: Observation Point

No glare found

PV array 3 and OP 14

Receptor type: Observation Point

No glare found

PV array 3 and OP 16

Receptor type: Observation Point

No glare found

PV array 3 and OP 18

Receptor type: Observation Point

No glare found

PV array 3 and OP 20

Receptor type: Observation Point

No glare found

PV array 3 and OP 21

Receptor type: Observation Point

No glare found

PV array 3 and OP 22

Receptor type: Observation Point

No glare found

PV array 3 and OP 23

Receptor type: Observation Point

No glare found

PV array 3 and OP 24

Receptor type: Observation Point

No glare found

PV array 3 and OP 25

Receptor type: Observation Point

No glare found

PV array 3 and OP 26

Receptor type: Observation Point

No glare found

PV array 3 and OP 27

Receptor type: Observation Point

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.

Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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Chris Sandifer PE

CHRIS SANDIFER, PE

Spring Hope, NC 27882 • 919.632.6519

chrissandifer@embarqmail.com

Graduate Electrical Engineer with broad expertise in the design, construction, maintenance and operation of electrical power distribution systems since 1972. Extensive experience and proficiency in the redesign, repair, and rebuilding of large rotating electrical equipment and large power transformers. Maintains a comprehensive knowledge of electrical and mechanical physics that enable a superior design. 30 plus years electric utility engineering experience.

Solar Experience

Independent Engineering Consultant

2010 - 2023

- Provide a total scope of medium and high voltage interconnection services for utility scale solar voltaic renewable energy developers including circuit design and equipment specifications.
- Vet potential solar farm sites for interconnection to the grid pursuant to the utility's compatibility requirements and congestion restraints.
- Provided preliminary solar site layouts, interconnection application technical data, and a single line diagram for each Interconnection package for the utility.
- Perform post mortem failure analyses for all types of renewable generator equipment including fluid filled transformers, switchgear and inverters.
- Provided expert testimony as to the 'health and safety' and the harmony in hundreds of hearings for zoning, CUPs & SUPs in multiple states.
- Provided decommissioning reports, glare analysis, EMI, sound pressure et al. site specific reports.
- Registered professional engineer in SC, NC, FL, GA, VA & TX.
- Hold multiple FCC licenses including the GROL (General Radiotelephone Operators License).
- NABCEP board certified Photovoltaic System Inspector.
- NC Dept. of Agriculture certified Pesticide Applicator
- NCSBA certified Beekeeper

Electrical Contractor

1999 - 2023

Licensed Electrical Contractor with the Unlimited Classification in NC: That business focus has been primarily the construction of medium and high voltage interconnections of utility scale renewable generators including photovoltaic, hydroelectric and landfill gas generators.

Education

Bachelor of Science, Electrical and Computer Engineering
Clemson University, Clemson, South Carolina

Farming

I grew up on a farm in SC and currently work and live on my farm in Nash County, NC. I lease approximately 100 acres for photovoltaic energy production. The importance of having a steady and stable cash flow for a percentage of the farm income is appreciated.

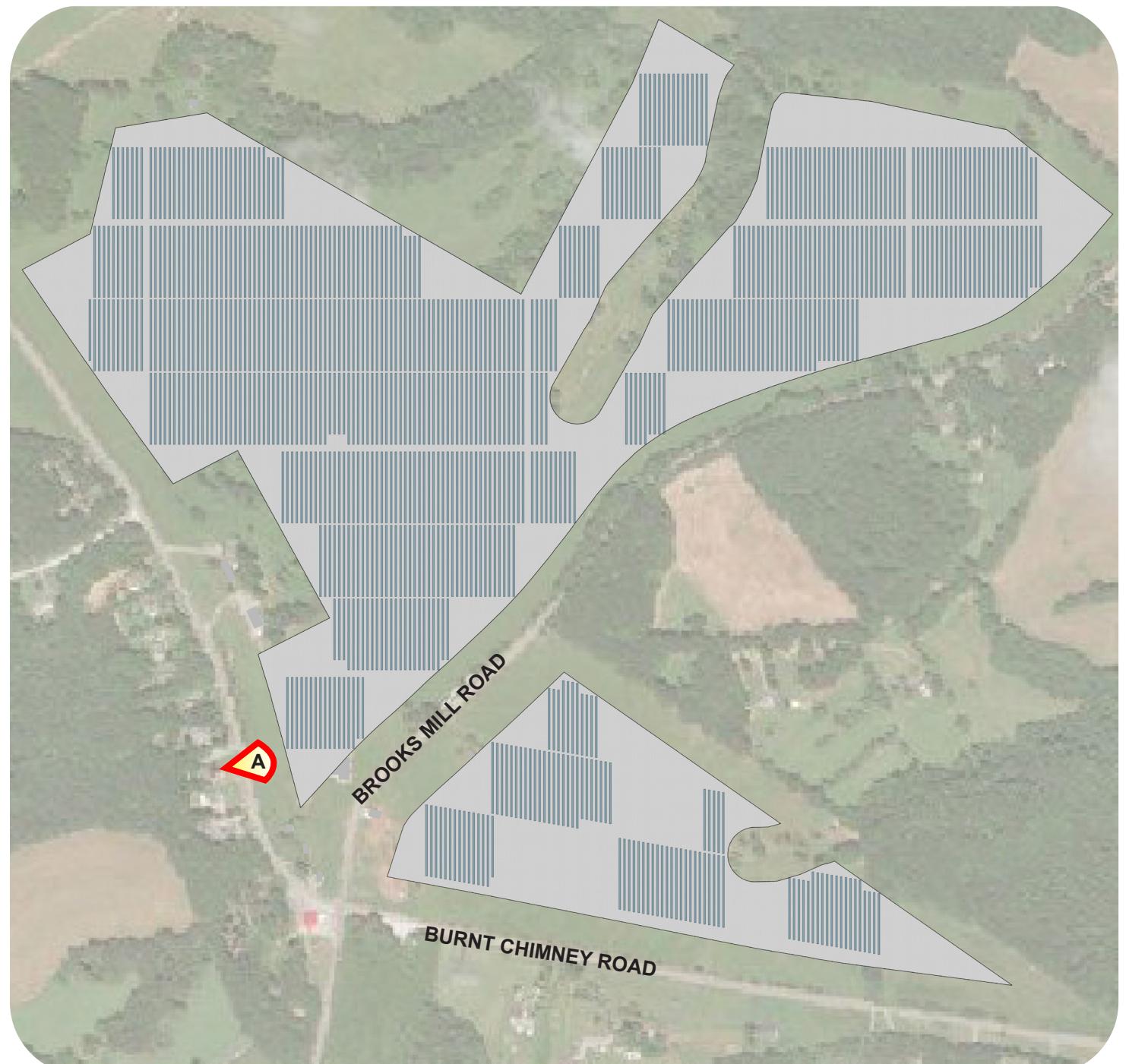
Planning Board

I serve on the Nash County Planning Board. Nash County has approved 38 utility-scale solar farms to date. The Board's experience with solar farms, as well as that of the Nash County Planning Department staff, has been very positive, and we look forward to more solar projects to benefit our community.



EXHIBIT H

LANDSCAPING RENDERINGS



KEY PLAN



EXISTING CONDITIONS | VIEW A



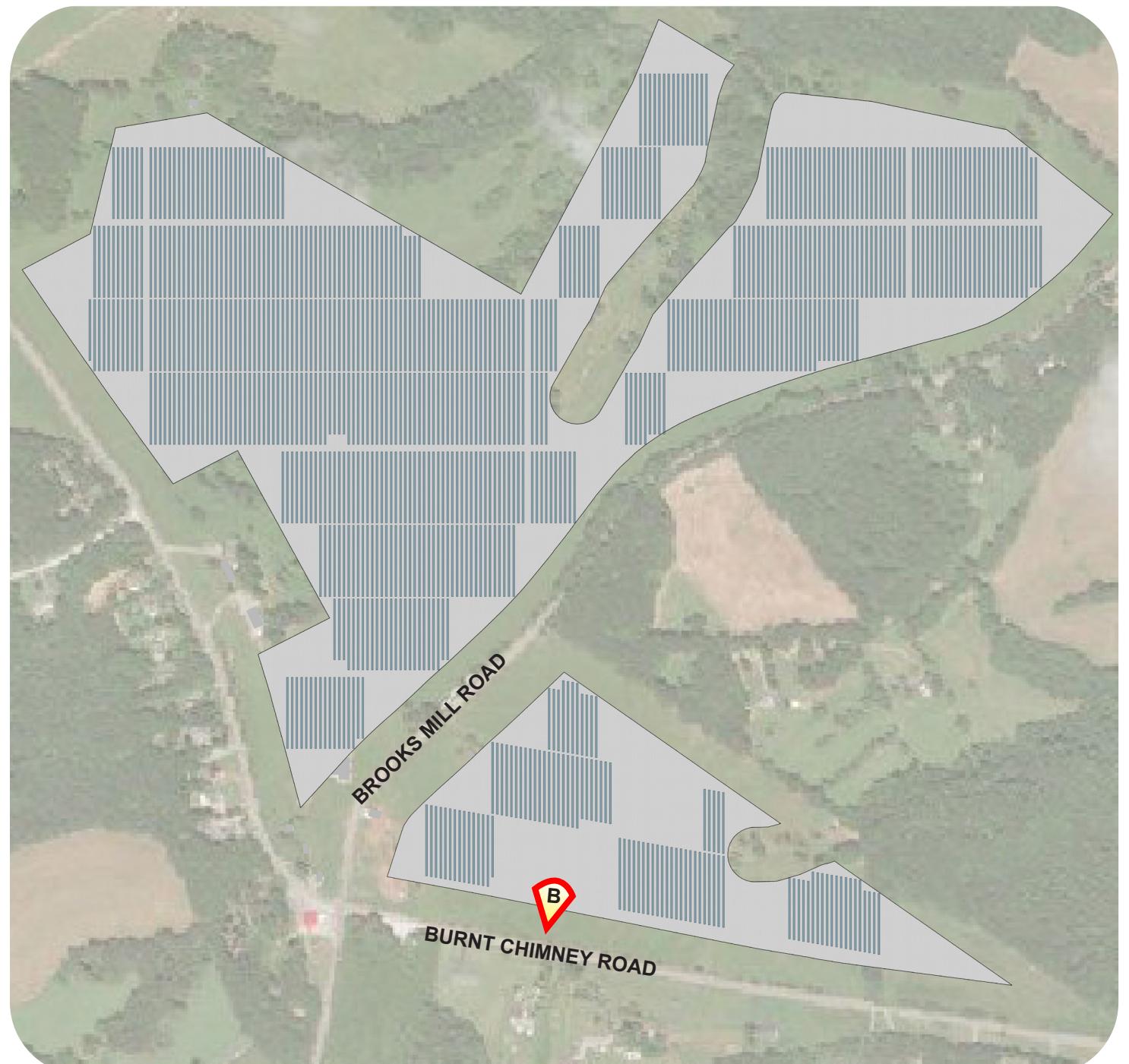
PROPOSED LANDSCAPE BUFFER - ESTIMATED TIME OF PLANTING (6' HT.)



PROPOSED LANDSCAPE BUFFER - ESTIMATED 3 YEAR GROWTH



PROPOSED LANDSCAPE BUFFER - ESTIMATED 10 YEAR GROWTH



KEY PLAN



EXISTING CONDITIONS | VIEW A



PROPOSED LANDSCAPE BUFFER - ESTIMATED TIME OF PLANTING (6' HT.)



PROPOSED LANDSCAPE BUFFER - ESTIMATED 3 YEAR GROWTH



PROPOSED LANDSCAPE BUFFER - ESTIMATED 10 YEAR GROWTH



EASTERN RED CEDAR



GREEN GIANT ARBORVITAE



DON'S DWARF WAX MYRTLE



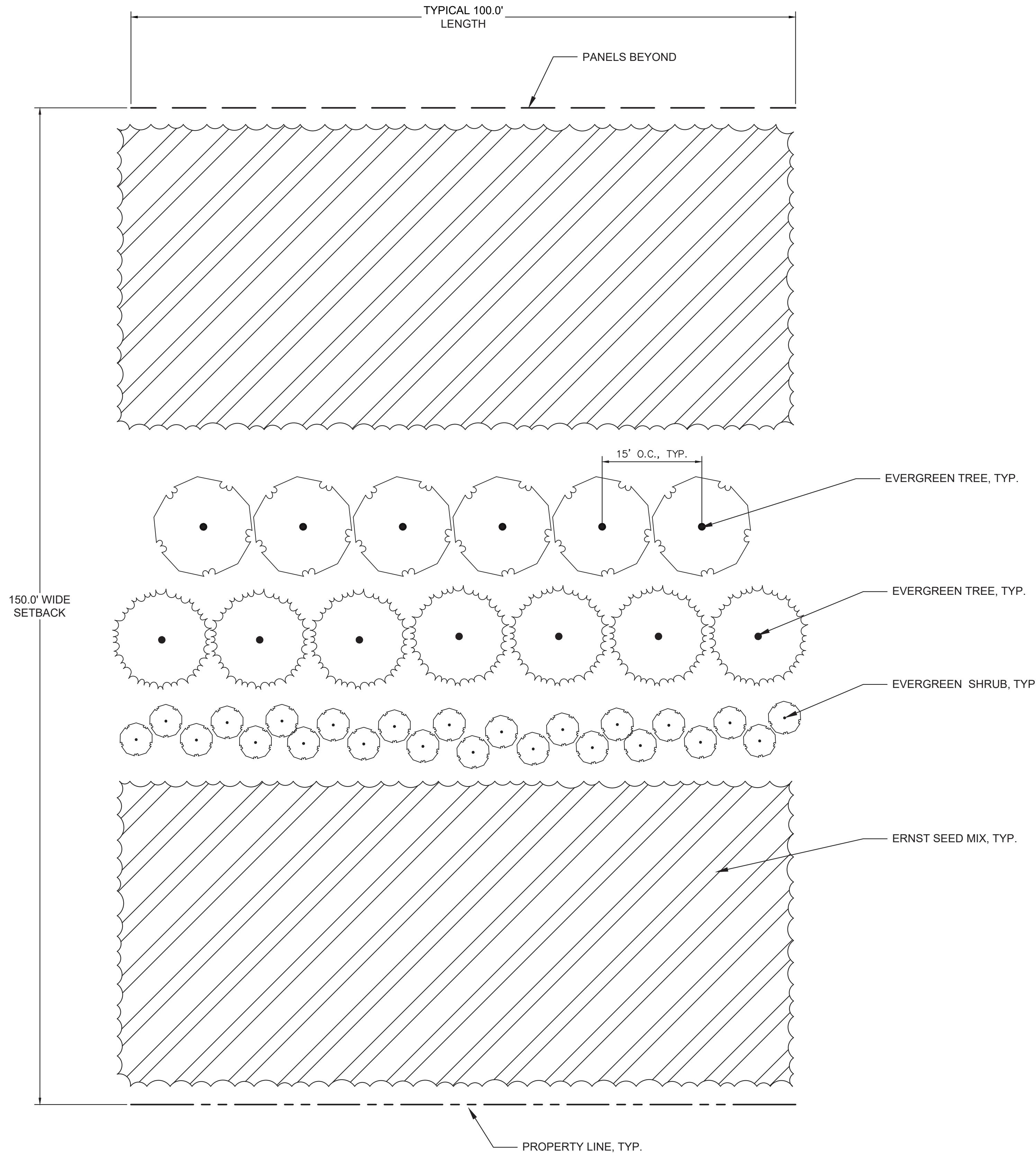
SHAMROCK HOLLY

PLANT PALETTE

EVERGREEN TREES
JUNIPERUS VIRGINIANA
HEIGHT: 30-65 FT
SPREAD: 8-25 FT
GROWTH RATE: 1-2 FT/YEAR

THUJA PLICATA 'GREEN GIANT'
HEIGHT: 40-60 FT
SPREAD: 12-15 FT
GROWTH RATE: 2-3 FT/YEAR

SHRUBS
MYRICA CERIFERA 'DONS DWARF'
HEIGHT: 3-4 FT
SPREAD: 4-6 FT
ILEX GLABRA 'SHAMROCK'
HEIGHT: 3-4 FT
SPREAD: 3-4 FT



Note: Buffer plantings will be positioned within the 150' buffer at elevations that will provide the best screening for the site.

MOUNTAIN BROOK SOLAR
FRANKLIN COUNTY, VIRGINIA

VIEWSHED ANALYSIS
PLANT PALETTE
01.12.2023

Kimley » Horn



EXHIBIT I

SHEEP GRAZING LETTER OF INTENT AND INFOGRAPHIC



January 24, 2023

Lost Sheep Grazing Company
Daniel Austin
449 Bower Ln
Rocky Mount, VA 24151

RE: Mountain Brook Solar Sheep Grazing

Daniel Austin,

This letter of intent (this “**Letter**”) summarizes the principal terms of a mutual non-binding understanding between Lost Sheep Grazing Company (“**LSGC**”) and Mountain Brook Solar, LLC (“**Mountain Brook**”) for the purpose of facilitating a sheep grazing initiative (the “**Initiative**”) to operate in conjunction with a photovoltaic solar project being developed by Mountain Brook in Franklin County, Virginia (the “**Project**”). LSGC and Mountain Brook are referred to in this Letter as the “**Parties**”.

After execution of this Letter, the Parties will negotiate in good faith a written agreement providing for the implementation of the Initiative (the “**Agreement**”). The Agreement will contain the definitive terms and conditions of the Initiative. Based on the information currently known to the Parties, the Parties agree that the following terms reflect their intention with respect to the key terms to be included in the Agreement:

1. Purpose. Both Parties are committed to the mutually beneficial integration of agriculture and solar development by facilitating sheep grazing on the Project site.
2. Access to Site; Installations. Mountain Brook will allow LSGC and its officers, employees, and agents reasonable access to the Project site in furtherance of the Initiative according to a regular visitation schedule to be provided by LSGC, and on an as-needed basis with reasonable prior notice to Mountain Brook in the event of an emergency. LSGC acknowledges and agrees that such access may be subject to restrictions such as health and safety compliance, non-disruption of ongoing operations, confidentiality undertakings, and supervision requirements. As part of its development of the Project, Mountain Brook will provide watering sites for the sheep per local soil and water conservation board requirements and low-voltage perimeter fencing acceptable to LSGC for the purpose of facilitating sheep grazing on the Project site.
3. Operation Term. LSGC commits to maintaining a flock of approximately 1,000 sheep to provide year-round vegetative management by rotationally grazing the sheep between their base operation and on the Project site after construction is complete, the site has been stabilized, and commercial operation of the Project has begun (the date on which these three conditions are satisfied, as determined by Mountain Brook in its reasonable discretion, the “**Initiative Start Date**”). LSGC plans to increase/adapt their flock after the first year. LSGC will provide sheep grazing vegetative management in the fenced 10–45-acre plots within the Project site, and will rotate the sheep among the plots to avoid over-grazing.
4. Publicity; Meeting Attendance. Both Parties will collaborate actively and publicly throughout the development and operation of the Project, each at its own cost and expense, to ensure the success



of the Initiative. LSGC will use its best efforts to attend meetings to report on the Initiative, to support the Project with the Board of Supervisors and to facilitate the Project's obtaining a Special Use Permit.

5. Other Terms. The Agreement will contain such other standard terms and conditions as the Parties deem appropriate and reasonable for an agreement of this nature.

It is expressly understood by the Parties that this Letter is not intended to, and does not, constitute an agreement to consummate any transaction or to enter into a definitive agreement, and neither Party will have any rights or obligations of any kind whatsoever by virtue of this Letter or any other written or oral expression by any Party or their respective representatives, subsidiaries and affiliates unless and until an Agreement is executed and delivered by the parties thereto.

If you are in agreement with the summary of our intentions as set forth above, please sign and return a copy of this Letter to us (by PDF is sufficient).

We look forward to working with you on this exciting new project.

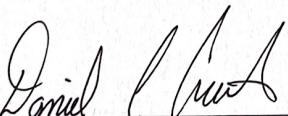
Sincerely,

A handwritten signature in blue ink, appearing to read "Itamar Sarussi".

Itamar Sarussi
Mountain Brook Solar, LLC

Acknowledged and agreed:

Lost Sheep Grazing Company

By: 

Name: Daniel Austin

Title: owner

Date: 1-30-23

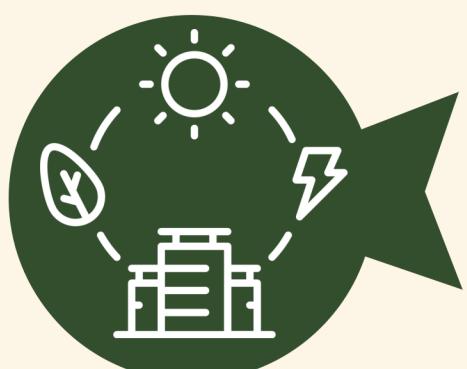
SHEEP AND SOLAR

THE BENEFITS OF INTEGRATED SHEEP AGRIVOLTAIC SYSTEMS

LESS THAN
1%

farmland is required for agrivoltaics to meet 20% of U.S. electric generation

Agrivoltaics is twice as land use efficient than providing sheep and PV services separately



What is Agrivoltaics?

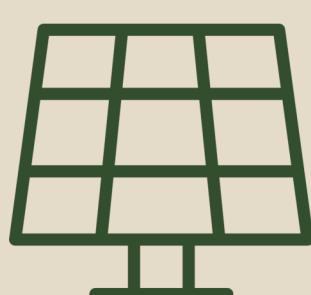
Also known as agrophotovoltaics, agrisolar, or dual-use solar, this kind of system combines traditional photovoltaic (PV) solar systems for simultaneous power generation and agricultural use.

Natural Maintenance

Sheep can replace regular maintenance operations, reducing or eliminating the use of herbicides, lawnmowers and weed-eaters, which negatively affect the environment and can damage PV systems.

Same Yields at Lower Cost

Sheep yield is reported to stay the same in agrivoltaic systems as in conventional pasture systems, meaning additional costly and environmentally impactful grain-based commercial feeds can be reduced or avoided.



A major concern for many rural communities about PV solar is its displacement of traditional agricultural land uses.



Agrivoltaics retains the agricultural features of the landscape.



Agrivoltaic systems are superior to conventional PV solar systems because they have dual purpose and reduce the environmental impacts associated with producing food and electricity.

CO2 REDUCTIONS

If sheep were shifted to PV solar farms for grazing instead of using traditional, separate grazing fields, the U.S. could experience a reduction in CO2 emissions of 5.73E8 kg per year. That is the equivalent of removing 117,000 average vehicles from the road.



The sheep will benefit from the pre-existing design of solar facilities, including shade from the PV panels against the elements, predator protection from the tall fences, and high quality food from the pollinator plantings.





EXHIBIT J

PROPERTY VALUE IMPACT STUDY



Kirkland Appraisals, LLC

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

January 19, 2023

Ms. Eliana Ginis
Mountain Brook Solar LLC
1201 Wilson Boulevard, Suite 2200
Arlington, VA 22209

RE: Mountain Brook Solar Impact Analysis, near Wirtz, Franklin County, VA

Ms. Ginis

At your request, I have considered the impact of a 20 MW solar farm proposed to be constructed on a portion of a 258.16-acre tract of land on Burnt Chimney Road, Wirtz, Franklin County, Virginia. Specifically, I have been asked to give my professional opinion on whether the proposed solar farm will have any impact on adjoining property value and whether "the location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located."

To form an opinion on these issues, I have researched and visited existing and proposed solar farms in Virginia as well as other states, researched articles through the Appraisal Institute and other studies, and discussed the likely impact with other real estate professionals. I have not been asked to assign any value to any specific property.

This letter is a limited report of a real property appraisal consulting assignment and subject to the limiting conditions attached to this letter. My client is Mountain Brook Solar LLC, represented to me by Ms. Eliana Ginis. My findings support the Application. The effective date of this consultation is January 19, 2023.

Conclusion

The adjoining properties are well set back from the proposed solar panels and most of the site has good existing landscaping for screening the proposed solar farm.

The matched pair analysis shows no impact on home values due to abutting or adjoining a solar farm as well as no impact to abutting or adjacent vacant residential or agricultural land where the solar farm is properly screened and buffered. The criteria that typically correlates with downward adjustments on property values such as noise, odor, and traffic all indicate that a solar farm is a compatible use for rural/residential transition areas and that it would function in a harmonious manner with this area.

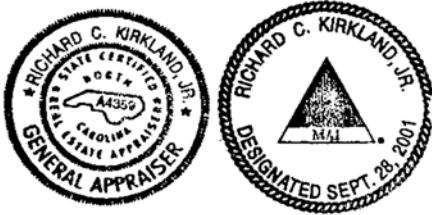
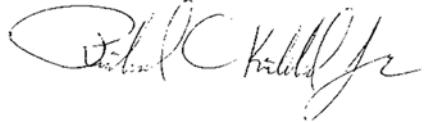
Data from the university studies, broker commentary, and other appraisal studies support a finding of no impact on property value adjoining a solar farm with proper setbacks and landscaped buffers.

Very similar solar farms in very similar areas have been found by hundreds of towns and counties not to have a substantial negative effect to abutting or adjoining properties, and many of those findings of no impact have been upheld by appellate courts. Similar solar farms have been approved with adjoining agricultural uses, schools, churches, and residential developments.

Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will have no impact on the value of adjoining or abutting properties and that the proposed use is in harmony with the area in which it is located. I note that some of the positive implications of a solar farm that have been expressed by people living next to solar farms include protection from future development of residential developments or other more intrusive uses, reduced dust, odor and chemicals from former farming operations, protection from light pollution at night, it's quiet, and there is minimal traffic.

If you have any questions, please let me know.

Sincerely,



Richard C. Kirkland, Jr., MAI
NC Certified General Appraiser #A4359
VA Certified General Appraiser # 4001017291

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I. Proposed Project and Adjoining Uses

Proposed Use Description

This 20 MW solar farm is proposed to be constructed on a portion of a 258.16-acre tract of land on Burnt Chimney Road, Wirtz, Franklin County, Virginia.

Adjoining Properties

I have considered adjoining uses and included a map to identify each parcel's location. The closest adjoining home will be 300 feet from the closest solar panel and the average distance to adjoining homes will be 597 feet to the nearest solar panel.

Adjoining land is a mix of residential and agricultural uses.

The breakdown of those uses by acreage and number of parcels is summarized below.

Adjoining Use Breakdown		
	Acreage	Parcels
Residential	24.48%	81.40%
Agricultural	21.22%	4.65%
Commercial	0.77%	2.33%
Agri/Res	53.53%	11.63%
Total	100.00%	100.00%



Surrounding Uses

#	MAP ID	Owner	GIS Data		Adjoin	Adjoin	Distance (ft)
			Acres	Present Use			
1	340003400	Wilfong	1.69	Residential	0.30%	2.33%	450
2	340003404	Dillon	50.13	Agricultural	8.85%	2.33%	N/A
3	340000809	Cassady	8.53	Residential	1.51%	2.33%	1060
4	340000800	Mahaney	9.91	Residential	1.75%	2.33%	830
5	340001000	Angle	97.98	Agri/Res	17.29%	2.33%	1890
6	0340002200	Brown	28.33	Agri/Res	5.00%	2.33%	300
7	340002100	Ayers	1.05	Residential	0.19%	2.33%	300
8	340002900	Dillon	70.10	Agricultural	12.37%	2.33%	N/A
9	340002400	Blankenship	1.00	Residential	0.18%	2.33%	410
10	340002500	Simpson	1.00	Residential	0.18%	2.33%	N/A
11	340002600	Simpson	0.99	Residential	0.17%	2.33%	355
12	340002700	Mullens	0.80	Residential	0.14%	2.33%	380
13	340002801	Partridge	5.01	Residential	0.88%	2.33%	655
14	340002800	Partridge	0.96	Residential	0.17%	2.33%	565
15	340003000	Dillon	28.50	Agri/Res	5.03%	2.33%	990
16	340003001	Dillon	6.00	Residential	1.06%	2.33%	450
17	340007800	Blankenship	39.51	Agri/Res	6.97%	2.33%	1200
18	340007610	Umberger	9.06	Residential	1.60%	2.33%	1240
19	340007609	Umberger	6.37	Residential	1.12%	2.33%	N/A
20	340007608	Campbell	5.73	Residential	1.01%	2.33%	705
21	340007607	Landon	5.81	Residential	1.03%	2.33%	645
22	340007606	Knotts	5.74	Residential	1.01%	2.33%	415
23	340007605	Turner	6.15	Residential	1.09%	2.33%	365
24	340007604	Robertson	5.04	Residential	0.89%	2.33%	320
25	340007603	Robertson	5.62	Residential	0.99%	2.33%	N/A
26	340007602	Robertson	13.48	Residential	2.38%	2.33%	450
27	340007601	McNeil	5.61	Residential	0.99%	2.33%	380
28	340007600	Holland	5.75	Residential	1.01%	2.33%	330
29	340007500	Brown	10.43	Residential	1.84%	2.33%	N/A
30	340007300	Robertson	4.35	Commercial	0.77%	2.33%	N/A
31	340007214	Hurt	0.91	Residential	0.16%	2.33%	N/A
32	340007213	Phillips	1.00	Residential	0.18%	2.33%	480
33	340007212	Pagans	1.02	Residential	0.18%	2.33%	390
34	340007211	Hale	1.08	Residential	0.19%	2.33%	345
35	340007210	Lynch	1.14	Residential	0.20%	2.33%	335
36	340007209	Cooper	1.16	Residential	0.20%	2.33%	375
37	340007208	McGhee	1.13	Residential	0.20%	2.33%	480
38	340007207	Moomey	1.24	Residential	0.22%	2.33%	535
39	340003200	Dalton	3.75	Residential	0.66%	2.33%	300
40	340007204	Pagans	1.28	Residential	0.23%	2.33%	N/A
41	340007203	Moss	1.29	Residential	0.23%	2.33%	355
42	340007202	Trelease	1.99	Residential	0.35%	2.33%	375
43	340003600	Cundiff	109.00	Agri/Res	19.24%	2.33%	1645
Total			566.620		100.00%	100.00%	597

Demographics Around Subject Property

I have pulled demographic data around a 1-mile, 3-mile and 5-mile radius from the middle of the project as shown on the following pages.





Housing Profile

24184, Wirtz, Virginia 2
24184, Wirtz, Virginia
Ring: 1 mile radius

Prepared by Esri
Latitude: 37.08873
Longitude: -79.74870

Population

2010 Total Population	358
2020 Total Population	358
2022 Total Population	350
2027 Total Population	345
2022-2027 Annual Rate	-0.29%

Households

2022 Median Household Income	\$69,243
2027 Median Household Income	\$79,451
2022-2027 Annual Rate	2.79%

Housing Units by Occupancy Status and Tenure

	Census 2010		2022		2027	
	Number	Percent	Number	Percent	Number	Percent
Total Housing Units	149	100.0%	143	100.0%	140	100.0%
Occupied	139	93.3%	132	92.3%	129	92.1%
Owner	112	75.2%	117	81.8%	115	82.1%
Renter	27	18.1%	15	10.5%	14	10.0%
Vacant	10	6.7%	11	7.7%	10	7.1%

Owner Occupied Housing Units by Value

	2022		2027	
	Number	Percent	Number	Percent
Total	117	100.0%	115	100.0%
<\$50,000	2	1.7%	1	0.9%
\$50,000-\$99,999	8	6.8%	2	1.7%
\$100,000-\$149,999	7	6.0%	2	1.7%
\$150,000-\$199,999	10	8.5%	4	3.5%
\$200,000-\$249,999	37	31.6%	19	16.5%
\$250,000-\$299,999	14	12.0%	9	7.8%
\$300,000-\$399,999	14	12.0%	12	10.4%
\$400,000-\$499,999	0	0.0%	0	0.0%
\$500,000-\$749,999	24	20.5%	64	55.7%
\$750,000-\$999,999	1	0.9%	2	1.7%
\$1,000,000-\$1,499,999	0	0.0%	0	0.0%
\$1,500,000-\$1,999,999	0	0.0%	0	0.0%
\$2,000,000+	0	0.0%	0	0.0%
Median Value	\$242,568		\$533,203	
Average Value	\$309,615		\$468,043	

Census 2010 Housing Units

	Number	Percent
Total	149	100.0%
In Urbanized Areas	0	0.0%
In Urban Clusters	0	0.0%
Rural Housing Units	149	100.0%

Data Note: Persons of Hispanic Origin may be of any race.

Source: Esri forecasts for 2022 and 2027. U.S. Census Bureau 2010 decennial Census data converted by Esri into 2020 geography.

January 14, 2023



Housing Profile

24184, Wirtz, Virginia 2
24184, Wirtz, Virginia
Ring: 3 mile radius

Prepared by Esri
Latitude: 37.08873
Longitude: -79.74870

Population

2010 Total Population	2,261
2020 Total Population	2,295
2022 Total Population	2,262
2027 Total Population	2,242
2022-2027 Annual Rate	-0.18%

Households

2022 Median Household Income	\$68,025
2027 Median Household Income	\$79,137
2022-2027 Annual Rate	3.07%

Housing Units by Occupancy Status and Tenure

	Census 2010		2022		2027	
	Number	Percent	Number	Percent	Number	Percent
Total Housing Units	1,117	100.0%	1,119	100.0%	1,114	100.0%
Occupied	882	79.0%	888	79.4%	882	79.2%
Owner	721	64.5%	800	71.5%	797	71.5%
Renter	161	14.4%	88	7.9%	85	7.6%
Vacant	235	21.0%	231	20.6%	232	20.8%

Owner Occupied Housing Units by Value

	2022		2027	
	Number	Percent	Number	Percent
Total	800	100.0%	799	100.0%
<\$50,000	16	2.0%	7	0.9%
\$50,000-\$99,999	35	4.4%	8	1.0%
\$100,000-\$149,999	63	7.9%	15	1.9%
\$150,000-\$199,999	72	9.0%	24	3.0%
\$200,000-\$249,999	123	15.4%	62	7.8%
\$250,000-\$299,999	56	7.0%	44	5.5%
\$300,000-\$399,999	105	13.1%	98	12.3%
\$400,000-\$499,999	43	5.4%	22	2.8%
\$500,000-\$749,999	201	25.1%	341	42.7%
\$750,000-\$999,999	73	9.1%	165	20.7%
\$1,000,000-\$1,499,999	12	1.5%	13	1.6%
\$1,500,000-\$1,999,999	1	0.1%	0	0.0%
\$2,000,000+	0	0.0%	0	0.0%
Median Value	\$333,333		\$587,610	
Average Value	\$411,156		\$564,268	

Census 2010 Housing Units

	Number		Percent	
	Total	1,117	Total	100.0%
In Urbanized Areas		0		0.0%
In Urban Clusters		0		0.0%
Rural Housing Units		1,117		100.0%

Data Note: Persons of Hispanic Origin may be of any race.

Source: Esri forecasts for 2022 and 2027. U.S. Census Bureau 2010 decennial Census data converted by Esri into 2020 geography.

January 14, 2023



Housing Profile

24184, Wirtz, Virginia 2
24184, Wirtz, Virginia
Ring: 5 mile radius

Prepared by Esri
Latitude: 37.08873
Longitude: -79.74870

Population

2010 Total Population	8,033
2020 Total Population	8,207
2022 Total Population	8,185
2027 Total Population	8,198
2022-2027 Annual Rate	0.03%

Households

2022 Median Household Income	\$73,845
2027 Median Household Income	\$83,690
2022-2027 Annual Rate	2.53%

Housing Units by Occupancy Status and Tenure

	Census 2010	2022		2027		
	Number	Percent	Number	Percent	Number	Percent
Total Housing Units	4,511	100.0%	4,631	100.0%	4,654	100.0%
Occupied						
Owner	3,368	74.7%	3,492	75.4%	3,506	75.3%
Renter	2,781	61.6%	3,099	66.9%	3,128	67.2%
Vacant	587	13.0%	393	8.5%	378	8.1%
	1,144	25.4%	1,139	24.6%	1,148	24.7%

Owner Occupied Housing Units by Value

	2022	2027		
	Number	Percent	Number	Percent
Total	3,098	100.0%	3,128	100.0%
<\$50,000	63	2.0%	24	0.8%
\$50,000-\$99,999	95	3.1%	22	0.7%
\$100,000-\$149,999	203	6.6%	45	1.4%
\$150,000-\$199,999	233	7.5%	72	2.3%
\$200,000-\$249,999	326	10.5%	152	4.9%
\$250,000-\$299,999	221	7.1%	144	4.6%
\$300,000-\$399,999	434	14.0%	340	10.9%
\$400,000-\$499,999	227	7.3%	151	4.8%
\$500,000-\$749,999	859	27.7%	1,384	44.2%
\$750,000-\$999,999	379	12.2%	729	23.3%
\$1,000,000-\$1,499,999	53	1.7%	57	1.8%
\$1,500,000-\$1,999,999	3	0.1%	4	0.1%
\$2,000,000+	2	0.1%	4	0.1%
Median Value			\$610,910	
Average Value			\$598,258	

Census 2010 Housing Units

	Number	Percent
Total	4,511	100.0%
In Urbanized Areas	0	0.0%
In Urban Clusters	20	0.4%
Rural Housing Units	4,490	99.5%

Data Note: Persons of Hispanic Origin may be of any race.

Source: Esri forecasts for 2022 and 2027. U.S. Census Bureau 2010 decennial Census data converted by Esri into 2020 geography.

January 14, 2023

II. Methodology and Discussion of Issues

Standards and Methodology

I conducted this analysis using the standards and practices established by the Appraisal Institute and that conform to the Uniform Standards of Professional Appraisal Practice. The analyses and methodologies contained in this report are accepted by all major lending institutions, and they are used in Virginia and across the country as the industry standard by certified appraisers conducting appraisals, market analyses, or impact studies and are considered adequate to form an opinion of the impact of a land use on neighboring properties. These standards and practices have also been accepted by the courts at the trial and appellate levels and by federal courts throughout the country as adequate to reach conclusions about the likely impact a use will have on adjoining or abutting properties.

The aforementioned standards compare property uses in the same market and generally within the same calendar year so that fluctuating markets do not alter study results. Although these standards do not require a linear study that examines adjoining property values before and after a new use (e.g. a solar farm) is developed, some of these studies do in fact employ this type of analysis. Comparative studies, as used in this report, are considered an industry standard.

The type of analysis employed is a Matched Pair Analysis or Paired Sales Analysis. This methodology is outlined in **The Appraisal of Real Estate**, Twelfth Edition by the Appraisal Institute pages 438-439. It is further detailed in **Real Estate Damages**, Third Edition, pages 33-36 by Randall Bell PhD, MAI. Paired sales analysis is used to support adjustments in appraisal work for factors ranging from the impact of having a garage, golf course view, or additional bedrooms. It is an appropriate methodology for addressing the question of impact of an adjoining solar farm. The paired sales analysis is based on the theory that when two properties are in all other respects equivalent, a single difference can be measured to indicate the difference in price between them. Dr. Bell describes it as comparing a test area to control areas. In the example provided by Dr. Bell he shows five paired sales in the test area compared to 1 to 3 sales in the control areas to determine a difference. I have used 3 sales in the control areas in my analysis for each sale developed into a matched pair.

Determining what is an External Obsolescence

An external obsolescence is a use of property that, because of its characteristics, might have a negative impact on the value of adjacent or nearby properties because of identifiable impacts. Determining whether a use would be considered an external obsolescence requires a study that isolates that use, eliminates any other causing factors, and then studies the sales of nearby versus distant comparable properties. The presence of one or a combination of key factors does not mean the use will be an external obsolescence, but a combination of these factors tends to be present when market data reflects that a use is an external obsolescence.

External obsolescence is evaluated by appraisers based on several factors. These factors include but are not limited to:

- 1) Traffic. Solar Farms are not traffic generators.
- 2) Odor. Solar farms do not produce odor.
- 3) Noise. Solar farms generate no noise concerns and are silent at night.

4) Environmental. Solar farms do not produce toxic or hazardous waste. Grass is maintained underneath the panels so there is minimal impervious surface area.

5) Appearance/Viewshed. This is the one area that potentially applies to solar farms. However, solar farms are generally required to provide significant setbacks and landscaping buffers to address that concern. Furthermore, any consideration of appearance of viewshed impacts has to be considered in comparison with currently allowed uses on that site. For example if a residential subdivision is already an allowed use, the question becomes in what way does the appearance impact adjoining property owners above and beyond the appearance of that allowed subdivision or other similar allowed uses.

6) Other factors. I have observed and studied many solar farms and have never observed any characteristic about such facilities that prevents or impedes neighbors from fully using their homes or farms or businesses for the use intended.

Relative Solar Farm Sizes

Solar farms have been increasing in size in recent years. Much of the data collected is from existing, older solar farms of smaller size, but there are numerous examples of sales adjoining 75 to 80 MW facilities that show a similar trend as the smaller solar farms. This is understandable given that the primary concern relative to a solar farm is the appearance or view of the solar farm, which is typically addressed through setbacks and landscaping buffers. The relevance of data from smaller solar farms to larger solar farms is due to the primary question being one of appearance. If the solar farm is properly screened, then little of the solar farm would be seen from adjoining property regardless of how many acres are involved.

Larger solar farms are often set up in sections where any adjoining owner would only be able to see a small section of the project even if there were no landscaping screen. Once a landscaping screen is in place, the primary view is effectively the same whether adjoining a 5 MW, 20 MW or 100 MW facility.

I have split out the data for the matched pairs adjoining larger solar farms only to illustrate the similarities later in this report.

Steps Involved in the Analysis

The paired sales analysis employed in this report follows the following process:

1. Identify sales of property adjoining existing solar farms.
2. Compare those sales to similar property that does not adjoin an existing solar farm.
3. Confirmation of sales are noted in the analysis write ups.
4. Distances from the homes to panels are included as a measure of the setbacks.
5. Topographic differences across the solar farms themselves are likewise noted along with demographic data for comparing similar areas.

There are a number of Sale/Resale comparables included in the write ups, but most of the data shown is for sales of homes after a solar farm has been announced (where noted) or after a solar farm has been constructed.

III. Research on Solar Farms

A. Appraisal Market Studies

I have also considered a number of impact studies completed by other appraisers as detailed below.

CohnReznick – Property Value Impact Study: Adjacent Property Values Solar Impact Study: A Study of Eight Existing Solar Facilities

Patricia McGarr, MAI, CRE, FRICS, CRA and Andrew R. Lines, MAI with CohnReznick completed an impact study for a proposed solar farm in Cheboygan County, Michigan completed on June 10, 2020. I am familiar with this study as well as a number of similar such studies completed by CohnReznick. I have not included all of these studies but I submit this one as representative of those studies.

This study addresses impacts on value from eight different solar farms in Michigan, Minnesota, Indiana, Illinois, Virginia and North Carolina. These solar farms are 19.6 MW, 100 MW, 11.9 MW, 23 MW, 71 MW, 61 MW, 40 MW, and 19 MW for a range from 11.9 MW to 100 MW with an average of 31 MW and a median of 31.5 MW. They analyzed a total of 24 adjoining property sales in the Test Area and 81 comparable sales in the Control Area over a five-year period.

The conclusion of this study is that there is no evidence of any negative impact on adjoining property values based on sales prices, conditions of sales, overall marketability, potential for new development or rate of appreciation.

Christian P. Kaila & Associates – Property Impact Analysis – Proposed Solar Power Plant Guthrie Road, Stuarts Draft, Augusta County, Virginia

Christian P. Kaila, MAI, SRA and George J. Finley, MAI developed an impact study as referenced above dated June 16, 2020. This was for a proposed 83 MW facility on 886 acres.

Mr. Kaila interviewed appraisers who had conducted studies and reviewed university studies and discussed the comparable impacts of other development that was allowed in the area for a comparative analysis of other impacts that could impact viewshed based on existing allowed uses for the site. He also discussed in detail the various other impacts that could cause a negative impact and how solar farms do not have such characteristics.

Mr. Kaila also interviewed county planners and real estate assessors in eight different Virginia counties with none of the assessor's identifying any negative impacts observed for existing solar projects.

Mr. Kaila concludes on a finding of no impact on property values adjoining the indicated solar farm.

Fred Beck, MAI, CCIM – Impact Analysis in Lincoln County 2013

Mr. Fred Beck, MAI, CCIM completed an impact analysis in 2013 for a proposed solar farm that concluded on a negative impact on value. That report relied on a single cancelled contract for an adjoining parcel where the contracted buyers indicated that the solar farm was the reason for the cancellation. It also relied on the activities of an assessment impact that was applied in a nearby county.

Mr. Beck was interviewed as part of the Christian Kalia study noted above. From that I quote "Mr. Beck concluded on no effect on moderate priced homes, and only a 5% change in his limited research of higher priced homes. His one sale that fell through is hardly a reliable sample. It also

was misleading on Mr. Beck's part to report the lower re-assessments since the primary cause of the re-assessments were based on the County Official, who lived adjacent to the solar farm, appeal to the assessor for reductions with his own home." In that Clay County Case study the noted lack of lot sales after announcement of the solar farm also coincided with the recession in 2008/2009 and lack of lot sales effectively defined that area during that time.

I further note, that I was present at the hearing where Mr. Beck presented these findings and the predominance of his argument before the Lincoln County Board of Commissioner's was based on the one cancelled sale as well as a matched pair analysis of high-end homes adjoining a four-story call center. He hypothesized that a similar impact from that example could be compared to being adjacent solar farm without explaining the significant difference in view, setbacks, landscaping, traffic, light, and noise. Furthermore, Mr. Beck did have matched pairs adjoining a solar farm in his study that he put in the back of his report and then ignored as they showed no impact on property value.

Also noted in the Christian Kalia interview notes is a response from Mr. Beck indicating that in his opinion "the homes were higher priced homes and had full view of the solar farm." Based on a description of screening so that "the solar farm would not be in full view to adjoining property owners. Mr. Beck said in that case, he would not see any drop in property value."

NorthStar Appraisal Company – Impact Analysis for Nichomus Run Solar, PilesgrovE, NJ, September 16, 2020

Mr. William J. Sapiro, MAI with NorthStar Appraisal Company considered a matched pair analysis for the potential impact on adjoining property values to this proposed 150 MW solar farm. Mr. Sapiro considered sales activity in a subdivision known as Point of Woods in South Brunswick Township and identified two recent new homes that were constructed and sold adjoining a 13 MW solar farm and compared them to similar homes in that subdivision that did not adjoin the solar farm. These homes sold in the \$1,290,450 to \$1,336,613 price range and these homes were roughly 200 feet from the closest solar panel.

Based on this analysis, he concluded that the adjoining solar farm had no impact on adjoining property value.

MR Valuation Consulting, LLC – The Kuhl Farm Solar Development and The Fischer Farm Solar Development – June 7, 2012

Mr. Mark Pomykacaz, MAI MRICS with MR Valuation Consulting, LLC considered a matched pair analysis for sales near these solar farms. The sales data presented supported a finding of no impact on property value for nearby and adjoining homes and concludes that there is no impact on marketing time and no additional risk involved with owning, building, or selling properties next to the solar farms.

Mary McClinton Clay, MAI – McCracken County Solar Project Value Impact Report, July 10, 2021

Ms. Mary Clay, MAI reviewed a report by Kirkland Appraisals in this case and also provided a differing opinion of impact. She cites a number of other appraisal studies and interestingly finds fault with heavily researched opinions, while praising the results of poorly researched studies that found the opposing view.

Her analysis includes details from solar farms that show no impact on value, but she dismisses those.

She cites the University of Texas study noted later in this report, but she cites only isolated portions of that study to conclude the opposite of what that study specifically concludes.

She cites the University of Rhode Island study noted alter in this report, but specifically excludes the conclusion of that study that in rural areas they found no impact on property value.

She cites lot sales near Spotsylvania Solar without confirming the purchase prices with brokers as indicative of market impact and has made no attempt to compare lot prices that are contemporaneous. In her 5 lot sales that she identifies, all of the lot prices decline with time from 2015 through 2019. This includes the 3 lot sales prior to the approval of the solar farm. The decrease in lot values shown in this chart are more indicative of the trend in the market, than of any impact related to the solar farm. Otherwise, how does she explain the drop in price from 2015 to 2017 prior to the solar farm approval.

She considers data at McBride Place Solar Farm and does a sale/resale analysis based on Zillow Home Value Index, which is not a reliable indication for appreciation in the market. She then adjusted her initial sales prior to the solar farm over 7 years to determine what she believes the home should have appreciated by and then compares that to an actual sale. She has run no tests or any analysis to show that the appreciation rates she is using are consistent with the market but more importantly she has not attempted to confirm any of these sales with market participants. I have spoken with brokers active in the sales that she cites and they have all indicated that the solar farm was not a negative factor in marketing or selling those homes.

She has considered lot sales at Sunshine Farms in Grandy, NC. She indicates that the lots next to the solar farm are selling for less than lots not near the solar farm, but she is actually using lot sales next to the solar farm prior to the solar farm being approved. She also ignores recent home sales adjoining this solar farm after it was built that show no impact on property value.

She also notes a couple of situations where solar developers have purchased adjoining homes and resold them or where a neighbor agreement was paid as proof of a negative impact on property value. Given that there are over 2,500 solar farms in the USA as of 2018 according to the U.S. Energy Information Administration and there are only a handful of such examples, this is clearly not an industry standard but a business decision. Furthermore, solar developers are not in the business of flipping homes and are in a position very similar to a bank that acquires a home as OREO (Other Real Estate Owned), where homes are frequently sold at discounted prices, not because of any drop in value, but because they are not a typically motivated seller. Market value requires an analysis of a typically motivated buyer and seller. So these are not good indicators of market value impacts.

The comments throughout this study are heavy in adjectives, avoids stating facts contrary to the conclusion and shows a strong selection bias.

Conclusion of Impact Studies

Of the five studies noted two included actual sales data to derive an opinion of no impact on value. The two studies to conclude on a negative impact includes the Fred Beck study based on no actual sales data, and he has since indicated that with landscaping screens he would not conclude on a negative impact. The other study by Mary Clay shows improper adjustments for time, a lack of confirmation of sales comparables, and exclusion of data that does not support her position.

I have relied on these studies as additional support for the findings in this impact analysis.

B. Articles

I have also considered a number of articles on this subject as well as conclusions and analysis as noted below.

Farm Journal Guest Editor, March 22, 2021 – Solar’s Impact on Rural Property Values

Andy Ames, ASFMRA (American Society of Farm Managers and Rural Appraisers) published this article that includes a discussion of his survey of appraisers and studies on the question of property value related to solar farms. He discusses the university studies that I have cited as well as Patricia McGarr, MAI.

He also discusses the findings of Donald A. Fisher, ARA, who served six years at the Chair of the ASFMRA’s National Appraisal Review Committee. He is also the Executive Vice President of the CNY Pomeroy Appraiser and has conducted several market studies on solar farms and property impact. He is quoted in the article as saying, “Most of the locations were in either suburban or rural areas, and all of those studies found either a neutral impact, or ironically, a positive impact, where values on properties after installation of solar farms went up higher than time trends.”

Howard Halderman, AFM, President and CEO of Halderman Real Estate and Farm Management attended the ASFMRA solar talk hosted by the Indiana Chapter of the ASFMRA and he concludes that other rural properties would likely see no impact and farmers and landowners shown even consider possible benefits. “In some cases, farmers who rent land to a solar company will insure the viability of their farming operation for a longer time period. This makes them better long-term tenants or land buyers so one can argue that higher rents and land values will follow due to the positive impact the solar leases offer.”

More recently in August 2022, Donald Fisher, ARA, MAI and myself led a webinar on this topic for the ASFMRA discussing the issues, the university studies and specific examples of solar farms having no impact on adjoining property values.

National Renewable Energy Laboratory – Top Five Large-Scale Solar Myths, February 3, 2016

Megan Day reports from NREL regarding a number of concerns neighbors often express. Myth #4 regarding property value impacts addresses specifically the numerous studies on wind farms that show no impact on property value and that solar farms have a significantly reduced visual impact from wind farms. She highlights that the appearance can be addressed through mitigation measures to reduce visual impacts of solar farms through vegetative screening. Such mitigations are not available to wind farms given the height of the windmills and again, those studies show no impact on value adjoining wind farms.

North Carolina State University: NC Clean Energy Technology Center White Paper: Balancing Agricultural Productivity with Ground-Based Solar Photovoltaic (PV) Development (Version 2), May 2019

Tommy Cleveland and David Sarkisian wrote a white paper for NCSU NC Clean Energy Technology Center regarding the potential impacts to agricultural productivity from a solar farm use. I have interviewed Tommy Cleveland on numerous occasions and I have also heard him speak on these issues at length as well. He addresses many of the common questions regarding how solar farms work and a detailed explanation of how solar farms do not cause significant impacts on the soils, erosion and other such concerns. This is a heavily researched paper with the references included.

North Carolina State University: NC Clean Energy Technology Center White Paper: Health and Safety Impacts of Solar Photovoltaics, May 2017

Tommy Cleveland wrote a white paper for NCSU NC Clean Energy Technology Center regarding the health and safety impacts to address common questions and concerns related to solar farms. This is a heavily researched white paper addressing questions ranging from EMFs, fire safety, as well as vegetation control and the breakdown of how a solar farm works.

C. *Broker Commentary*

In the process of working up the matched pairs used later in this report, I have collected comments from brokers who have actually sold homes adjoining solar farms indicating that the solar farm had no impact on the marketing, timing, or sales price for the adjoining homes. I have included comments from brokers within this report where they discussed specific solar projects including brokers from Kentucky, Virginia, Tennessee, and North Carolina.

I have additional commentary from other states including New Jersey and Michigan that provide the same conclusion.

IV. University Studies

I have also considered the following studies completed by four different universities related to solar farms and impacts on property values.

A. *University of Texas at Austin, May 2018*

An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations

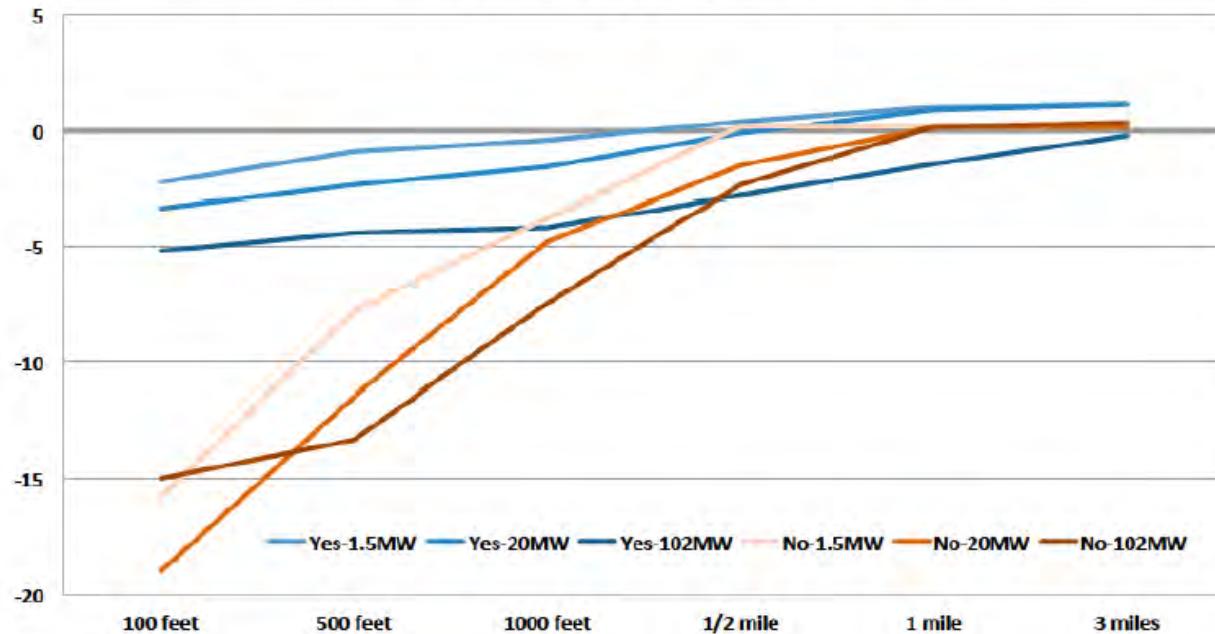
This study considers solar farms from two angles. First it looks at where solar farms are being located and concludes that they are being located primarily in low density residential areas where there are fewer homes than in urban or suburban areas.

The second part is more applicable in that they conducted a survey of appraisers/assessors on their opinions of the possible impacts of proximity to a solar farm. They consider the question in terms of size of the adjoining solar farm and how close the adjoining home is to the solar farm. I am very familiar with this part of the study as I was interviewed by the researchers multiple times as they were developing this. One very important question that they ask within the survey is very illustrative. They asked if the appraiser being surveyed had ever appraised a property next to a solar farm. There is a very noticeable divide in the answers provided by appraisers who have experience appraising property next to a solar farm versus appraisers who self-identify as having no experience or knowledge related to that use.

On Page 16 of that study they have a chart showing the responses from appraisers related to proximity to a facility and size of the facility, but they separate the answers as shown below with appraisers with experience in appraising properties next to a solar farm shown in blue and those inexperienced shown in brown. Even within 100 feet of a 102 MW facility the response from experienced appraisers were -5% at most on impact. While inexperienced appraisers came up with significantly higher impacts. This chart clearly shows that an uninformed response widely diverges from the sales data available on this subject.

Chart B.2 - Estimates of Property Value Impacts (%) by Size of Facility, Distance, & Respondent Type

Have you assessed a home near a utility-scale solar installation?



Furthermore, the question cited above does not consider any mitigating factors such as landscaping buffers or screens which would presumably reduce the minor impacts noted by experienced appraisers on this subject.

The conclusion of the researchers is shown on Page 23 indicated that “Results from our survey of residential home assessors show that the majority of respondents believe that proximity to a solar installation has either no impact or a positive impact on home values.”

This analysis supports the conclusion of this report that the data supports no impact on adjoining property values.

B. University of Rhode Island, September 2020

Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island

The University of Rhode Island published a study entitled **Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island** on September 29, 2020 with lead researchers being Vasundhara Gaur and Corey Lang. I have read that study and interviewed Mr. Corey Lang related to that study. This study is often cited by opponents of solar farms but the findings of that study have some very specific caveats according to the report itself as well as Mr. Lang from the interview.

While that study does state in the Abstract that they found depreciation of homes within 1-mile of a solar farm, that impact is limited to non-rural locations. On Pages 16-18 of that study under Section 5.3 Heterogeneity in treatment effect they indicate that the impact that they found was limited to non-rural locations with the impact in rural locations effectively being zero. For the study they defined “rural” as a municipality/township with less than 850 population per square mile.

They further tested the robustness of that finding and even in areas up to 2,000 population per square mile they found no statistically significant data to suggest a negative impact. They have not specifically defined a point at which they found negative impacts to begin, as the sensitivity study stopped checking at the 2,000-population dataset.

Where they did find negative impacts was in high population density areas that was largely a factor of running the study in Massachusetts and Rhode Island which the study specifically cites as being the 2nd and 3rd most population dense states in the USA. Mr. Lang in conversation as well as in recorded presentations has indicated that the impact in these heavily populated areas may reflect a loss in value due to the scarce greenery in those areas and not specifically related to the solar farm itself. In other words, any development of that site might have a similar impact on property value.

Based on this study I have checked the population for Gills Creek District of Franklin County, which has a population of 8,685 for 2022 based on [HomeTownLocator.com](https://www.hometownlocator.com) and a total area of 62.93 square miles. This indicates a population density of 138 people per square mile which puts this well below the threshold indicated by the Rhode Island Study.

I therefore conclude that the Rhode Island Study supports a finding of no impact on adjoining properties for the proposed solar farm.

Gills Creek District Data & Demographics (As of July 1, 2022)

POPULATION		HOUSING	
Total Population	8,685 (100%)	Total HU (Housing Units)	5,843 (100%)
Population in Households	8,630 (99.4%)	Owner Occupied HU	3,435 (58.8%)
Population in Families	7,320 (84.3%)	Renter Occupied HU	383 (6.6%)
Population in Group Quarters ¹	55 (0.6%)	Vacant Housing Units	2,025 (34.7%)
Population Density	138	Median Home Value	\$545,110
Diversity Index ²	17	Average Home Value	\$552,475
		Housing Affordability Index ³	76

INCOME		HOUSEHOLDS	
Median Household Income	\$82,868	Total Households	3,818
Average Household Income	\$110,578	Average Household Size	2.26
% of Income for Mortgage ⁴	35%	Family Households	2,839
Per Capita Income	\$49,141	Average Family Size	3
Wealth Index ⁵	137		

C. Georgia Institute of Technology, October 2020

Utility-Scale Solar Farms and Agricultural Land Values

This study was completed by Nino Abashidze as Post-Doctoral Research Associate of Health Economics and Analytics Labe (HEAL), School of Economics, Georgia Institute of Technology. This research was started at North Carolina State University and analyzes properties near 451 utility-scale ground-mount solar installations in NC that generate at least 1 MW of electric power. A total of 1,676 land sales within 5-miles of solar farms were considered in the analysis.

This analysis concludes on Page 21 of the study “Although there are no direct effects of solar farms on nearby agricultural land values, we do find evidence that suggests construction of a solar farm may create a small, positive, option -value for land owners that is capitalized into land prices. Specifically, after construction of a nearby solar farm, we find that agricultural land that is also located near transmission infrastructure may increase modestly in value.”

This study supports a finding of no impact on adjoining agricultural property values and in some cases could support a modest increase in value.

D. Master’s Thesis: ECU by Zachary Dickerson July 2018

A Solar Farm in My Backyard? Resident Perspectives of Utility-Scale Solar in Eastern North Carolina

This study was completed as part of a Master of Science in Geography Master’s Thesis by Zachary Dickerson in July 2018. This study sets out to address three questions:

1. Are there different aspects that affect resident satisfaction regarding solar farms?
2. Are there variations in satisfaction for residents among different geographic settings, e.g. neighborhoods adjacent to the solar farms or distances from the solar farms?
3. How can insight from both the utility and planning sectors, combined with knowledge gained from residents, fill gaps in communication and policy writing in regard to solar farms?

This was done through survey and interview with adjacent and nearby neighbors of existing solar farms. The positive to neutral comments regarding the solar farms were significantly higher than negative. The researcher specifically indicates on Page 46 “The results show that respondents generally do not believe the solar farms pose a threat to their property values.”

The most negative comments regarding the solar farms were about the lack of information about the approval process and the solar farm project prior to construction.

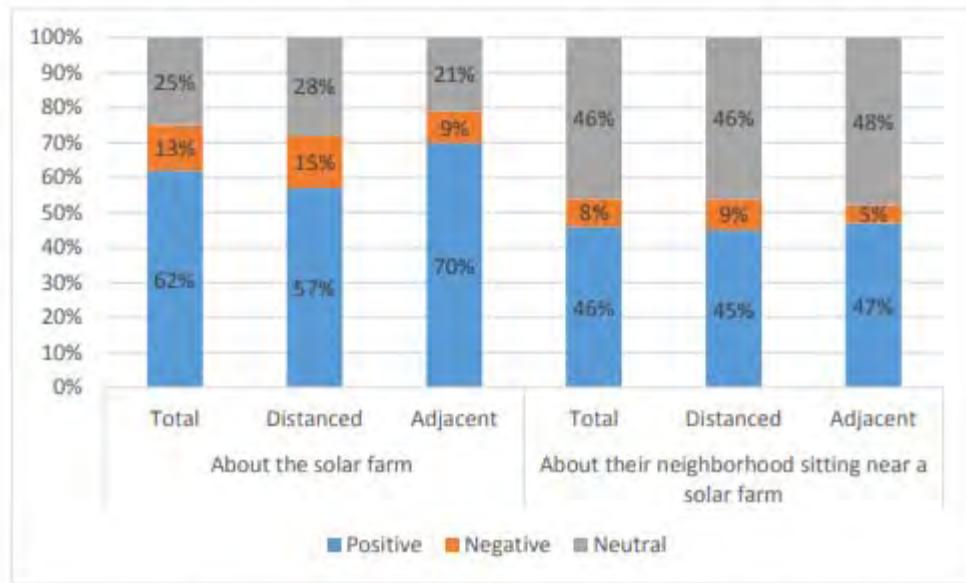


Figure 11: Residents' positive/negative word choices by geographic setting for both questions

V. Assessor Surveys

I have been working on a survey of Virginia Assessors regarding property values related to solar farms and whether or not the local assessors have found any data to support any changes to value on property adjoining solar farms. In this process I have contacted every assessor's office by email and I have received responses by email and by phone from a number of these counties. Many of the counties in Virginia rely on outside firms to assist in gathering data for the assessments and where that is the case, we have contacted the outside firms regarding the question of whether or not the assessors are currently making any adjustments to properties adjoining solar farms.

I currently have response from 16 counties that have solar farms in them and of those 16 responses none of the assessors are currently applying a negative impact on property value. One response suggested that adjoining values may go up.

I did speak with Randy Willis with Pearson Assessors. His company assists in the assessments in many of the counties south of Richmond. He indicated that they had found no data to suggest a negative impact on property value and they have looked as they were concerned about that issue. He indicated that they would make no negative impact adjustments and that he recognizes that there are a number of agricultural adjoining uses that have a greater impact on adjoining properties in terms of noise, dust and odor than a solar farm would have. He did indicate that there could be situations where an individual home might have a greater visual impact and those should be looked at on a case-by-case basis, but he also agreed that many allowed agricultural uses could have similar visual impacts on such properties as well.

VIRGINIA Commissioner of the Revenue

County	Assessor Name	Number of Farms in Operation	Change in adjacent property value
Appomattox	Sara Henderson	1, plus one in process	No
Augusta	W. Jean Shrewsbury	no operational	No
Buckingham	Stephanie D. Love	1	No
Charlotte	Naisha Pridgen Carter	1, several others in the works	No
Clarke	Donna Peake	1	No
Frederick	Seth T. Thatcher	none, 2 approved for 2022	No, assuming compatible with rural area
Goochland	Mary Ann Davis		No
Hanover	Ed Burnett	1	No
Louisa	Stacey C. Fletcher	2 operational by end of year	No, only if supported by market data
Mecklenburg	Joseph E. "Ed" Taylor		No
Nottoway	Randy Willis with Pearson Assessors		No
Powhatan	Charles Everest	2 approved, 1 built	Likely increase in value
Rockingham	Dan Cullers	no operational	Likely no
Southampton	Amy B. Carr	1	Not normally
Surry	Jonathan F. Judkins	1	None at this time
Westmoreland	William K. Hoover	4	No

Responses: 16

Negative Impact on Adjoining Value = Yes: 0

Negative Impact on Adjoining Value = No: 16

I have also attempted to contact all of the assessor departments in North Carolina to determine how local assessors are handling solar farms and adjoining property values. I have spoken personally with a number of assessors, but much of this data was obtained via email. I have 39 counties in NC that have both responded to these questions on property value and also have solar farms in that county. I have excluded responses from assessors from counties where there are no current solar farms.

As can be seen in the chart below, of the 39 responses all of the responses have indicated that they make no adjustment to properties adjoining solar farms. Several assessors indicated that it would require an adjoining property owner to appeal their property value with data showing a negative impact before they would make any adjustment and to date they have not had that happen.

I also point out specifically Clay County. I spoke with the assessor there specifically about adjustments that were applied to some properties near a solar farm back in 2008. She was unaware of the details of that event as she was not in this position at that time. As discussed earlier in this report the lower re-assessments at that solar farm were based on a County Official, who owned property adjacent to the solar farm, who made an appeal to the assessor for reductions for his own property. The noted lack of lot sales after announcement of the solar farm however coincided with the recession in 2008/2009 and lack of lot sales effectively defined that area during that time, but without relying on any data the assessor made that change in that time frame based on conversations with the assessor. Since then, Clay County has confirmed that they do not currently make any changes to adjoining property values and the current county assessor was not even aware that they had in the past done so.

NC Assessor Survey on Solar Farm Property Value Impacts

County	Assessor's Name	Number of Farms	Change in Adjacent Property Value
Alexander	Doug Fox	3	No
Buncombe	Lisa Kirbo	1	No
Burke	Daniel Isenhour	3, 2 on 1 parcel, 1 on 3 parcels	No
Cabarrus	Justin	less than 10, more in the works	No
Caldwell	Monty Woods	3 small	No, but will look at data in 2025
Catawba	Lori Ray	14	No
Chatham	Jenny Williams	13	No
Cherokee	Kathy Killian	9	No
Chowan	Melissa Radke	3, I almost operational	No
Clay	Bonnie L. Lyvers		No
Davidson	Libby	1	No
Duplin	Gary Rose	34, 2 more in planning	No
Franklin	Marion Cascone	11	No
Gaston	Traci Hovis	3	No
Gates	Chris Hill	3	No
Granville	Jenny Griffin	8	No
Halifax	C. Shane Lynch	Multiple	No
Hoke	Mandi Davis	4	No
Hyde	Donnie Shumate	1 to supplement egg processing plant	No
Iredell	Wes Long	2, 3 others approved	No
Lee	Lisa Faulkner	8	No
Lincoln	Susan Sain	2	No
Moore	Michael Howery	10	No
New Hanover	Rhonda Garner	35	No
Orange	Chad Phillip	2 or 7 depending on breakdown	No
Pender	Kayla Bolick Futrell	6	No
Person	Russell Jones	9	No
Pitt	Russell D. Hill	8, 1 in planning	No
Randolph	Mark Frick	19	No
Rockingham	Mark C McClintock	6	No
Rutherford	Kim Aldridge	20	No
Sampson	Jim Johnson	9, 1 in construction	No
Scotland	James Brown	15, 1 in process	No
Stokes	Richard Brim	2	No
Surry	Penny Harrison	4, 2 more in process	No
Union	Robin E. Merry	6	No
Vance	Cathy E. Renn	13	No
Warren	John Preston	7	No
Wayne	Alan Lumpkin	32	No
Wilson	William (Witt) Putney	~16	No, mass appraisal standards applied

Responses: 39

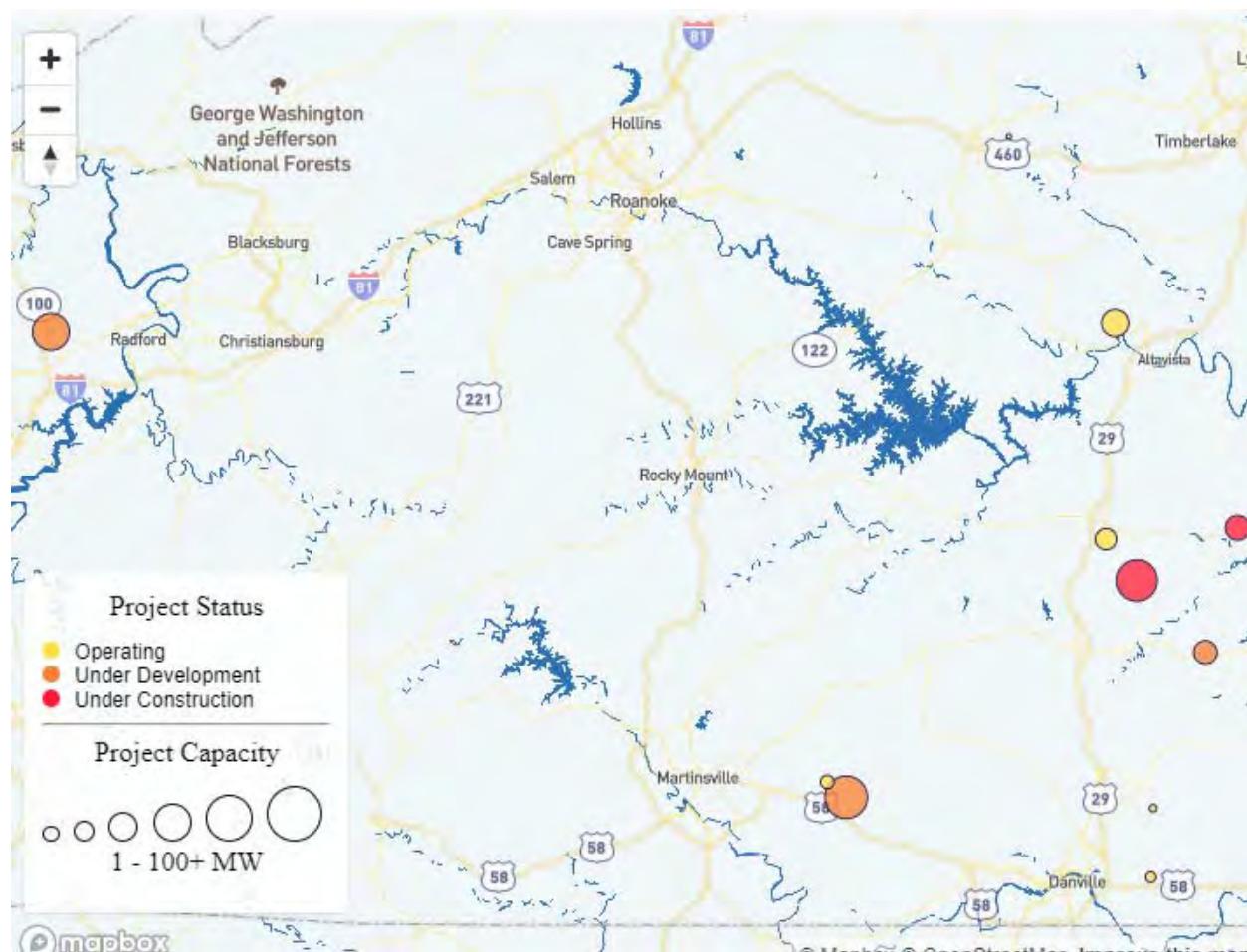
Negative Impact on Adjoining Value = Yes: 0

Negative Impact on Adjoining Value = No: 39

VI. Summary of Solar Projects In Virginia

I have researched the solar projects in Virginia. I identified the solar farms through the Solar Energy Industries Association (SEIA) Major Projects List and then excluded the roof mounted facilities. I focused on larger solar farms over 10 MW though I have included a couple of smaller solar farms as shown in the chart below.

Below I have an excerpt from that map showing the area around Rocky Mount. The closest operating solar farm identified are the two near the east side of the map around Altavista. There is another smaller project just east of Martinsville to the south. The project closest to Altavista is called Altavista Solar and is an 80 MW project in Campbell County that was built in 2022. This project is too new for identifying sales impacts as it just finished construction. The next one is Whitehorn Solar which is located south of Altavista in Gretna, Pittsylvania County and it is a 50 MW project that finished construction in December 2021. I have discussed this solar farm later in this report. The solar farm near Martinsville is a 20 MW project called Energix Leatherwood and it was built in August 2021. I did not identify any adjoining sales since construction was complete.



I was able to identify and research 85 additional solar farms in Virginia as shown below. These are primarily over 20 MW in size with adjoining homes as close as 100 feet and the mix of adjoining uses is primarily agricultural and residential.

Solar #	Name	State	County	City	Output (MW)	Total	Used	Avg. Dist	Closest	Adjoining Use by Acre			
						Output (MW)	Acres	Acres	to home	Home	Res	Agri	Agri/Res Com
115	Buckingham I	VA	Buckingham	Cumberland	19.8	481.18		N/A	N/A	8%	73%	18%	0%
121	Scott	VA	Powhatan	Powhatan	20	898.4		1,421	730	29%	28%	44%	0%
204	Walker-Correctional	VA	New Kent	Barhamsville	20	484.65		516	103	13%	68%	20%	0%
205	Sappony	VA	Sussex	Stony Creek	20	322.68				2%	98%	0%	0%
216	Beetle	VA	Southampton	Boykins	40	422.19		1,169	310	0%	10%	90%	0%
222	Grasshopper	VA	Mecklenburg	Chase City	80	946.25				6%	87%	5%	1%
226	Belcher/Desper	VA	Louisa	Louisa	88	1238.1			150	19%	53%	28%	0%
228	Bluestone Farm	VA	Mecklenburg	Chase City	4.99	332.5				0%	100%	0%	0%
257	Nokesville	VA	Prince William	Nokesville		331.01				12%	49%	17%	23%
261	Buckingham II	VA	Buckingham	Buckingham	19.8	460.05				6%	79%	15%	0%
262	Mount Jackson	VA	Shenandoah	Mount Jackson	15.65	652.47				21%	51%	14%	13%
263	Gloucester	VA	Gloucester	Gloucester	20	203.55		508	190	17%	55%	28%	0%
267	Scott II	VA	Powhatan	Powhatan		701				41%	25%	34%	0%
270	TWE Myrtle	VA	Suffolk	Suffolk	15	258.97	120	1,115	150	34%	48%	17%	0%
272	Churchview	VA	Middlesex	Church View	20	567.91				9%	64%	27%	0%
303	Turner	VA	Henrico	Henrico	20	463.12		N/A	N/A	21%	37%	0%	42%
311	Sunnybrook Farm	VA	Halifax	Scottsburg		527.88	340	N/A	N/A	15%	59%	26%	0%
312	Powell Creek	VA	Halifax	Alton		513		N/A	N/A	7%	71%	22%	0%
339	Crystal Hill	VA	Halifax	Crystal Hill		628.67	218	1,570	140	6%	41%	35%	18%
353	Amazon East(ern s)	VA	Accomack	Oak Hall	80	1000		645	135	8%	75%	17%	0%
354	Alton Post	VA	Halifax	Alton		501.96		749	100	2%	58%	40%	0%
357	Water Strider	VA	Halifax	Nathalie		1134	960	821	250	7%	55%	38%	0%
363	Remington	VA	Fauquier	Remington	20	277.2	125	2,755	1,280	10%	41%	31%	18%
364	Greenwood	VA	Culpepper	Stevensburg	100	2266.6	1800	788	200	8%	62%	29%	0%
366	Culpeper Sr	VA	Culpeper	Culpeper		12.53		N/A	N/A	15%	0%	86%	0%
369	Cherrydale	VA	Northampton	Kendall Grove	20	180.17		N/A	N/A	5%	0%	92%	3%
370	Clarke	VA	Clarke	White Post	10	234.84		N/A	N/A	14%	39%	46%	1%
371	Bedford	VA	Bedford	Bedford	3	101	20	N/A	N/A	8%	0%	66%	26%
372	Woodland	VA	Isle of Wight	Smithfield	19.7	211.12		606	190	9%	0%	91%	0%
373	Whitehouse	VA	Louisa	Louisa	20	499.52		1,195	110	24%	55%	18%	4%
406	Foxhound	VA	Halifax	Clover	91	1311.8		885	185	5%	61%	17%	18%
483	Essex Solar Center	VA	Essex	Center Cross	20	106.12		693	360	3%	70%	27%	0%
484	Southampton	VA	Southampton	Newsoms	100	3243.9		-	-	3%	78%	17%	3%
494	Walnut	VA	King and Queen	Shackelfords	110	1700	1173	641	165	14%	72%	13%	1%
496	Piney Creek	VA	Halifax	Clover	80	776.18	422	523	195	15%	62%	24%	0%
500	Rappahannock	VA	Lancaster	White Stone	2	184	25	831	560	30%	0%	70%	0%
510	UVA Puller	VA	Middlesex	Topping	15	120	120	1,095	185	59%	32%	0%	10%
516	Dogwood	VA	Page	Stanley	20	360.7	110	2,207	225	12%	22%	65%	0%
518	Fountain Creek	VA	Greenville	Emporia	80	798.3	595	862	300	6%	23%	71%	0%
557	Winterpock 1	VA	Chesterfield	Chesterfield		518	308	2,106	350	4%	78%	18%	0%
559	Wood Brothers	VA	Middlesex	Hartfield	5	60.61	38.67	878	205	12%	86%	0%	2%
577	Windsor	VA	Isle of Wight	Windsor	85	760.87	760.87	459	160	8%	71%	21%	0%
579	Spotsylvania	VA	Spotsylvania	Paytes	500	6412	3500			9%	52%	11%	27%
586	Sweet Sue	VA	King William	Aylett	77	1262	576	1,617	680	7%	68%	25%	0%
591	Warwick	VA	Prince George	Disputanta	26.5	1090.1	564.53	555	115	12%	67%	21%	0%
621	Loblolly	VA	Surry	Spring Grove	150	2181.9	1000	1,860	110	7%	62%	31%	0%
622	Woodridge	VA	Albemarle	Scottsville	138	2260.9	1000	1,106	215	9%	63%	28%	0%
624	Reams	VA	Dinwiddie	Dinwiddie	5	64.1	37.8	873	270	28%	40%	32%	0%
633	Brunswick	VA	Greenville	Emporia	150.2	2076.4	1387.3	1,091	240	4%	85%	11%	0%
642	Belcher 3	VA	Louisa	Louisa		749.36	658.56	598	180	14%	71%	14%	1%
649	Endless Caverns	VA	Rockingham	New Market	31.5	355	323.6	624	190	15%	27%	51%	7%
664	Watlington	VA	Halifax	South Boston	20	240.09	137	536	215	24%	48%	28%	0%
672	Spout Spring	VA	Appomattox	Appomattox	60	881.12	673.37	836	335	16%	30%	46%	8%

Solar #	Name	State	County	City	Output (MW)	Total	Used	Avg. Dist	Closest	Adjoining Use by Acre			
						Output (MW)	Acres	Acres	to home	Home	Res	Agri	Agri/Res Com
703 Lily Pond		VA	Dinwiddie	Carson	80	1107.5	600	628	110	13%	75%	12%	0%
704 Midway		VA	Albemarle	Batesville	8	136	90	858	340	20%	46%	34%	0%
749 Martin		VA	Goochland	Richmond	5	114.2	114.2	1,491	470	7%	54%	39%	0%
750 Palmer		VA	Fluvanna	Zion Crossroads	5	57	41	525	165	31%	55%	0%	14%
755 Danville		VA	Pittsylvania	Danville	6	72.08	72.08	616	135	22%	63%	15%	0%
756 Martin Trail		VA	Halifax	Clover	6	43	37	254	115	6%	13%	81%	0%
757 Route 360		VA	Halifax	Clover	5.65	110	40	1,957	1,275	6%	18%	76%	0%
769 Cavalier		VA	Surry/Isle of Wigh	Elberon	240	5050	3323	1,231	215	2%	78%	20%	0%
772 Riverstone		VA	Buckingham	Arvonia	149.5	1939	1193	814	355	4%	90%	6%	0%
773 Sunfish		VA	Orange	Culpeper	80	1131.5	679.5	1,121	120	4%	13%	38%	44%
776 West Lake		VA	Franklin	Harrisburg	20	592.82	592.82	3,280	1,260	11%	18%	49%	22%
777 Aditya		VA	Louisa	Louisa	11	94.67	60	614	350	15%	85%	0%	0%
781 Waller		VA	Lancaster	Burgess		1400	1400	880	125	28%	72%	0%	0%
795 Harris Staunton		VA	Halifax	South Boston	47	697	697	352	185	3%	89%	8%	0%
803 Hickory		VA	Chesterfield	Chesterfield	4.7	95.21	22	1,286	325	8%	22%	70%	0%
809 Mountain Brook		VA	Franklin	Wirtz	20				427	195	24%	21%	54%
812 Prince Edward		VA	Prince Edward		25	369.2	369.2	1,275	660	0%	55%	45%	0%
813 Redbud		VA	Frederick	Winchester	30	262.99	262.99	529	150	29%	55%	17%	0%
829 OFW		VA	Shenandoah	Mount Jackson	20	126.64	126.64	504	110	6%	57%	31%	6%
831 Knight		VA	Rockingham	Shenandoah	70	461.59	461.59	833	240	0%	100%	0%	0%
833 Dayton Wayland		VA	Rockingham	Dayton	4	50.7	50.7	684	100	45%	53%	2%	0%
834 Firefly		VA	Pittsylvania			3143	3143	-	200	12%	73%	15%	0%
854 Reeve		VA	Prince Edward	Pamplin	5	164.7	164.7	2,232	1,195	7%	71%	22%	0%
858 360 Solar Center		VA	Chesterfield	Skinnerquarter	100	2000	410	2,036	235	1%	97%	2%	0%
864 Purdy		VA	Greenville	Purdy	65	596	596	825	250	5%	66%	29%	0%
865 Clover Creek		VA	Halifax	Clover	90	1472	1472	1,691	310	10%	89%	1%	0%
870 Pineside		VA	Buckingham	Scottsville	74.9	2242	2242	2,484	500	22%	51%	27%	0%
872 Rosalind		VA	Greenville	Emporia	160	1795	1795	654	500	8%	86%	7%	0%
879 Wheelhouse		VA	Lunenburg	Victoria	912.47	60	60	2,071	900	7%	41%	51%	0%
880 Elam		VA	Prince Edward	Pamplin	138.9	3	3	1,066	425	22%	66%	12%	0%
881 Helios		VA	Pulaski	Pulaski	11.45	141.76	141.76	734	225	48%	28%	24%	0%
882 Enon		VA	Stafford	Stafford	3	36.76	36.76	289	120	37%	63%	0%	0%
900 Land of Promise		VA	Chesapeake	Chesapeake	5	134.66	134.66	1,338	785	44%	48%	8%	0%
901 Pocatcy		VA	Chesapeake	Chesapeake	2	27.22	27.22	632	445	21%	79%	0%	0%
(MW)						Total	Used	Avg. Dist	Closest	Adjoining Use by Acre			
(MW)						Output	Acres	Acres	to home	Home	Res	Agri	Agri/Res Com
Average						64.6	815.0	624.2	1059	327	14%	54%	28%
Median						20.0	482.9	331.8	836	215	10%	57%	22%
High						912.5	6412.0	3500.0	3280	1280	59%	100%	92%
Low						2.0	3.0	3.0	254	100	0%	0%	0%

On the following pages I have included summary data on constructed solar farms from the list indicated above. Similar information is available for the larger set of solar farms in the adjoining states in my files if requested.

115: Buckingham Solar, E. James Anderson Hwy, Buckingham, VA

This project was proposed in 2017 and located on 460 acres with the closest home proposed to be 150 feet from the closest solar panel.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	5.95%	71.79%
Agricultural	78.81%	20.51%
Agri/Res	15.24%	7.69%
Total	100.00%	100.00%

121: Scott Solar Project, 1580 Goodes Bridge Rd, Powhatan, VA

This project was built in 2016 and located on 165 acres out of 898 acres for a 17 MW with the closest home proposed to be 730 feet from the closest solar panel.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	28.83%	78.57%
Agri/Res	43.52%	3.57%
Agricultural	27.65%	17.86%
Total	100.00%	100.00%

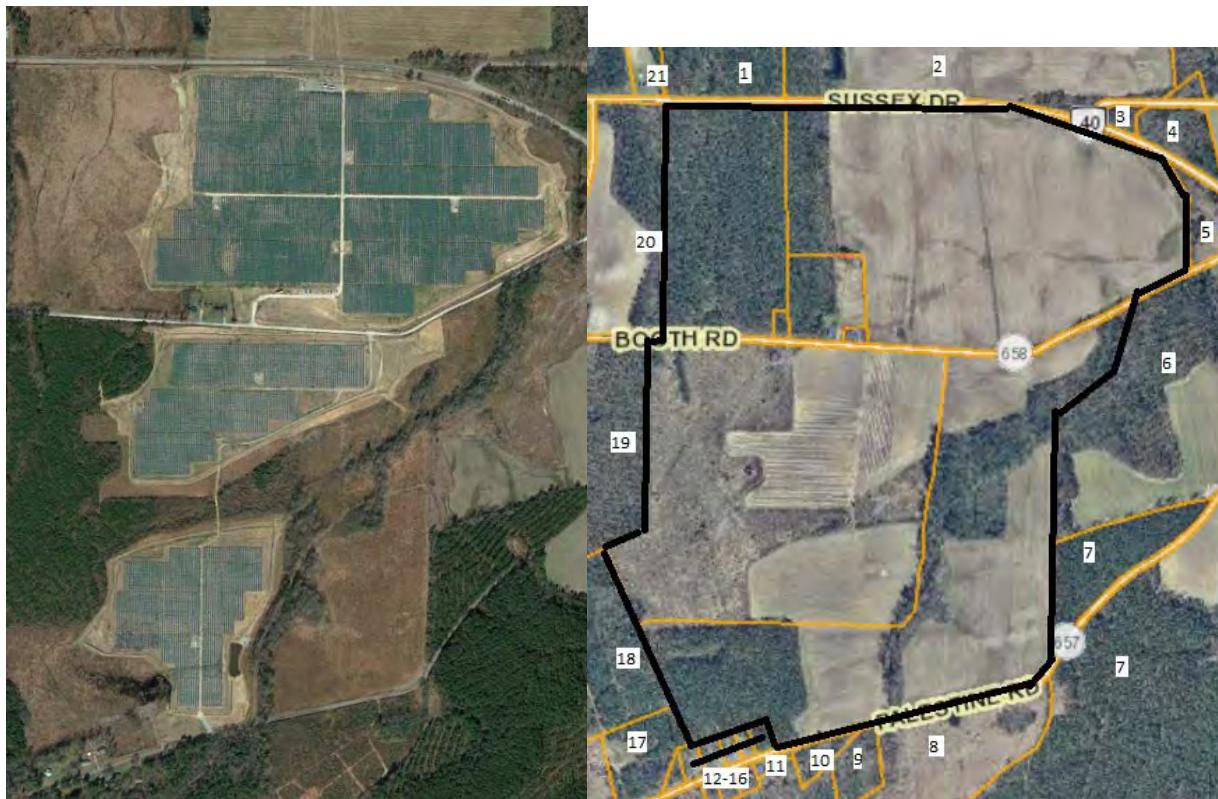
204: Walker-Correctional Solar, Barham Road, Barhamsville, VA

This project was built in 2017 and located on 484.65 acres for a 20 MW with the closest home at 110 feet from the closest solar panel with an average distance of 500 feet.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	12.59%	76.92%
Agricultural	67.71%	15.38%
Agri/Res	19.70%	7.69%
Total	100.00%	100.00%

205: Sappony Solar, Sussex Drive, Stony Creek, VA



This project was built in 2017 and located on 484.65 acres for a 20 MW with the closest home at 110 feet from the closest solar panel with an average distance of 500 feet.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	12.59%	76.92%
Agricultural	67.71%	15.38%
Agri/Res	19.70%	7.69%
Total	100.00%	100.00%

354: Amazon Solar project East (Eastern Shore), Accomack, VA



This project was built in 2016 for a solar project on a 1,000-acre assemblage for an 80 MW facility. The closest home is 135 feet from the closest panel.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	8.18%	63.74%
Agricultural	75.16%	30.77%
Agri/Res	16.56%	3.30%
Substation	0.08%	1.10%
Church	0.01%	1.10%
Total	100.00%	100.00%

364: Remington Solar, 12080 Lucky Hill Rd, Remington, VA



This project was built in 2017 for a solar project on a 125-acre tract for a 20 MW facility. There were some recent home sales adjoining this project, but it was difficult to do any matched pairs. One sale was an older home in very poor condition according to the broker and required crossing railroad tracks on a private road to get access to the home and located across from a large industrial building. The other sale is a renovated historic home on a large tract of land just one parcel north of the large industrial building. These sales essentially have too much static around them to isolate any impacts separate from these other factors.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	10.24%	65.38%
Agricultural	40.79%	19.23%
Agri/Res	30.87%	7.69%
Warehouse	0.82%	3.85%
Substation	17.28%	3.85%
Total	100.00%	100.00%

370: Cherrydale Solar, Seaside Road, Kendall Grove, VA

This project was built in 2017 and located on 180.17 acres for a 20 MW facility.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	5.44%	80.77%
Agricultural	92.01%	15.38%
Warehouse	2.55%	3.85%
Total	100.00%	100.00%

371: Clarke County Solar, Double Tollgate Road, White Post, VA



This project was built in 2017 and located on a portion of a 234.84-acre tract for a 20 MW facility.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	13.70%	74.19%
Agricultural	38.89%	6.45%
Agri/Res	46.07%	6.45%
Commercial	0.19%	6.45%
Warehouse	0.85%	3.23%
Substation	0.30%	3.23%
Total	100.00%	100.00%

373: *Woodland Solar, Longview Drive, Smithfield, VA*



This project was built in 2016 for a solar project on a 211.12-acre tract for a 19.7 MW facility. The closest single-family home is 190 feet away from the closest solar panel. The average distance is 606 feet.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	8.85%	46.15%
Agricultural	91.08%	46.15%
Cell Tower	0.07%	7.69%
Total	100.00%	100.00%

374: Whitehouse Solar, Chalklevel Road, Louisa, VA



This project was built in 2016 for a solar project on a 499.52-acre tract for a 20 MW facility. The closest single-family home is 110 feet away from the closest solar panel. The average distance is 1,195 feet.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	23.55%	70.27%
Agricultural	54.51%	10.81%
Agri/Res	18.22%	2.70%
Commercial	2.49%	13.51%
Industrial	1.22%	2.70%
Total	100.00%	100.00%

484: Essex Solar, Tidewater Trail, Center Cross, VA

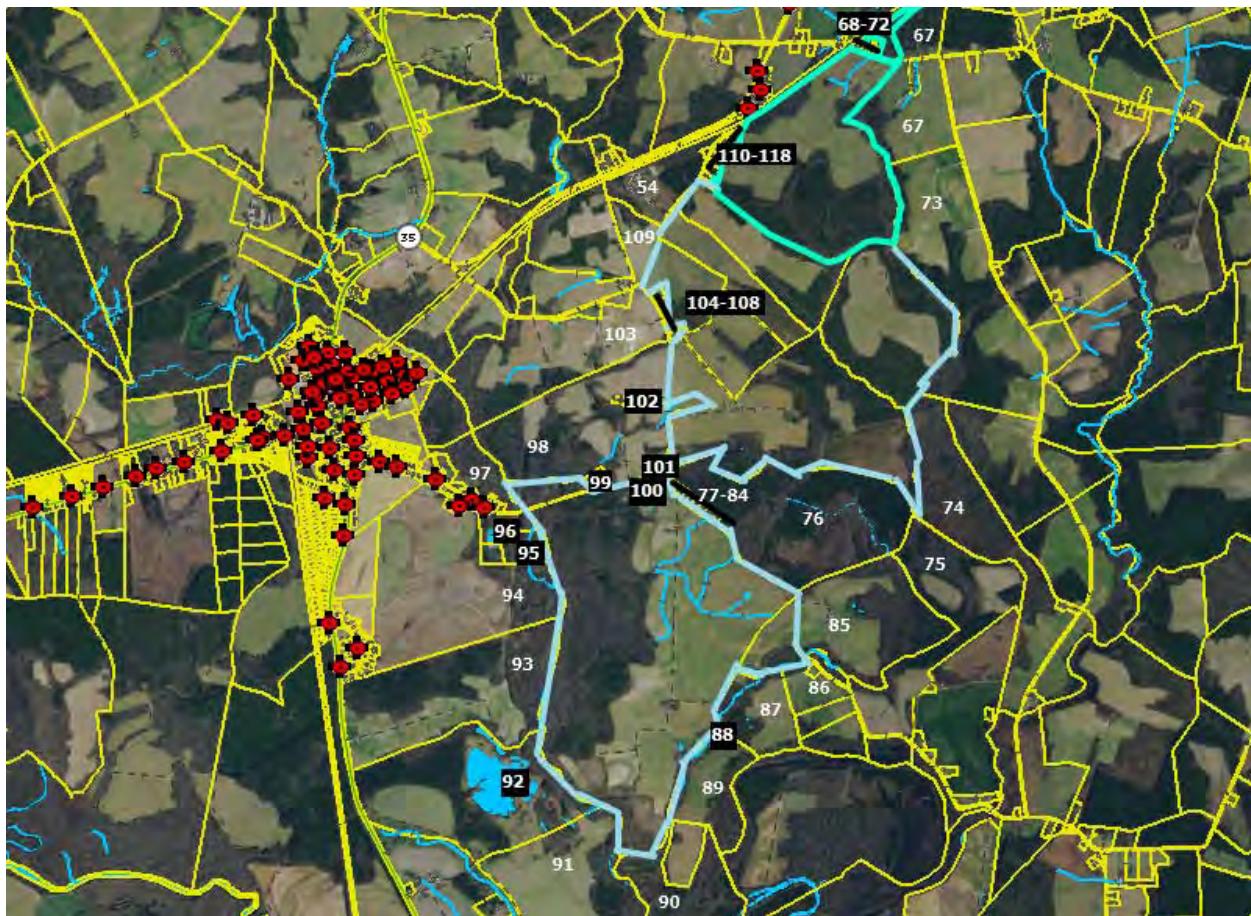
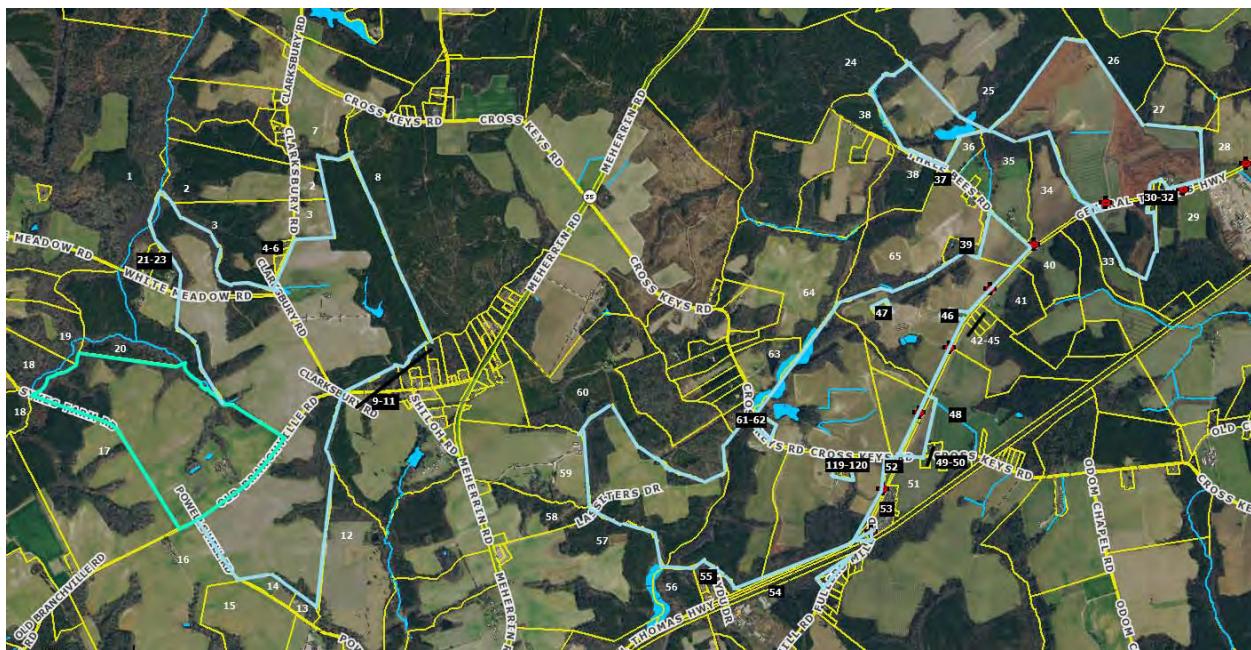


This project was built in 2017 for a solar project on a 106.12-acre tract for a 20 MW facility. The closest single-family home is 360 feet away from the closest solar panel. The average distance is 693 feet.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	3.13%	57.89%
Agricultural	69.65%	26.32%
Agri/Res	26.99%	10.53%
Religious	0.23%	5.26%
Total	100.00%	100.00%

485: Southampton Solar, General Thomas Hwy, Newsoms, VA





This project was built in 2017 for a solar project on an assemblage of 3,244 acres for a 100 MW facility.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	2.56%	53.33%
Agricultural	77.99%	36.67%
Agri/Res	16.56%	8.33%
Industrial	2.89%	1.67%
Total	100.00%	100.00%

VII. Market Analysis of the Impact on Value from Solar Farms

I have researched hundreds of solar farms in numerous states to determine the impact of these facilities on the value of adjoining property. This research has primarily been in North Carolina, but I have also conducted market impact analyses in Virginia, South Carolina, Tennessee, Texas, Oregon, Mississippi, Maryland, New York, California, Missouri, Florida, Montana, Georgia, Louisiana, and New Jersey.

Wherever I have looked at solar farms, I have derived a breakdown of the adjoining uses to show what adjoining uses are typical for solar farms and what uses would likely be considered consistent with a solar farm use similar to the breakdown that I've shown for the subject property on the previous page. A summary showing the results of compiling that data over hundreds of solar farms is shown later in the Scope of Research section of this report.

I also consider whether the properties adjoining a solar farm in one location have characteristics similar to the properties abutting or adjoining the proposed site so that I can make an assessment of market impact on each proposed site. Notably, in most cases solar farms are placed in areas very similar to the site in question, which is surrounded by low density residential and agricultural uses. In my over 700 studies, I have found a striking repetition of that same typical adjoining use mix in over 90% of the solar farms I have looked at. Matched pair results in multiple states are strikingly similar, and all indicate that solar farms – which generate very little traffic, and do not generate noise, dust or have other harmful effects – do not negatively impact the value of adjoining or abutting properties.

On the following pages I have considered matched pair data specific to Virginia and Kentucky.

In the next section I have considered matched pair data throughout the Southeast of the United States as being the most similar states that would most readily compare to Virginia. This includes data from Florida, Georgia, South Carolina, North Carolina, Tennessee, Virginia and Maryland. I focused on projects of 5 MW and larger though I have significant supplemental data on solar farms just smaller than that in North Carolina that show similar results. This data is available in my files.

I have additional supporting information from other states in my files that show a consistent pattern across the United States, but again, I have focused on the Southeast in this analysis.

A. *Virginia Data*

I have identified matched pairs adjoining the solar farms noted above. I have also included data from a solar farm in Kentucky that does a good job of illustrating distant views of solar panels in relation to adjoining housing.

The following pages detail the matched pairs and how they were derived.

1. Matched Pair – Clarke County Solar, Clarke County, VA



This project is a 20 MW facility located on a 234-acre tract that was built in 2017.

I have considered two recent sales of Parcel 3. The home on this parcel is 1,230 feet from the closest panel as measured in the second map from Google Earth, which shows the solar farm under construction. This home sold in January 2017 for \$295,000 and again in August 2019 for \$385,000. I show each sale below and compare those to similar home sales in each time frame. The significant increase in price between 2017 and 2019 is due to a major kitchen remodel, new roof, and related upgrades as well as improvement in the market in general. The sale and later resale of the home with updates and improvements speaks to pride of ownership and increasing overall value as properties perceived as diminished are less likely to be renovated and sold for profit.

I note that 102 Tilthammer includes a number of barns that I did not attribute any value in the analysis. The market would typically give some value for those barns but even without that adjustment there is an indication of a positive impact on value due to the solar farm. The landscaping buffer from this home is considered light.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
3	Adjoins	833 Nations Spr	5.13	8/18/2019	\$385,000	1979	1,392	\$276.58	3/2	Det Gar	Ranch	UnBsmt
	Not	167 Leslie	5.00	8/19/2020	\$429,000	1980	1,665	\$257.66	3/2	Det2Gar	Ranch	
	Not	2393 Old Chapel	2.47	8/10/2020	\$330,000	1974	1,500	\$220.00	3/1.5	Det Gar	Ranch	
	Not	102 Tilthammer	6.70	5/7/2019	\$372,000	1970	1,548	\$240.31	3/1.5	Det Gar	Ranch	UnBsmt

Adjoining Sales Adjusted

Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
-\$13,268		-\$2,145	-\$56,272		-\$5,000	\$50,000	\$385,000			1230
-\$9,956	\$25,000	\$8,250	-\$19,008	\$5,000		\$50,000	\$389,286	-4%	-1%	
\$3,229		\$16,740	-\$29,991	\$5,000			\$366,978	5%	0%	

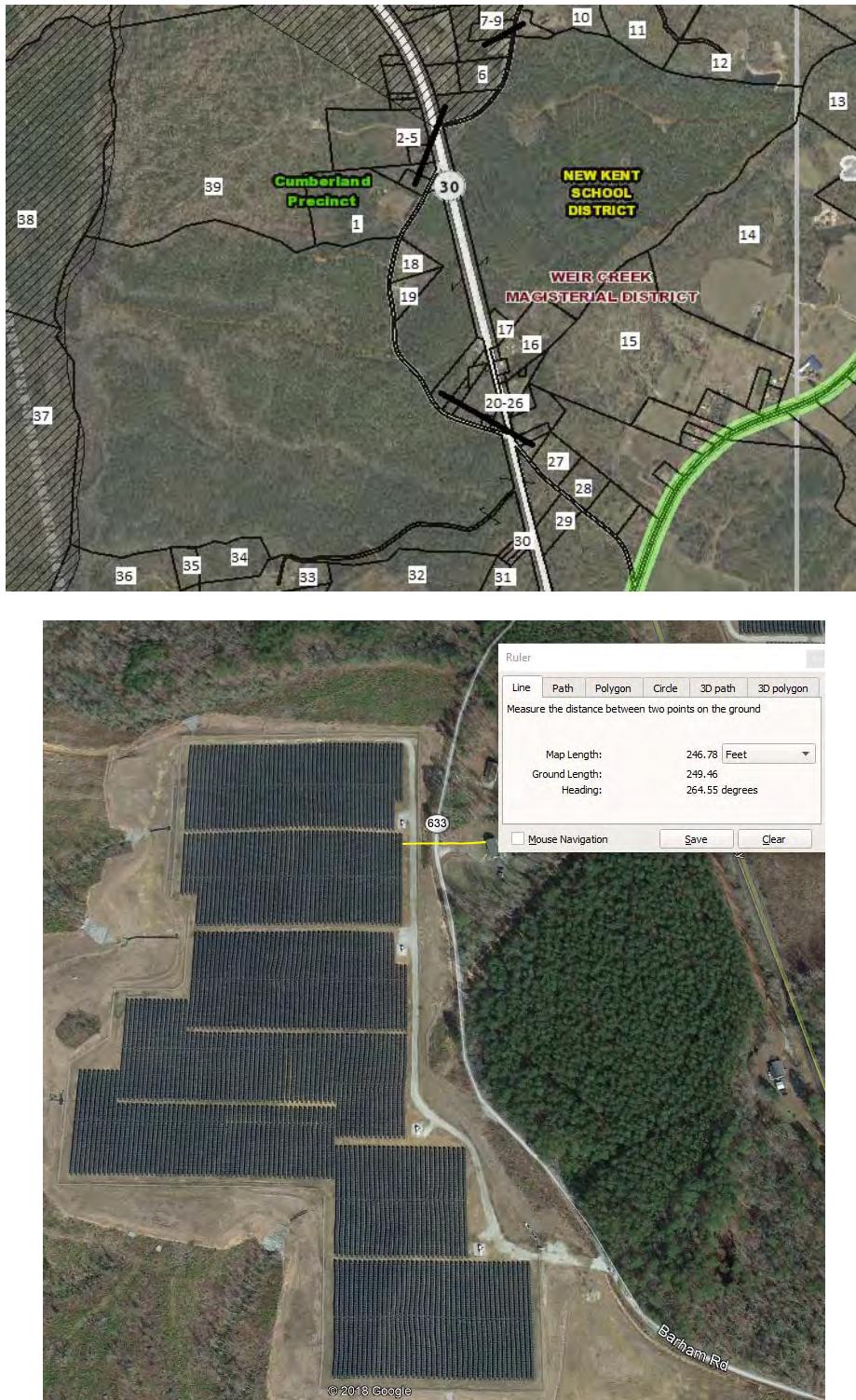
Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
3	Adjoins	833 Nations Spr	5.13	1/9/2017	\$295,000	1979	1,392	\$211.93	3/2	Det Gar	Ranch	UnBsmt
	Not	6801 Middle	2.00	12/12/2017	\$249,999	1981	1,584	\$157.83	3/2	Open	Ranch	
	Not	4174 Rockland	5.06	1/2/2017	\$300,000	1990	1,688	\$177.73	3/2	2 Gar	2-story	
	Not	400 Sugar Hill	1.00	6/7/2018	\$180,000	1975	1,008	\$178.57	3/1	Open	Ranch	

Adjoining Sales Adjusted

Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
-\$7,100	\$25,000	-\$2,500	-\$24,242		\$5,000	\$50,000	\$295,000			1230
\$177		-\$16,500	-\$42,085		-\$10,000	\$50,000	\$281,592	5%		
-\$7,797		\$3,600	\$54,857	\$10,000	\$5,000	\$50,000	\$295,661	0%	1%	

2. Matched Pair – Walker-Correctional Solar, Barham Road, Barhamsville, VA



This project was built in 2017 and located on 484.65 acres for a 20 MW with the closest home at 110 feet from the closest solar panel with an average distance of 500 feet.

I considered the recent sale identified on the map above as Parcel 19, which is directly across the street and based on the map shown on the following page is 250 feet from the closest panel. A

limited buffering remains along the road with natural growth being encouraged, but currently the panels are visible from the road. Alex Uminski, SRA with MGMiller Valuations in Richmond VA confirmed this sale with the buying and selling broker. The selling broker indicated that the solar farm was not a negative influence on this sale and in fact the buyer noticed the solar farm and then discovered the listing. The privacy being afforded by the solar farm was considered a benefit by the buyer. I used a matched pair analysis with a similar sale nearby as shown below and found no negative impact on the sales price. Property actually closed for more than the asking price. The landscaping buffer is considered light.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	5241 Barham	2.65	10/18/2018	\$264,000	2007	1,660	\$159.04	3/2	Drive	Ranch	Modular
Not	17950 New Kent	5.00	9/5/2018	\$290,000	1987	1,756	\$165.15	3/2.5	3 Gar	Ranch	
Not	9252 Ordinary	4.00	6/13/2019	\$277,000	2001	1,610	\$172.05	3/2	1.5-Gar	Ranch	
Not	2416 W Miller	1.04	9/24/2018	\$299,000	1999	1,864	\$160.41	3/2.5	Gar	Ranch	

Adjoining Sales Adjusted

Solar	Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
Adjoins	5241 Barham								\$264,000		250
Not	17950 New Kent			-\$8,000	\$29,000	-\$4,756	-\$5,000	-\$20,000	-\$15,000	\$266,244	-1%
Not	9252 Ordinary		-\$8,310	-\$8,000	\$8,310	\$2,581		-\$10,000	-\$15,000	\$246,581	7%
Not	2416 W Miller			\$8,000	\$11,960	-\$9,817	-\$5,000	-\$10,000	-\$15,000	\$279,143	-6%

Average Diff 0%

I also spoke with Patrick W. McCrerey of Virginia Estates who was marketing a property that sold at 5300 Barham Road adjoining the Walker-Correctional Solar Farm. He indicated that this property was unique with a home built in 1882 and heavily renovated and updated on 16.02 acres. The solar farm was through the woods and couldn't be seen by this property and it had no impact on marketing this property. This home sold on April 26, 2017 for \$358,000. I did not set up any matched pairs for this property since it is a unique property that any such comparison would be difficult to rely on. The broker's comments do support the assertion that the adjoining solar farm had no impact on value. The home in this case was 510 feet from the closest panel.

3. Matched Pair – Sappony Solar, Sussex County, VA



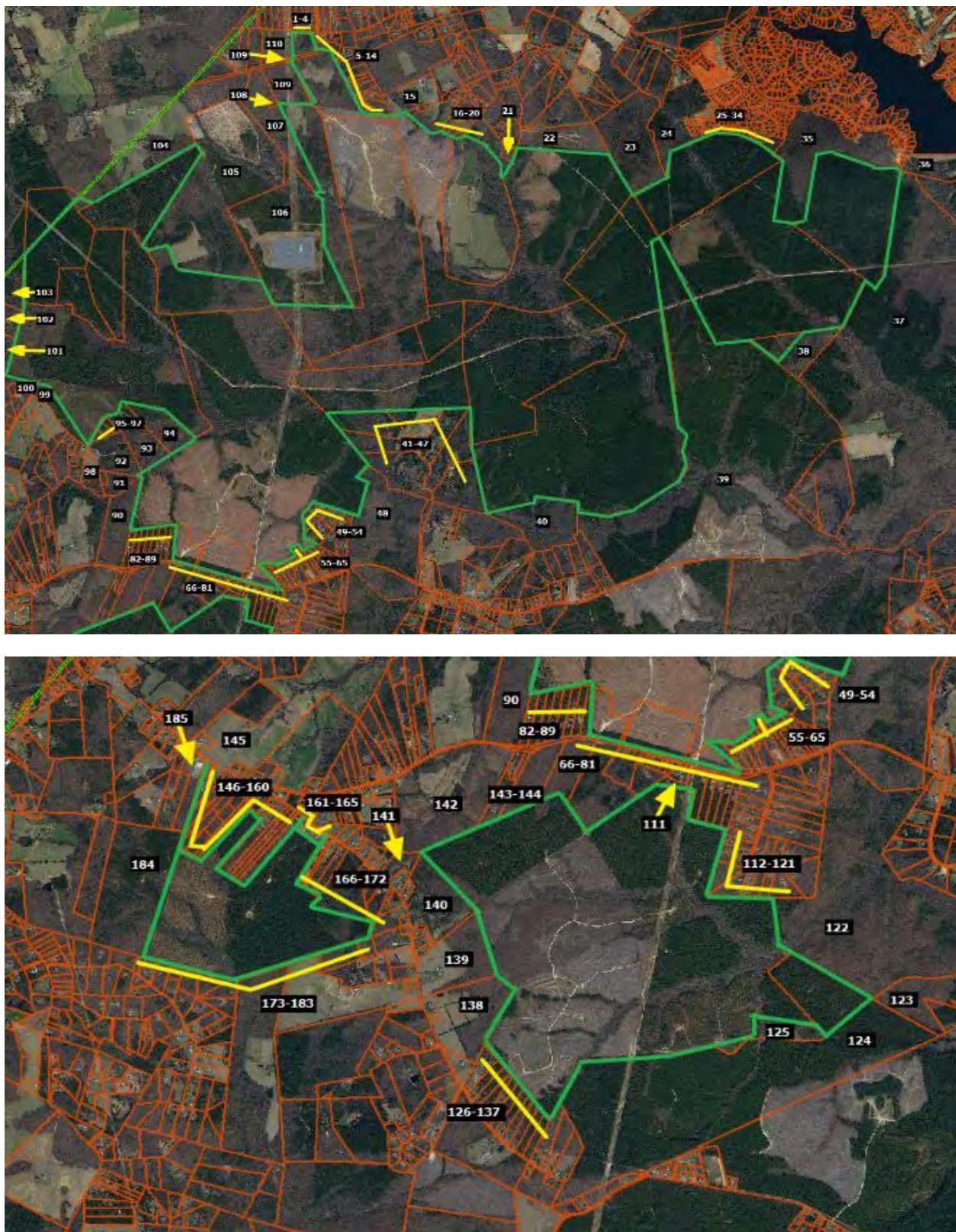
This project is a 30 MW facility located on a 322.68-acre tract that was built in the fourth quarter of 2017.

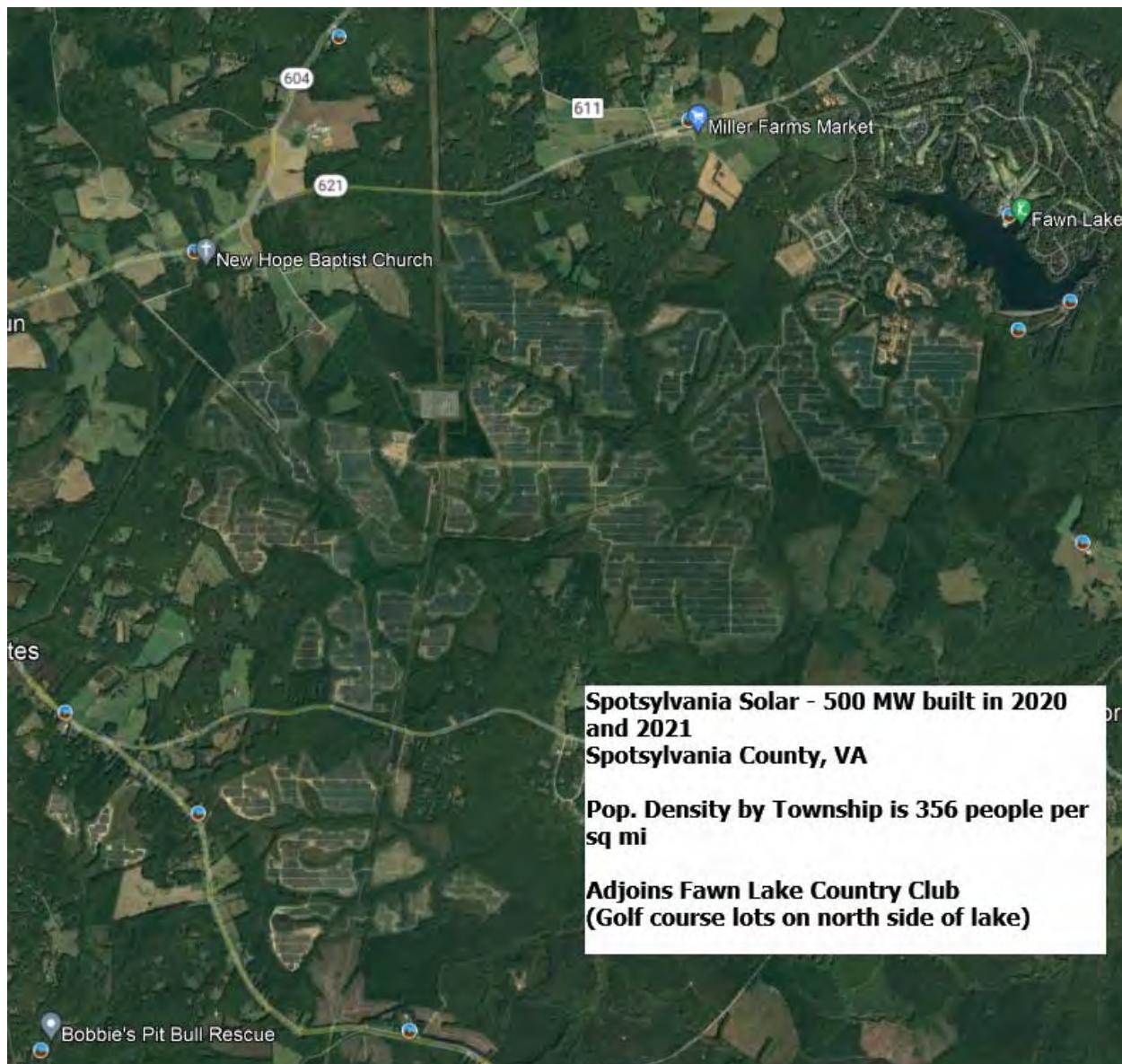
I have considered the 2018 sale of Parcel 17 as shown below. This was a 1,900 s.f. manufactured home on a 6.00-acre lot that sold in 2018. I have compared that to three other nearby manufactured homes as shown below. The range of impacts is within typical market variation with an average of -1%, which supports a conclusion of no impact on property value. The landscaping buffer is considered medium.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	12511 Palestine	6.00	7/31/2018	\$128,400	2013	1,900	\$67.58	4/2.5	Open	Manuf		
Not	15698 Concord	3.92	7/31/2018	\$150,000	2010	2,310	\$64.94	4/2	Open	Manuf	Fence	
Not	23209 Sussex	1.03	7/7/2020	\$95,000	2005	1,675	\$56.72	3/2	Det Crpt	Manuf		
Not	6494 Rocky Br	4.07	11/8/2018	\$100,000	2004	1,405	\$71.17	3/2	Open	Manuf		

Adjoining Sales Adjusted

4. Matched Pair – Spotsylvania Solar, Paytes, VA



This solar farm is being built in four phases with the area known as Site C having completed construction in November 2020 after the entire project was approved in April 2019. Site C, also known as Pleimont 1 Solar, includes 99.6 MW located in the southeast corner of the project and shown on the maps above with adjoining parcels 111 through 144. The entire Spotsylvania project totals 500 MW on 3500 acres out of a parent tract assemblage of 6,412 acres.

I have identified three adjoining home sales that occurred during construction and development of the site in 2020.

The first is located on the north side of Site A on Orange Plank Road. The second is located on Nottoway Lane just north of Catharpin Road on the south side of Site A and east of Site C. The third is located on Post Oak Road for a home that backs up to Site C that sold in September 2020 near the completion of construction for Site C.

Spotsylvania Solar Farm

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	12901 Orng Plnk	5.20	8/27/2020	\$319,900	1984	1,714	\$186.64	3/2	Drive	1.5	Un Bsmt
Not	8353 Gold Dale	3.00	1/27/2021	\$415,000	2004	2,064	\$201.07	3/2	3 Gar	Ranch	
Not	6488 Southfork	7.26	9/9/2020	\$375,000	2017	1,680	\$223.21	3/2	2 Gar	1.5	Barn/Patio
Not	12717 Flintlock	0.47	12/2/2020	\$290,000	1990	1,592	\$182.16	3/2.5	Det Gar	Ranch	

Adjoining Sales Adjusted

Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
12901 Orng Plnk								\$319,900		1270
8353 Gold Dale	-\$5,219	\$20,000	-\$41,500	-\$56,298			-\$20,000	\$311,983	2%	
6488 Southfork	-\$401	-\$20,000	-\$61,875	\$6,071			-\$15,000	\$283,796	11%	
12717 Flintlock	-\$2,312	\$40,000	-\$8,700	\$17,779	-\$5,000	-\$5,000		\$326,767	-2%	

Average Diff 4%

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	9641 Nottoway	11.00	5/12/2020	\$449,900	2004	3,186	\$141.21	4/2.5	Garage	2-Story	Un Bsmt
Not	26123 Lafayette	1.00	8/3/2020	\$390,000	2006	3,142	\$124.12	3/3.5	Gar/DtG	2-Story	
Not	11626 Forest	5.00	8/10/2020	\$489,900	2017	3,350	\$146.24	4/3.5	2 Gar	2-Story	
Not	10304 Pny Brnch	6.00	7/27/2020	\$485,000	1998	3,076	\$157.67	4/4	2Gar/Dt2 Ranch		Fn Bsmt

Adjoining Sales Adjusted

Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
9641 Nottoway								\$449,900		1950
26123 Lafayette	-\$2,661	\$45,000	-\$3,900	\$4,369	-\$10,000	-\$5,000		\$417,809	7%	
11626 Forest	-\$3,624		-\$31,844	-\$19,187		-\$5,000		\$430,246	4%	
10304 Pny Brnch	-\$3,030		\$14,550	\$13,875	-\$15,000	-\$15,000	-\$10,000	\$470,396	-5%	

Average Diff 2%

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	13353 Post Oak	5.20	9/21/2020	\$300,000	1992	2,400	\$125.00	4/3	Drive	2-Story	Fn Bsmt
Not	9609 Logan Hgt	5.86	7/4/2019	\$330,000	2004	2,352	\$140.31	3/2	2Gar	2-Story	
Not	12810 Catharpian	6.18	1/30/2020	\$280,000	2008	2,240	\$125.00	4/2.5	Drive	2-Story Bsmt/Nd Pnt	
Not	10725 Rbrt Lee	5.01	10/26/2020	\$295,000	1995	2,166	\$136.20	4/3	Gar	2-Story	Fn Bsmt

Adjoining Sales Adjusted

Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
13353 Post Oak								\$300,000		1171
9609 Logan Hgt	\$12,070		-\$19,800	\$5,388		-\$15,000	\$15,000	\$327,658	-9%	
12810 Catharpian	\$5,408		-\$22,400	\$16,000	\$5,000		\$15,000	\$299,008	0%	
10725 Rbrt Lee	-\$849		-\$4,425	\$25,496		-\$10,000		\$305,222	-2%	

Average Diff -4%

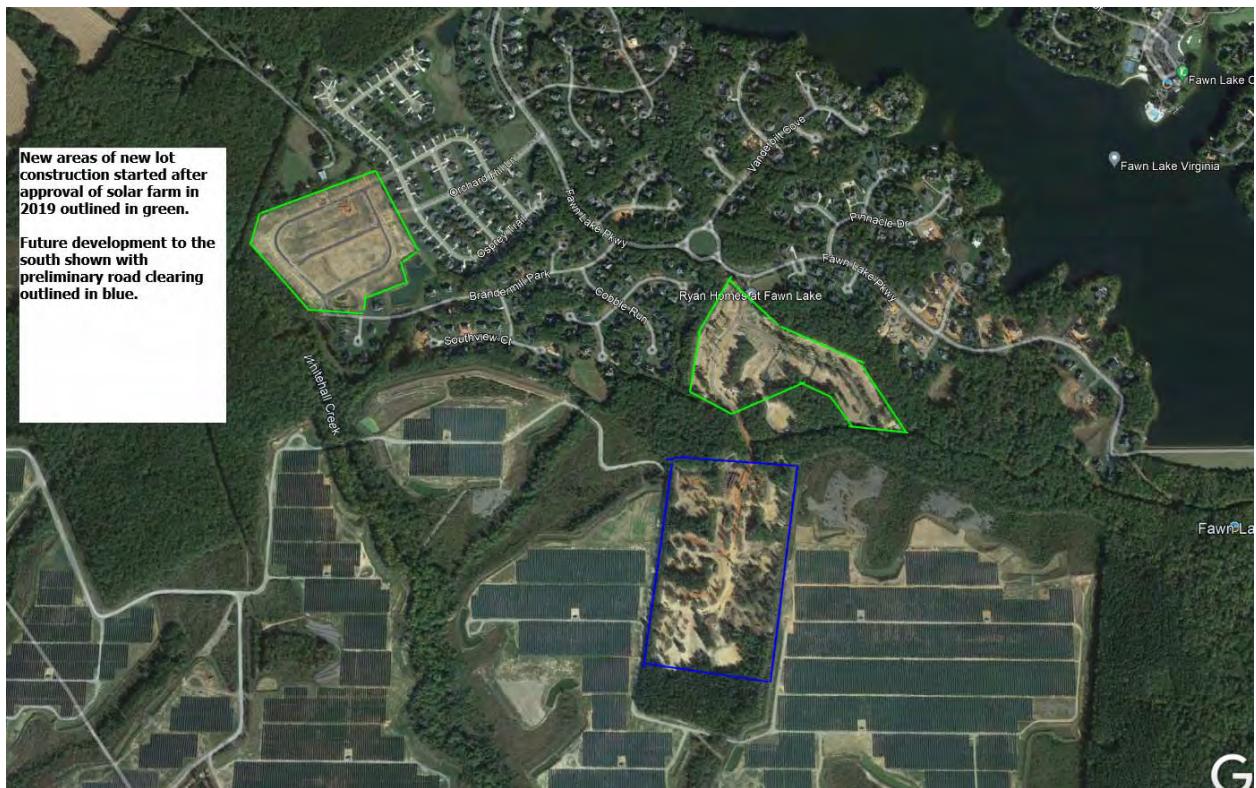
All three of these homes are well set back from the solar panels at distances over 1,000 feet and are well screened from the project. All three show no indication of any impact on property value.

There are a couple of recent lot sales located along Southview Court that have sold since the solar farm was approved. The most recent lot sales include 11700 Southview Court that sold on December 29, 2021 for \$140,000 for a 0.76-acre lot. This property was on the market for less than 2 months before closing within 6% of the asking price. This lot sold earlier in September 2019 for \$55,000 based on a liquidation sale from NTS to an investor.

A similar 0.68-acre lot at 11507 Stonewood Court within the same subdivision located away from the solar farm sold on March 9, 2021 for \$109,000. This lot sold for 18% over the asking price within 1 month of listing suggesting that this was priced too low. Adjusting this lot value upward by 12% for very strong growth in the market over 2021, the adjusted indicated value is \$122,080 for this lot. This is still showing a 15% premium for the lot backing up to the solar farm.

The lot at 11009 Southview Court sold on August 5, 2019 for \$65,000, which is significantly lower than the more recent sales. This lot was sold by NTS the original developer of this subdivision, who was in the process of liquidating lots in this subdivision with multiple lot sales in this time period throughout the subdivision being sold at discounted prices. The home was later improved by the buyer with a home built in 2020 with 2,430 square feet ranch, 3.5 bathrooms, with a full basement, and a current assessed value of \$492,300.

I spoke with Chris Kalia, MAI, Mark Doherty, local real estate investor, and Alex Doherty, broker, who are all three familiar with this subdivision and activity in this neighborhood. All three indicated that there was a deep sell off of lots in the neighborhood by NTS at discounted prices under \$100,000 each. Those lots since that time are being sold for up to \$140,000. The prices paid for the lots below \$100,000 were liquidation values and not indicative of market value. Homes are being built in the neighborhood on those lots with home prices ranging from \$600,000 to \$800,000 with no sign of impact on pricing due to the solar farm according to all three sources.





Fawn Lake Lot Sales

Parcel	Solar?	Address	Acres	Sale Date	Sale Price	Ad. For Time	% Diff
A	Adjoins	11700 Southview Ct	0.76	12/29/2021	\$140,000		
1	1 parcel away	11603 Southview Ct	0.44	3/31/2022	\$140,000	\$141,960	-1.4%
2	Not adjoin	11507 Stonewood Ct	0.68	3/9/2021	\$109,000	\$118,374	15.4%
3	Not adjoin	11312 Westgate Wy	0.83	10/15/2020	\$125,000	\$142,000	-1.4%
4	Not adjoin	11409 Darkstone Pl	0.589	9/23/2021	\$118,000	\$118,000	15.7%

Average 7.1%
Median 7.0%

Least Adjusted 15.7%
2nd Least Adjusted -1.4%
(Parcel 1 off solar farm)

Time Adjustments are based on the FHFA Housing Price Index

5. Matched Pair – Crittenden Solar, Crittenden, KY



This solar farm was built in December 2017 on a 181.70-acre tract but utilizing only 34.10 acres. This is a 2.7 MW facility with residential subdivisions to the north and south.

I have identified five home sales to the north of this solar farm on Clairborne Drive and one home sale to the south on Eagle Ridge Drive since the completion of this solar farm. The home sale on Eagle Drive is for a \$75,000 home and all of the homes along that street are similar in size and price range. According to local broker Steve Glacken with Cutler Real Estate these are the lowest price range/style home in the market. I have not analyzed that sale as it would unlikely provide significant data to other homes in the area.

Mr. Glacken has been selling lots at the west end of Clairborne for new home construction. He indicated in 2020 that the solar farm near the entrance of the development has been a complete non-factor and none of the home sales are showing any concern over the solar farm. Most of the homes are in the \$250,000 to \$280,000 price range. The vacant residential lots are being marketed for \$28,000 to \$29,000. The landscaping buffer is considered light, but the rolling terrain allows for distant views of the panels from the adjoining homes along Clairborne Drive.

The first home considered is a bit of an anomaly for this subdivision in that it is the only manufactured home that was allowed in the community. It sold on January 3, 2019. I compared that sale to three other manufactured home sales in the area making minor adjustments as shown on the next page to account for the differences. After all other factors are considered the adjustments show a -1% to +13% impact due to the adjacency of the solar farm. The best indicator is 1250 Cason, which shows a 3% impact. A 3% impact is within the normal static of real estate transactions and therefore not considered indicative of a positive impact on the property, but it strongly supports an indication of no negative impact.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	250 Claiborne	0.96	1/3/2019	\$120,000	2000	2,016	\$59.52	3/2	Drive	Manuf	
	Not	1250 Cason	1.40	4/18/2018	\$95,000	1994	1,500	\$63.33	3/2	2-Det	Manuf	Carport
	Not	410 Reeves	1.02	11/27/2018	\$80,000	2000	1,456	\$54.95	3/2	Drive	Manuf	
	Not	315 N Fork	1.09	5/4/2019	\$107,000	1992	1,792	\$59.71	3/2	Drive	Manuf	

Adjustments

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
Adjoins	250 Claiborne								\$120,000			373
Not	1250 Cason	\$2,081		\$2,850	\$26,144		-\$5,000	-\$5,000	\$116,075	3%		
Not	410 Reeves	\$249		\$0	\$24,615				\$104,865	13%		
Not	315 N Fork	-\$1,091		\$4,280	\$10,700				\$120,889	-1%		5%

I also looked at three other home sales on this street as shown below. These are stick-built homes and show a higher price range.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	300 Claiborne	1.08	9/20/2018	\$212,720	2003	1,568	\$135.66	3/3	2-Car	Ranch	Brick
	Not	460 Claiborne	0.31	1/3/2019	\$229,000	2007	1,446	\$158.37	3/2	2-Car	Ranch	Brick
	Not	2160 Sherman	1.46	6/1/2019	\$265,000	2005	1,735	\$152.74	3/3	2-Car	Ranch	Brick
	Not	215 Lexington	1.00	7/27/2018	\$231,200	2000	1,590	\$145.41	5/4	2-Car	Ranch	Brick

Adjustments

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
Adjoins	300 Claiborne								\$213,000			488
Not	460 Claiborne	-\$2,026		-\$4,580	\$15,457	\$5,000			\$242,850	-14%		
Not	2160 Sherman	-\$5,672		-\$2,650	-\$20,406				\$236,272	-11%		
Not	215 Lexington	\$1,072		\$3,468	-\$2,559	-\$5,000			\$228,180	-7%		-11%

This set of matched pairs shows a minor negative impact for this property. I was unable to confirm the sales price or conditions of this sale. The best indication of value is based on 215 Lexington, which required the least adjusting and supports a -7% impact.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	350 Claiborne	1.00	7/20/2018	\$245,000	2002	1,688	\$145.14	3/3	2-Car	Ranch	Brick
	Not	460 Claiborne	0.31	1/3/2019	\$229,000	2007	1,446	\$158.37	3/2	2-Car	Ranch	Brick
	Not	2160 Sherman	1.46	6/1/2019	\$265,000	2005	1,735	\$152.74	3/3	2-Car	R/FBsmt	Brick
	Not	215 Lexington	1.00	7/27/2018	\$231,200	2000	1,590	\$145.41	5/4	2-Car	Ranch	Brick

Adjustments

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
Adjoins	350 Claiborne								\$245,000			720
Not	460 Claiborne	-\$3,223		-\$5,725	\$30,660	\$5,000			\$255,712	-4%		
Not	2160 Sherman	-\$7,057		-\$3,975	-\$5,743				\$248,225	-1%		
Not	215 Lexington	-\$136		\$2,312	\$11,400	-\$5,000			\$239,776	2%		-1%

The following photograph shows the light landscaping buffer and the distant view of panels that was included as part of the marketing package for this property. The panels are visible somewhat on the left and somewhat through the trees in the center of the photograph. The first photograph is from the home, with the second photograph showing the view near the rear of the lot.



This set of matched pairs shows a no negative impact for this property. The range of adjusted impacts is -4% to +2%. The best indication is -1%, which as described above is within the typical market static and supports no impact on adjoining property value.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	370 Claiborne	1.06	8/22/2019	\$273,000	2005	1,570	\$173.89	4/3	2-Car	2-Story	Brick
	Not	2160 Sherman	1.46	6/1/2019	\$265,000	2005	1,735	\$152.74	3/3	2-Car	R/FBsmt	Brick
	Not	2290 Dry	1.53	5/2/2019	\$239,400	1988	1,400	\$171.00	3/2.5	2-Car	R/FBsmt	Brick
	Not	125 Lexington	1.20	4/17/2018	\$240,000	2001	1,569	\$152.96	3/3	2-Car	Split	Brick

Adjustments

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Avg Distance
Adjoins	370 Claiborne								\$273,000			930
Not	2160 Sherman	\$1,831		\$0	-\$20,161				\$246,670	10%		
Not	2290 Dry	\$2,260		\$20,349	\$23,256	\$2,500			\$287,765	-5%		
Not	125 Lexington	\$9,951			\$4,800				\$254,751	7%		
											4%	

This set of matched pairs shows a general positive impact for this property. The range of adjusted impacts is -5% to +10%. The best indication is +7%. I typically consider measurements of +/-5% to be within the typical variation in real estate transactions. This indication is higher than that and suggests a positive relationship.

The photograph from the listing shows panels visible between the home and the trampoline shown in the picture.



Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	330 Claiborne	1.00	12/10/2019	\$282,500	2003	1,768	\$159.79	3/3	2-Car	Ranch	Brick/pool
Not	895 Osborne	1.70	9/16/2019	\$249,900	2002	1,705	\$146.57	3/2	2-Car	Ranch	Brick/pool
Not	2160 Sherman	1.46	6/1/2019	\$265,000	2005	1,735	\$152.74	3/3	2-Car	R/FBsmt	Brick
Not	215 Lexington	1.00	7/27/2018	\$231,200	2000	1,590	\$145.41	5/4	2-Car	Ranch	Brick

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	Avg		
										% Diff	% Diff	Distance
Adjoins	330 Claiborne								\$282,500			665
Not	895 Osborne	\$1,790		\$1,250	\$7,387	\$5,000		\$0	\$265,327	6%		
Not	2160 Sherman	\$4,288		-\$2,650	\$4,032			\$20,000	\$290,670	-3%		
Not	215 Lexington	\$9,761		\$3,468	\$20,706	-\$5,000		\$20,000	\$280,135	1%		
												1%

This set of matched pairs shows a general positive impact for this property. The range of adjusted impacts is -3% to +6%. The best indication is +6%. I typically consider measurements of +/-5% to be within the typical variation in real estate transactions. This indication is higher than that and suggests a positive relationship. The landscaping buffer on these is considered light with a fair visibility of the panels from most of these comparables and only thin landscaping buffers separating the homes from the solar panels.

I also looked at four sales that were during a rapid increase in home values around 2021, which required significant time adjustments based on the FHFA Housing Price Index. Sales in this time frame are less reliable for impact considerations as the peak buyer demand allowed for homes to sell with less worry over typical issues such as repairs.

The home at 250 Claiborne Drive sold with no impact from the solar farm according to the buyer's broker Lisa Ann Lay with Keller Williams Realty Service. As noted earlier, this is the only manufactured home in the community and is a bit of an anomaly. There was an impact on this sale due to an appraisal that came in low likely related to the manufactured nature of the home. Ms. Lay indicated that there was significant back and forth between both brokers and the appraiser to address the low appraisal, but ultimately, the buyers had to pay \$20,000 out of pocket to cover the difference in appraised value and the purchase price. The low appraisal was not attributed to the solar farm, but the difficulty in finding comparable sales and likely the manufactured housing.

Adjoining Residential Sales After Solar Farm Built

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	250 Claiborne	1.05	1/5/2022	\$210,000	2002	1,592	\$131.91	4/2	Drive	Ranch	Manuf
Not	255 Spillman	0.64	3/4/2022	\$166,000	1991	1,196	\$138.80	3/1	Drive	Ranch	Remodel
Not	546 Waterworks	0.28	4/29/2021	\$179,500	2007	1,046	\$171.61	4/2	Drive	Ranch	3/4 Fin B
Not	240 Shawnee	1.18	6/7/2021	\$180,000	1977	1,352	\$133.14	3/2	Gar	Ranch	N/A

Solar	Address	Time	YB	GLA	BR/BA	Park	Other	Total	Avg		
									% Diff	% Diff	Distance
Adjoins	250 Claiborne							\$210,000			365
Not	255 Spillman	-\$379	\$9,130	\$43,971	\$10,000			-\$20,000	\$208,722	1%	
Not	546 Waterworks	\$1,772	-\$4,488	\$74,958				-\$67,313	\$184,429	12%	
Not	240 Shawnee	\$1,501	\$22,500	\$25,562		-\$10,000		\$219,563		-5%	
											3%

The photograph of the rear view from the listing is shown below.



The home at 260 Claiborne Drive sold with no impact from the solar farm according to the buyer's broker Jim Dalton with Ashcraft Real Estate Services. He noted that there was significant wood rot and a heavy smoker smell about the house, but even that had no impact on the price due to high demand in the market.

Adjoining Residential Sales After Solar Farm Built

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	260 Claiborne	1.00	10/13/2021	\$175,000	2001	1,456	\$120.19	3/2	Drive	Ranch	N/A
Not	355 Oakwood	0.58	10/27/2020	\$186,000	2002	1,088	\$170.96	3/2	Gar	Ranch	3/4 Fin B
Not	30 Ellen Kay	0.50	1/30/2020	\$183,000	1988	1,950	\$93.85	3/2	Gar	2-Story	N/A
Not	546 Waterworks	0.28	4/29/2021	\$179,500	2007	1,046	\$171.61	4/2	Drive	Ranch	3/4 Fin B

Solar	Address	Time	YB	GLA	BR/BA	Park	Other	Total	Avg		
									% Diff	% Diff	Distance
Adjoins	260 Claiborne							\$175,000			390
Not	355 Oakwood	\$18,339	-\$930	\$50,329			-\$10,000	-\$69,750	\$173,988	1%	
Not	30 Ellen Kay	\$31,974	\$11,895	-\$37,088			-\$10,000		\$179,781	-3%	
Not	546 Waterworks	\$8,420	-\$5,385	\$56,287				-\$67,313	\$171,510	2%	
										0%	

The photograph of the rear view from the listing is shown below.



These next two were brick and with unfinished basements which made them easier to compare and therefore more reliable. For 300 Claiborne I considered the sale of a home across the street that did not back up to the solar farm and it adjusted to well below the range of the other comparables. I have included it, but would not rely on that which means this next comparable strongly supports a range of 0 to +3% and not up to +19%.

Joining Residential Sales After Solar Farm Built

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	300 Claiborne	0.89	12/18/2021	\$290,000	2002	1,568	\$184.95	3/3	2-Car	Br Rnch	Bsmt
Not	405 Claiborne	0.41	2/1/2022	\$267,750	2004	1,787	\$149.83	3/2	2-Car	Br Rnch	Bsmt
Not	39 Pinhook	0.68	3/31/2022	\$299,000	1992	1,680	\$177.98	3/2	2-Car	Br Rnch	Bsmt
Not	5 Pinhook	0.70	4/7/2022	\$309,900	1992	1,680	\$184.46	3/2	2-Car	Br Rnch	Bsmt

Solar	Address	Time	YB	GLA	BR/BA	Park	Other	Avg			Distance
								Total	% Diff	% Diff	
Adjoins	300 Claiborne							\$290,000			570
Not	405 Claiborne	-\$3,384	-\$2,678	-\$26,251				\$235,437	19%		
Not	39 Pinhook	-\$8,651	\$14,950	-\$15,947				\$289,352	0%		
Not	5 Pinhook	-\$9,576	\$15,495	-\$16,528				\$299,291	-3%		5%

The photograph of the rear view from the listing is shown below.



The home at 410 Claiborne included an inground pool with significant landscaping around it that was a challenge. Furthermore, two of the comparables had finished basements. I made no adjustment for the pool on those two comparables and considered the two factors to cancel out

Adjoining Residential Sales After Solar Farm Built

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	410 Claiborne	0.31	2/10/2021	\$275,000	2006	1,595	\$172.41	3/2	2-Car	Br Rnch	Bsmt/Pool
Not	114 Austin	1.40	12/23/2020	\$248,000	1994	1,650	\$150.30	3/2	2-Car	Br Rnch	Bsmt
Not	125 Liza	0.29	6/25/2021	\$315,000	2005	1,913	\$164.66	4/3	2-Car	Br Rnch	Ktchn Bsmt
Not	130 Hannahs	0.42	2/9/2021	\$295,000	2007	1,918	\$153.81	3/3	2-Car	Br Rnch	Fin Bsmt

Solar	Address	Time	YB	GLA	BR/BA	Park	Other	Total	Avg		
									% Diff	% Diff	Distance
Adjoins	410 Claiborne							\$275,000			1080
Not	114 Austin	\$3,413	\$14,880	-\$6,613				\$20,000	\$279,680	-2%	
Not	125 Liza	-\$11,945	\$1,575	-\$41,890	-\$10,000				\$252,740	8%	
Not	130 Hannahs	\$83	-\$1,475	-\$39,743	-\$10,000				\$243,864	11%	
											6%

The nine matched pairs considered in this analysis includes five that show no impact on value, one that shows a negative impact on value, and three that show a positive impact. The negative indication supported by one matched pair is -7% and the positive impacts are +6% and +7%. The two neutral indications show impacts of -5% to +5%. The average indicated impact is +2% when all nine of these indicators are blended.

Furthermore, the comments of the local real estate brokers strongly support the data that shows no negative impact on value due to the proximity to the solar farm.

6. Matched Pair – White House Solar, Louisa, VA



This project was built in 2016 for a solar project on a 499.52-acre tract for a 20 MW facility. The closest single-family home is 110 feet away from the closest solar panel. The average distance is 1,195 feet.

I have identified one recent adjoining home sale to the north of this project that sold in 2020. I spoke with the broker, Stacie Chandler, who represented the buyer in that transaction. She indicated that the solar farm had no impact on the price that they negotiated on that home. That is supported by the matched pair shown below.

The adjustments shown below make no adjustment for the difference in acreage for the smaller parcels. One of these is on a smaller lot, but located in a golf course community with rear exposure to the golf course. The other is in Mineral and while the lots are not the same size, they are similarly valued. I also adjusted this property upward by \$50,000 for the condition/lack of renovation. This adjustment is based on the fact that this home was renovated following the 2020 purchase and then resold in 2021 for \$75,000 more than the 2020 value. Comparing the 2021 renovated price at \$144/s.f. to the subject property and adjusting on the same rates would require a downward adjustment to the comparable of \$10,400 for time, upward by \$8,325 for year built, and downward by \$5,000 for the extra half bathroom for an indicated adjusted value of \$252,925 which suggests a 5% reduction in value due to the solar farm. Either way this comparable requires significant adjustments and suggests a range of -5% to 0% impact. The Woodger comparable required less

adjustment and suggests an 11% enhancement due to proximity to the solar farm and that is without any consideration of this home having a superior exposure to a golf course.

Whitehouse Solar

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	127 Walnut Wds	4.09	3/27/2020	\$240,000	1984	1,824	\$131.58	3/2	2 Gar	Br Rnch	Reno
Not	126 Woodger	0.63	4/29/2019	\$240,000	1992	1,956	\$122.70	3/2+2	2 Gar	Br Rnch	Golf
Not	808 Virginia	0.51	3/16/2020	\$185,000	1975	1,806	\$102.44	3/2.5	2 Gar	Br Rnch	
Not	273 Carsons	3.94	9/29/2018	\$248,500	1985	2,224	\$111.74	4/3	Drive	Ranch	Not Brck

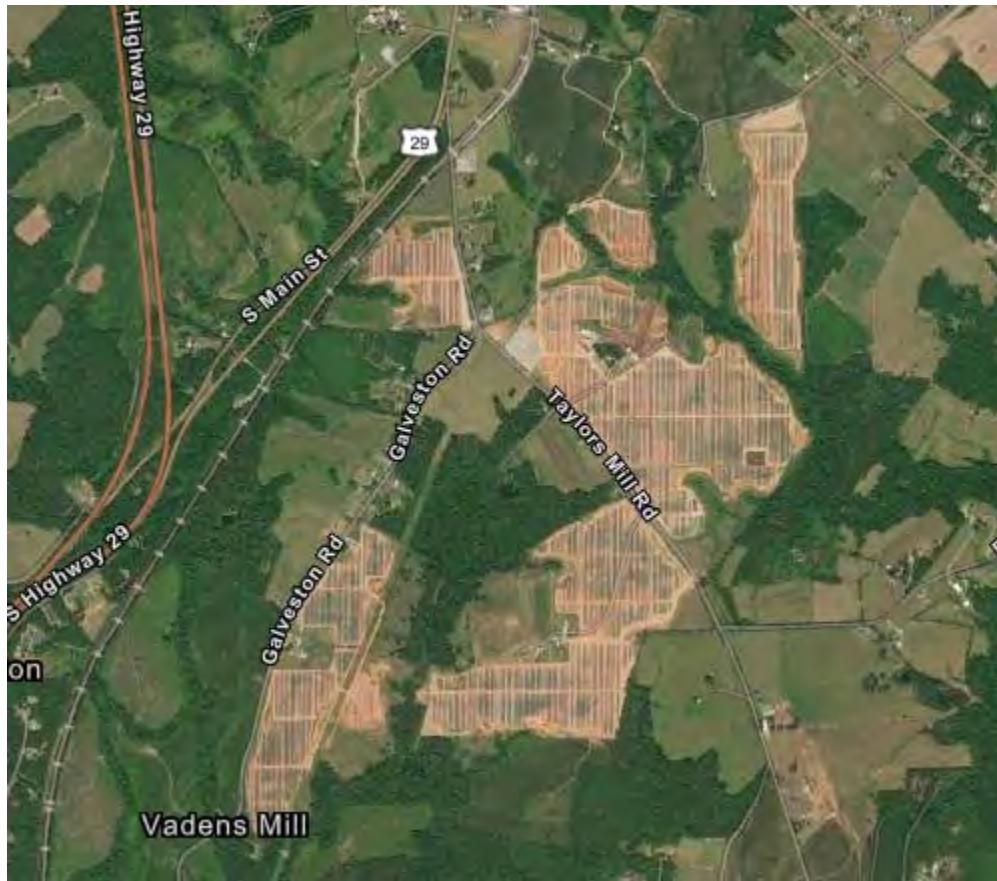
Adjoining Sales Adjusted

Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
127 Walnut Wds								\$240,000		1400
126 Woodger	\$6,569			-\$9,600	-\$12,957	-\$10,000		\$214,012	11%	
808 Virginia	\$167			\$8,325	\$1,475	-\$5,000		\$239,967	0%	
273 Carsons	\$11,131			-\$1,243	-\$35,755	-\$10,000	\$15,000	\$12,425	\$240,059	0%
Average Diff									4%	

These matched pairs are generally challenging in that one is shown before and after a renovation suggesting impacts of -5% to 0%. The comparable requiring the least adjustment is on a golf course but it also was not recently renovated which makes it less reliable. Finally, the Carsons property was similar, but older and is not brick. While I adjusted for those factors it really does not make for a great matched pair.

The best indication by the matched pairs is -5% to 0%. The broker involved in the transaction indicated that the solar farm had no impact on property value. Given those comments and the range of impacts shown, I conclude that this home sale near the White House solar project indicates no impact on property value.

7. Matched Pair – Whitehorn Solar, Gretna, Pittsylvania, VA



This project was built in 2021 for a solar project with 50 MW. Adjoining uses are residential and agricultural. There was a sale located at 1120 Taylors Mill Road that sold on December 20, 2021, which is about the time the solar farm was completed. This sold for \$224,000 for 2.02 acres with a 2,079 s.f. mobile home on it that was built in 2010. The property was listed for \$224,000 and sold for that same price within two months (went under contract almost exactly 30 days from listing). This sales price works out to \$108 per square foot. This home is 255 feet from the nearest panel.

I have compared this sale to an August 20, 2020 sale at 1000 Long Branch Drive that included 5.10 acres with a 1,980 s.f. mobile home that was built in 1993 and sold for \$162,000, or \$81.82 per square foot. Adjusting this upward for significant growth between this sale date and December 2021 relied on data provided by the FHFA House Pricing Index, which indicates that for homes in the Roanoke, VA MSA would be expected to appreciate from \$162,000 to \$191,000 over that period of time. Using \$191,000 as the effective value as of the date of comparison, the indicated value of this sale works out to \$96.46 per square foot. Adjusting this upward by 17% for the difference in year built, but downward by 5% for the much larger lot size at this comparable, I derive an adjusted indication of value of \$213,920, or \$108 per square foot.

This indicates no impact on value attributable to the new solar farm located across from the home on Taylors Mill Road.

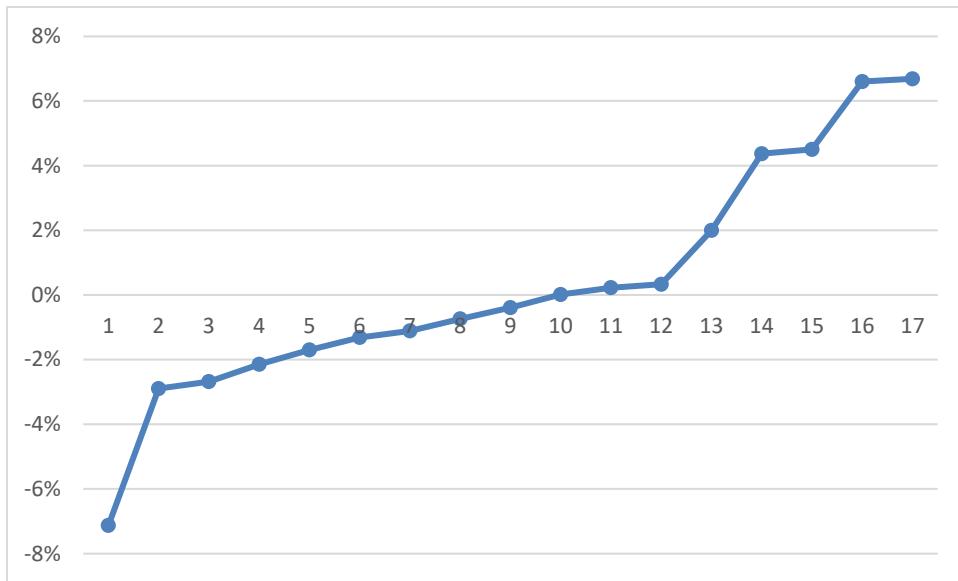
Conclusion

The solar farm matched pairs shown above have similar characteristics to each other in terms of population, but with several outliers showing solar farms in far more urban areas. The median income for the population within 1 mile of a solar farm among this subset of matched pairs is \$70,486 with a median housing unit value of \$264,681. Most of the comparables are under \$500,000 in the home price, with \$483,333 being the high end of the set, though I have matched pairs in other states over \$1,000,000 in price adjoining large solar farms. The predominate adjoining uses are residential and agricultural. These figures are in line with the larger set of solar farms that I have looked at with the predominant adjoining uses being residential and agricultural and similar to the solar farm breakdown shown for Virginia and adjoining states as well as the proposed subject property.

Based on the similarity of adjoining uses and demographic data between these sites and the subject property, I consider it reasonable to compare these sites to the subject property.

Matched Pair Summary			Adj. Uses By Acreage						1 mile Radius (2010-2022 Data)						
	Name	City	State	Acres	MW	Topo			Ag	Ag/Res	Com/Ind	Population	Income	Unit	Veg. Buffer
						Shift	Res	Ag							
1	Clarke Cnty	White Post	VA	234	20.00	70	14%	39%	46%	1%	578	\$81,022	\$374,453	Light	
2	Walker	Barhamsville	VA	485	20.00	N/A	12%	68%	20%	0%	203	\$80,773	\$320,076	Light	
3	Sappony	Stony Crk	VA	322	20.00	N/A	2%	98%	0%	0%	74	\$51,410	\$155,208	Medium	
4	Spotsylvania	Paytes	VA	3,500	500.00	160	37%	52%	11%	0%	74	\$120,861	\$483,333	Med to Hvy	
5	Crittenden	Crittenden	KY	34	2.70	40	22%	51%	27%	0%	1,419	\$60,198	\$178,643	Light	
6	White House	Louisa	VA	500	20.00	N/A	24%	55%	18%	3%	409	\$57,104	\$209,286	Medium	
7	Whitehorn	Gretna	VA	N/A	50.00	N/A	N/A	N/A	N/A	N/A	166	\$43,179	\$168,750		
Average				846	90.39	90	19%	61%	20%	1%	418	\$70,650	\$269,964		
Median				404	20.00	70	18%	54%	19%	0%	203	\$60,198	\$209,286		
High				3,500	500.00	160	37%	98%	46%	3%	1,419	\$120,861	\$483,333		
Low				34	2.70	40	2%	39%	0%	0%	74	\$43,179	\$155,208		
Mountain Brook															
1 Mile Radius				258	20.00	70	24%	21%	54%	1%	350	\$69,243	\$309,615		
3 Mile Radius				258	20.00	70	24%	21%	54%	1%	2,262	\$68,025	\$411,156		
5 Mile Radius				258	20.00	70	24%	21%	54%	1%	8,185	\$73,845	\$454,333		

On the following page is a summary of the matched pairs for all of the solar farms noted above. They show a pattern of results from -7% to +7% with an average of 0% and a median finding of 0%. As can be seen in the chart of those results below, most of the data points are between -3% and +2%. This variability is common with real estate and consistent with market "static." I therefore conclude that these results strongly support an indication of no impact on property value due to the adjacent solar farm. Only 1 of the 17 data points show a negative impact greater than the typical variability due to market imperfection, while 3 of the 17 data points show a positive impact. This leaves 13 of the 17 indications showing no impact and within the typical market variability/imperfection that would be expected for any property.



I have further broken down these results based on the MWs, Landscaping, and distance from panel to show the following range of findings for these different categories.

This breakdown shows no homes between 100-200 feet. Solar farms up to 75 MW show homes between 201 and 500 feet with no impact on value. Most of the findings are for homes between 201 and 500 feet.

Light landscaping screens are showing no impact on value at any distances, though solar farms over 75.1 MW only show Medium and Heavy landscaping screens in the 3 examples identified.

Residential Dwelling Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	Area	MW	Approx		Date	Adj. Sale		Veg.
						Distance	Tax ID/Address		Sale Price	Price	
1	Clarke Cnty	White Post	VA	Rural	20	1230	833 Nations Spr 6801 Middle	Jan-17	\$295,000	\$296,157	0% Light
2	Walker	Barhamsville	VA	Rural	20	250	5241 Barham 9252 Ordinary	Dec-17	\$249,999	\$264,000	Light
3	Clarke Cnty	White Post	VA	Rural	20	1230	833 Nations Spr 2393 Old Chapel	Oct-18	\$277,000	\$246,581	7% Light
4	Sappony	Stony Creek	VA	Rural	20	1425	12511 Palestine 6494 Rocky Branch	Aug-19	\$385,000	\$330,000	-1% Medium
5	Spotsylvania	Paytes	VA	Rural	617	1270	12901 Orange Plnk 12717 Flintlock	Jul-18	\$128,400	\$100,000	-3% Medium
6	Spotsylvania	Paytes	VA	Rural	617	1950	9641 Nottoway 11626 Forest	Nov-18	\$319,900	\$290,000	-2% Medium
7	Spotsylvania	Paytes	VA	Rural	617	1171	13353 Post Oak 12810 Catharpin	Aug-20	\$489,900	\$430,246	4% Heavy
8	Crittenden	Crittenden	KY	Suburban	2.7	373	250 Claiborne 315 N Fork	Jan-19	\$120,000	\$107,000	-1% Light
9	Crittenden	Crittenden	KY	Suburban	2.7	488	300 Claiborne 1795 Bay Valley	Sep-18	\$213,000	\$231,200	7% Light
10	Crittenden	Crittenden	KY	Suburban	2.7	720	350 Claiborne 2160 Sherman	Dec-17	\$245,000	\$265,000	-1% Light
11	Crittenden	Crittenden	KY	Suburban	2.7	930	370 Claiborne 125 Lexington	Jul-18	\$273,000	\$240,000	-3% Light
12	Crittenden	Crittenden	KY	Suburban	2.7	665	330 Claiborne 2160 Sherman	Apr-18	\$282,500	\$265,000	-2% Light
13	Crittenden	Crittenden	KY	Suburban	2.7	390	260 Claiborne 546 Waterworks	Dec-19	\$175,000	\$179,500	2% Light
14	Crittenden	Crittenden	KY	Suburban	2.7	570	300 Claiborne 39 Pinhook	Oct-21	\$290,000	\$299,000	0% Light
15	Crittenden	Crittenden	KY	Suburban	2.7	1080	410 Claiborne 114 Austin	Mar-22	\$275,000	\$248,000	-2% Light
16	White House	Louisa	VA	Rural	20	1400	127 Walnut 126 Woodger	Feb-21	\$240,000	\$240,000	0% Light
17	Whitehorn	Gretna	VA	Rural	50	255	1120 Taylors Mill 1000 Long Branch	Mar-20	\$224,000	\$162,000	-7% Light
								Aug-20	\$213,920		5%

		Avg.								Indicated
		MW	Distance							Impact
Average		118.98	906						Average	0%
Median		20.00	930						Median	0%
High		617.00	1,950						High	7%
Low		2.70	250						Low	-7%

MW Range									
4.4 to 10									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
Average	N/A	-4%	3%	N/A	N/A	N/A	N/A	N/A	N/A
Median	N/A	-4%	3%	N/A	N/A	N/A	N/A	N/A	N/A
High	N/A	-1%	7%	N/A	N/A	N/A	N/A	N/A	N/A
Low	N/A	-7%	-1%	N/A	N/A	N/A	N/A	N/A	N/A
10.1 to 30									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
Average	N/A	7%	-1%	N/A	N/A	-3%	N/A	N/A	N/A
Median	N/A	7%	-1%	N/A	N/A	-3%	N/A	N/A	N/A
High	N/A	7%	0%	N/A	N/A	-3%	N/A	N/A	N/A
Low	N/A	7%	-1%	N/A	N/A	-3%	N/A	N/A	N/A
30.1 to 75									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Median	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
75.1+									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
Average	N/A	N/A	N/A	N/A	N/A	1%	N/A	N/A	N/A
Median	N/A	N/A	N/A	N/A	N/A	1%	N/A	N/A	N/A
High	N/A	N/A	N/A	N/A	N/A	4%	N/A	N/A	N/A
Low	N/A	N/A	N/A	N/A	N/A	-2%	N/A	N/A	N/A

B. Southeastern USA Data – Over 5 MW

1. Matched Pair – AM Best Solar Farm, Goldsboro, NC

This 5 MW solar farm adjoins Spring Garden Subdivision which had new homes and lots available for new construction during the approval and construction of the solar farm. The recent home sales have ranged from \$200,000 to \$250,000. This subdivision sold out the last homes in late 2014. The solar farm is clearly visible particularly along the north end of this street where there is only a thin line of trees separating the solar farm from the single-family homes.

Homes backing up to the solar farm are selling at the same price for the same floor plan as the homes that do not back up to the solar farm in this subdivision. According to the builder, the solar farm has been a complete non-factor. Not only do the sales show no difference in the price paid for the various homes adjoining the solar farm versus not adjoining the solar farm, but there are actually more recent sales along the solar farm than not. There is no impact on the sellout rate, or time to sell for the homes adjoining the solar farm.

I spoke with a number of owners who adjoin the solar farm and none of them expressed any concern over the solar farm impacting their property value.

The data presented on the following page shows multiple homes that have sold in 2013 and 2014 adjoining the solar farm at prices similar to those not along the solar farm. These series of sales indicate that the solar farm has no impact on the adjoining residential use.

The homes that were marketed at Spring Garden are shown below.

 Americana SqFt: 3,194 Bed / Bath: 3 / 3.5 Price: \$237,900 View Now »	 Washington SqFt: 3,292 Bed / Bath: 4 / 3.5 Price: \$244,900 View Now »
 Presidential SqFt: 3,400 Bed / Bath: 5 / 3.5 Price: \$247,900 View Now »	 Kennedy SqFt: 3,494 Bed / Bath: 5 / 3 Price: \$249,900 View Now »
 Virginia SqFt: 3,449 Bed / Bath: 5 / 3 Price: \$259,900 View Now »	



The homes adjoining the solar farm are considered to have a light landscaping screen as it is a narrow row of existing pine trees supplemented with evergreen plantings.

Matched Pairs

As of Date: 9/3/2014

Adjoining Sales After Solar Farm Completed

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600195570	Helm	0.76	Sep-13	\$250,000	2013	3,292	\$75.94	2 Story
3600195361	Leak	1.49	Sep-13	\$260,000	2013	3,652	\$71.19	2 Story
3600199891	McBrayer	2.24	Jul-14	\$250,000	2014	3,292	\$75.94	2 Story
3600198632	Foresman	1.13	Aug-14	\$253,000	2014	3,400	\$74.41	2 Story
3600196656	Hinson	0.75	Dec-13	\$255,000	2013	3,453	\$73.85	2 Story
Average		1.27		\$253,600	2013.4	3,418	\$74.27	
Median		1.13		\$253,000	2013	3,400	\$74.41	

Adjoining Sales After Solar Farm Announced

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
0	Feddersen	1.56	Feb-13	\$247,000	2012	3,427	\$72.07	Ranch
0	Gentry	1.42	Apr-13	\$245,000	2013	3,400	\$72.06	2 Story
Average		1.49		\$246,000	2012.5	3,414	\$72.07	
Median		1.49		\$246,000	2012.5	3,414	\$72.07	

Adjoining Sales Before Solar Farm Announced

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600183905	Carter	1.57	Dec-12	\$240,000	2012	3,347	\$71.71	1.5 Story
3600193097	Kelly	1.61	Sep-12	\$198,000	2012	2,532	\$78.20	2 Story
3600194189	Hadwan	1.55	Nov-12	\$240,000	2012	3,433	\$69.91	1.5 Story
Average		1.59		\$219,000	2012	2,940	\$74.95	
Median		1.59		\$219,000	2012	2,940	\$74.95	

Nearby Sales After Solar Farm Completed

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600193710	Barnes	1.12	Oct-13	\$248,000	2013	3,400	\$72.94	2 Story
3601105180	Nackley	0.95	Dec-13	\$253,000	2013	3,400	\$74.41	2 Story
3600192528	Mattheis	1.12	Oct-13	\$238,000	2013	3,194	\$74.51	2 Story
3600198928	Beckman	0.93	Mar-14	\$250,000	2014	3,292	\$75.94	2 Story
3600196965	Hough	0.81	Jun-14	\$224,000	2014	2,434	\$92.03	2 Story
3600193914	Preskitt	0.67	Jun-14	\$242,000	2014	2,825	\$85.66	2 Story
3600194813	Bordner	0.91	Apr-14	\$258,000	2014	3,511	\$73.48	2 Story
3601104147	Shaffer	0.73	Apr-14	\$255,000	2014	3,453	\$73.85	2 Story
Average		0.91		\$246,000	2013.625	3,189	\$77.85	
Median		0.92		\$249,000	2014	3,346	\$74.46	

Nearby Sales Before Solar Farm Announced

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600191437	Thomas	1.12	Sep-12	\$225,000	2012	3,276	\$68.68	2 Story
3600087968	Lilley	1.15	Jan-13	\$238,000	2012	3,421	\$69.57	1.5 Story
3600087654	Burke	1.26	Sep-12	\$240,000	2012	3,543	\$67.74	2 Story
3600088796	Hobbs	0.73	Sep-12	\$228,000	2012	3,254	\$70.07	2 Story
Average		1.07		\$232,750	2012	3,374	\$69.01	
Median		1.14		\$233,000	2012	3,349	\$69.13	

Matched Pair Summary

	Adjoins Solar Farm		Nearby Solar Farm	
	Average	Median	Average	Median
Sales Price	\$253,600	\$253,000	\$246,000	\$249,000
Year Built	2013	2013	2014	2014
Size	3,418	3,400	3,189	3,346
Price/SF	\$74.27	\$74.41	\$77.85	\$74.46

Percentage Differences

Median Price	-2%
Median Size	-2%
Median Price/SF	0%

I note that 2308 Granville Drive sold again in November 2015 for \$267,500, or \$7,500 more than when it was purchased new from the builder two years earlier (Tax ID 3600195361, Owner: Leak). The neighborhood is clearly showing appreciation for homes adjoining the solar farm.

The Median Price is the best indicator to follow in any analysis as it avoids outlying samples that would otherwise skew the results. The median sizes and median prices are all consistent throughout the sales both before and after the solar farm whether you look at sites adjoining or nearby to the solar farm. The average size for the homes nearby the solar farm shows a smaller building size and a higher price per square foot. This reflects a common occurrence in real estate where the price per square foot goes up as the size goes down. So even comparing averages the indication is for no impact, but I rely on the median rates as the most reliable indication for any such analysis.

I have also considered four more recent resales of homes in this community as shown on the following page. These comparable sales adjoin the solar farm at distances ranging from 315 to 400 feet. The matched pairs show a range from -9% to +6%. The range of the average difference is -2% to +1% with an average of 0% and a median of +0.5%. These comparable sales support a finding of no impact on property value.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	103 Granville Pl	1.42	7/27/2018	\$265,000	2013	3,292	\$80.50	4/3.5	2-Car	2-Story		385
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
													Avg
													% Diff
													-2%
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff		
	Adjoins	103 Granville Pl								\$265,000			
	Not	2219 Granville	\$4,382		\$1,300		\$0			\$265,682	0%		
	Not	634 Friendly	-\$8,303		-\$6,675	\$16,721	-\$10,000			\$258,744	2%		
	Not	2403 Granville	-\$6,029		-\$1,325	\$31,356				\$289,001	-9%		

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	104 Erin	2.24	6/19/2017	\$280,000	2014	3,549	\$78.90	5/3.5	2-Car	2-Story		315
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
													Avg
													% Diff
													0%
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff		
	Adjoins	104 Erin								\$280,000			
	Not	2219 Granville	-\$4,448		\$2,600	\$16,238				\$274,390	2%		
	Not	634 Friendly	-\$17,370		-\$5,340	\$34,702	-\$10,000			\$268,992	4%		
	Not	2403 Granville	-\$15,029		\$0	\$48,285				\$298,256	-7%		

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	2312 Granville	0.75	5/1/2018	\$284,900	2013	3,453	\$82.51	5/3.5	2-Car	2-Story		400
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
													Avg
													% Diff
													1%
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff		
	Adjoins	2312 Granville								\$284,900			
	Not	2219 Granville	\$2,476		\$1,300	\$10,173				\$273,948	4%		
	Not	634 Friendly	-\$10,260		-\$6,675	\$27,986	-\$10,000			\$268,051	6%		
	Not	2403 Granville	-\$7,972		-\$1,325	\$47,956				\$303,659	-7%		

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	2310 Granville	0.76	5/14/2019	\$280,000	2013	3,292	\$85.05	5/3.5	2-Car	2-Story		400
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
													Avg
													% Diff
													1%
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff		
	Adjoins	2310 Granville								\$280,000			
	Not	2219 Granville	\$10,758		\$1,300	\$0				\$272,058	3%		
	Not	634 Friendly	-\$1,755		-\$6,675	\$16,721	-\$10,000			\$265,291	5%		
	Not	2403 Granville	\$469		-\$1,325	\$31,356				\$295,500	-6%		

I have also considered the original sales prices in this subdivision relative to the recent resale values as shown in the chart below. This rate of appreciation is right at 2.5% over the last 6 years. Zillow indicates that the average home value within the 27530-zip code as of January 2014 was \$101,300 and as of January 2020 that average is \$118,100. This indicates an average increase in the market of 2.37%. I conclude that the appreciation of the homes adjoining the solar farm are not impacted by the presence of the solar farm based on this data.

Address	Initial Sale		Second Sale		Year	% Apprec.		% /Year
	Date	Price	Date	Price		Diff	Apprec.	
1 103 Granville Pl	4/1/2013	\$245,000	7/27/2018	\$265,000	5.32	\$20,000	8.16%	1.53%
2 105 Erin	7/1/2014	\$250,000	6/19/2017	\$280,000	2.97	\$30,000	12.00%	4.04%
3 2312 Granville	12/1/2013	\$255,000	5/1/2015	\$262,000	1.41	\$7,000	2.75%	1.94%
4 2312 Granville	5/1/2015	\$262,000	5/1/2018	\$284,900	3.00	\$22,900	8.74%	2.91%
5 2310 Granville	8/1/2013	\$250,000	5/14/2019	\$280,000	5.79	\$30,000	12.00%	2.07%
6 2308 Granville	9/1/2013	\$260,000	11/12/2015	\$267,500	2.20	\$7,500	2.88%	1.31%
7 2304 Granville	9/1/2012	\$198,000	6/1/2017	\$225,000	4.75	\$27,000	13.64%	2.87%
8 102 Erin	8/1/2014	\$253,000	11/1/2016	\$270,000	2.25	\$17,000	6.72%	2.98%
							Average	2.46%
							Median	2.47%

2. Matched Pair – Mulberry, Selmer, TN



This 16 MW solar farm was built in 2014 on 208.89 acres with the closest home being 480 feet.

This solar farm adjoins two subdivisions with Central Hills having a mix of existing and new construction homes. Lots in this development have been marketed for \$15,000 each with discounts offered for multiple lots being used for a single home site. I spoke with the agent with Rhonda Wheeler and Becky Hearnsberger with United County Farm & Home Realty who noted that they have seen no impact on lot or home sales due to the solar farm in this community.

I have included a map below as well as data on recent sales activity on lots that adjoin the solar farm or are near the solar farm in this subdivision both before and after the announced plan for this solar farm facility. I note that using the same method I used to breakdown the adjoining uses at the subject property I show that the predominant adjoining uses are residential and agricultural, which is consistent with the location of most solar farms.

Adjoining Use Breakdown

	Acreage	Parcels
Commercial	3.40%	0.034
Residential	12.84%	79.31%
Agri/Res	10.39%	3.45%
Agricultural	73.37%	13.79%
Total	100.00%	100.00%

I have run a number of direct matched comparisons on the sales adjoining this solar farm as shown below. These direct matched pairs include some of those shown above as well as additional more recent sales in this community. In each of these I have compared the one sale adjoining the solar farm to multiple similar homes nearby that do not adjoin a solar farm to look for any potential impact from the solar farm.

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
3	Adjoins	491 Dusty	6.86	10/28/2016	\$176,000	2009	1,801	\$97.72	3/2	2-Gar	Ranch	
	Not	820 Lake Trail	1.00	6/8/2018	\$168,000	2013	1,869	\$89.89	4/2	2-Gar	Ranch	
	Not	262 Country	1.00	1/17/2018	\$145,000	2000	1,860	\$77.96	3/2	2-Gar	Ranch	
	Not	35 April	1.15	8/16/2016	\$185,000	2016	1,980	\$93.43	3/2	2-Gar	Ranch	

Adjoining Sales Adjusted												
Parcel	Solar	Address	Time	Site	YB	GLA	Park	Other	Total	% Diff	Distance	
3	Adjoins	491 Dusty							\$176,000		480	
	Not	820 Lake Trail	-\$8,324		\$12,000	-\$3,360	-\$4,890		\$163,426	7%		
	Not	262 Country	-\$5,450		\$12,000	\$6,525	-\$3,680		\$154,396	12%		
	Not	35 April	\$1,138		\$12,000	-\$6,475	-\$13,380		\$178,283	-1%		
									Average	6%		

The best matched pair is 35 April Loop, which required the least adjustment and indicates a -1% increase in value due to the solar farm adjacency.

Adjoining Residential Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
12	Adjoins	57 Cooper	1.20	2/26/2019	\$163,000	2011	1,586	\$102.77	3/2	2-Gar	1.5 Story	Pool
	Not	191 Amelia	1.00	8/3/2018	\$132,000	2005	1,534	\$86.05	3/2	Drive	Ranch	
	Not	75 April	0.85	3/17/2017	\$134,000	2012	1,588	\$84.38	3/2	2-Crprt	Ranch	
	Not	345 Woodland	1.15	12/29/2016	\$131,000	2002	1,410	\$92.91	3/2	1-Gar	Ranch	

Adjoining Sales Adjusted

Parcel	Solar	Address	Sales Price	Time	Site	YB	GLA	Park	Other	Total	% Diff	Distance
12	Adjoins	57 Cooper	\$163,000							\$163,000		685
	Not	191 Amelia	\$132,000	\$2,303		\$3,960	\$2,685	\$10,000	\$5,000	\$155,947	4%	
	Not	75 April	\$134,000	\$8,029	\$4,000	-\$670	-\$135	\$5,000	\$5,000	\$155,224	5%	
	Not	345 Woodland	\$131,000	\$8,710		\$5,895	\$9,811		\$5,000	\$160,416	2%	
										Average	4%	

The best matched pair is 191 Amelia, which was most similar in time frame of sale and indicates a +4% increase in value due to the solar farm adjacency.

Adjoining Residential Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
15	Adjoins	297 Country	1.00	9/30/2016	\$150,000	2002	1,596	\$93.98	3/2	4-Gar	Ranch	
	Not	185 Dusty	1.85	8/17/2015	\$126,040	2009	1,463	\$86.15	3/2	2-Gar	Ranch	
	Not	53 Glen	1.13	3/9/2017	\$126,000	1999	1,475	\$85.42	3/2	2-Gar	Ranch	Brick

Adjoining Sales Adjusted

Parcel	Solar	Address	Sales Price	Time	Site	YB	GLA	Park	Other	Total	% Diff	Distance
15	Adjoins	297 Country	\$150,000							\$150,000		650
	Not	185 Dusty	\$126,040	\$4,355			-\$4,411	\$9,167	\$10,000	\$145,150	3%	
	Not	53 Glen	\$126,000	-\$1,699			\$1,890	\$8,269	\$10,000	\$144,460	4%	
										Average	3%	

The best matched pair is 53 Glen, which was most similar in time frame of sale and required less adjustment. It indicates a +4% increase in value due to the solar farm adjacency.

The average indicated impact from these three sets of matched pairs is +4%, which suggests a mild positive relationship due to adjacency to the solar farm. The landscaping buffer for this project is mostly natural tree growth that was retained as part of the development but much of the trees separating the panels from homes are actually on the lots for the homes themselves. I therefore consider the landscaping buffer to be thin to moderate for these adjoining homes.

I have also looked at several lot sales in this subdivision as shown below.

These are all lots within the same community and the highest prices paid are for lots one parcel off from the existing solar farm. These prices are fairly inconsistent, though they do suggest about a \$3,000 loss in the lots adjoining the solar farm. This is an atypical finding and additional details suggest there is more going on in these sales than the data crunching shows. First of all Parcel 4 was purchased by the owner of the adjoining home and therefore an atypical buyer seeking to expand a lot and the site is not being purchased for home development. Moreover, using the SiteToDoBusiness demographic tools, I found that the 1-mile radius around this development is expecting a total population increase over the next 5 years of 3 people. This lack of growing demand for lots is largely explained in that context. Furthermore, the fact that finished home sales as shown above are showing no sign of a negative impact on property value makes this data unreliable and inconsistent with the data shown in sales to an end user. I therefore place little weight on this outlier data.

Parcel	Solar	Address	Acres	Date Sold	Sales Price	4/18/2019		4/18/2019	
						Adj for Time	\$/AC	Adj for Time	Adj for Time
4	Adjoins	Shelter	2.05	10/25/2017	\$16,000	\$16,728	\$7,805	\$8,160	
10	Adjoins	Carter	1.70	8/2/2018	\$14,000	\$14,306	\$8,235	\$8,415	
11	Adjoins	Cooper	1.28	9/17/2018	\$12,000	\$12,215	\$9,375	\$9,543	
	Not	75 Dusty	1.67	4/18/2019	\$20,000	\$20,000	\$11,976	\$11,976	
	Not	Lake Trl	1.47	11/7/2018	\$13,000	\$13,177	\$8,844	\$8,964	
	Not	Lake Trl	1.67	4/18/2019	\$20,000	\$20,000	\$11,976	\$11,976	
Adjjoins		Per Acre	Not Adjoins	Per Acre	% DIF/Lot	% DIF/AC			
Average		\$14,416	\$8,706	\$17,726	\$10,972	19%			
Median		\$14,306	\$8,415	\$20,000	\$11,976	28%			
High		\$16,728	\$9,543	\$20,000	\$11,976	16%			
Low		\$12,215	\$8,160	\$13,177	\$8,964	7%			

3. Matched Pair – Leonard Road Solar Farm, Hughesville, MD



This 5 MW solar farm is located on 47 acres and mostly adjoins agricultural and residential uses to the west, south and east as shown above. The property also adjoins retail uses and a church. I looked at a 2016 sale of an adjoining home with a positive impact on value adjoining the solar farm of 2.90%. This is within typical market friction and supports an indication of no impact on property value.

I have shown this data below. The landscaping buffer is considered heavy.

Leonardtown Road Solar Farm, Hughesville, MD

Nearby Residential Sale After Solar Farm Construction													
Address	Solar Farm Acres	Date Sold	Sales Price*	Built	GBA	\$/GBA	Style	BR/BA	Bsmt	Park	Upgrades	Other	
14595 Box Elder Ct	Adjoins	3.00	2/12/2016	\$291,000	1991	2,174	\$133.85	Colonial	5/2.5	No	2 Car Att	N/A	Deck
15313 Bassford Rd	Not	3.32	7/20/2016	\$329,800	1990	2,520	\$130.87	Colonial	3/2.5	Finished	2 Car Att	Custom	Scr Por/Patio

*\$9,000 concession deducted from sale price for Box Elder and \$10,200 deducted from Bassford

Adjoining Sales Adjusted

Address	Date Sold	Sales Price	Time	Adjustments				Total
				GLA	Bsmt	Upgrades	Other	
14595 Box Elder Ct	2/12/2016	\$291,000						\$291,000
15313 Bassford Rd	7/20/2016	\$329,800		-\$3,400	-\$13,840	-\$10,000	-\$15,000	-\$5,000
			Difference Attributable to Location				\$8,440	
							2.90%	

This is within typical market friction and supports an indication of no impact on property value.

4. Matched Pair – Gastonia SC Solar, Gastonia, NC

This 5 MW project is located on the south side of Neal Hawkins Road just outside of Gastonia. The property identified above as Parcel 4 was listed for sale while this solar farm project was going

through the approval process. The property was put under contract during the permitting process with the permit being approved while the due diligence period was still ongoing. After the permit was approved the property closed with no concerns from the buyer. I spoke with Jennifer Bouvier, the broker listing the property and she indicated that the solar farm had no impact at all on the sales price. She considered some nearby sales to set the price and the closing price was very similar to the asking price within the typical range for the market. The buyer was aware that the solar farm was coming and they had no concerns.

This two-story brick dwelling was sold on March 20, 2017 for \$270,000 for a 3,437 square foot dwelling built in 1934 in average condition on 1.42 acres. The property has four bedrooms and two bathrooms. The landscaping screen is light for this adjoining home due to it being a new planted landscaping buffer.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	609 Neal Hawkins	1.42	3/20/2017	\$270,000	1934	3,427	\$78.79	4/2	Open	2-Brick	
Not	1418 N Modena	4.81	4/17/2018	\$225,000	1930	2,906	\$77.43	3/3	2-Crpt	2-Brick	
Not	363 Dallas Bess	2.90	11/29/2018	\$265,500	1968	2,964	\$89.57	3/3	Open	FinBsmt	
Not	1612 Dallas Chry	2.74	9/17/2018	\$245,000	1951	3,443	\$71.16	3/2	Open	2-Brick	Unfin bath

Adjoining Sales Adjusted

I also considered the newer adjoining home identified as Parcel 5 that sold later in 2017 and it likewise shows no negative impact on property value. This is also considered a light landscaping buffer.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style
Adjoins	611 Neal Hawkins	0.78	7/6/2017	\$288,000	1991	2,256	\$127.66	5/3	2-Gar	1.5 Brick
Not	1211 Still Frst	0.51	7/30/2018	\$280,000	1989	2,249	\$124.50	3/3	2-Gar	Br Rnch
Not	2867 Colony Wds	0.52	8/14/2018	\$242,000	1990	2,006	\$120.64	3/3	2-Gar	Br Rnch
Not	1010 Strawberry	1.00	10/4/2018	\$315,000	2002	2,330	\$135.19	3/2.5	2-Gar	1.5 Brick

Adjoining Sales Adjusted

5. Matched Pair – Summit/Ranchlands Solar, Moyock, NC



This project is located at 1374 Caritoke Highway, Moyock, NC. This is an 80 MW facility on a parent tract of 2,034 acres. Parcels Number 48 and 53 as shown in the map above were sold in 2016. The project was under construction during the time period of the first of the matched pair sales and the permit was approved well prior to that in 2015.

I looked at multiple sales of adjoining and nearby homes and compared each to multiple comparables to show a range of impacts from -10% up to +11% with an average of +2% and a median of +3%. These ranges are well within typical real estate variation and supports an indication of no impact on property value.

Adjoining Residential Sales After Solar Farm Approved														
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance	
48	Adjoins	129 Pinto	4.29	4/15/2016	\$170,000	1985	1,559	\$109.04	3/2	Drive	MFG		1,060	
	Not	102 Timber	1.30	4/1/2016	\$175,500	2009	1,352	\$129.81	3/2	Drive	MFG			
	Not	120 Ranchland	0.99	10/1/2014	\$170,000	2002	1,501	\$113.26	3/2	Drive	MFG			

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	129 Pinto								\$170,000		-3%
Not	102 Timber	\$276	\$10,000	-\$29,484	\$18,809				\$175,101	-3%	
Not	120 Ranchland	\$10,735	\$10,000	-\$20,230	\$4,598				\$175,103	-3%	

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	105 Pinto	4.99	12/16/2016	\$206,000	1978	1,484	\$138.81	3/2	Det G	Ranch	
Not	111 Spur	1.15	2/1/2016	\$193,000	1985	2,013	\$95.88	4/2	Gar	Ranch	
Not	103 Marshall	1.07	3/29/2017	\$196,000	2003	1,620	\$120.99	3/2	Drive	Ranch	
Not	127 Ranchland	0.00	6/9/2015	\$219,900	1988	1,910	\$115.13	3/2	Gar/3Det	Ranch	

Adjoining Sales Adjusted											
Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Avg Distance
105 Pinto								\$206,000			980
111 Spur	\$6,747	\$10,000	-\$6,755	-\$25,359				\$177,633	14%		
103 Marshall	-\$2,212	\$10,000	-\$24,500	-\$8,227		\$5,000		\$176,212	14%		
127 Ranchland	\$13,399	\$10,000	-\$10,995	-\$24,523		-\$10,000		\$197,781	4%		11%

Adjoining Residential Sales After Solar Farm Built														
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance	
15	Adjoins	318 Green View	0.44	9/15/2019	\$357,000	2005	3,460	\$103.18	4/4	2-Car	1.5 Brick		570	
	Not	195 St Andrews	0.55	6/17/2018	\$314,000	2002	3,561	\$88.18	5/3	2-Car	2.0 Brick			
	Not	336 Green View	0.64	1/13/2019	\$365,000	2006	3,790	\$96.31	6/4	3-Car	2.0 Brick			
	Not	275 Green View	0.36	8/15/2019	\$312,000	2003	3,100	\$100.65	5/3	2-Car	2.0 Brick			

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	318 Green View								\$357,000		4%
Not	195 St Andrews	\$12,040			\$4,710	-\$7,125	\$10,000		\$333,625	7%	
Not	336 Green View	\$7,536			-\$1,825	-\$25,425		-\$5,000	\$340,286	5%	
Not	275 Green View	\$815			\$3,120	\$28,986	\$10,000		\$354,921	1%	

Adjoining Residential Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
29	Adjoins	164 Ranchland	1.01	4/30/2019	\$169,000	1999	2,052	\$82.36	4/2	Gar	MFG		440
	Not	150 Pinto	0.94	3/27/2018	\$168,000	2017	1,920	\$87.50	4/2	Drive	MFG		
	Not	105 Longhorn	1.90	10/10/2017	\$184,500	2002	1,944	\$94.91	3/2	Drive	MFG		
	Not	112 Pinto	1.00	7/27/2018	\$180,000	2002	1,836	\$98.04	3/2	Drive	MFG	Fenced	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg	
											% Diff	-10%
Adjoins	164 Ranchland								\$169,000			
Not	150 Pinto	\$5,649		-\$21,168	\$8,085				\$5,000	\$165,566	2%	
Not	105 Longhorn	\$8,816	-\$10,000	-\$3,875	\$7,175				\$5,000	\$191,616	-13%	
Not	112 Pinto	\$4,202		-\$3,780	\$14,824				\$5,000	\$200,245	-18%	

Adjoining Residential Sales After Solar Farm Built

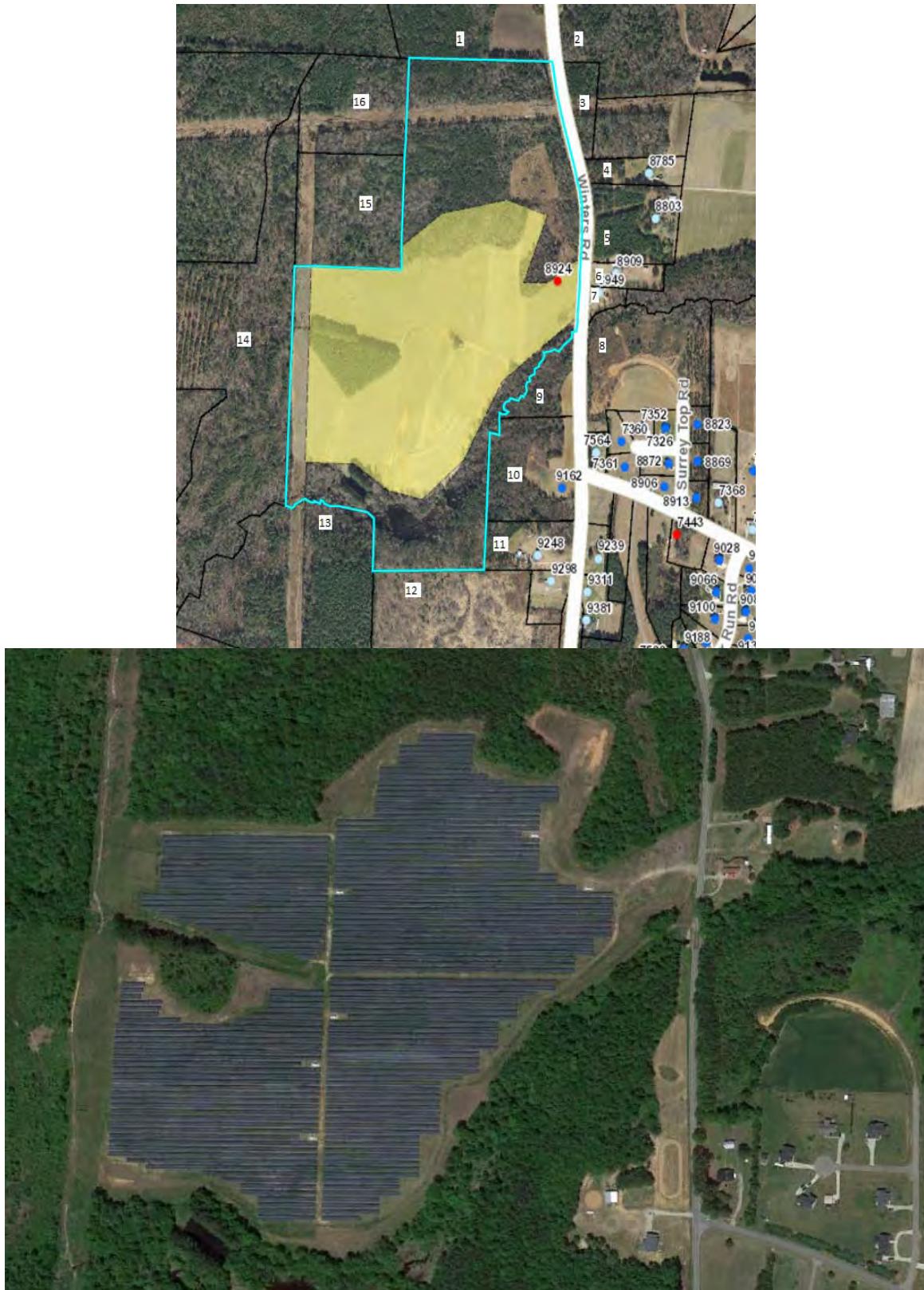
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	358 Oxford	10.03	9/16/2019	\$478,000	2008	2,726	\$175.35	3/3	2 Gar	Ranch		635
	Not	276 Summit	10.01	12/20/2017	\$355,000	2006	1,985	\$178.84	3/2	2 Gar	Ranch		
	Not	176 Providence	6.19	5/6/2019	\$425,000	1990	2,549	\$166.73	3/3	4 Gar	Ranch	Brick	
	Not	1601 B Caratoke	12.20	9/26/2019	\$440,000	2016	3,100	\$141.94	4/3.5	5 Gar	Ranch	Pool	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg	
											% Diff	5%
Adjoins	358 Oxford								\$478,000			
Not	276 Summit	\$18,996			\$3,550	\$106,017	\$10,000			\$493,564	-3%	
Not	176 Providence	\$4,763			\$38,250	\$23,609		-\$10,000	-\$25,000	\$456,623	4%	
Not	1601 B Caratoke	-\$371		\$50,000	-\$17,600	-\$42,467	-\$5,000	-\$10,000		\$414,562	13%	

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Nearby	343 Oxford	10.01	3/9/2017	\$490,000	2016	3,753	\$130.56	3/3	2 Gar	1.5 Story	Pool	970
	Not	287 Oxford	10.01	9/4/2017	\$600,000	2013	4,341	\$138.22	5/4.5	8-Gar	1.5 Story	Pool	
	Not	301 Oxford	10.00	4/23/2018	\$434,000	2013	3,393	\$127.91	5/3	2 Gar	1.5 Story		
	Not	218 Oxford	10.01	4/4/2017	\$525,000	2006	4,215	\$124.56	4/3	4 Gar	1.5 Story	VG Barn	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg	
											% Diff	3%
Adjoins	343 Oxford								\$490,000			
Not	287 Oxford	-\$9,051			\$9,000	-\$65,017	-\$15,000	-\$25,000		\$494,932	-1%	
Not	301 Oxford	-\$14,995	-\$10,000		\$6,510	\$36,838				\$452,353	8%	
Not	218 Oxford	-\$1,150			\$26,250	-\$46,036		-\$10,000	-\$10,000	\$484,064	1%	

6. Matched Pair – Tracy Solar, Bailey, NC

This project is located in rural Nash County on Winters Road with a 5 MW facility that was built in 2016 on 50 acres. A local builder acquired parcels 9 and 10 following construction as shown below

at rates comparable to other tracts in the area. They then built a custom home for an owner and sold that at a price similar to other nearby homes as shown in the matched pair data below. The retained woods provide a heavy landscaped buffer for this homesite.

Adjoining Land Sales After Solar Farm Completed

#	Solar Farm	TAX ID	Grantor	Grantee	Address	Acres	Date Sold	Sales Price	\$/AC	Other
9 & 10	Adjoins & 316004	316003 & 316004	Cozart	Kingsmill	9162 Winters	13.22	7/21/2016	\$70,000	\$5,295	
Not	6056	Billingsly			427 Young	41	10/21/2016	\$164,000	\$4,000	
Not	33211	Fulcher	Weikel		10533 Cone	23.46	7/18/2017	\$137,000	\$5,840	Doublewide, structures
Not	106807	Perry	Gardner		Claude Lewis	11.22	8/10/2017	\$79,000	\$7,041	Gravel drive for sub, cleared
Not	3437	Vaughan	N/A		11354 Old Lewis Sch	18.73	Listing	\$79,900	\$4,266	Small cemetery,wooded

Adjoining Sales Adjusted

Time	Acres	Location	Other	Adj \$/Ac	% Diff
				\$5,295	

\$0	\$400	\$0	\$0	\$4,400	17%
-\$292	\$292	\$0	-\$500	\$5,340	-1%
-\$352	\$0	\$0	-\$1,000	\$5,689	-7%
-\$213	\$0	\$0	\$213	\$4,266	19%

Average 7%

Adjoining Residential Sales After Solar Farm Completed

#	Solar Farm	Address	Acres	Date Sold	Sales Price	Built	GLA	\$/GLA	BR/BA	Style	Other
9 & 10	Adjoins	9162 Winters	13.22	1/5/2017	\$255,000	2016	1,616	\$157.80	3/2	Ranch	1296 sf wrkshp
	Not	7352 Red Fox	0.93	6/30/2016	\$176,000	2010	1,529	\$115.11	3/2	2-story	

Adjoining Sales Adjusted

Time	Acres	YB	GLA	Style	Other	Total	% Diff
						\$255,000	
\$0	\$44,000	\$7,392	\$5,007	\$5,000	\$15,000	\$252,399	1%

The comparables for the land show either a significant positive relationship or a mild negative relationship to having and adjoining solar farm, but when averaged together they show no negative impact. The wild divergence is due to the difficulty in comping out this tract of land and the wide variety of comparables used. The two comparables that show mild negative influences include a property that was partly developed as a residential subdivision and the other included a doublewide with some value and accessory agricultural structures. The tax assessed value on the improvements were valued at \$60,000. So both of those comparables have some limitations for comparison. The two that show significant enhancement due to adjacency includes a property with a cemetery located in the middle and the other is a tract almost twice as large. Still that larger tract after adjustment provides the best matched pair as it required the least adjustment. I therefore conclude that there is no negative impact due to adjacency to the solar farm shown by this matched pair.

The dwelling that was built on the site was a build-to-suit and was compared to a nearby homesale of a property on a smaller parcel of land. I adjusted for that difference based on a \$25,000 value for a 1-acre home site versus the \$70,000 purchase price of the larger subject tract. The other adjustments are typical and show no impact due to the adjacency to the solar farm.

The closest solar panel to the home is 780 feet away.

I note that the representative for Kingsmill Homes indicated that the solar farm was never a concern in purchasing the land or selling the home. He also indicated that they had built a number of nearby homes across the street and it had never come up as an issue.

7. Matched Pair – Manatee Solar Farm, Parrish, FL



This solar farm is located near Seminole Trail, Parrish, FL. The solar farm has a 74.50 MW output and is located on a 1,180.38-acre tract and was built in 2016. The tract is owned by Florida Power & Light Company.

I have considered the recent sale of 13670 Highland Road, Wimauma, Florida. This one-story, concrete block home is located just north of the solar farm and separated from the solar farm by a railroad corridor. This home is a 3 BR, 3 BA 1,512 s.f. home with a carport and workshop. The property includes new custom cabinets, granite counter tops, brand-new stainless-steel appliances, updated bathrooms and new carpet in the bedrooms. The home is sitting on 5 acres. The home was built in 1997.

I have compared this sale to several nearby homesales as part of this matched pair analysis as shown below. The landscaping separating the home from the solar farm is considered heavy.

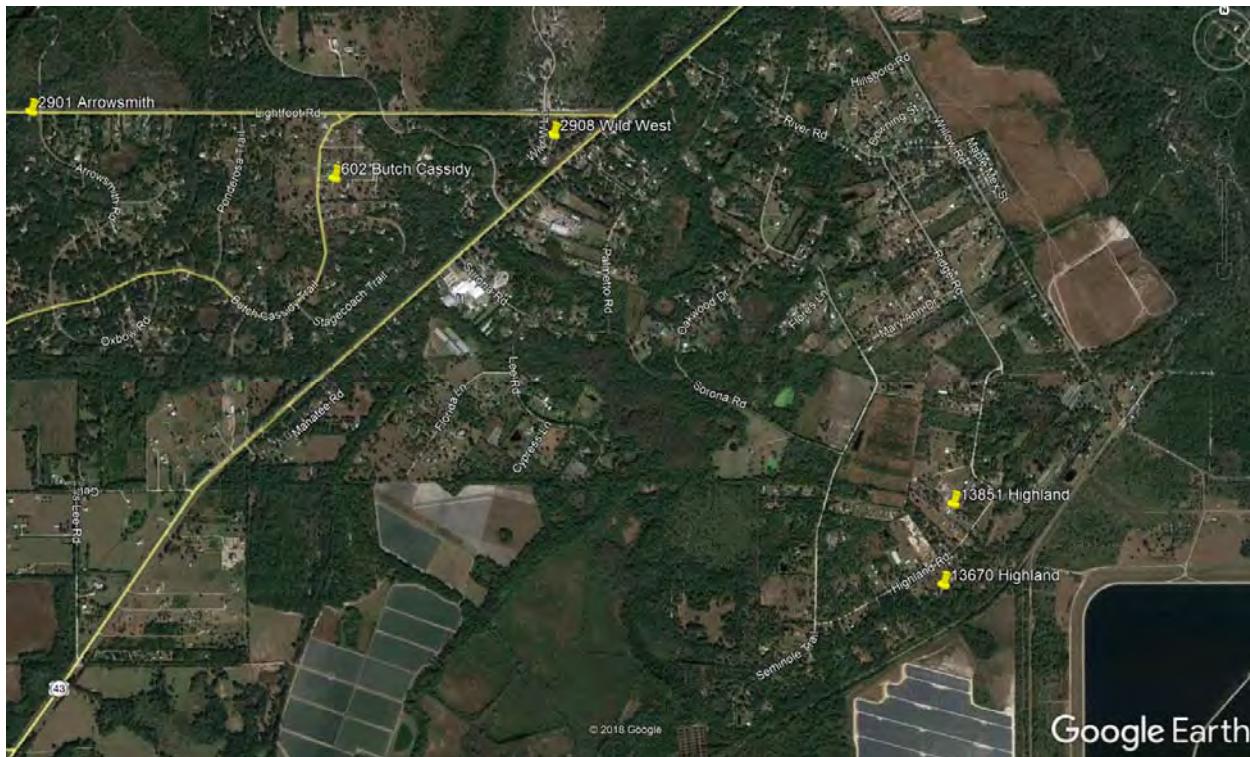
Solar	TAX ID/Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Note
Adjoins	13670 Highland	5.00	8/21/2017	\$255,000	1997	1,512	\$168.65	3/3	Carport/Wrkshp	Ranch	Renov.
Not	2901 Arrowsmith	1.91	1/31/2018	\$225,000	1979	1,636	\$137.53	3/2	2 Garage/Wrkshp	Ranch	
Not	602 Butch Cassidy	1.00	5/5/2017	\$220,000	2001	1,560	\$141.03	3/2	N/A	Ranch	Renov.
Not	2908 Wild West	1.23	7/12/2017	\$254,000	2003	1,554	\$163.45	3/2	2 Garage/Wrkshp	Ranch	Renov.
Not	13851 Highland	5.00	9/13/2017	\$240,000	1978	1,636	\$146.70	4/2	3 Garage	Ranch	Renov.

Solar	TAX ID/Address	Adjoining Sales Adjusted								Total	% Diff
		Time	Acres	YB	GLA	BR/BA	Park	Note			
Adjoins	13670 Highland								\$255,000		
Not	2901 Arrowsmith	\$2,250	\$10,000	\$28,350	-\$8,527	\$5,000	-\$10,000	\$10,000	\$262,073	-3%	
Not	602 Butch Cassidy	-\$2,200	\$10,000	-\$6,160	-\$3,385	\$5,000	\$2,000		\$225,255	12%	
Not	2908 Wild West	\$0	\$10,000	-\$10,668	-\$3,432	\$5,000	-\$10,000		\$244,900	4%	
Not	13851 Highland	\$0	\$0	\$31,920	-\$9,095	\$3,000	-\$10,000		\$255,825	0%	
										Average	3%

The sales prices of the comparables before adjustments range from \$220,000 to \$254,000. After adjustments they range from \$225,255 to \$262,073. The comparables range from no impact to a strong positive impact. The comparables showing -3% and +4% impact on value is considered within a typical range of value and therefore not indicative of any impact on property value.

This set of matched pair data falls in line with the data seen in other states. The closest solar panel to the home at 13670 Highland is 1,180 feet. There is a wooded buffer between these two properties.

I have included a map showing the relative location of these properties below.



8. Matched Pair – McBride Place Solar Farm, Midland, NC

This project is located on Mount Pleasant Road, Midland, North Carolina. The property is on 627 acres on an assemblage of 974.59 acres. The solar farm was approved in early 2017 for a 74.9 MW facility.

I have considered the sale of 4380 Joyner Road which adjoins the proposed solar farm near the northwest section. This property was appraised in April of 2017 for a value of \$317,000 with no consideration of any impact due to the solar farm in that figure. The property sold in November

2018 for \$325,000 with the buyer fully aware of the proposed solar farm. The landscaping buffer relative to Joyner Road, Hayden Way, Chanel Court and Kristi Lane is considered medium, while the landscaping for the home at the north end of Chanel Court is considered very light.

I have considered the following matched pairs to the subject property.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	4380 Joyner	12.00	11/22/2017	\$325,000	1979	1,598	\$203.38	3/2	2xGar	Ranch	Outbldg
Not	3870 Elkwood	5.50	8/24/2016	\$250,000	1986	1,551	\$161.19	3/2.5	Det 2xGar	Craft	
Not	8121 Lower Rocky	18.00	2/8/2017	\$355,000	1977	1,274	\$278.65	2/2	2xCarprt	Ranch	Eq. Fac.
Not	13531 Cabarrus	7.89	5/20/2016	\$267,750	1981	2,300	\$116.41	3/2	2xGar	Ranch	

Adjoining Sales Adjusted

Time	Acres	YB	Condition	GLA	BR/BA	Park	Other	Total	% Diff
\$7,500	\$52,000	-\$12,250	\$10,000	\$2,273	-\$2,000	\$2,500	\$7,500	\$317,523	2%
\$7,100	-\$48,000	\$4,970		\$23,156	\$0	\$3,000	-\$15,000	\$330,226	-2%
\$8,033	\$33,000	-\$3,749	\$20,000	-\$35,832	\$0	\$0	\$7,500	\$296,702	9%
							Average		3%

The home at 4380 Joyner Road is 275 feet from the closest solar panel.

I also considered the recent sale of a lot at 5800 Kristi Lane that is on the east side of the proposed solar farm. This 4.22-acre lot sold in December 2017 for \$94,000. A home was built on this lot in 2019 with the closest point from home to panel at 689 feet. The home site is heavily wooded and there remains a wooded buffer between the solar panels and the home. I spoke with the broker, Margaret Dabbs, who indicated that the solar farm was considered a positive by both buyer and seller as it ensures no subdivision will be happening in that area. Buyers in this market are looking for privacy and seclusion.

The breakdown of recent lot sales on Kristi are shown below with the lowest price paid for the lot with no solar farm exposure, though that lot has exposure to Mt Pleasant Road South. Still the older lot sales have exposure to the solar farm and sold for higher prices than the front lot and adjusting for time would only increase that difference.

Adjoining Lot Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	\$/AC	\$/Lot
Adjoins		5811 Kristi	3.74	5/1/2018	\$100,000	\$26,738	\$100,000
Adjoins		5800 Kristi	4.22	12/1/2017	\$94,000	\$22,275	\$94,000
Not		5822 Kristi	3.43	2/24/2020	\$90,000	\$26,239	\$90,000

The lot at 5811 Kristi Lane sold in May 2018 for \$100,000 for a 3.74-acre lot. The home that was built later in 2018 is 505 feet to the closest solar panel. This home then sold to a homeowner for \$530,000 in April 2020. I have compared this home sale to other properties in the area as shown below.

Adjoining Residential Sales After Solar Farm Built

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	5811 Kristi	3.74	3/31/2020	\$530,000	2018	3,858	\$137.38	5/3.5	2 Gar	2-story	Cement Ext
Not	3915 Tania	1.68	12/9/2019	\$495,000	2007	3,919	\$126.31	3/3.5	2 Gar	2-story	3Det Gar
Not	6782 Manatee	1.33	3/8/2020	\$460,000	1998	3,776	\$121.82	4/2/2h	2 Gar	2-story	Water
Not	314 Old Hickory	1.24	9/20/2019	\$492,500	2017	3,903	\$126.18	6/4.5	2 Gar	2-story	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	5811 Kristi								\$530,000		5%
Not	3915 Tania	\$6,285		\$27,225	-\$3,852			-\$20,000	\$504,657	5%	
Not	6782 Manatee	\$1,189		\$46,000	\$4,995	\$5,000			\$517,183	2%	
Not	314 Old Hickory	\$10,680		\$2,463	-\$2,839	-\$10,000			\$492,803	7%	

After adjusting the comparables, I found that the average adjusted value shows a slight increase in value for the subject property adjoining a solar farm. As in the other cases, this is a mild positive impact on value but within the typical range of real estate transactions.

I also looked at 5833 Kristi Lane that sold on 9/14/2020 for \$625,000. This home is 470 feet from the closest panel.

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Nearby	5833 Kristi	4.05	9/14/2020	\$625,000	2008	4,373	\$142.92	5/4	3-Car	2-Brick	
Not	4055 Dakeita	4.90	12/30/2020	\$629,000	2005	4,427	\$142.08	4/4	4-Car	2-Brick	4DetGar/Stable
Not	9615 Bales	2.16	6/30/2020	\$620,000	2007	4,139	\$149.79	4/5	3-Car	2-Stone	2DetGar
Not	9522 Bales	1.47	6/18/2020	\$600,000	2007	4,014	\$149.48	4/4.5	3-Car	2-Stone	

Adjoining Sales Adjusted

Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Avg Distance
5833 Kristi								\$625,000			470
4055 Dakeita	-\$9,220		\$5,661	-\$6,138			-\$25,000		\$594,303	5%	
9615 Bales	\$6,455		\$1,860	\$28,042	-\$10,000	-\$15,000			\$631,356	-1%	
9522 Bales	\$7,233		\$1,800	\$42,930	-\$5,000				\$646,963	-4%	
											0%

The average difference is 0% impact and the differences are all within a close range with this set of comparables and supports a finding of no impact on property value.

I have also looked at 4504 Chanel Court. This home sold on January 1, 2020 for \$393,500 for this 3,010 square foot home built in 2004 with 3 bedrooms, 3.5 bathrooms, and a 3-car garage. This home includes a full partially finished basement that significantly complicates comparing this to other sales. This home previously sold on January 23, 2017 for \$399,000. This was during the time that the solar farm was a known factor as the solar farm was approved in early 2017 and public discussions had already commenced. I spoke with Rachelle Killman with Real Estate Realty, LLC the buyer's agent for this transaction and she indicated that the solar farm was not a factor or consideration for the buyer. She noted that you could see the panels sort of through the trees, but it wasn't a concern for the buyer. She was not familiar with the earlier 2017 sale, but indicated that it was likely too high. This again goes back to the partially finished basement issue. The basement has a fireplace, and an installed 3/4 bathroom but otherwise bare studs and concrete floors with different buyers assigning varying value to that partly finished space. I also reached out to Don Gomez with Don Anthony Realty, LLC as he was the listing agent.

I also looked at the recent sale of 4599 Chanel Court. This home is within 310 feet of solar panels but notably does not have a good landscaping screen in place as shown in the photo below. The plantings appear to be less than 3-feet in height and only a narrow, limited screen of existing hardwoods were kept. The photograph is from the listing.

According to Scott David with Better Homes and Gardens Paracle Realty, this property was under contract for \$550,000 contingent on the buyer being able to sell their former home. The former home was apparently overpriced and did not sell and the contract stretched out over 2.5 months.

The seller was in a bind as they had a home they were trying to buy contingent on this closing and were about to lose that opportunity. A cash buyer offered them a quick close at \$500,000 and the seller accepted that offer in order to not lose the home they were trying to buy. According to Mr. David, the original contracted buyer and the actual cash buyer never considered the solar farm as a negative. In fact Mr. David noted that the actual buyer saw it as a great opportunity to purchase a home where a new subdivision could not be built behind his house. I therefore conclude that this property supports a finding of no impact on adjoining property, even where the landscaping screen still requires time to grow in for a year-round screen.

I also considered a sale/resale analysis on this property. This same home sold on September 15, 2015 for \$462,000. Adjusting this upward by 5% per year for the five years between these sales dates suggests a value of \$577,500. Comparing that to the \$550,000 contract that suggests a 5% downward impact, which is within a typical market variation. Given that the broker noted no negative impact from the solar farm and the analysis above, I conclude this sale supports a finding of no impact on value.



9. Matched Pair – Mariposa Solar, Gaston County, NC



This project is a 5 MW facility located on 35.80 acres out of a parent tract of 87.61 acres at 517 Blacksnake Road, Stanley that was built in 2016.

I have considered a number of recent sales around this facility as shown below.

The first is identified in the map above as Parcel 1, which is 215 Mariposa Road. This is an older dwelling on large acreage with only one bathroom. I've compared it to similar nearby homes as shown below. The landscaping buffer for this home is considered light.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style
Adjoins	215 Mariposa	17.74	12/12/2017	\$249,000	1958	1,551	\$160.54	3/1	Garage	Br/Rnch
Not	249 Mariposa	0.48	3/1/2019	\$153,000	1974	1,792	\$85.38	4/2	Garage	Br/Rnch
Not	110 Airport	0.83	5/10/2016	\$166,000	1962	2,165	\$76.67	3/2	Crprt	Br/Rnch
Not	1249 Blacksnake	5.01	9/20/2018	\$242,500	1980	2,156	\$112.48	3/2	Drive	1.5
Not	1201 Abernathy	27.00	5/3/2018	\$390,000	1970	2,190	\$178.08	3/2	Crprt	Br/Rnch

Adjoining Residential Sales After Solar Farm Approved					Adjoining Sales Adjusted									
Solar	Address	Acres	Date Sold	Sales Price	Time	YB	Acres	GLA	BR/BA	Park	Other	Total	% Diff	
Adjoins	215 Mariposa	17.74	12/12/2017	\$249,000								\$249,000		
Not	249 Mariposa	0.48	3/1/2019	\$153,000	-\$5,583	-\$17,136	\$129,450	-\$20,576	-\$10,000			\$229,154	8%	
Not	110 Airport	0.83	5/10/2016	\$166,000	\$7,927	-\$4,648	\$126,825	-\$47,078	-\$10,000			\$239,026	4%	
Not	1249 Blacksnake	5.01	9/20/2018	\$242,500	-\$5,621	-\$37,345	\$95,475	-\$68,048	-\$10,000	\$5,000		\$221,961	11%	
Not	1201 Abernathy	27.00	5/3/2018	\$390,000	-\$4,552	-\$32,760	-\$69,450	-\$60,705	-\$10,000			\$212,533	15%	
													Average	9%

The average difference after adjusting for all factors is +9% on average, which suggests an enhancement due to the solar farm across the street. Given the large adjustments for acreage and size, I will focus on the low end of the adjusted range at 4%, which is within the typical deviation and therefore suggests no impact on value.

I have also considered Parcel 4 that sold after the solar farm was approved but before it had been constructed in 2016. The landscaping buffer for this parcel is considered light.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	242 Mariposa	2.91	9/21/2015	\$180,000	1962	1,880	\$95.74	3/2	Carport	Br/Rnch	Det Wrkshop
Not	249 Mariposa	0.48	3/1/2019	\$153,000	1974	1,792	\$85.38	4/2	Garage	Br/Rnch	
Not	110 Airport	0.83	5/10/2016	\$166,000	1962	2,165	\$76.67	3/2	Crprt	Br/Rnch	
Not	1249 Blacksnake	5.01	9/20/2018	\$242,500	1980	2,156	\$112.48	3/2	Drive		1.5

Adjoining Residential Sales After Solar Farm Approved Adjoining Sales Adjusted

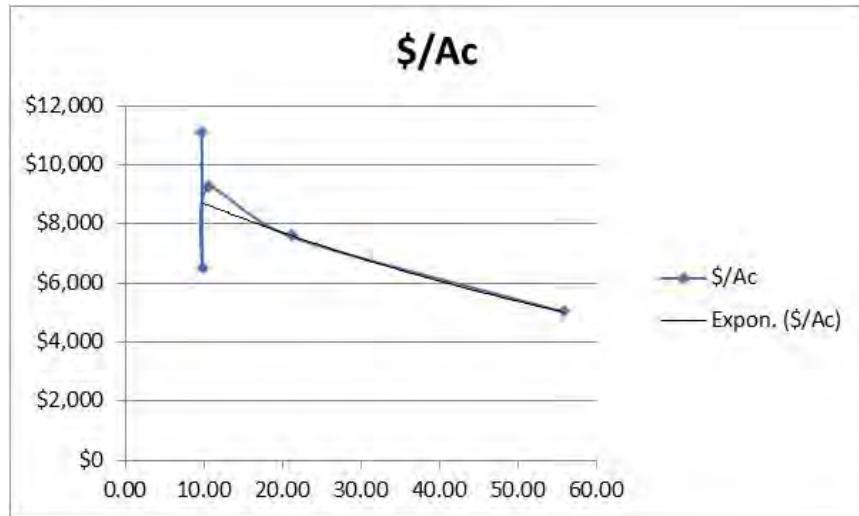
Solar	Address	Acres	Date Sold	Sales Price	Time	YB	Acres	GLA	BR/BA	Park	Other	Total	% Diff	
Adjoins	242 Mariposa	2.91	9/21/2015	\$180,000								\$180,000		
Not	249 Mariposa	0.48	3/1/2019	\$153,000	-\$15,807	-\$12,852	\$18,468	\$7,513			-\$3,000	\$25,000	\$172,322	
Not	110 Airport	0.83	5/10/2016	\$166,000	-\$3,165	\$0	\$15,808	-\$28,600				\$25,000	\$175,043	
Not	1249 Blacksnake	5.01	9/20/2018	\$242,500	-\$21,825	-\$30,555	-\$15,960	-\$40,942			\$2,000	\$25,000	\$160,218	
													Average	6%

The average difference after adjusting for all factors is +6%, which is again suggests a mild increase in value due to the adjoining solar farm use. The median is a 4% adjustment, which is within a standard deviation and suggests no impact on property value.

I have also considered the recent sale of Parcel 13 that is located on Blacksnake Road south of the project. I was unable to find good land sales in the same 20-acre range, so I have considered sales of larger and smaller acreage. I adjusted each of those land sales for time. I then applied the price per acre to a trendline to show where the expected price per acre would be for 20 acres. As can be seen in the chart below, this lines up exactly with the purchase of the subject property. I therefore conclude that there is no impact on Parcel 13 due to proximity to the solar farm.

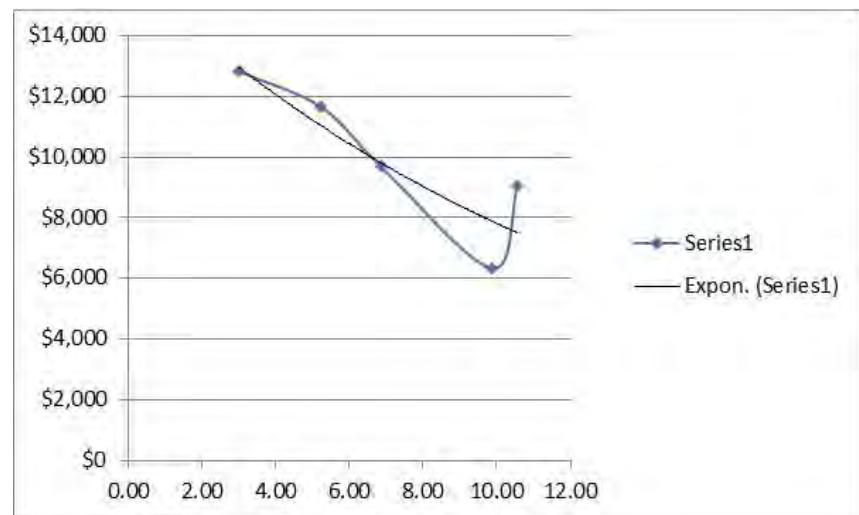
Adjoining Residential Land Sales After Solar Farm Approved Adjoining Sales Adjusted

Solar	Tax/Street	Acres	Date Sold	Sales Price	\$/Ac	Time	\$/Ac
Adjoins	174339/Blacksnake	21.15	6/29/2018	\$160,000	\$7,565		\$7,565
Not	227852/Abernathy	10.57	5/9/2018	\$97,000	\$9,177	\$38	\$9,215
Not	17443/Legion	9.87	9/7/2018	\$64,000	\$6,484	-\$37	\$6,447
Not	164243/Alexis	9.75	2/1/2019	\$110,000	\$11,282	-\$201	\$11,081
Not	176884/Bowden	55.77	6/13/2018	\$280,000	\$5,021	\$7	\$5,027



Finally, I have considered the recent sale of Parcel 17 that sold as vacant land. I was unable to find good land sales in the same 7-acre range, so I have considered sales of larger and smaller acreage. I adjusted each of those land sales for time. I then applied the price per acre to a trendline to show where the expected price per acre would be for 7 acres. As can be seen in the chart below, this lines up with the trendline running right through the purchase price for the subject property. I therefore conclude that there is no impact on Parcel 13 due to proximity to the solar farm. I note that this property was improved with a 3,196 square foot ranch built in 2018 following the land purchase, which shows that development near the solar farm was unimpeded.

Adjoining Residential Land Sales After Solar Farm Approved						Adjoining Sales Adjusted			
Solar	Tax/Street	Acres	Date Sold	Sales Price	\$/Ac	Time	Location	\$/Ac	
Adjoins	227039/Mariposa	6.86	12/6/2017	\$66,500	\$9,694			\$9,694	
Not	227852/Abernathy	10.57	5/9/2018	\$97,000	\$9,177	-\$116		\$9,061	
Not	17443/Legion	9.87	9/7/2018	\$64,000	\$6,484	-\$147		\$6,338	
Not	177322/Robinson	5.23	5/12/2017	\$66,500	\$12,715	\$217	-\$1,272	\$11,661	
Not	203386/Carousel	2.99	7/13/2018	\$43,500	\$14,548	-\$262	-\$1,455	\$12,832	



10. Matched Pair – Clarke County Solar, Clarke County, VA

This project is a 20 MW facility located on a 234-acre tract that was built in 2017.

I have considered two recent sales of Parcel 3. The home on this parcel is 1,230 feet from the closest panel as measured in the second map from Google Earth, which shows the solar farm under construction. This home sold in January 2017 for \$295,000 and again in August 2019 for \$385,000. I show each sale below and compare those to similar home sales in each time frame. The significant increase in price between 2017 and 2019 is due to a major kitchen remodel, new roof, and related upgrades as well as improvement in the market in general. The sale and later resale of the home with updates and improvements speaks to pride of ownership and increasing overall value as properties perceived as diminished are less likely to be renovated and sold for profit.

I note that 102 Tilthammer includes a number of barns that I did not attribute any value in the analysis. The market would typically give some value for those barns but even without that adjustment there is an indication of a positive impact on value due to the solar farm. The landscaping buffer from this home is considered light.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
3	Adjoins	833 Nations Spr	5.13	8/18/2019	\$385,000	1979	1,392	\$276.58	3/2	Det Gar	Ranch	UnBsmt
	Not	167 Leslie	5.00	8/19/2020	\$429,000	1980	1,665	\$257.66	3/2	Det2Gar	Ranch	
	Not	2393 Old Chapel	2.47	8/10/2020	\$330,000	1974	1,500	\$220.00	3/1.5	Det Gar	Ranch	
	Not	102 Tilthammer	6.70	5/7/2019	\$372,000	1970	1,548	\$240.31	3/1.5	Det Gar	Ranch	UnBsmt

Adjoining Sales Adjusted

Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
-\$13,268		-\$2,145	-\$56,272		-\$5,000	\$50,000	\$385,000			1230
-\$9,956	\$25,000	\$8,250	-\$19,008	\$5,000		\$50,000	\$389,286	-4%	-1%	
\$3,229		\$16,740	-\$29,991	\$5,000			\$366,978	5%	0%	

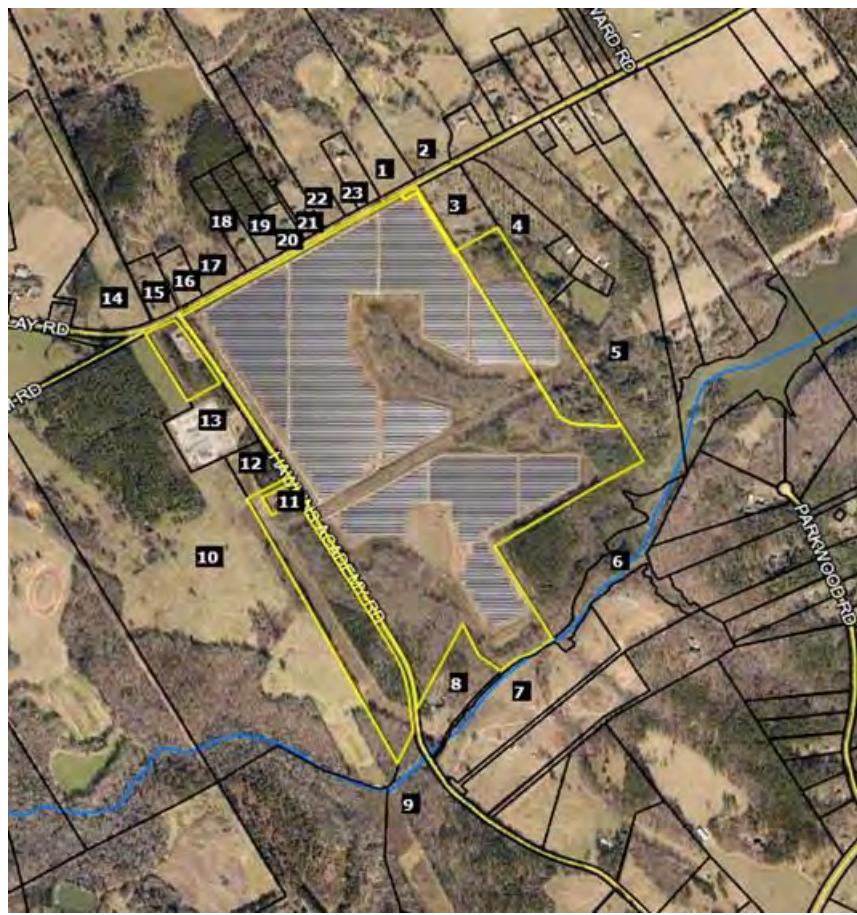
Adjoining Residential Sales After Solar Farm Approved

Neighboring Residential Sales After Solar Panel Approval													
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other	
3	Adjoins	833 Nations Spr	5.13	1/9/2017	\$295,000	1979	1,392	\$211.93	3/2	Det Gar	Ranch	UnBsmt	
	Not	6801 Middle	2.00	12/12/2017	\$249,999	1981	1,584	\$157.83	3/2	Open	Ranch		
	Not	4174 Rockland	5.06	1/2/2017	\$300,000	1990	1,688	\$177.73	3/2	2 Gar	2-story		
	Not	400 Sugar Hill	1.00	6/7/2018	\$180,000	1975	1,008	\$178.57	3/1	Open	Ranch		

Adjoining Sales Adjusted

Rejoining Sales Adjusted							Avg			
Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
-\$7,100	\$25,000	-\$2,500	-\$24,242		\$5,000	\$50,000	\$295,000			1230
\$177		-\$16,500	-\$42,085		-\$10,000	\$50,000	\$296,157	0%	5%	
-\$7,797		\$3,600	\$54,857	\$10,000	\$5,000	\$50,000	\$281,592			
							\$295,661	0%	1%	

11. Matched Pair – Simon Solar, Social Circle, GA



This 30 MW solar farm is located off Hawkins Academy Road and Social Circle Fairplay Road. I identified three adjoining sales to this tract after development of the solar farm. However, one of those is shown as Parcel 12 in the map above and includes a powerline easement encumbering over a third of the 5 acres and adjoins a large substation as well. It would be difficult to isolate those impacts from any potential solar farm impact and therefore I have excluded that sale. I also excluded the recent sale of Parcel 17, which is a farm with conservation restrictions on it that similarly would require a detailed examination of those conservation restrictions in order to see if there was any impact related to the solar farm. I therefore focused on the recent sale of Parcel 7 and the adjoining parcel to the south of that. They are technically not adjoining due to the access road for the flag-shaped lot to the east. Furthermore, there is an apparent access easement serving the two rear lots that encumber these two parcels which is a further limitation on these sales. This analysis assumes that the access easement does not negatively impact the subject property, though it may.

The landscaping buffer relative to this parcel is considered medium.

Adjoining Land Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	\$/AC	Type	Other
7+	Adjoins	4514 Hawkins	36.86	3/31/2016	\$180,000	\$4,883	Pasture	Esmts
	Not	HD Atha	69.95	12/20/2016	\$357,500	\$5,111	Wooded	N/A
	Not	Pannell	66.94	11/8/2016	\$322,851	\$4,823	Mixed	*
	Not	1402 Roy	123.36	9/29/2016	\$479,302	\$3,885	Mixed	**

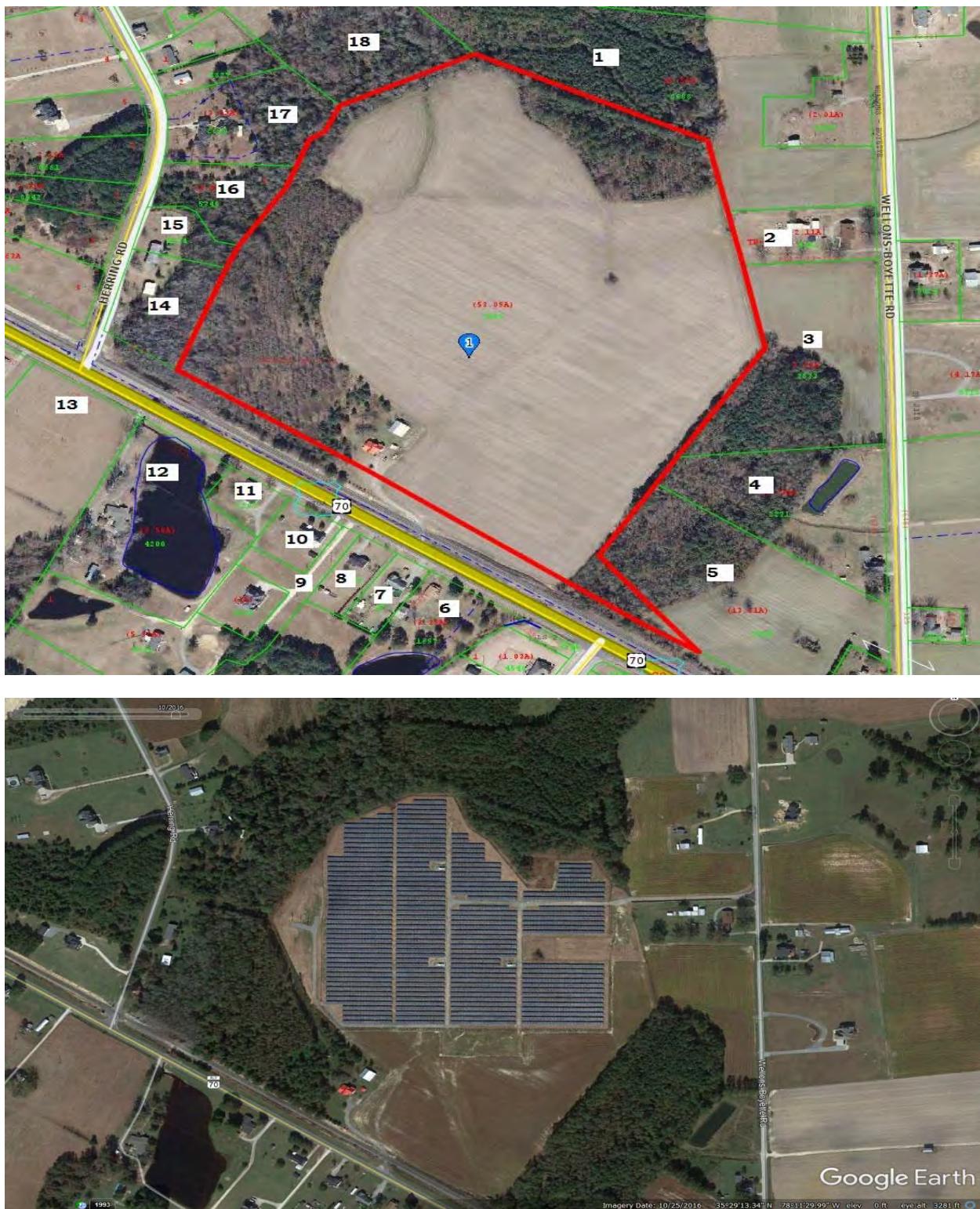
* Adjoining 1 acre purchased by same buyer in same deed. Allocation assigned on the County Tax Record.

** Dwelling built in 1996 with a 2016 tax assessed value of \$75,800 deducted from sales price to reflect land value

Adjoining Sales Adjusted					Avg	
Time	Size	Type	Other	Total/Ac	% Diff	% Diff
				\$4,883		
\$89	\$256			\$5,455	-12%	
-\$90	\$241			\$4,974	-2%	
-\$60	\$389			\$4,214	14%	
						0%

The range of impact identified by these matched pairs are -12% to +14%, with an average of 0% impact due to the solar farm. The best matched pair with the least adjustment supports a -2% impact due to the solar farm. I note again that this analysis considers no impact for the existing access easements that meander through this property and it may be having an impact. Still at -2% impact as the best indication for the solar farm, I consider that to be no impact given that market fluctuations support +/- 5%.

12. Matched Pair – Candace Solar, Princeton, NC



This 5 MW solar farm is located at 4839 US 70 Highway just east of Herring Road. This solar farm was completed on October 25, 2016.

I identified three adjoining sales to this tract after development of the solar farm with frontage on US 70. I did not attempt to analyze those sales as they have exposure to an adjacent highway and railroad track. Those homes are therefore problematic for a matched pair analysis unless I have similar homes fronting on a similar corridor.

I did consider a land sale and a home sale on adjoining parcels without those complications.

The lot at 499 Herring Road sold to Paradise Homes of Johnston County of NC, Inc. for \$30,000 in May 2017 and a modular home was placed there and sold to Karen and Jason Toole on September 29, 2017. I considered the lot sale first as shown below and then the home sale that followed. The landscaping buffer relative to this parcel is considered medium.

Adjoining Land Sales After Solar Farm Approved										Adjoining Sales Adjusted			
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Other	Time	Site	Other	Total	% Diff		
16	Adjoins	499 Herring	2.03	5/1/2017	\$30,000					\$30,000			
	Not	37 Becky	0.87	7/23/2019	\$24,500	Sub/Pwr	-\$1,679	\$4,900		\$27,721	8%		
	Not	5858 Bizzell	0.88	8/17/2016	\$18,000		\$390	\$3,600		\$21,990	27%		
	Not	488 Herring	2.13	12/20/2016	\$35,000		\$389			\$35,389	-18%		
												Average	5%

Following the land purchase, the modular home was placed on the site and sold. I have compared this modular home to the following sales to determine if the solar farm had any impact on the purchase price.

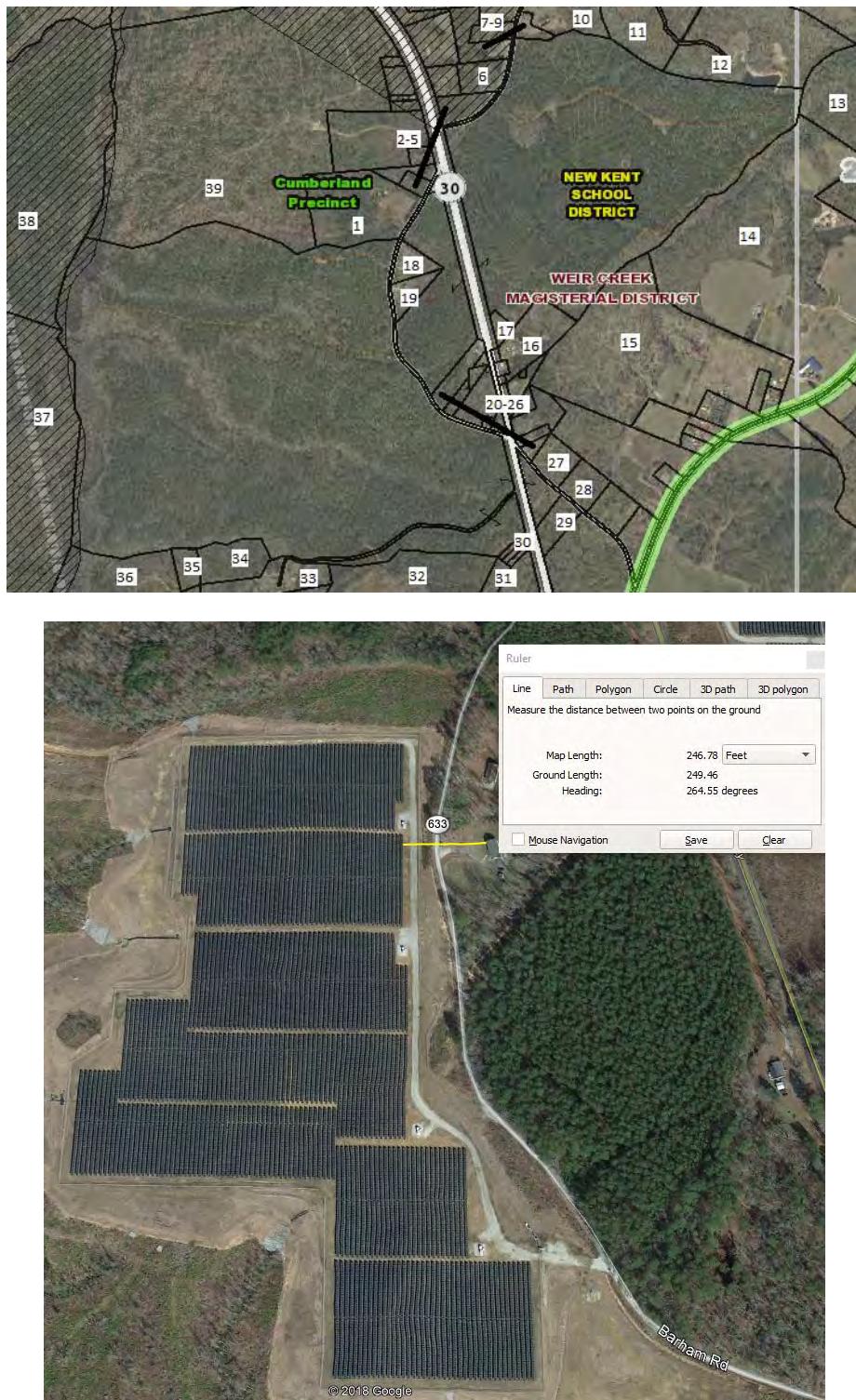
Adjoining Residential Sales After Solar Farm Approved												
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
16	Adjoins	499 Herring	2.03	9/27/2017	\$215,000	2017	2,356	\$91.26	4/3	Drive	Modular	
	Not	678 WC	6.32	3/8/2019	\$226,000	1995	1,848	\$122.29	3/2.5	Det Gar	Mobile	Ag bldgs
	Not	1810 Bay V	8.70	3/26/2018	\$170,000	2003	2,356	\$72.16	3/2	Drive	Mobile	Ag bldgs
	Not	1795 Bay V	1.78	12/1/2017	\$194,000	2017	1,982	\$97.88	4/3	Drive	Modular	

Adjoining Residential Sales Af Adjoining Sales Adjusted											Avg		
Parcel	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
16	Adjoins	499 Herring								\$215,000			488
	Not	678 WC	-\$10,037	-\$25,000	\$24,860	\$37,275	-\$5,000	-\$7,500	-\$20,000	\$220,599	-3%		
	Not	1810 Bay V	-\$2,579	-\$20,000	\$11,900	\$0				\$159,321	26%		
	Not	1795 Bay V	-\$1,063		\$0	\$21,964				\$214,902	0%		8%

The best comparable is 1795 Bay Valley as it required the least adjustment and was therefore most similar, which shows a 0% impact. This signifies no impact related to the solar farm.

The range of impact identified by these matched pairs ranges are therefore -3% to +26% with an average of +8% for the home and an average of +4% for the lot, though the best indicator for the lot shows a \$5,000 difference in the lot value due to the proximity to the solar farm or a -12% impact.

13. Matched Pair – Walker-Correctional Solar, Barham Road, Barhamsville, VA



This project was built in 2017 and located on 484.65 acres for a 20 MW with the closest home at 110 feet from the closest solar panel with an average distance of 500 feet.

I considered the recent sale identified on the map above as Parcel 19, which is directly across the street and based on the map shown on the following page is 250 feet from the closest panel. A

limited buffering remains along the road with natural growth being encouraged, but currently the panels are visible from the road. Alex Uminski, SRA with MGMiller Valuations in Richmond VA confirmed this sale with the buying and selling broker. The selling broker indicated that the solar farm was not a negative influence on this sale and in fact the buyer noticed the solar farm and then discovered the listing. The privacy being afforded by the solar farm was considered a benefit by the buyer. I used a matched pair analysis with a similar sale nearby as shown below and found no negative impact on the sales price. Property actually closed for more than the asking price. The landscaping buffer is considered light.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	5241 Barham	2.65	10/18/2018	\$264,000	2007	1,660	\$159.04	3/2	Drive	Ranch	Modular
Not	17950 New Kent	5.00	9/5/2018	\$290,000	1987	1,756	\$165.15	3/2.5	3 Gar	Ranch	
Not	9252 Ordinary	4.00	6/13/2019	\$277,000	2001	1,610	\$172.05	3/2	1.5-Gar	Ranch	
Not	2416 W Miller	1.04	9/24/2018	\$299,000	1999	1,864	\$160.41	3/2.5	Gar	Ranch	

Adjoining Sales Adjusted

Solar	Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
Adjoins	5241 Barham								\$264,000		250
Not	17950 New Kent			-\$8,000	\$29,000	-\$4,756	-\$5,000	-\$20,000	-\$15,000	\$266,244	-1%
Not	9252 Ordinary		-\$8,310	-\$8,000	\$8,310	\$2,581		-\$10,000	-\$15,000	\$246,581	7%
Not	2416 W Miller			\$8,000	\$11,960	-\$9,817	-\$5,000	-\$10,000	-\$15,000	\$279,143	-6%

Average Diff 0%

I also spoke with Patrick W. McCrerey of Virginia Estates who was marketing a property that sold at 5300 Barham Road adjoining the Walker-Correctional Solar Farm. He indicated that this property was unique with a home built in 1882 and heavily renovated and updated on 16.02 acres. The solar farm was through the woods and couldn't be seen by this property and it had no impact on marketing this property. This home sold on April 26, 2017 for \$358,000. I did not set up any matched pairs for this property since it is a unique property that any such comparison would be difficult to rely on. The broker's comments do support the assertion that the adjoining solar farm had no impact on value. The home in this case was 510 feet from the closest panel.

14. Matched Pair – Innovative Solar 46, Roslin Farm Rd, Hope Mills, NC



This project was built in 2016 and located on 532 acres for a 78.5 MW solar farm with the closest home at 125 feet from the closest solar panel with an average distance of 423 feet.

I considered the recent sale of a home on Roslin Farm Road just north of Running Fox Road as shown below. This sale supports an indication of no impact on property value. The landscaping buffer is considered light.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	6849 Roslin Farm	1.00	2/18/2019	\$155,000	1967	1,610	\$96.27	3/3	Drive	Ranch	Brick	435
Not	6592 Sim Canady	2.43	9/5/2017	\$185,000	1974	2,195	\$84.28	3/2	Gar	Ranch	Brick	
Not	1614 Joe Hall	1.63	9/3/2019	\$145,000	1974	1,674	\$86.62	3/2	Det Gar	Ranch	Brick	
Not	109 Bledsoe	0.68	1/17/2019	\$150,000	1973	1,663	\$90.20	3/2	Gar	Ranch	Brick	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	Avg	% Diff	% Diff
Adjoins	6849 Roslin Farm								\$155,000			5%
Not	6592 Sim Canady	\$8,278			-\$6,475	-\$39,444	\$10,000	-\$5,000	\$152,359		2%	
Not	1614 Joe Hall	-\$2,407			-\$5,075	-\$3,881	\$10,000	-\$2,500	\$141,137		9%	
Not	109 Bledsoe	\$404	\$10,000		-\$4,500	-\$3,346		-\$5,000	\$147,558		5%	

15. Matched Pair – Innovative Solar 42, County Line Rd, Fayetteville, NC

This project was built in 2017 and located on 413.99 acres for a 71 MW with the closest home at 135 feet from the closest solar panel with an average distance of 375 feet.

I considered the recent sales identified on the map above as Parcels 2 and 3, which is directly across the street these homes are 330 and 340 feet away. Parcel 2 includes an older home built in 1976, while Parcel 3 is a new home built in 2019. So the presence of the solar farm had no impact on new construction in the area.

The matched pairs for each of these are shown below. The landscaping buffer relative to these parcels is considered light.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	2923 County Ln	8.98	2/28/2019	\$385,000	1976	2,905	\$132.53	3/3	2-Car	Ranch	Brick/Pond	340
Not	1928 Shaw Mill	17.00	7/3/2019	\$290,000	1977	3,001	\$96.63	4/4	2-Car	Ranch	Brick/Pond/Rental	
Not	2109 John McM.	7.78	4/25/2018	\$320,000	1978	2,474	\$129.35	3/2	Det Gar	Ranch	Vinyl/Pool/Stable	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	2923 County Ln								\$385,000		3%
Not	1928 Shaw Mill	-\$3,055	\$100,000	-\$1,450	-\$7,422	-\$10,000			\$368,074	4%	
Not	2109 John McM.	\$8,333			-\$3,200	\$39,023	\$10,000		\$5,000	\$379,156	2%

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	2935 County Ln	1.19	6/18/2019	\$266,000	2019	2,401	\$110.79	4/3	Gar	2-Story		330
Not	3005 Hemingway	1.17	5/16/2019	\$269,000	2018	2,601	\$103.42	4/3	Gar	2-Story		
Not	7031 Glynn Mill	0.60	5/8/2018	\$255,000	2017	2,423	\$105.24	4/3	Gar	2-Story		
Not	5213 Bree Brdg	0.92	5/7/2019	\$260,000	2018	2,400	\$108.33	4/3	3-Gar	2-Story		

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	2935 County Ln								\$266,000		3%
Not	3005 Hemingway	\$748		\$1,345	-\$16,547				\$254,546	4%	
Not	7031 Glynn Mill	\$8,724		\$2,550	-\$1,852				\$264,422	1%	
Not	5213 Bree Brdg	\$920		\$1,300	\$76				-\$10,000	\$252,296	5%

Both of these matched pairs adjust to an average of +3% on impact for the adjoining solar farm, meaning there is a slight positive impact due to proximity to the solar farm. This is within the standard +/- of typical real estate transactions, which strongly suggests no impact on property value. I noted specifically that for 2923 County Line Road, the best comparable is 2109 John McMillan as it does not have the additional rental unit on it. I made no adjustment to the other sale for the value of that rental unit, which would have pushed the impact on that comparable downward – meaning there would have been a more significant positive impact.

16. Matched Pair – Sunfish Farm, Keenebuc Rd, Willow Spring, NC



This project was built in 2015 and located on 49.6 acres (with an inset 11.25-acre parcel) for a 6.4 MW project with the closest home at 135 feet with an average distance of 105 feet.

I considered the 2017 sale identified on the map above, which is 205 feet away from the closest panel. The matched pairs for each of these are shown below followed by a more recent map showing the panels at this site. The average difference in the three comparables and the subject property is +3% after adjusting for differences in the sales date, year built, gross living area, and other minor differences. This data is supported by the comments from the broker Brian Schroepfer with Keller Williams that the solar farm had no impact on the purchase price. The landscaping screen is considered light.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style
Adjoins		7513 Glen Willow	0.79	9/1/2017	\$185,000	1989	1,492	\$123.99	3/2	Gar	BR/Rnch
Not		2968 Tram	0.69	7/17/2017	\$155,000	1984	1,323	\$117.16	3/2	Drive	BR/Rnch
Not		205 Pine Burr	0.97	12/29/2017	\$191,000	1991	1,593	\$119.90	3/2.5	Drive	BR/Rnch
Not		1217 Old Honeycutt	1.00	12/15/2017	\$176,000	1978	1,558	\$112.97	3/2.5	2Carprt	VY/Rnch

Adjustments

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	Avg % Diff	% Diff
Adjoins	7513 Glen Willow								\$185,000		
Not	2968 Tram	\$601		\$3,875	\$15,840			\$10,000		\$185,316	0%
Not	205 Pine Burr	-\$1,915		-\$1,910	-\$9,688	-\$5,000				\$172,487	7%
Not	1217 Old Honeycutt	-\$1,557		\$9,680	-\$5,965	-\$5,000		\$5,280	\$178,438		4%

3%

17. Matched Pair – Sappony Solar, Sussex County, VA



This project is a 30 MW facility located on a 322.68-acre tract that was built in the fourth quarter of 2017.

I have considered the 2018 sale of Parcel 17 as shown below. This was a 1,900 s.f. manufactured home on a 6.00-acre lot that sold in 2018. I have compared that to three other nearby manufactured homes as shown below. The range of impacts is within typical market variation with an average of -1%, which supports a conclusion of no impact on property value. The landscaping buffer is considered medium.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	12511 Palestine	6.00	7/31/2018	\$128,400	2013	1,900	\$67.58	4/2.5	Open	Manuf		
Not	15698 Concord	3.92	7/31/2018	\$150,000	2010	2,310	\$64.94	4/2	Open	Manuf	Fence	
Not	23209 Sussex	1.03	7/7/2020	\$95,000	2005	1,675	\$56.72	3/2	Det Crpt	Manuf		
Not	6494 Rocky Br	4.07	11/8/2018	\$100,000	2004	1,405	\$71.17	3/2	Open	Manuf		

Adjoining Sales Adjusted

18. Matched Pair – Camden Dam, Camden, NC



This 5 MW project was built in 2019 and located on a portion of 49.83 acres.

Parcel 1 noted above along with the home on the adjoining parcel to the north of that parcel sold in late 2018 after this solar farm was approved but prior to construction being completed in 2019. I have considered this sale as shown below. The landscaping screen is considered light.

The comparable at 548 Trotman is the most similar and required the least adjustment shows no impact on property value. The other two comparables were adjusted consistently with one showing significant enhancement and another as showing a mild negative. The best indication is the one requiring the least adjustment. The other two sales required significant site adjustments which make them less reliable. The best comparable and the average of these comparables support a finding of no impact on property value.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	122 N Mill Dam	12.19	11/29/2018	\$350,000	2005	2,334	\$149.96	3/3.5	3-Gar	Ranch	
Not	548 Trotman	12.10	5/31/2018	\$309,000	2007	1,960	\$157.65	4/2	Det2G	Ranch	Wrkshp
Not	198 Sand Hills	2.00	12/22/2017	\$235,000	2007	2,324	\$101.12	4/3	Open	Ranch	
Not	140 Sleepy Hwy	2.05	8/12/2019	\$330,000	2010	2,643	\$124.86	4/3	1-Gar	1.5 Story	

Adjoining Sales Adjusted

19. Matched Pair – Grandy Solar, Grandy, NC



This 20 MW project was built in 2019 and located on a portion of 121 acres.

Parcels 40 and 50 have sold since construction began on this solar farm. I have considered both in matched pair analysis below. I note that the marketing for Parcel 40 (120 Par Four) identified the lack of homes behind the house as a feature in the listing. The marketing for Parcel 50 (269 Grandy) identified the property as "very private." Landscaping for both of these parcels is considered light.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acre	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	120 Par Four	0.92	8/17/2019	\$315,000	2006	2,188	\$143.97	4/3	2-Gar	1.5 Story	Pool
Not	102 Teague	0.69	1/5/2020	\$300,000	2005	2,177	\$137.80	3/2	Det 3G	Ranch	
Not	112 Meadow Lk	0.92	2/28/2019	\$265,000	1992	2,301	\$115.17	3/2	Gar	1.5 Story	
Not	116 Barefoot	0.78	9/29/2020	\$290,000	2004	2,192	\$132.30	4/3	2-Gar	2 Story	

Adjoining Sales Adjusted

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	269 Grandy	0.78	5/7/2019	\$275,000	2019	1,535	\$179.15	3/2.5	2-Gar	Ranch	
Not	307 Grandy	1.04	10/8/2018	\$240,000	2002	1,634	\$146.88	3/2	Gar	1.5 Story	
Not	103 Branch	0.95	4/22/2020	\$230,000	2000	1,532	\$150.13	4/2	2-Gar	1.5 Story	
Not	103 Spring Lf	1.07	8/14/2018	\$270,000	2002	1,635	\$165.14	3/2	2-Gar	Ranch	Pool

Adjoining Sales Adjusted

Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Avg
											Distance
269 Grandy								\$275,000			477
307 Grandy	\$5,550		\$20,400	-\$8,725	\$5,000	\$10,000		\$272,225	1%		
103 Branch	-\$8,847		\$21,850	\$270				\$243,273	12%		
103 Spring Lf	\$7,871		\$22,950	-\$9,908	\$5,000			-\$20,000	\$275,912	0%	
											4%

Both of these matched pairs support a finding of no impact on value. This is reinforced by the listings for both properties identifying the privacy due to no housing in the rear of the property as part of the marketing for these homes.

20. Matched Pair – Champion Solar, Lexington County, SC



This project is a 10 MW facility located on a 366.04-acre tract that was built in 2017.

I have considered the 2020 sale of an adjoining home located off 517 Old Charleston Road. Landscaping is considered light.

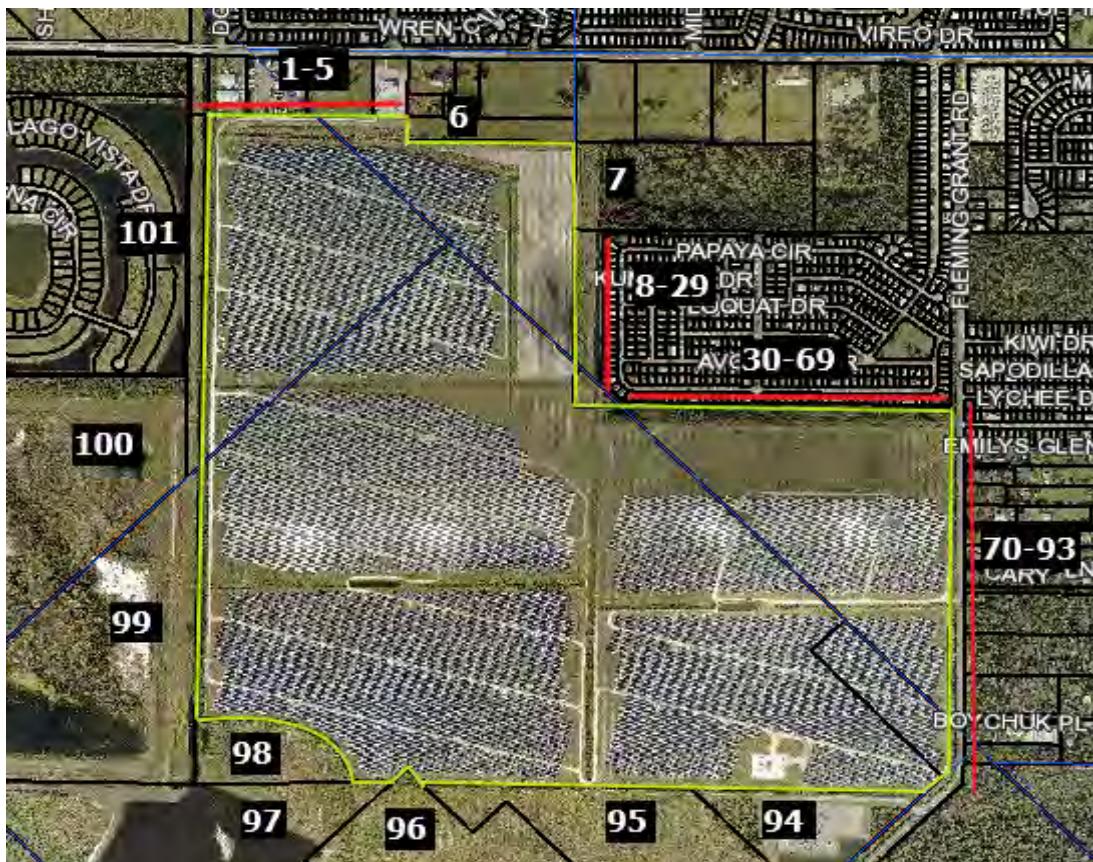
Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	517 Old Charleston	11.05	8/25/2020	\$110,000	1962	925	\$118.92	3/1	Cpport	Br Rnch	
Not	133 Buena Vista	2.65	6/21/2020	\$115,000	1979	1,104	\$104.17	2/2	Cpport	Br Rnch	
Not	214 Crystal Spr	2.13	6/10/2019	\$102,500	1970	1,025	\$100.00	3/2	Cpport	Rnch	
Not	1429 Laurel	2.10	2/21/2019	\$126,000	1960	1,250	\$100.80	2/1.5	Open	Br Rnch	3 Gar/Brn

Adjoining Sales Adjusted

4%

21. Matched Pair – Barefoot Bay Solar Farm, Barefoot Bay, FL



This project is located on 504 acres for a 704.5 MW facility. Most of the adjoining uses are medium density residential with some lower density agricultural uses to the southwest. This project was built in 2018. There is a new subdivision under development to the west.

I have considered a number of recent home sales from the Barefoot Bay Golf Course in the Barefoot Bay Recreation District. There are a number of sales of these mobile/manufactured homes along the eastern boundary and the lower northern boundary. I have compared those home sales to other similar homes in the same community but without the exposure to the solar farm. Staying within the same community keeps location and amenity impacts consistent. I did avoid any comparison with home sales with golf course or lakefront views as that would introduce another variable.

The six manufactured/double wide homes shown below were each compared to three similar homes in the same community and are consistently showing no impact on the adjoining property values. Based on the photos from the listings, there is limited but some visibility of the solar farm to the east, but the canal and landscaping between are providing a good visual buffer and actually are commanding a premium over the non-canal homes.

Landscaping for these adjoining homes is considered light, though photographs from the listings show that those homes on Papaya that adjoin the solar farm from east/west have no visibility of the solar farm and is effectively medium density due to the height differential. The homes that adjoin the solar farm from north/south along Papaya have some filtered view of the solar farm through the trees.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales	Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
14	Adjoins	465 Papaya Cr	0.12	7/21/2019	\$155,000		1993	1,104	\$140.40	2/2	Drive	Manuf	Canal
	Not	1108 Navajo	0.14	2/27/2019	\$129,000		1984	1,220	\$105.74	2/2	Crprt	Manuf	Canal
	Not	1007 Barefoot	0.11	9/3/2020	\$168,000		2005	1,052	\$159.70	2/2	Crprt	Manuf	Canal
	Not	1132 Waterway	0.11	7/10/2020	\$129,000		1982	1,012	\$127.47	2/2	Crprt	Manuf	Canal

Adjoining Sales Adjusted

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
19	Adjoins	455 Papaya	0.12	9/1/2020	\$183,500	2005	1,620	\$113.27	3/2	Crprt	Manuf	Canal
	Not	938 Waterway	0.11	2/12/2020	\$160,000	1986	1,705	\$93.84	2/2	Crprt	Manuf	Canal
	Not	719 Barefoot	0.12	4/14/2020	\$150,000	1996	1,635	\$91.74	3/2	Crprt	Manuf	Canal
	Not	904 Fir	0.17	9/27/2020	\$192,500	2010	1,626	\$118.39	3/2	Crprt	Manuf	Canal

Adjoining Sales Adjusted

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
37	Adjoins	419 Papaya	0.09	7/16/2019	\$127,500	1986	1,303	\$97.85	2/2	Crprt	Manuf	Green
	Not	865 Tamarind	0.12	2/4/2019	\$133,900	1995	1,368	\$97.88	2/2	Crprt	Manuf	Green
	Not	501 Papaya	0.10	6/15/2018	\$109,000	1986	1,234	\$88.33	2/2	Crprt	Manuf	
	Not	418 Papaya	0.09	8/28/2019	\$110,000	1987	1,248	\$88.14	2/2	Crprt	Manuf	

Adjoining Sales Adjusted

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
39	Adjoins	413 Papaya	0.09	7/16/2020	\$130,000	2001	918	\$141.61	2/2	Crprt	Manuf	Grn/Upd
	Not	341 Loquat	0.09	2/3/2020	\$118,000	1985	989	\$119.31	2/2	Crprt	Manuf	Full Upd
	Not	1119 Pocatella	0.19	1/5/2021	\$120,000	1993	999	\$120.12	2/2	Crprt	Manuf	Green
	Not	1367 Barefoot	0.10	1/12/2021	\$130,500	1987	902	\$144.68	2/2	Crprt	Manuf	Green/Upd

Adjoining Sales Adjusted

Joining Sales Adjusted							Avg			
Address	Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
413 Papaya							\$130,000			690
341 Loquat	\$1,631	\$9,440	-\$6,777				\$122,294	6%		
1119 Pocatella	-\$1,749	\$4,800	-\$7,784			\$5,000	\$120,267	7%		
1367 Barefoot	-\$1,979	\$9,135	\$1,852				\$139,507	-7%		2%

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
48	Adjoins	343 Papaya	0.09	12/17/2019	\$145,000	1986	1,508	\$96.15	3/2	Crprt	Manuf	Gn/Fc/Upd
	Not	865 Tamarind	0.12	2/4/2019	\$133,900	1995	1,368	\$97.88	2/2	Crprt	Manuf	Green
	Not	515 Papaya	0.09	3/22/2018	\$145,000	2005	1,376	\$105.38	3/2	Crprt	Manuf	Green
	Not	849 Tamarind	0.15	6/26/2019	\$155,000	1997	1,716	\$90.33	3/2	Crprt	Manuf	Grn/Fnce

Adjoining Sales Adjusted

Address	Time	YB	GLA	BR/BA	Park	Other	Total	Avg		
								% Diff	% Diff	Distance
343 Papaya							\$145,000			690
865 Tamarind	\$3,566	-\$6,026	\$10,963				\$142,403	2%		
515 Papaya	\$7,759	-\$13,775	\$11,128				\$150,112	-4%		
849 Tamarind	\$2,273	-\$8,525	-\$15,030				\$5,000	\$138,717	4%	
										1%

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
52	Nearby	335 Papaya	0.09	4/17/2018	\$110,000	1987	1,180	\$93.22	2/2	Crprt	Manuf	Green
	Not	865 Tamarind	0.12	2/4/2019	\$133,900	1995	1,368	\$97.88	2/2	Crprt	Manuf	Green
	Not	501 Papaya	0.10	6/15/2018	\$109,000	1986	1,234	\$88.33	2/2	Crprt	Manuf	
	Not	604 Puffin	0.09	10/23/2018	\$110,000	1988	1,320	\$83.33	2/2	Crprt	Manuf	

Adjoining Sales Adjusted

Address	Time	YB	GLA	BR/BA	Park	Other	Total	Avg		
								% Diff	% Diff	Distance
335 Papaya							\$110,000			710
865 Tamarind	-\$3,306	-\$5,356	-\$14,721				\$0	\$110,517	0%	
501 Papaya	-\$542	\$545	-\$3,816				\$5,000	\$110,187	0%	
604 Puffin	-\$1,752	-\$550	-\$9,333				\$5,000	\$103,365	6%	
										2%

I also identified a new subdivision being developed just to the west of this solar farm called The Lakes at Sebastian Preserve. These are all canal-lot homes that are being built with homes starting at \$271,000 based on the website and closed sales showing up to \$342,000. According to Monique, the onsite broker with Holiday Builders, the solar farm is difficult to see from the lots that back up to that area and she does not anticipate any difficulty in selling those future homes or lots or any impact on the sales price. The closest home that will be built in this development will be approximately 340 feet from the nearest panel.

Based on the closed home prices in Barefoot Bay as well as the broker comments and activity at The Lakes at Sebastian Preserve, the data around this solar farm strongly indicates no negative impact on property value.

22. Matched Pair – Miami-Dade Solar Farm, Miami, FL



This project is located on 346.80 acres for a 74.5 MW facility. All of the adjoining uses are agricultural and residential. This project was built in 2019.

I considered the recent sale of Parcel 26 to the south that sold for over \$1.6 million dollars. This home is located on 4.2 acres with additional value in the palm trees according to the listing. The comparables include similar homes nearby that are all actually on larger lots and several include avocado or palm tree income as well. All of the comparables are in similar proximity to the subject and all have similar proximity to the Miami-Dade Executive airport that is located 2.5 miles to the east.

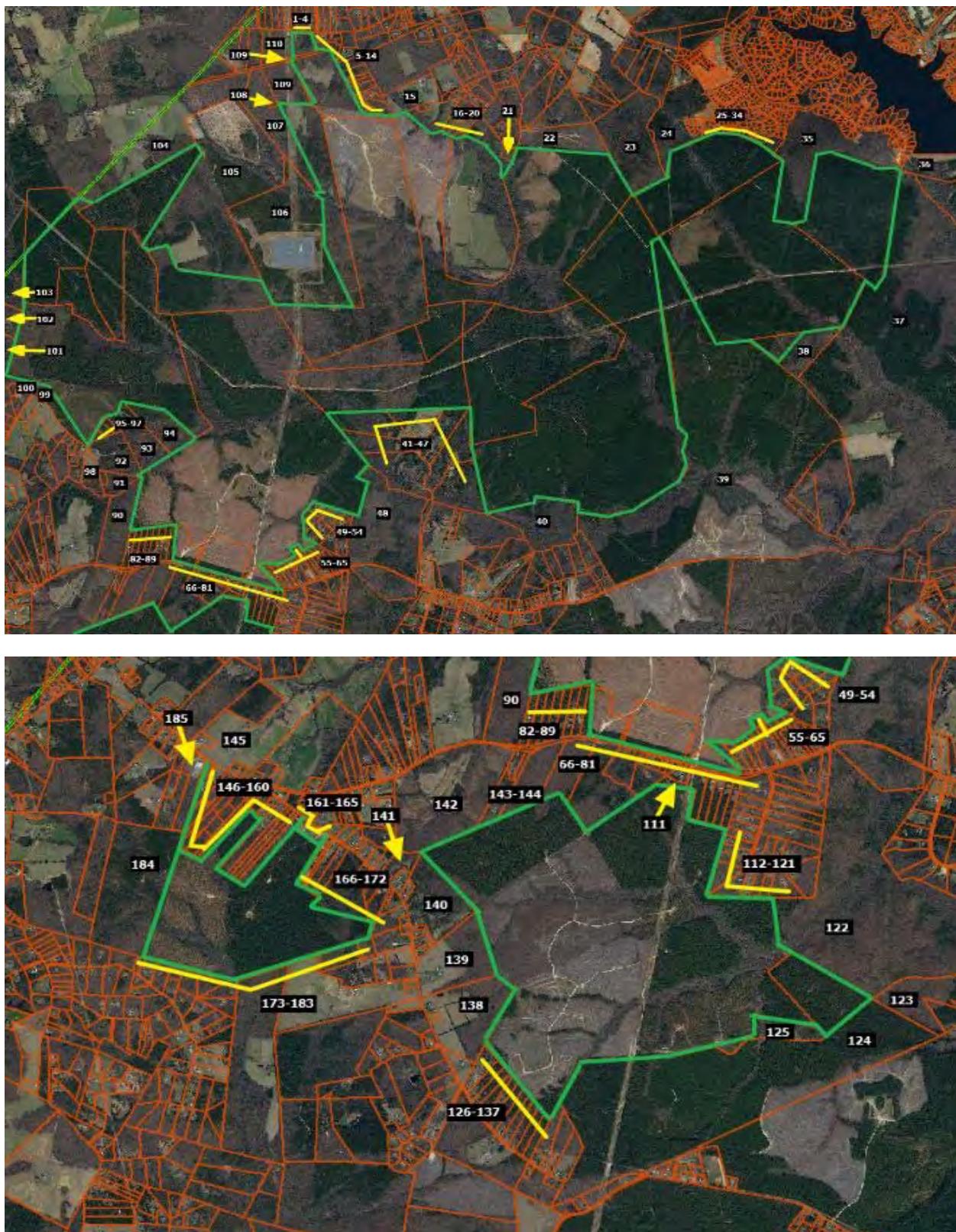
These sales are showing no impact on the value of the property from the adjoining solar farm. The landscaping is considered light.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
26	Adjoins	13600 SW 182nd	4.20	11/5/2020	\$1,684,000	2008	6,427	\$262.02	5/5.5	3 Gar	CBS Rnch Pl/Guest	
	Not	18090 SW 158th	5.73	10/8/2020	\$1,050,000	1997	3,792	\$276.90	5/4	3 Gar	CBS Rnch	
	Not	14311 SW 187th	4.70	10/22/2020	\$1,100,000	2005	3,821	\$287.88	6/5	3 Gar	CBS Rnch	Pool
	Not	17950 SW 158th	6.21	10/22/2020	\$1,730,000	2000	6,917	\$250.11	6/5.5	2 Gar	CBS Rnch	Pool

Adjoining Sales Adjusted

Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
13600 SW 182nd								\$1,684,000			1390
18090 SW 158th	\$2,478		\$57,750	\$583,703	\$30,000			\$1,723,930	-2%		
14311 SW 187th	\$1,298		\$16,500	\$600,178	\$10,000			\$1,727,976	-3%		
17950 SW 158th	\$2,041		\$69,200	-\$98,043			\$10,000	\$1,713,199	-2%		-2%

23. Matched Pair – Spotsylvania Solar, Paytes, VA

This solar farm is being built in four phases with the area known as Site C having completed construction in November 2020 after the entire project was approved in April 2019. Site C, also known as Pleinmont 1 Solar, includes 99.6 MW located in the southeast corner of the project and shown on the maps above with adjoining parcels 111 through 144. The entire Spotsylvania project totals 617 MW on 3500 acres out of a parent tract assemblage of 6,412 acres.

I have identified three adjoining home sales that occurred during construction and development of the site in 2020.

The first is located on the north side of Site A on Orange Plank Road. The second is located on Nottoway Lane just north of Caparthin Road on the south side of Site A and east of Site C. The third is located on Post Oak Road for a home that backs up to Site C that sold in September 2020 near the completion of construction for Site C.

Spotsylvania Solar Farm

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	12901 Orng Plnk	5.20	8/27/2020	\$319,900	1984	1,714	\$186.64	3/2	Drive	1.5	Un Bsmt
Not	8353 Gold Dale	3.00	1/27/2021	\$415,000	2004	2,064	\$201.07	3/2	3 Gar	Ranch	
Not	6488 Southfork	7.26	9/9/2020	\$375,000	2017	1,680	\$223.21	3/2	2 Gar	1.5	Barn/Patio
Not	12717 Flintlock	0.47	12/2/2020	\$290,000	1990	1,592	\$182.16	3/2.5	Det Gar	Ranch	

Adjoining Sales Adjusted

Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
12901 Orng Plnk								\$319,900		1270
8353 Gold Dale	-\$5,219	\$20,000	-\$41,500	-\$56,298			-\$20,000	\$311,983	2%	
6488 Southfork	-\$401	-\$20,000	-\$61,875	\$6,071			-\$15,000	\$283,796	11%	
12717 Flintlock	-\$2,312	\$40,000	-\$8,700	\$17,779	-\$5,000	-\$5,000		\$326,767	-2%	
Average Diff								4%		

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	9641 Nottoway	11.00	5/12/2020	\$449,900	2004	3,186	\$141.21	4/2.5	Garage	2-Story	Un Bsmt
Not	26123 Lafayette	1.00	8/3/2020	\$390,000	2006	3,142	\$124.12	3/3.5	Gar/DtG	2-Story	
Not	11626 Forest	5.00	8/10/2020	\$489,900	2017	3,350	\$146.24	4/3.5	2 Gar	2-Story	
Not	10304 Pny Brnch	6.00	7/27/2020	\$485,000	1998	3,076	\$157.67	4/4	2Gar/Dt2 Ranch		Fn Bsmt

Adjoining Sales Adjusted

Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
9641 Nottoway								\$449,900		1950
26123 Lafayette	-\$2,661	\$45,000	-\$3,900	\$4,369	-\$10,000	-\$5,000		\$417,809	7%	
11626 Forest	-\$3,624		-\$31,844	-\$19,187		-\$5,000		\$430,246	4%	
10304 Pny Brnch	-\$3,030		\$14,550	\$13,875	-\$15,000	-\$15,000	-\$10,000	\$470,396	-5%	
Average Diff								2%		

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	13353 Post Oak	5.20	9/21/2020	\$300,000	1992	2,400	\$125.00	4/3	Drive	2-Story	Fn Bsmt
Not	9609 Logan Hgt	5.86	7/4/2019	\$330,000	2004	2,352	\$140.31	3/2	2Gar	2-Story	
Not	12810 Catharpian	6.18	1/30/2020	\$280,000	2008	2,240	\$125.00	4/2.5	Drive	2-Story Bsmt/Nd Pnt	
Not	10725 Rbrt Lee	5.01	10/26/2020	\$295,000	1995	2,166	\$136.20	4/3	Gar	2-Story	Fn Bsmt

Adjoining Sales Adjusted										
Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
13353 Post Oak								\$300,000		1171
9609 Logan Hgt	\$12,070		-\$19,800	\$5,388		-\$15,000	\$15,000	\$327,658	-9%	
12810 Catharpian	\$5,408		-\$22,400	\$16,000	\$5,000		\$15,000	\$299,008	0%	
10725 Rbrt Lee	-\$849		-\$4,425	\$25,496		-\$10,000		\$305,222	-2%	
									Average Diff	-4%

All three of these homes are well set back from the solar panels at distances over 1,000 feet and are well screened from the project. All three show no indication of any impact on property value.

There are a couple of recent lot sales located along Southview Court that have sold since the solar farm was approved. The most recent lot sales include 11700 Southview Court that sold on December 29, 2021 for \$140,000 for a 0.76-acre lot. This property was on the market for less than 2 months before closing within 6% of the asking price. This lot sold earlier in September 2019 for \$55,000 based on a liquidation sale from NTS to an investor.

A similar 0.68-acre lot at 11507 Stonewood Court within the same subdivision located away from the solar farm sold on March 9, 2021 for \$109,000. This lot sold for 18% over the asking price within 1 month of listing suggesting that this was priced too low. Adjusting this lot value upward by 12% for very strong growth in the market over 2021, the adjusted indicated value is \$122,080 for this lot. This is still showing a 15% premium for the lot backing up to the solar farm.

The lot at 11009 Southview Court sold on August 5, 2019 for \$65,000, which is significantly lower than the more recent sales. This lot was sold by NTS the original developer of this subdivision, who was in the process of liquidating lots in this subdivision with multiple lot sales in this time period throughout the subdivision being sold at discounted prices. The home was later improved by the buyer with a home built in 2020 with 2,430 square feet ranch, 3.5 bathrooms, with a full basement, and a current assessed value of \$492,300.

I spoke with Chris Kalia, MAI, Mark Doherty, local real estate investor, and Alex Doherty, broker, who are all three familiar with this subdivision and activity in this neighborhood. All three indicated that there was a deep sell off of lots in the neighborhood by NTS at discounted prices under \$100,000 each. Those lots since that time are being sold for up to \$140,000. The prices paid for the lots below \$100,000 were liquidation values and not indicative of market value. Homes are being built in the neighborhood on those lots with home prices ranging from \$600,000 to \$800,000 with no sign of impact on pricing due to the solar farm according to all three sources.

Conclusion – SouthEast Over 5 MW

Southeast USA Over 5 MW Matched Pair Summary

	Name	City	State	Acres	MW	Adj. Uses By Acreage					1 mile Radius (2010-2020 Data)			
						Topo Shift	Res	Ag	Ag/Res	Com/Ind	Pop.	Income	Unit	Veg. Buffer
1	AM Best	Goldsboro	NC	38	5.00	2	38%	0%	23%	39%	1,523	\$37,358	\$148,375	Light
2	Mulberry	Selmer	TN	160	5.00	60	13%	73%	10%	3%	467	\$40,936	\$171,746	Lt to Med
3	Leonard	Hughesville	MD	47	5.00	20	18%	75%	0%	6%	525	\$106,550	\$350,000	Light
4	Gastonia SC	Gastonia	NC	35	5.00	48	33%	0%	23%	44%	4,689	\$35,057	\$126,562	Light
5	Summit	Moyock	NC	2,034	80.00	4	4%	0%	94%	2%	382	\$79,114	\$281,731	Light
6	Tracy	Bailey	NC	50	5.00	10	29%	0%	71%	0%	312	\$43,940	\$99,219	Heavy
7	Manatee	Parrish	FL	1,180	75.00	20	2%	97%	1%	0%	48	\$75,000	\$291,667	Heavy
8	McBride	Midland	NC	627	75.00	140	12%	10%	78%	0%	398	\$63,678	\$256,306	Lt to Med
9	Mariposa	Stanley	NC	36	5.00	96	48%	0%	52%	0%	1,716	\$36,439	\$137,884	Light
10	Clarke Cnty	White Post	VA	234	20.00	70	14%	39%	46%	1%	578	\$81,022	\$374,453	Light
11	Simon	Social Circle	GA	237	30.00	71	1%	63%	36%	0%	203	\$76,155	\$269,922	Medium
12	Candace	Princeton	NC	54	5.00	22	76%	24%	0%	0%	448	\$51,002	\$107,171	Medium
13	Walker	Barhamsville	VA	485	20.00	N/A	12%	68%	20%	0%	203	\$80,773	\$320,076	Light
14	Innov 46	Hope Mills	NC	532	78.50	0	17%	83%	0%	0%	2,247	\$58,688	\$183,435	Light
15	Innov 42	Fayetteville	NC	414	71.00	0	41%	59%	0%	0%	568	\$60,037	\$276,347	Light
16	Sunfish	Willow Spring	NC	50	6.40	30	35%	35%	30%	0%	1,515	\$63,652	\$253,138	Light
17	Sappony	Stony Crk	VA	322	20.00	N/A	2%	98%	0%	0%	74	\$51,410	\$155,208	Light
18	Camden Dam	Camden	NC	50	5.00	0	17%	72%	11%	0%	403	\$84,426	\$230,288	Light
19	Grandy	Grandy	NC	121	20.00	10	55%	24%	0%	21%	949	\$50,355	\$231,408	Light
20	Champion	Pelion	SC	100	10.00	N/A	4%	70%	8%	18%	1,336	\$46,867	\$171,939	Light
21	Barefoot Bay	Barefoot Bay	FL	504	74.50	0	11%	87%	0%	3%	2,446	\$36,737	\$143,320	Lt to Med
22	Miami-Dade	Miami	FL	347	74.50	0	26%	74%	0%	0%	127	\$90,909	\$403,571	Light
23	Spotsylvania	Paytes	VA	3,500	617.00	160	37%	52%	11%	0%	74	\$120,861	\$483,333	Md to Hvy
Average				485	57.04	38	24%	48%	22%	6%	923	\$63,955	\$237,700	
Median				234	20.00	20	17%	59%	11%	0%	467	\$60,037	\$231,408	
High				3,500	617.00	160	76%	98%	94%	44%	4,689	\$120,861	\$483,333	
Low				35	5.00	0	1%	0%	0%	0%	48	\$35,057	\$99,219	

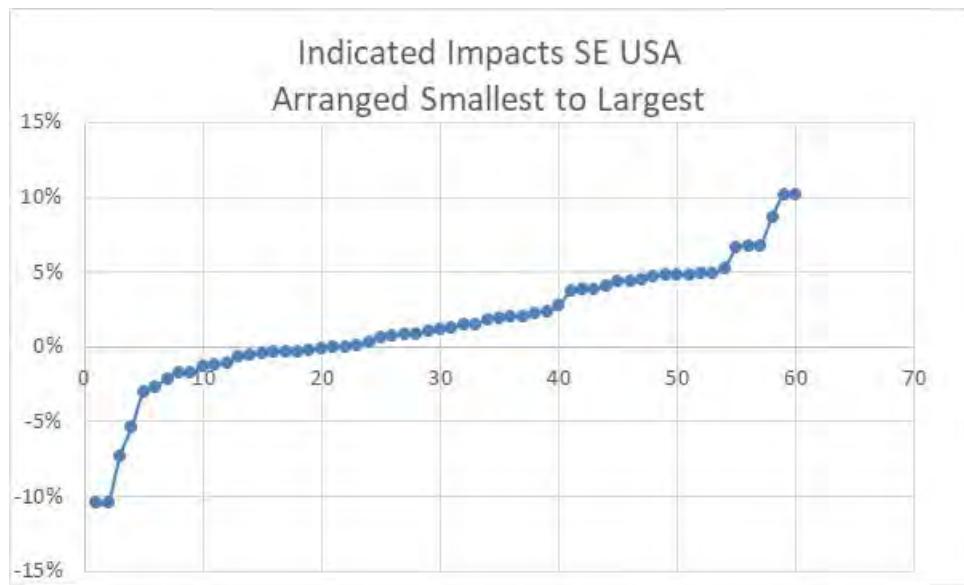
The solar farm matched pairs shown above have similar characteristics to each other in terms of population, but with several outliers showing solar farms in more urban areas. The median income for the population within 1 mile of a solar farm is \$60,037 with a median housing unit value of \$231,408. Most of the comparables are under \$300,000 in the home price, with \$483,333 being the high end of the set, though I have matched pairs in multiple states over \$1,000,000 adjoining solar farms. The adjoining uses show that residential and agricultural uses are the predominant adjoining uses. These figures are in line with the larger set of solar farms that I have looked at with the predominant adjoining uses being residential and agricultural and similar to the solar farm breakdown shown for Virginia and adjoining states as well as the proposed subject property.

Based on the similarity of adjoining uses and demographic data between these sites and the subject property, I consider it reasonable to compare these sites to the subject property.

I have pulled 56 matched pairs from the above referenced solar farms to provide the following summary of home sale matched pairs and land sales next to solar farms. The summary shows that the range of differences is from -10% to +10% with an average of +1% and median of +1%. This means that the average and median impact is for a slight positive impact due to adjacency to a solar farm. However, this +1% rate is within the typical variability I would expect from real estate. I therefore conclude that this data shows no negative or positive impact due to adjacency to a solar farm.

While the range is seemingly wide, the graph below clearly shows that the vast majority of the data falls between -5% and +5% and most of those are clearly in the 0 to +5% range. This data strongly supports an indication of no impact on adjoining residential uses to a solar farm.

I therefore conclude that these matched pairs support a finding of no impact on value at the subject property for the proposed project, which as proposed will include a landscaped buffer to screen adjoining residential properties.



Residential Dwelling Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	MW	Approx		Date	Adj. Sale		Veg.
					Distance	Tax ID/Address		Sale Price	Price	
1	AM Best	Goldsboro	NC	5	280	3600195570 3600198928	Sep-13	\$250,000	\$250,000	Light
2	AM Best	Goldsboro	NC	5	280	3600195361 3600194813	Mar-14	\$250,000	\$250,000	0%
3	AM Best	Goldsboro	NC	5	280	3600199891 3600198928	Sep-13	\$260,000	\$258,000	Light
4	AM Best	Goldsboro	NC	5	280	3600198632 3600193710	Apr-14	\$258,000	\$258,000	1%
5	AM Best	Goldsboro	NC	5	280	3600196656 3601105180	Mar-14	\$250,000	\$250,000	0%
6	AM Best	Goldsboro	NC	5	280	3600182511 3600183905	Aug-14	\$253,000	\$253,000	Light
7	AM Best	Goldsboro	NC	5	280	3600182784 3600193710	Oct-13	\$248,000	\$248,000	2%
8	AM Best	Goldsboro	NC	5	280	3600195361 3600195361	Dec-13	\$255,000	\$253,000	Light
9	Mulberry	Selmer	TN	5	400	0900AA011 099CA043	Dec-13	\$253,000	\$247,000	Light
10	Mulberry	Selmer	TN	5	400	099CA002 0990NA040	Oct-13	\$240,000	\$245,000	1%
11	Mulberry	Selmer	TN	5	480	491 Dusty 35 April	Nov-15	\$267,500	\$267,800	Light
12	Mulberry	Selmer	TN	5	650	297 Country 53 Glen	Sep-13	\$260,000	\$130,000	Medium
13	Mulberry	Selmer	TN	5	685	57 Cooper 191 Amelia	Jul-14	\$130,000	\$148,900	Light
14	Leonard Rd	Hughesville	MD	5.5	230	14595 Box Elder 15313 Bassford Rd	Feb-16	\$291,000	\$136,988	-5%
15	Neal Hawkins	Gastonia	NC	5	225	609 Neal Hawkins 1418 N Modena	Jul-16	\$329,800	\$292,760	Light
16	Summit	Moyock	NC	80	1,060	129 Pinto 102 Timber	Mar-17	\$270,000	\$225,000	10%
17	Summit	Moyock	NC	80	980	105 Pinto 127 Ranchland	Apr-16	\$170,000	\$175,500	Light
18	Tracy	Bailey	NC	5	780	9162 Winters 7352 Red Fox	Dec-16	\$206,000	\$175,101	-3%
19	Manatee	Parrish	FL	75	1180	13670 Highland 13851 Highland	Jun-15	\$219,900	\$198,120	Light
20	McBride Place	Midland	NC	75	275	4380 Joyner 3870 Elkwood	Jan-17	\$255,000	\$176,000	Heavy
21	McBride Place	Midland	NC	75	505	5811 Kristi 3915 Tania	Aug-18	\$252,399	\$252,399	1%
22	Mariposa	Stanley	NC	5	1155	215 Mariposa 110 Airport	Sep-18	\$255,825	\$240,000	Heavy
23	Mariposa	Stanley	NC	5	570	242 Mariposa 110 Airport	Dec-17	\$239,026	\$180,000	Light
24	Clarke Cnty	White Post	VA	20	1230	833 Nations Spr 6801 Middle	Apr-16	\$239,043	\$250,000	3%
25	Candace	Princeton	NC	5	488	499 Herring 1795 Bay Valley	Jan-17	\$296,157	\$249,999	Light
26	Walker	Barhamsville	VA	20	250	5241 Barham 9252 Ordinary	Dec-17	\$214,902	\$194,000	0%
27	AM Best	Goldsboro	NC	5	385	103 Granville Pl 2219 Granville	Oct-18	\$264,000	\$277,000	Light
28	AM Best	Goldsboro	NC	5	315	104 Erin 2219 Granville	Jun-19	\$246,581	\$265,000	7%
29	AM Best	Goldsboro	NC	5	400	2312 Granville 2219 Granville	Jan-18	\$265,682	\$280,000	Light
							May-18	\$274,390	\$265,000	0%
							Jan-18	\$273,948	\$284,900	Light

Residential Dwelling Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	Approx			Date	Adj. Sale		Veg.	
				MW	Distance	Tax ID/Address		Sale Price	Price	% Diff	Buffer
30	AM Best	Goldsboro	NC	5	400	2310 Granville 634 Friendly	May-19	\$280,000			Light
31	Summit	Moyock	NC	80	570	318 Green View 336 Green View	Jul-19	\$267,000	\$265,291	5%	Light
32	Summit	Moyock	NC	80	440	164 Ranchland 105 Longhorn	Sep-19	\$357,000			Light
33	Summit	Moyock	NC	80	635	358 Oxford 176 Providence	Jan-19	\$365,000	\$340,286	5%	Light
34	Summit	Moyock	NC	80	970	343 Oxford 218 Oxford	Apr-19	\$169,000			Light
35	Innov 46	Hope Mills	NC	78.5	435	6849 Roslin Farm 109 Bledsoe	Oct-17	\$184,500	\$186,616	-10%	
36	Innov 42	Fayetteville	NC	71	340	2923 County Line 2109 John McMillan	Sep-19	\$478,000			Light
37	Innov 42	Fayetteville	NC	71	330	2935 County Line 7031 Glynn Mill	Feb-19	\$425,000	\$456,623	4%	Light
38	Sunfish	Willow Sprng	NC	6.4	205	7513 Glen Willow 205 Pine Burr	Mar-17	\$490,000			Light
39	Neal Hawkins	Gastonia	NC	5	145	611 Neal Hawkins 1211 Still Forrest	Apr-17	\$155,000			Light
40	Clarke Cnty	White Post	VA	20	1230	833 Nations Spr 2393 Old Chapel	Jun-19	\$150,000	\$147,558	5%	Light
41	Sappony	Stony Creek	VA	20	1425	12511 Palestine 6494 Rocky Branch	May-18	\$385,000			Medium
42	Camden Dam	Camden	NC	5	342	122 N Mill Dam 548 Trotman	Aug-20	\$330,000	\$389,286	-1%	
43	Grandy	Grandy	NC	20	405	120 Par Four 116 Barefoot	Jul-18	\$128,400			Light
44	Grandy	Grandy	NC	20	477	269 Grandy 103 Spring Leaf	Sep-20	\$100,000	\$131,842	-3%	
45	Champion	Pelion	SC	10	505	517 Old Charleston 1429 Laurel	May-19	\$275,000			Light
46	Barefoot Bay	Barefoot Bay	FL	74.5	765	465 Papaya 1132 Waterway	Aug-19	\$110,000	\$107,856	2%	
47	Barefoot Bay	Barefoot Bay	FL	74.5	750	455 Papaya 904 Fir	Feb-19	\$155,000			Medium
48	Barefoot Bay	Barefoot Bay	FL	74.5	690	419 Papaya 865 Tamarind	Jul-20	\$127,500			Medium
49	Barefoot Bay	Barefoot Bay	FL	74.5	690	413 Papaya 1367 Barefoot	Jan-21	\$133,900	\$124,613	2%	
50	Barefoot Bay	Barefoot Bay	FL	74.5	690	343 Papaya 865 Tamarind	Apr-18	\$130,500			Light
51	Barefoot Bay	Barefoot Bay	FL	74.5	710	335 Papaya 865 Tamarind	Dec-19	\$145,000			
52	Miami-Dade	Miami	FL	74.5	1390	13600 SW 182nd 17950 SW 158th	Feb-19	\$133,900	\$142,403	2%	
53	Spotsylvania	Paytes	VA	617	1270	12901 Orange Plnk 12717 Flintlock	Nov-20	\$1,684,000			Light
54	Spotsylvania	Paytes	VA	617	1950	9641 Nottoway 11626 Forest	Oct-20	\$1,730,000	\$1,713,199	-2%	
55	Spotsylvania	Paytes	VA	617	1171	13353 Post Oak 12810 Catharpin	Aug-20	\$319,900			Medium
56	McBride Place	Midland	NC	75	470	5833 Kristi 4055 Dakeita	Sep-20	\$449,900			Heavy
							Dec-20	\$489,900	\$430,246	4%	
								\$280,000	\$299,008	0%	
								\$625,000			Light
								\$600,000	\$594,303	5%	

Avg.			Indicated		
MW	Distance		Average	Impact	
64.91	612			1%	
20.00	479			1%	
617.00	1,950			10%	
5.00	145			-10%	

I have further broken down these results based on the MWs, Landscaping, and distance from panel to show the following range of findings for these different categories.

Most of the findings are for homes between 201 and 500 feet. Most of the findings are for Light landscaping screens.

Light landscaping screens are showing no impact on value at any distances, including for solar farms over 75.1 MW.

MW Range									
4.4 to 10									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
#	1	19	2	0	1	2	0	0	1
Average	5%	2%	3%	N/A	0%	4%	N/A	N/A	1%
Median	5%	1%	3%	N/A	0%	4%	N/A	N/A	1%
High	5%	10%	4%	N/A	0%	4%	N/A	N/A	1%
Low	5%	-5%	3%	N/A	0%	4%	N/A	N/A	1%
10.1 to 30									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
#	0	3	2	0	0	1	0	0	0
Average	N/A	4%	-1%	N/A	N/A	-3%	N/A	N/A	N/A
Median	N/A	5%	-1%	N/A	N/A	-3%	N/A	N/A	N/A
High	N/A	7%	0%	N/A	N/A	-3%	N/A	N/A	N/A
Low	N/A	0%	-1%	N/A	N/A	-3%	N/A	N/A	N/A
30.1 to 75									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
#	0	2	3	0	0	4	0	0	0
Average	N/A	1%	0%	N/A	N/A	0%	N/A	N/A	N/A
Median	N/A	1%	0%	N/A	N/A	0%	N/A	N/A	N/A
High	N/A	2%	2%	N/A	N/A	9%	N/A	N/A	N/A
Low	N/A	1%	-2%	N/A	N/A	-7%	N/A	N/A	N/A
75.1+									
Landscaping	Light	Light	Light	Medium	Medium	Medium	Heavy	Heavy	Heavy
Distance	100-200	201-500	500+	100-200	201-500	500+	100-200	201-500	500+
#	0	2	5	0	0	2	0	0	1
Average	N/A	-3%	2%	N/A	N/A	1%	N/A	N/A	0%
Median	N/A	-3%	4%	N/A	N/A	1%	N/A	N/A	0%
High	N/A	5%	5%	N/A	N/A	4%	N/A	N/A	0%
Low	N/A	-10%	-3%	N/A	N/A	-2%	N/A	N/A	0%

C. Summary of National Data on Solar Farms

I have worked in 19 states related to solar farms and I have been tracking matched pairs in most of those states. On the following pages I provide a brief summary of those findings showing 37 solar farms over 5 MW studied with each one providing matched pair data supporting the findings of this report.

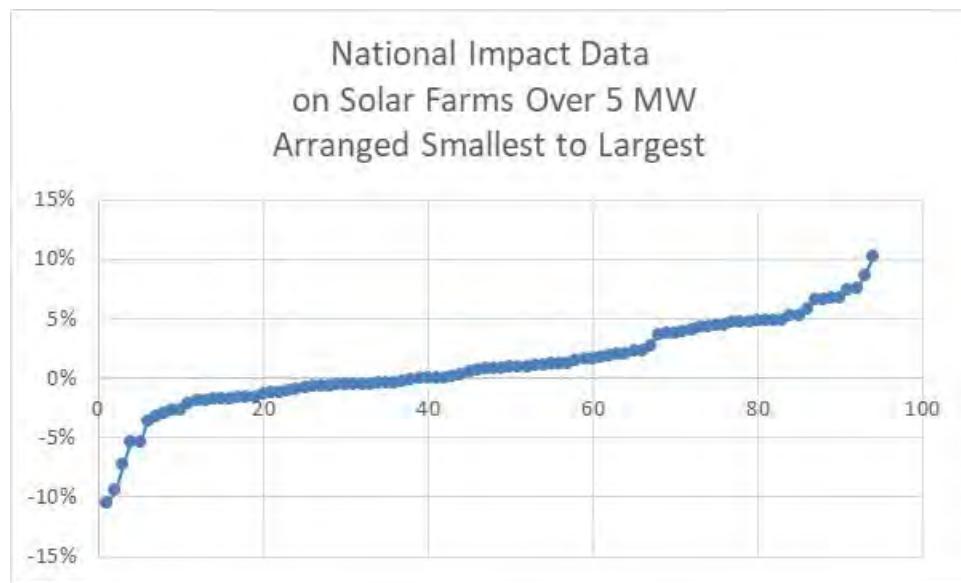
The solar farms summary is shown below with a summary of the matched pair data shown on the following page.

Matched Pair Summary				Adj. Uses By Acreage						1 mile Radius (2010-2020 Data)				
	Name	City	State	Topo			Adj. Res			Med.			Avg. Housing	
				Acres	MW	Shift	Res	Ag	Ag/Res	Com/Ind	Popl.	Income	Unit	Veg. Buffer
1	AM Best	Goldsboro	NC	38	5.00	2	38%	0%	23%	39%	1,523	\$37,358	\$148,375	Light
2	Mulberry	Selmer	TN	160	5.00	60	13%	73%	10%	3%	467	\$40,936	\$171,746	Lt to Med
3	Leonard	Hughesville	MD	47	5.00	20	18%	75%	0%	6%	525	\$106,550	\$350,000	Light
4	Gastonie SC	Gastonie	NC	35	5.00	48	33%	0%	23%	44%	4,689	\$35,057	\$126,562	Light
5	Summit	Moyock	NC	2,034	80.00	4	4%	0%	94%	2%	382	\$79,114	\$281,731	Light
7	Tracy	Bailey	NC	50	5.00	10	29%	0%	71%	0%	312	\$43,940	\$99,219	Heavy
8	Manatee	Parrish	FL	1,180	75.00	20	2%	97%	1%	0%	48	\$75,000	\$291,667	Heavy
9	McBride	Midland	NC	627	75.00	140	12%	10%	78%	0%	398	\$63,678	\$256,306	Lt to Med
10	Grand Ridge	Streator	IL	160	20.00	1	8%	87%	5%	0%	96	\$70,158	\$187,037	Light
11	Dominion	Indianapolis	IN	134	8.60	20	3%	97%	0%	0%	3,774	\$61,115	\$167,515	Light
12	Mariposa	Stanley	NC	36	5.00	96	48%	0%	52%	0%	1,716	\$36,439	\$137,884	Light
13	Clarke Cnty	White Post	VA	234	20.00	70	14%	39%	46%	1%	578	\$81,022	\$374,453	Light
14	Flemington	Flemington	NJ	120	9.36	N/A	13%	50%	28%	8%	3,477	\$105,714	\$444,696	Lt to Med
15	Frenchtown	Frenchtown	NJ	139	7.90	N/A	37%	35%	29%	0%	457	\$111,562	\$515,399	Light
16	McGraw	East Windsor	NJ	95	14.00	N/A	27%	44%	0%	29%	7,684	\$78,417	\$362,428	Light
17	Tinton Falls	Tinton Falls	NJ	100	16.00	N/A	98%	0%	0%	2%	4,667	\$92,346	\$343,492	Light
18	Simon	Social Circle	GA	237	30.00	71	1%	63%	36%	0%	203	\$76,155	\$269,922	Medium
19	Candace	Princeton	NC	54	5.00	22	76%	24%	0%	0%	448	\$51,002	\$107,171	Medium
20	Walker	Barhamsville	VA	485	20.00	N/A	12%	68%	20%	0%	203	\$80,773	\$320,076	Light
21	Innov 46	Hope Mills	NC	532	78.50	0	17%	83%	0%	0%	2,247	\$58,688	\$183,435	Light
22	Innov 42	Fayetteville	NC	414	71.00	0	41%	59%	0%	0%	568	\$60,037	\$276,347	Light
23	Demille	Lapeer	MI	160	28.40	10	10%	68%	0%	22%	2,010	\$47,208	\$187,214	Light
24	Turrill	Lapeer	MI	230	19.60	10	75%	59%	0%	25%	2,390	\$46,839	\$110,361	Light
25	Sunfish	Willow Spring	NC	50	6.40	30	35%	35%	30%	0%	1,515	\$63,652	\$253,138	Light
26	Picture Rocks	Tucson	AZ	182	20.00	N/A	6%	88%	6%	0%	102	\$81,081	\$280,172	None
27	Avra Valley	Tucson	AZ	246	25.00	N/A	3%	94%	3%	0%	85	\$80,997	\$292,308	None
28	Sappony	Stony Crk	VA	322	20.00	N/A	2%	98%	0%	0%	74	\$51,410	\$155,208	Medium
29	Camden Dam	Camden	NC	50	5.00	0	17%	72%	11%	0%	403	\$84,426	\$230,288	Light
30	Grandy	Grandy	NC	121	20.00	10	55%	24%	0%	21%	949	\$50,355	\$231,408	Light
31	Champion	Pelion	SC	100	10.00	N/A	4%	70%	8%	18%	1,336	\$46,867	\$171,939	Light
32	Eddy II	Eddy	TX	93	10.00	N/A	15%	25%	58%	2%	551	\$59,627	\$139,088	Light
33	Somerset	Somerset	TX	128	10.60	N/A	5%	95%	0%	0%	1,293	\$41,574	\$135,490	Light
34	DG Amp Piqua	Piqua	OH	86	12.60	2	26%	16%	58%	0%	6,735	\$38,919	\$96,555	Light
45	Barefoot Bay	Barefoot Bay	FL	504	74.50	0	11%	87%	0%	3%	2,446	\$36,737	\$143,320	Lt to Med
36	Miami-Dade	Miami	FL	347	74.50	0	26%	74%	0%	0%	127	\$90,909	\$403,571	Light
37	Spotsylvania	Paytes	VA	3,500	617.00	160	37%	52%	11%	0%	74	\$120,861	\$483,333	Med to Hvy
Average				362	42.05	32	24%	52%	19%	6%	1,515	\$66,292	\$242,468	
Median				150	17.80	10	16%	59%	7%	0%	560	\$62,384	\$230,848	
High				3,500	617.00	160	98%	98%	94%	44%	7,684	\$120,861	\$515,399	
Low				35	5.00	0	1%	0%	0%	0%	48	\$35,057	\$96,555	

From these 37 solar farms, I have derived 94 matched pairs. The matched pairs show no negative impact at distances as close as 105 feet between a solar panel and the nearest point on a home. The range of impacts is -10% to +10% with an average and median of +1%.

	Avg.		Indicated	
	MW	Distance		Impact
Average	44.80	569	Average	1%
Median	14.00	400	Median	1%
High	617.00	1,950	High	10%
Low	5.00	145	Low	-10%

While the range is broad, the two charts below show the data points in range from lowest to highest. There is only 3 data points out of 94 that show a negative impact. The rest support either a finding of no impact or 9 of the data points suggest a positive impact due to adjacency to a solar farm. As discussed earlier in this report, I consider this data to strongly support a finding of no impact on value as most of the findings are within typical market variation and even within that, most are mildly positive findings.



D. Larger Solar Farms

I have also considered larger solar farms to address impacts related to larger projects. Projects have been increasing in size and most of the projects between 100 and 1000 MW are newer with little time for adjoining sales. I have included a breakdown of solar farms with 20 MW to 80 MW facilities with one 617 MW facility.

Matched Pair Summary - @20 MW And Larger										Adj. Uses By Acreage			1 mile Radius (2010-2019 Data)		
Topo	Shift	Res	Ag	Ag/Res	Com/Ind	Popl.	Income	Unit	Veg.	Buffer					
1	Summit	Moyock	NC	2,034	80.00	4	4%	0%	94%	2%	382	\$79,114	\$281,731	Light	
2	Manatee	Parrish	FL	1,180	75.00	20	2%	97%	1%	0%	48	\$75,000	\$291,667	Heavy	
3	McBride	Midland	NC	627	75.00	140	12%	10%	78%	0%	398	\$63,678	\$256,306	Lt to Med	
4	Grand Ridge	Streator	IL	160	20.00	1	8%	87%	5%	0%	96	\$70,158	\$187,037	Light	
5	Clarke Cnty	White Post	VA	234	20.00	70	14%	39%	46%	1%	578	\$81,022	\$374,453	Light	
6	Simon	Social Circle	GA	237	30.00	71	1%	63%	36%	0%	203	\$76,155	\$269,922	Medium	
7	Walker	Barhamsville	VA	485	20.00	N/A	12%	68%	20%	0%	203	\$80,773	\$320,076	Light	
8	Innov 46	Hope Mills	NC	532	78.50	0	17%	83%	0%	0%	2,247	\$58,688	\$183,435	Light	
9	Innov 42	Fayetteville	NC	414	71.00	0	41%	59%	0%	0%	568	\$60,037	\$276,347	Light	
10	Demille	Lapeer	MI	160	28.40	10	10%	68%	0%	22%	2,010	\$47,208	\$187,214	Light	
11	Turrill	Lapeer	MI	230	19.60	10	75%	59%	0%	25%	2,390	\$46,839	\$110,361	Light	
12	Picure Rocks	Tucson	AZ	182	20.00	N/A	6%	88%	6%	0%	102	\$81,081	\$280,172	Light	
13	Avra Valley	Tucson	AZ	246	25.00	N/A	3%	94%	3%	0%	85	\$80,997	\$292,308	None	
14	Sappony	Stony Crk	VA	322	20.00	N/A	2%	98%	0%	0%	74	\$51,410	\$155,208	None	
15	Grandy	Grandy	NC	121	20.00	10	55%	24%	0%	21%	949	\$50,355	\$231,408	Medium	
16	Barefoot Bay	Barefoot Bay	FL	504	74.50	0	11%	87%	0%	3%	2,446	\$36,737	\$143,320	Lt to Med	
17	Miami-Dade	Miami	FL	347	74.50	0	26%	74%	0%	0%	127	\$90,909	\$403,571	Light	
18	Spotsylvania	Paytes	VA	3,500	617.00	160	37%	52%	11%	0%	74	\$120,861	\$483,333	Med to Hwy	
Average				640	76.03		19%	64%	17%	4%	721	\$69,501	\$262,659		
Median				335	29.20		12%	68%	2%	0%	293	\$72,579	\$273,135		
High				3,500	617.00		75%	98%	94%	25%	2,446	\$120,861	\$483,333		
Low				121	19.60		1%	0%	0%	0%	48	\$36,737	\$110,361		

The breakdown of adjoining uses, population density, median income and housing prices for these projects are very similar to those of the larger set. The matched pairs for each of these were considered earlier and support a finding of no negative impact on the adjoining home values.

I have included a breakdown of solar farms with 50 MW to 617 MW facilities adjoining.

Matched Pair Summary - @50 MW And Larger										Adj. Uses By Acreage			1 mile Radius (2010-2019 Data)		
Topo	Shift	Res	Ag	Ag/Res	Com/Ind	Popl.	Income	Unit	Veg.	Buffer					
1	Summit	Moyock	NC	2,034	80.00	4	4%	0%	94%	2%	382	\$79,114	\$281,731	Light	
2	Manatee	Parrish	FL	1,180	75.00	20	2%	97%	1%	0%	48	\$75,000	\$291,667	Heavy	
3	McBride	Midland	NC	627	75.00	140	12%	10%	78%	0%	398	\$63,678	\$256,306	Lt to Med	
4	Innov 46	Hope Mills	NC	532	78.50	0	17%	83%	0%	0%	2,247	\$58,688	\$183,435	Light	
5	Innov 42	Fayetteville	NC	414	71.00	0	41%	59%	0%	0%	568	\$60,037	\$276,347	Light	
6	Barefoot Bay	Barefoot Bay	FL	504	74.50	0	11%	87%	0%	3%	2,446	\$36,737	\$143,320	Lt to Med	
7	Miami-Dade	Miami	FL	347	74.50	0	26%	74%	0%	0%	127	\$90,909	\$403,571	Light	
8	Spotsylvania	Paytes	VA	3,500	617.00	160	37%	52%	11%	0%	74	\$120,861	\$483,333	Med to Hwy	
Average				1,142	143.19		19%	58%	23%	1%	786	\$73,128	\$289,964		
Median				580	75.00		15%	67%	0%	0%	390	\$69,339	\$279,039		
High				3,500	617.00		41%	97%	94%	3%	2,446	\$120,861	\$483,333		
Low				347	71.00		2%	0%	0%	0%	48	\$36,737	\$143,320		

The breakdown of adjoining uses, population density, median income and housing prices for these projects are very similar to those of the larger set. The matched pairs for each of these were considered earlier and support a finding of no negative impact on the adjoining home values.

The data for these larger solar farms is shown in the SE USA and the National data breakdowns with similar landscaping, setbacks and range of impacts that fall mostly in the +/-5% range as can be seen earlier in this report.

On the following page I show 81 projects ranging in size from 50 MW up to 1,000 MW with an average size of 111.80 MW and a median of 80 MW. The average closest distance for an adjoining home is 263 feet, while the median distance is 188 feet. The closest distance is 57 feet. The mix of adjoining uses is similar with most of the adjoining uses remaining residential or agricultural in nature. This is the list of solar farms that I have researched for possible matched pairs and not a complete list of larger solar farms in those states.

Parcel #	State	City	Name	Output		Used Acres	Avg. Dist to home	Closest Home	Adjoining Use by Acre			Com
				Total (MW)	Acres				Res	Agri	Ag/R	
78 NC		Moyock	Summit/Ranchland	80	2034		674	360	4%	94%	0%	2%
133 MS		Hattiesburg	Hattiesburg	50	1129	479.6	650	315	35%	65%	0%	0%
179 SC		Ridgeland	Jasper	140	1600	1000	461	108	2%	85%	13%	0%
211 NC		Enfield	Chestnut	75	1428.1		1,429	210	4%	96%	0%	0%
222 VA		Chase City	Grasshopper	80	946.25				6%	87%	5%	1%
226 VA		Louisa	Belcher	88	1238.1			150	19%	53%	28%	0%
305 FL		Dade City	Mountain View	55	347.12		510	175	32%	39%	21%	8%
319 FL		Jasper	Hamilton	74.9	1268.9	537	3,596	240	5%	67%	28%	0%
336 FL		Parrish	Manatee	74.5	1180.4		1,079	625	2%	50%	1%	47%
337 FL		Arcadia	Citrus	74.5	640				0%	0%	100%	0%
338 FL		Port Charlotte	Babcock	74.5	422.61				0%	0%	100%	0%
353 VA		Oak Hall	Amazon East(ern sh	80	1000		645	135	8%	75%	17%	0%
364 VA		Stevensburg	Greenwood	100	2266.6	1800	788	200	8%	62%	29%	0%
368 NC		Warsaw	Warsaw	87.5	585.97	499	526	130	11%	66%	21%	3%
390 NC		Ellerbe	Innovative Solar 34	50	385.24	226	N/A	N/A	1%	99%	0%	0%
399 NC		Midland	McBride	74.9	974.59	627	1,425	140	12%	78%	9%	0%
400 FL		Mulberry	Alafia	51	420.35		490	105	7%	90%	3%	0%
406 VA		Clover	Foxhound	91	1311.8		885	185	5%	61%	17%	18%
410 FL		Trenton	Trenton	74.5	480		2,193	775	0%	26%	55%	19%
411 NC		Battleboro	Fern	100	1235.4	960.71	1,494	220	5%	76%	19%	0%
412 MD		Goldsboro	Cherrywood	202	1722.9	1073.7	429	200	10%	76%	13%	0%
434 NC		Conetoe	Conetoe	80	1389.9	910.6	1,152	120	5%	78%	17%	0%
440 FL		Debary	Debary	74.5	844.63		654	190	3%	27%	0%	70%
441 FL		Hawthorne	Horizon	74.5	684				3%	81%	16%	0%
484 VA		Newsoms	Southampton	100	3243.9		-	-	3%	78%	17%	3%
486 VA		Stuarts Draft	Augusta	125	3197.4	1147	588	165	16%	61%	16%	7%
491 NC		Misenheimer	Misenheimer 2018	80	740.2	687.2	504	130	11%	40%	22%	27%
494 VA		Shacklefords	Walnut	110	1700	1173	641	165	14%	72%	13%	1%
496 VA		Clover	Piney Creek	80	776.18	422	523	195	15%	62%	24%	0%
511 NC		Scotland Neck	American Beech	160	3255.2	1807.8	1,262	205	2%	58%	38%	3%
514 NC		Reidsville	Williamsburg	80	802.6	507	734	200	25%	12%	63%	0%
517 VA		Luray	Cape	100	566.53	461	519	110	42%	12%	46%	0%
518 VA		Emporia	Fountain Creek	80	798.3	595	862	300	6%	23%	71%	0%
525 NC		Plymouth	Macadamia	484	5578.7	4813.5	1,513	275	1%	90%	9%	0%
526 NC		Mooresboro	Broad River	50	759.8	365	419	70	29%	55%	16%	0%
555 FL		Mulberry	Durrance	74.5	463.57	324.65	438	140	3%	97%	0%	0%
560 NC		Yadkinville	Sugar	60	477	357	382	65	19%	39%	20%	22%
561 NC		Enfield	Halifax 80mw 2019	80	1007.6	1007.6	672	190	8%	73%	19%	0%
577 VA		Windsor	Windsor	85	564.1	564.1	572	160	9%	67%	24%	0%
579 VA		Paytes	Spotsylvania	500	6412	3500			9%	52%	11%	27%
582 NC		Salisbury	China Grove	65	428.66	324.26	438	85	58%	4%	38%	0%
583 NC		Walnut Cove	Lick Creek	50	1424	185.11	410	65	20%	64%	11%	5%
584 NC		Enfield	Sweetleaf	94	1956.3	1250	968	160	5%	63%	32%	0%
586 VA		Aylett	Sweet Sue	77	1262	576	1,617	680	7%	68%	25%	0%
593 NC		Windsor	Sumac	120	3360.6	1257.9	876	160	4%	90%	6%	0%
599 TN		Somerville	Yum Yum	147	4000	1500	1,862	330	3%	32%	64%	1%
602 GA		Waynesboro	White Oak	76.5	516.7	516.7	2,995	1,790	1%	34%	65%	0%
603 GA		Butler	Butler GA	103	2395.1	2395.1	1,534	255	2%	73%	23%	2%
604 GA		Butler	White Pine	101.2	505.94	505.94	1,044	100	1%	51%	48%	1%
605 GA		Metter	Live Oak	51	417.84	417.84	910	235	4%	72%	23%	0%
606 GA		Hazelhurst	Hazelhurst II	52.5	947.15	490.42	2,114	105	9%	64%	27%	0%
607 GA		Bainbridge	Decatur Parkway	80	781.5	781.5	1,123	450	2%	27%	22%	49%
608 GA		Leslie-DeSoto	Americus	1000	9661.2	4437	5,210	510	1%	63%	36%	0%
616 FL		Fort White	Fort White	74.5	570.5	457.2	828	220	12%	71%	17%	0%
621 VA		Spring Grove	Loblolly	150	2181.9	1000	1,860	110	7%	62%	31%	0%
622 VA		Scottsville	Woodridge	138	2260.9	1000	1,094	170	9%	63%	28%	0%
625 NC		Middlesex	Phobos	80	754.52	734	356	57	14%	75%	10%	0%
628 MI		Deerfield	Carroll Road	200	1694.8	1694.8	343	190	12%	86%	0%	2%
633 VA		Emporia	Brunswick	150.2	2076.4	1387.3	1,091	240	4%	85%	11%	0%
634 NC		Elkin	Partin	50	429.4	257.64	945	155	30%	25%	15%	30%

Parcel #	State	City	Name	Output	Total	Used	Avg. Dist	Closest	Adjoining	Use by Acre		
				(MW)	Acres	Acres	to home	Home	Res	Agri	Ag/R	Com
638	GA	Dry Branch	Twiggs	200	2132.7	2132.7	-	-	10%	55%	35%	0%
639	NC	Hope Mills	Innovative Solar 46	78.5	531.87	531.87	423	125	17%	83%	0%	0%
640	NC	Hope Mills	Innovative Solar 42	71	413.99	413.99	375	135	41%	59%	0%	0%
645	NC	Stanley	Hornet	75	1499.5	858.4	663	110	30%	40%	23%	6%
650	NC	Grifton	Grifton 2	56	681.59	297.6	363	235	1%	99%	0%	0%
651	NC	Grifton	Buckleberry	52.1	367.67	361.67	913	180	5%	54%	41%	0%
657	KY	Greensburg	Horseshoe Bend	60	585.65	395	1,394	63	3%	36%	61%	0%
658	KY	Campbellsville	Flat Run	55	429.76	429.76	408	115	13%	52%	35%	0%
666	FL	Archer	Archer	74.9	636.94	636.94	638	200	43%	57%	0%	0%
667	FL	New Smyrna Beach	Pioneer Trail	74.5	1202.8	900	1,162	225	14%	61%	21%	4%
668	FL	Lake City	Sunshine Gateway	74.5	904.29	472	1,233	890	11%	80%	8%	0%
669	FL	Florahome	Coral Farms	74.5	666.54	580	1,614	765	19%	75%	7%	0%
672	VA	Appomattox	Spout Spring	60	881.12	673.37	836	335	16%	30%	46%	8%
676	TX	Stamford	Alamo 7	106.4	1663.1	1050	-	-	6%	83%	0%	11%
677	TX	Fort Stockton	RE Roserock	160	1738.2	1500	-	-	0%	100%	0%	0%
678	TX	Lamesa	Lamesa	102	914.5	655	921	170	4%	41%	11%	44%
679	TX	Lamesa	Ivory	50	706	570	716	460	0%	87%	2%	12%
680	TX	Uvalde	Alamo 5	95	830.35	800	925	740	1%	93%	6%	0%
684	NC	Waco	Brookcliff	50	671.03	671.03	560	150	7%	21%	15%	57%
689	AZ	Arlington	Mesquite	320.8	3774.5	2617	1,670	525	8%	92%	0%	0%
692	AZ	Tucson	Avalon	51	479.21	352	-	-	0%	100%	0%	0%

81

Average	111.80	1422.4	968.4	1031	263	10%	62%	22%	6%
Median	80.00	914.5	646.0	836	188	7%	64%	17%	0%
High	1000.00	9661.2	4813.5	5210	1790	58%	100%	100%	70%
Low	50.00	347.1	185.1	343	57	0%	0%	0%	0%

VIII. Distance Between Homes and Panels

I have measured distances at matched pairs as close as 105 feet between panel and home to show no impact on value. This measurement goes from the closest point on the home to the closest solar panel. This is a strong indication that at this distance there is no impact on adjoining homes.

However, in tracking other approved solar farms across Virginia, North Carolina and other states, I have found that it is common for there to be homes within 100 to 150 feet of solar panels. Given the visual barriers in the form of privacy fencing or landscaping, there is no sign of negative impact.

I have also tracked a number of locations where solar panels are between 50 and 100 feet of single-family homes. In these cases the landscaping is typically a double row of more mature evergreens at time of planting. There are many examples of solar farms with one or two homes closer than 100-feet, but most of the adjoining homes are further than that distance.

IX. Topography

As shown on the summary charts for the solar farms, I have been identifying the topographic shifts across the solar farms considered. Differences in topography can impact visibility of the panels, though typically this results in distant views of panels as opposed to up close views. The topography noted for solar farms showing no impact on adjoining home values range from as much as 160-foot shifts across the project. Given that appearance is the only factor of concern and that distance plus landscape buffering typically addresses up close views, this leaves a number of potentially distant views of panels. I specifically note that in Crittenden in KY there are distant views of panels from the adjoining homes that showed no impact on value.

General rolling terrain with some distant solar panel views are showing no impact on adjoining property value.

X. Potential Impacts During Construction

Any development of a site will have a certain amount of construction, whether it is for a commercial agricultural use such as large-scale poultry operations or a new residential subdivision. Construction will be temporary and consistent with other development uses of the land and in fact dust from the construction will likely be less than most other construction projects given the minimal grading. I would not anticipate any impacts on property value due to construction on the site.

I note that in the matched pairs that I have included there have been a number of home sales that happened after a solar farm was approved but before the solar farm was built showing no impact on property value. Therefore the anticipated construction had no impact as shown by that data.

XI. Scope of Research

I have researched over 750 solar farms and sites on which solar farms are existing and proposed in Virginia, Illinois, Tennessee, North Carolina, Kentucky as well as other states to determine what uses are typically found in proximity with a solar farm. The data I have collected and provide in this report strongly supports the assertion that solar farms are having no negative consequences on adjoining agricultural and residential values.

Beyond these references, I have quantified the adjoining uses for a number of solar farm comparables to derive a breakdown of the adjoining uses for each solar farm. The chart below shows the breakdown of adjoining or abutting uses by total acreage.

Percentage By Adjoining Acreage							Closest	All Res	All Comm
	Res	Ag	Res/AG	Comm	Ind	Avg Home	Home	Uses	Uses
Average	19%	53%	20%	2%	6%	887	344	91%	8%
Median	11%	56%	11%	0%	0%	708	218	100%	0%
High	100%	100%	100%	93%	98%	5,210	4,670	100%	98%
Low	0%	0%	0%	0%	0%	90	25	0%	0%

Res = Residential, Ag = Agriculture, Com = Commercial

Total Solar Farms Considered: 705

I have also included a breakdown of each solar farm by number of adjoining parcels to the solar farm rather than based on adjoining acreage. Using both factors provide a more complete picture of the neighboring properties.

Percentage By Number of Parcels Adjoining							Closest	All Res	All Comm
	Res	Ag	Res/AG	Comm	Ind	Avg Home	Home	Uses	Uses
Average	61%	24%	9%	2%	4%	887	344	93%	6%
Median	65%	19%	5%	0%	0%	708	218	100%	0%
High	100%	100%	100%	60%	78%	5,210	4,670	105%	78%
Low	0%	0%	0%	0%	0%	90	25	0%	0%

Res = Residential, Ag = Agriculture, Com = Commercial

Total Solar Farms Considered: 705

Both of the above charts show a marked residential and agricultural adjoining use for most solar farms. Every single solar farm considered included an adjoining residential or residential/agricultural use.

XII. Specific Factors Related To Impacts on Value

I have completed a number of Impact Studies related to a variety of uses and I have found that the most common areas for impact on adjoining values typically follow a hierarchy with descending levels of potential impact. I will discuss each of these categories and how they relate to a solar farm.

1. Hazardous material
2. Odor
3. Noise
4. Traffic
5. Stigma
6. Appearance

1. Hazardous material

A solar farm presents no potential hazardous waste byproduct as part of normal operation. Any fertilizer, weed control, vehicular traffic, or construction will be significantly less than typically applied in a residential development and even most agricultural uses.

The various solar farms that I have inspected and identified in the addenda have no known environmental impacts associated with the development and operation.

2. Odor

The various solar farms that I have inspected produced no odor.

3. Noise

Whether discussing passive fixed solar panels, or single-axis trackers, there is no negative impact associated with noise from a solar farm. The transformer reportedly has a hum similar to an HVAC that can only be heard in close proximity to this transformer and the buffers on the property are sufficient to make emitted sounds inaudible from the adjoining properties. No sound is emitted from the facility at night.

The various solar farms that I have inspected were inaudible from the roadways.

4. Traffic

The solar farm will have no onsite employee's or staff. The site requires only minimal maintenance. Relative to other potential uses of the site (such as a residential subdivision), the additional traffic generated by a solar farm use on this site is insignificant.

5. Stigma

There is no stigma associated with solar farms and solar farms and people generally respond favorably towards such a use. While an individual may express concerns about proximity to a solar farm, there is no specific stigma associated with a solar farm. Stigma generally refers to things such as adult establishments, prisons, rehabilitation facilities, and so forth.

Solar panels have no associated stigma and in smaller collections are found in yards and roofs in many residential communities. Solar farms are adjoining elementary, middle and high schools as well as churches and subdivisions. I note that one of the solar farms in this report not only adjoins a church, but is actually located on land owned by the church. Solar panels on a roof are often cited as an enhancement to the property in marketing brochures.

I see no basis for an impact from stigma due to a solar farm.

6. Appearance

I note that larger solar farms using fixed or tracking panels are a passive use of the land that is in keeping with a rural/residential area. As shown below, solar farms are comparable to larger greenhouses. This is not surprising given that a greenhouse is essentially another method for collecting passive solar energy. The greenhouse use is well received in residential/rural areas and has a similar visual impact as a solar farm.



The solar panels are all less than 15 feet high, which means that the visual impact of the solar panels will be similar in height to a typical greenhouse and lower than a single-story residential dwelling. Were the subject property developed with single family housing, that development would have a much greater visual impact on the surrounding area given that a two-story home with attic could be three to four times as high as these proposed panels.

Whenever you consider the impact of a proposed project on viewshed or what the adjoining owners may see from their property it is important to distinguish whether or not they have a protected viewshed or not. Enhancements for scenic vistas are often measured when considering properties that adjoin preserved open space and parks. However, adjoining land with a preferred view today conveys no guarantee that the property will continue in the current use. Any consideration of the impact of the appearance requires a consideration of the wide variety of other uses a property already has the right to be put to, which for solar farms often includes subdivision development, agricultural business buildings such as poultry, or large greenhouses and the like.

Dr. Randall Bell, MAI, PhD, and author of the book **Real Estate Damages**, Third Edition, on Page 146 “Views of bodies of water, city lights, natural settings, parks, golf courses, and other amenities are considered desirable features, particularly for residential properties.” Dr. Bell continues on Page 147 that “View amenities may or may not be protected by law or regulation. It is sometimes argued that views have value only if they are protected by a view easement, a zoning ordinance, or covenants, conditions, and restrictions (CC&Rs), although such protections are relatively

uncommon as a practical matter. The market often assigns significant value to desirable views irrespective of whether or not such views are protected by law.”

Dr. Bell concludes that a view enhances adjacent property, even if the adjacent property has no legal right to that view. He then discusses a “borrowed” view where a home may enjoy a good view of vacant land or property beyond with a reasonable expectation that the view might be partly or completely obstructed upon development of the adjoining land. He follows that with “This same concept applies to potentially undesirable views of a new development when the development conforms to applicable zoning and other regulations. Arguing value diminution in such cases is difficult, since the possible development of the offending property should have been known.” In other words, if there is an allowable development on the site then arguing value diminution with such a development would be difficult. This further extends to developing the site with alternative uses that are less impactful on the view than currently allowed uses.

This gets back to the point that if a property has development rights and could currently be developed in such a way that removes the viewshed such as a residential subdivision, then a less intrusive use such as a solar farm that is easily screened by landscaping would not have a greater impact on the viewshed of any perceived value adjoining properties claim for viewshed. Essentially, if there are more impactful uses currently allowed, then how can you claim damages for a less impactful use.

7. Conclusion

On the basis of the factors described above, it is my professional opinion that the proposed solar farm will not negatively impact adjoining property values. The only category of impact of note is appearance, which is addressed through setbacks and landscaping buffers. The matched pair data supports that conclusion.

XIII. Conclusion

The matched pair analysis shows no negative impact in home values due to abutting or adjoining a solar farm as well as no impact to abutting or adjacent vacant residential or agricultural land. The criteria that typically correlates with downward adjustments on property values such as noise, odor, and traffic all support a finding of no impact on property value.

Very similar solar farms in very similar areas have been found by hundreds of towns and counties not to have a substantial injury to abutting or adjoining properties, and many of those findings of no impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments.

I have found no difference in the mix of adjoining uses or proximity to adjoining homes based on the size of a solar farm and I have found no significant difference in the matched pair data adjoining larger solar farms versus smaller solar farms. The data in the Southeast is consistent with the larger set of data that I have nationally, as is the more specific data located in and around Virginia.

Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will have no negative impact on the value of adjoining or abutting property. I note that some of the positive implications of a solar farm that have been expressed by people living next to solar farms include protection from future development of residential developments or other more intrusive uses, reduced dust, odor and chemicals from former farming operations, protection from light pollution at night, it's quiet, and there is no traffic.

XIV. Certification

I certify that, to the best of my knowledge and belief:

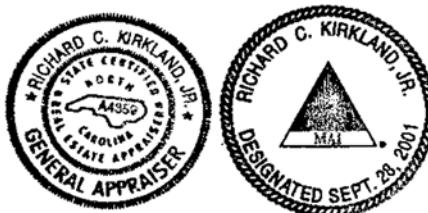
1. The statements of fact contained in this report are true and correct;
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions;
3. I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved;
4. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment;
5. My engagement in this assignment was not contingent upon developing or reporting predetermined results;
6. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of the appraisal;
7. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute;
8. My analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives;
10. I have not made a personal inspection of the property that is the subject of this report, and;
11. No one provided significant real property appraisal assistance to the person signing this certification.
12. As of the date of this report I have completed the continuing education program for Designated Members of the Appraisal Institute;
13. I provided an earlier analysis on this project with a slightly different layout on November 11, 2019. I have not completed any other appraisal related assignments regarding this project within the three years prior to engagement in this current assignment.

Disclosure of the contents of this appraisal report is governed by the bylaws and regulations of the Appraisal Institute and the National Association of Realtors.

Neither all nor any part of the contents of this appraisal report shall be disseminated to the public through advertising media, public relations media, news media, or any other public means of communications without the prior written consent and approval of the undersigned.



Richard C. Kirkland, Jr., MAI
State Certified General Appraiser





Kirkland Appraisals, LLC

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Raleigh, North Carolina 27603
Mobile (919) 414-8142
rkirkland2@gmail.com
www.kirklandappraisals.com

Professional Experience

Kirkland Appraisals, LLC , Raleigh, N.C.	2003 – Present
Commercial appraiser	
Hester & Company , Raleigh, N.C.	1996 – 2003
Commercial appraiser	

Professional Affiliations

MAI (Member, Appraisal Institute) designation #11796	2001
NC State Certified General Appraiser # A4359	1999
VA State Certified General Appraiser # 4001017291	
SC State Certified General Appraiser # 6209	
FL State Certified General Appraiser # RZ3950	
GA State Certified General Appraiser # 321885	
MI State Certified General Appraiser # 1201076620	
PA State Certified General Appraiser # GA004598	
OH State Certified General Appraiser # 2021008689	
IN State Certified General Appraiser # CG42100052	

Education

Bachelor of Arts in English , University of North Carolina, Chapel Hill	1993
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Continuing Education

Uniform Standards of Professional Appraisal Practice Update	2022
Sexual Harassment Prevention Training	2021
Appraisal of Land Subject to Ground Leases	2021
Florida Appraisal Laws and Regulations	2020
Michigan Appraisal Law	2020
Uniform Standards of Professional Appraisal Practice Update	2020
Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book)	2019
The Cost Approach	2019
Income Approach Case Studies for Commercial Appraisers	2018
Introduction to Expert Witness Testimony for Appraisers	2018
Appraising Small Apartment Properties	2018
Florida Appraisal Laws and Regulations	2018
Uniform Standards of Professional Appraisal Practice Update	2018
Appraisal of REO and Foreclosure Properties	2017
Appraisal of Self Storage Facilities	2017
Land and Site Valuation	2017
NCDOT Appraisal Principles and Procedures	2017
Uniform Standards of Professional Appraisal Practice Update	2016
Forecasting Revenue	2015
Wind Turbine Effect on Value	2015

Supervisor/Trainee Class	2015
Business Practices and Ethics	2014
Subdivision Valuation	2014
Uniform Standards of Professional Appraisal Practice Update	2014
Introduction to Vineyard and Winery Valuation	2013
Appraising Rural Residential Properties	2012
Uniform Standards of Professional Appraisal Practice Update	2012
Supervisors/Trainees	2011
Rates and Ratios: Making sense of GIMs, OARs, and DCFs	2011
Advanced Internet Search Strategies	2011
Analyzing Distressed Real Estate	2011
Uniform Standards of Professional Appraisal Practice Update	2011
Business Practices and Ethics	2011
Appraisal Curriculum Overview (2 Days – General)	2009
Appraisal Review - General	2009
Uniform Standards of Professional Appraisal Practice Update	2008
Subdivision Valuation: A Comprehensive Guide	2008
Office Building Valuation: A Contemporary Perspective	2008
Valuation of Detrimental Conditions in Real Estate	2007
The Appraisal of Small Subdivisions	2007
Uniform Standards of Professional Appraisal Practice Update	2006
Evaluating Commercial Construction	2005
Conservation Easements	2005
Uniform Standards of Professional Appraisal Practice Update	2004
Condemnation Appraising	2004
Land Valuation Adjustment Procedures	2004
Supporting Capitalization Rates	2004
Uniform Standards of Professional Appraisal Practice, C	2002
Wells and Septic Systems and Wastewater Irrigation Systems	2002
Appraisals 2002	2002
Analyzing Commercial Lease Clauses	2002
Conservation Easements	2000
Preparation for Litigation	2000
Appraisal of Nonconforming Uses	2000
Advanced Applications	2000
Highest and Best Use and Market Analysis	1999
Advanced Sales Comparison and Cost Approaches	1999
Advanced Income Capitalization	1998
Valuation of Detrimental Conditions in Real Estate	1999
Report Writing and Valuation Analysis	1999
Property Tax Values and Appeals	1997
Uniform Standards of Professional Appraisal Practice, A & B	1997
Basic Income Capitalization	1996



EXHIBIT K

DECOMMISSIONING



Removal and Disposal of Site Components

Modules: Modules will be inspected for physical damage, tested for functionality, and disconnected and removed from racking. Functioning modules will be packed and stored in an offsite facility for reuse or resale. Non-functioning or non-reusable modules will be packed, palletized and shipped to the manufacturer to a third party for recycling or disposal. **Energix procures solar modules from First Solar, an American module manufacturer. First Solar offers module recycling program to its customers.** First Solar contributes to a circular economy by converting mining byproducts into a highly efficient PV technology manufactured using less energy, water, and semiconductor than other commercially available PV technologies. First Solar recovers more than 90% of module materials for reuse, providing high quality secondary resources for new solar panels, glass, rubber, and aluminum products.

Racking: Racking and racking components will be disassembled and removed from the steel foundation posts, processed to appropriate size, and sent to a metal recycling facility.

Steel Foundation Posts: All structural foundation steel posts will be pulled out to full depth, removed, processed to appropriate size, and shipped to a recycling facility.

Overhead and Underground Cables and Lines: Underground cables and conduits contain no materials known to be harmful to the environment. As part of the decommissioning of the Project, all cables will be excavated and removed from the site.

Inverters, Transformers, and Ancillary Equipment: All electrical equipment will be disconnected and disassembled. All parts will be removed from the site and reconditioned and reused, sold as scrap, recycled, or disposed of appropriately, at the Project Company's sole discretion, consistent with applicable regulations and industry standards

Equipment Pads and Ancillary Foundations: Foundations will be excavated to a depth sufficient to remove all conduits, cables, aggregate, and concrete. All materials will be removed from the site and reconditioned and reused, sold as scrap, recycled, or disposed of appropriately, consistent with applicable regulations and industry standards.

Fence: All fence parts and foundations will be removed from the site and reconditioned and reused, sold as scrap, recycled, or disposed of appropriately. The surrounding areas will be restored to preconstruction conditions to extent feasible.

Access Roads: Facility access roads will be used for decommissioning purposes, after which removal of roads will be discussed with the Landowner, and either left intact or removed, consistent with applicable regulations and standards.

Restoration/Reclamation of Site

The goal of restoration is to restore natural hydrology and plant communities to the greatest extent practicable while minimizing new disturbance and removal of native vegetation. The decommissioning best management practices (BMP's) to minimize erosion and to contain sediment to the extent practicable with the intent of meeting this goal include:



1. Minimize new disturbance and removal of native vegetation to the greatest extent practicable. The vegetative buffer shall remain in place after decommissioning unless the Landowner requests for it to be removed. If it is removed, the area will be restored to pre-construction condition
2. Removal of all above and below ground solar equipment and access roads up to three feet below surrounding grade, backfill with subgrade material and cover with suitable topsoil to allow adequate root penetration for plants, and so that subsurface structures do not substantially disrupt ground water movements.
3. Any topsoil that is removed from the surface for decommissioning will be stockpiled to be reused when restoring plant communities. Once decommissioning activity is complete, topsoil will be re-spread to assist in establishing and maintaining plant communities.
4. Stabilize soils and re-vegetate with regional plants appropriate for the soil conditions and adjacent habitat and use local seed sources where feasible, consistent with Landowner objectives. Reseeding with native plants will not be performed for site that will be returned to agricultural use or other more intensive beneficial uses.
5. During and after decommissioning activities, install erosion and sediment control measures in all disturbance areas where potential for erosion and sediment transport exists, consistent with storm water management objectives and requirements.
6. Remediate any petroleum product leaks and chemical releases related to the Project prior to completion of decommissioning.

Decommissioning of the site will comply with permits for NPDES/SDS CSW Permit, Spill Containment and Countermeasure (SPCC) Plan, and SWPPP, if grading activities are necessary and exceed applicable permit thresholds. Decommissioning should include post-restoration monitoring as required by the NPDES/SDS CSW Permit and SWPPP and other applicable requirements. In addition, the Project Company's Field Representative assigned to decommissioning monitoring will stay in contact with the Landowner, including onsite check-ins until the NPDES/ SDS CSW permit is closed.



EXHIBIT L

PROJECT CONFORMITY WITH THE FRANKLIN COUNTY COMPREHENSIVE PLAN

MEMORANDUM

TO: Franklin County Planning Commission

FROM: Scott Foster, Jr., Esq., and Jasdeep Singh Khaira, Esq., Gentry Locke Attorneys

DATE: January 31, 2023

SUBJECT: Analysis of Mountain Brook Solar’s Conformity with the Franklin County 2025 Comprehensive Plan

Members of the Planning Commission,

Mountain Brook Solar, LLC (“Applicant”) requests that the Franklin County (the “County”) Planning Commission review Mountain Brook Solar (the “Project”) for conformity with the Franklin County 2025 Comprehensive Plan (the “Plan”) as required by Va. Code § 15.2-2232. This request provides information needed for the County determination that the Project is “substantially in accord” with the Plan.

I. Project Summary

The Project is a solar electric generation facility with the capacity to deliver up to 20 megawatts (“MW”) of electricity to the electric transmission system that serves the County and surrounding area. The Project parcel identification numbers are 0340003100, 0340003300 and 0340002300. The total parcel area is approximately 258.16 acres, while the limit of construction is approximately 184 acres. The total area under the solar panels would be approximately 37.31 acres.

II. Va. Code §15.2-2232 “Substantially in Accord” Determination

Va. Code §15.2-2232 provides that the County’s Comprehensive Plan controls “the general or approximate location, character, and extent of each feature shown on the plan.” For any “public utility facility” that is proposed after the adoption of the Comprehensive Plan, the County’s Planning Commission is tasked with determining whether the “***general location or approximate***

location, character, and extent thereof [of the public utility facility] . . . is substantially in accord with the adopted comprehensive plan or part thereof (emphasis added).” Because the Project is considered a public utility facility pursuant to Va. Code § 56-232, the Planning Commission is called upon to determine if the proposed “general location or approximate location, character, and extent” of the Project is “substantially in accord” with the Plan. In this context, “substantially in accord” is interpreted to mean “largely, but not wholly.”¹

III. The Project’s Location is in Conformity with the Plan

The Project Complies with the Zoning Ordinance

The Franklin County Zoning Ordinance (the “Ordinance”) is the primary tool used to implement the Plan. As a result, when evaluating a solar facility for conformity with the Plan, a foundational question to consider is how and whether the facility is permitted within the zoning district where it is proposed. The Ordinance defines a “utility-scale solar generation facility” as a “renewable energy project that generates electricity from sunlight, consisting of one (1) or more photovoltaic systems and other appurtenant structures and facilities within the boundaries of the site, and is designed to interconnect with the electrical grid and/or to serve facilities that are not adjacent or under common use, ownership, or control.”² Importantly, the Ordinance permits utility-scale solar generation facilities on land zoned in the Agricultural District (“A-1”) with a Special Use Permit (“SUP”).³

Here, the Project would meet the utility-scale solar generation facility definition due to its planned interconnection with the electrical grid to serve facilities that are not adjacent or under common use, ownership, or control. Moreover, two (2) of the Project parcels, 0340003100 and

¹ The Albemarle County Land Use Law Handbook Kamptner/June 2016, p. H-2.

² See, Franklin County, Va., Code of Ordinances Ch. 25, § 25-40 (further stating that in the context of this ordinance, the acreage and boundary representing a utility scale solar generation facility includes the entirety of the area leased for use as a solar generating site).

³ Franklin County, Va., Code of Ordinances Ch. 25, § 25-179.

0340003300, are currently zoned A-1. The third parcel, 0340002300, is currently zoned in the General Business District (“B-2”), which does not allow utility-scale solar generation facilities even with a SUP. In using the Franklin County Parcel and Zoning Viewer to review the Project area, it becomes apparent that the third parcel is an outlier. All the adjacent parcels are zoned A-1. Additionally, during the due diligence phase the Applicant learned that the B-2 parcel is currently being used for agriculture. Further research uncovered that the parcel was rezoned B-2 years ago when the current landowner’s grandfather decided to accommodate bluegrass festivals on the property. In order to ensure project viability, the Applicant has already requested to rezone the third parcel, 0340002300, to A-1. The following analysis assumes that the rezoning request is granted and the third parcel reverts back to A-1. Consequently, pursuant to the negotiated terms of a Special Use Permit, constructing and utilizing a utility-scale solar generation facility is an acceptable use of the parcels within the A-1 zoning district and therefore, conforms to the Ordinance and, by extension, the Plan.

The Project is not Located in a Town, Village or Growth Area

Here, the Project is not located in a Town, Village or Designated Growth Area, which is a requirement of the Plan.⁴ By avoiding these areas, the Project will not occupy area the County has reserved for concentration of future growth.

The Project will not adversely affect the County’s soil, water or air

One goal the Plan provides is preserving and improving the quality of the County’s soil, water and air.⁵ Strategically, the County aims to fully evaluate any new development proposal that

⁴ Franklin County 2025 Comprehensive Plan at Chapter 11 (as amended by Franklin County Board of Supervisors Resolution #19-07-2022).

⁵ Franklin County 2025 Comprehensive Plan at 11-9.

intends to introduce hazardous waste into the atmosphere, soil or water, and ensure appropriate protective measures are incorporated into the construction process.⁶

Importantly, the Project will not introduce any hazardous wastes into the atmosphere, soil or water. Except for second hand vehicle air emissions created during the construction phase of the Project, the Project will not create any airborne emissions nor will it utilize any ground or surface water. Regarding soil, the Project effectively ‘saves’ or ‘banks’ the underlying land by allowing it to lie fallow for at least thirty-five years. This time allows the soil, and the microbes within it, to replenish, which ultimately improves the soil quality. The Project will also utilize the planting of native grasses and pollinator habitat under the panels and within the Project area to help improve rainwater absorption rates and improve local water quality. Pursuant to the stormwater management strategy in the Plan, the Project will have a stormwater management plan that includes low impact development techniques to equate pre- and post- development runoff, and the permit for the project will contain specific stormwater management terms and procedures.⁷

The Project meets the County’s Goals, Objectives and Strategies for Renewable Energy

The County’s recently passed amendment to Chapter 11 of the Plan provides goals, objectives and strategies for utility scale renewable energy in the County.⁸ The main objective is to promote the use of utility scale solar generating facilities, while simultaneously minimizing the impact of those facilities on the County’s natural, agricultural, scenic, tourism and cultural resources.⁹ Some strategies for implementing that objective are: (I) avoiding impact of solar facilities on available farmland, including prime farmland and farmland of statewide significance;

⁶ Franklin County 2025 Comprehensive Plan at 11-9.

⁷ Franklin County 2025 Comprehensive Plan at 11-9.

⁸ Franklin County 2025 Comprehensive Plan at Chapter 11 (as amended by Franklin County Board of Supervisors Resolution #19-07-2022).

⁹ Franklin County 2025 Comprehensive Plan at Chapter 11 (as amended by Franklin County Board of Supervisors Resolution #19-07-2022).

(II) screening facilities from public rights-of-way and adjacent properties; (III) avoiding visual impacts from the facilities on scenic and cultural resources; (IV) promoting agrivoltaics for farmers to still use certain areas of their land where solar facilities are located and (V) avoid allowing solar facilities in Designated Growth Areas.¹⁰

As previously mentioned, the Project is not located within any of the three Designated Growth areas. The Project will also have 150 foot setbacks from roads and 300 foot setbacks from all adjacent residences. A 30 foot buffer will also be planted around the Project where there is no existing vegetation. These setbacks and buffers will provide adequate screening which will reduce visual impacts from the Project on the surrounding landscape. Additionally, the Project will allow for sheep grazing on the Project area which allows the Project to overlay the agricultural use of the parcels, thereby promoting agrivoltaics. Finally, based on the Applicant's due diligence, the soils are not designated as prime agricultural soils.

IV. The Project's Character, and Extent are in Conformity with the Plan.

The Project will not Contribute to the County's Solid or Hazardous Waste

The Plan makes note that the County must ensure long term capability to dispose of solid and hazardous waste.¹¹ Here, the Project will not create any solid or hazardous waste until decommissioning. Recycling and disposal of the decommissioned Project will be outlined in a decommission plan to be submitted at site plan approval.

The Project will Provide Direct and Indirect Economic Benefit to the County

A major goal for the County is promoting a County economy that is expanding, diverse, environmentally sensitive and that creates more and better jobs and business opportunities for local

¹⁰ Franklin County 2025 Comprehensive Plan at Chapter 11 (as amended by Franklin County Board of Supervisors Resolution #19-07-2022).

¹¹ Franklin County 2025 Comprehensive Plan at 11-15.

residents.¹² Here, the Project would contribute to the local tax base and would support local workers through construction jobs and ongoing operations and maintenance jobs without any offsetting demands for County services like schools or public utilities. Additionally, employers are increasingly looking to operate in areas served by carbon-free energy. The Project has the potential to attract future businesses and employers that are seeking to set up shop in areas that support green energy. Moreover, as detailed in the permit application, the Project will provide significant revenue to the County both via local taxation and voluntary payments by the Applicant, which can be used to support core County services or other economic development efforts, as the Board of Supervisors may direct.

V. Conclusion

Pursuant to the requirement of Va. State Code §15.2-2232, the Applicant asks that the Planning Commission confirm that the Project is substantially in accord with the Plan. As detailed above, this project is in significant agreement with the plan.

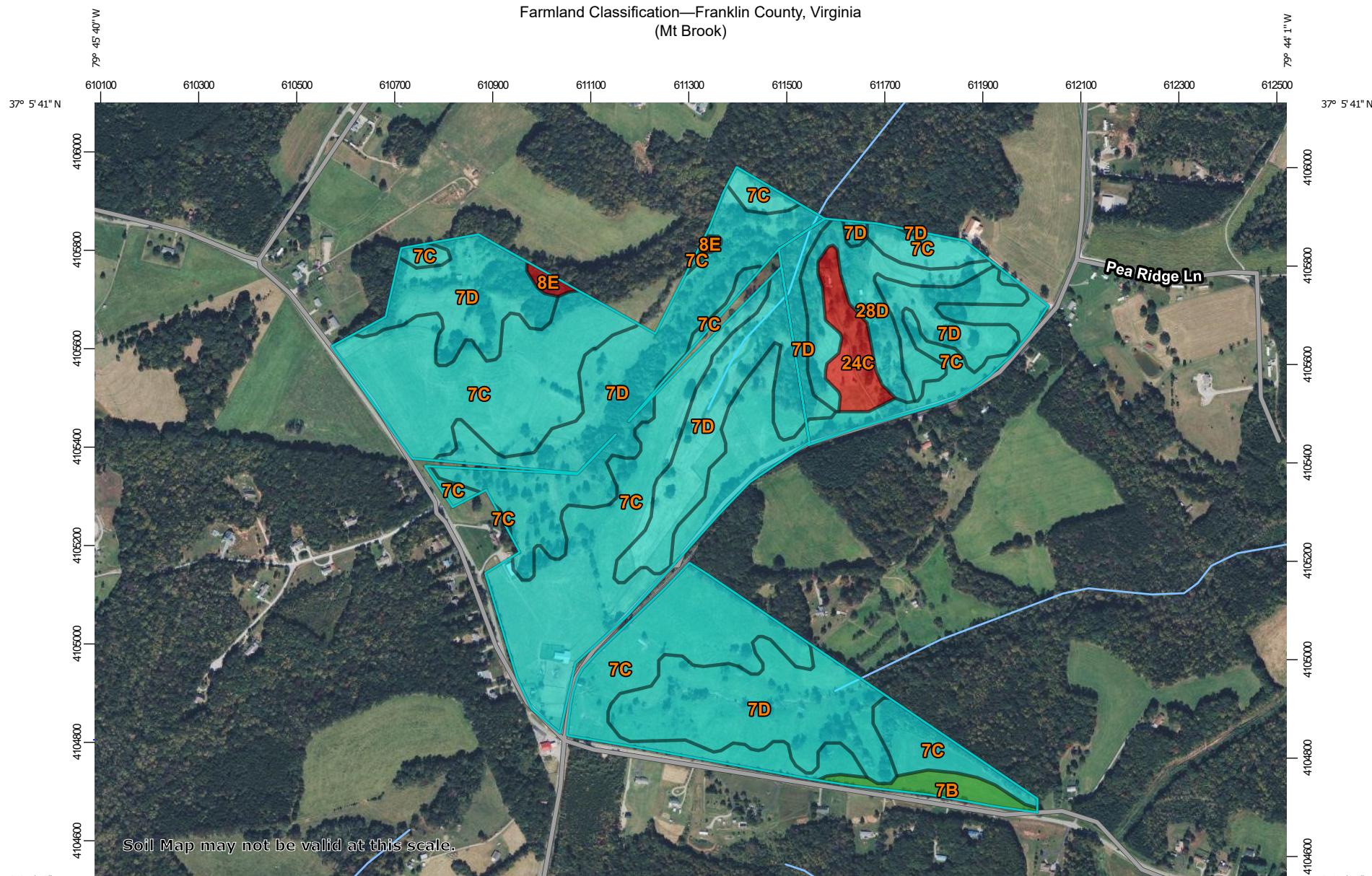
¹² Franklin County 2025 Comprehensive Plan at 11-6.



EXHIBIT M

FARMLAND CLASSIFICATION

Farmland Classification—Franklin County, Virginia
(Mt Brook)



Map Scale: 1:11,100 if printed on A landscape (11" x 8.5") sheet.



0 150 300 600 900
Meters
0 500 1000 2000 3000
Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

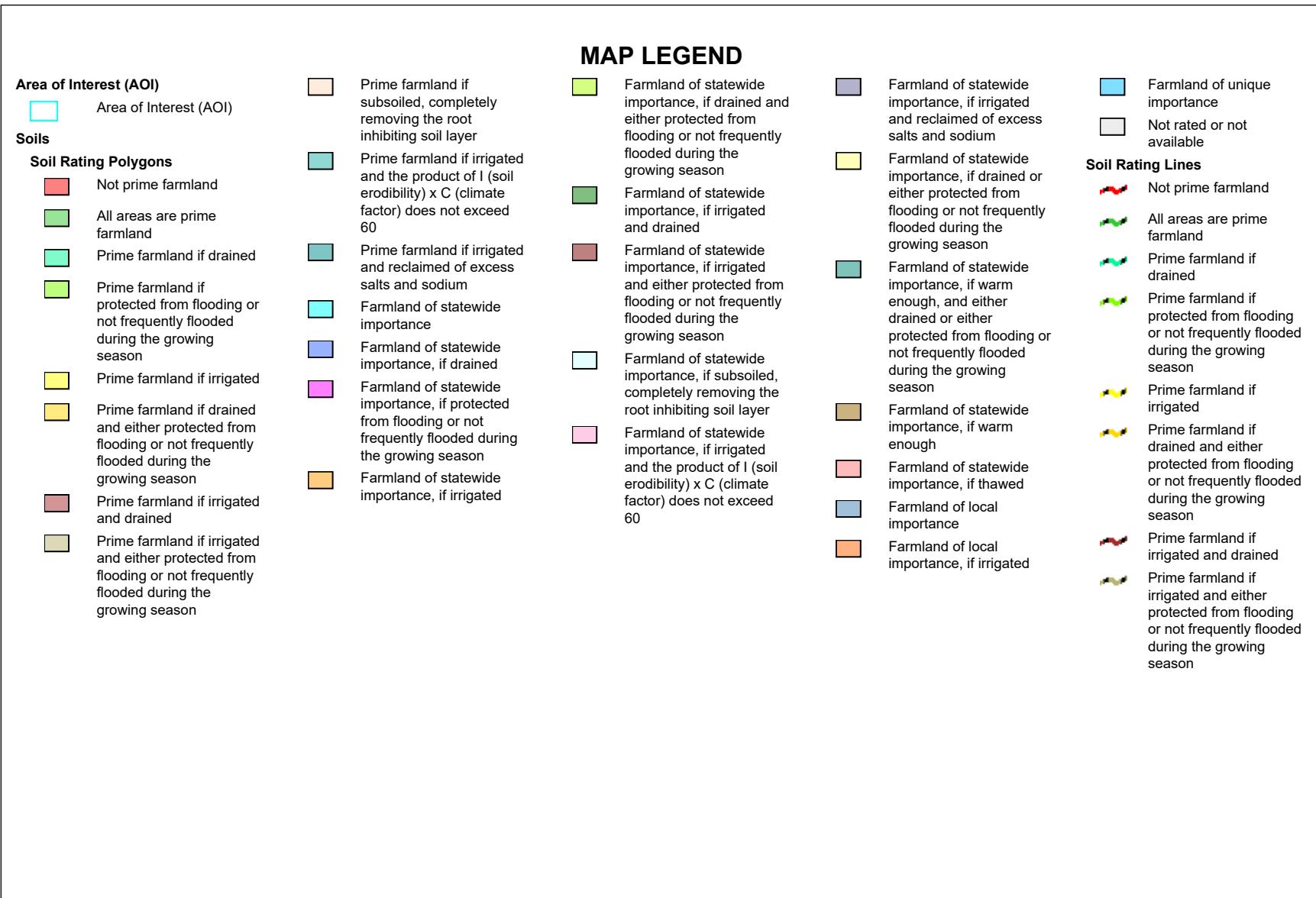


Natural Resources
Conservation Service

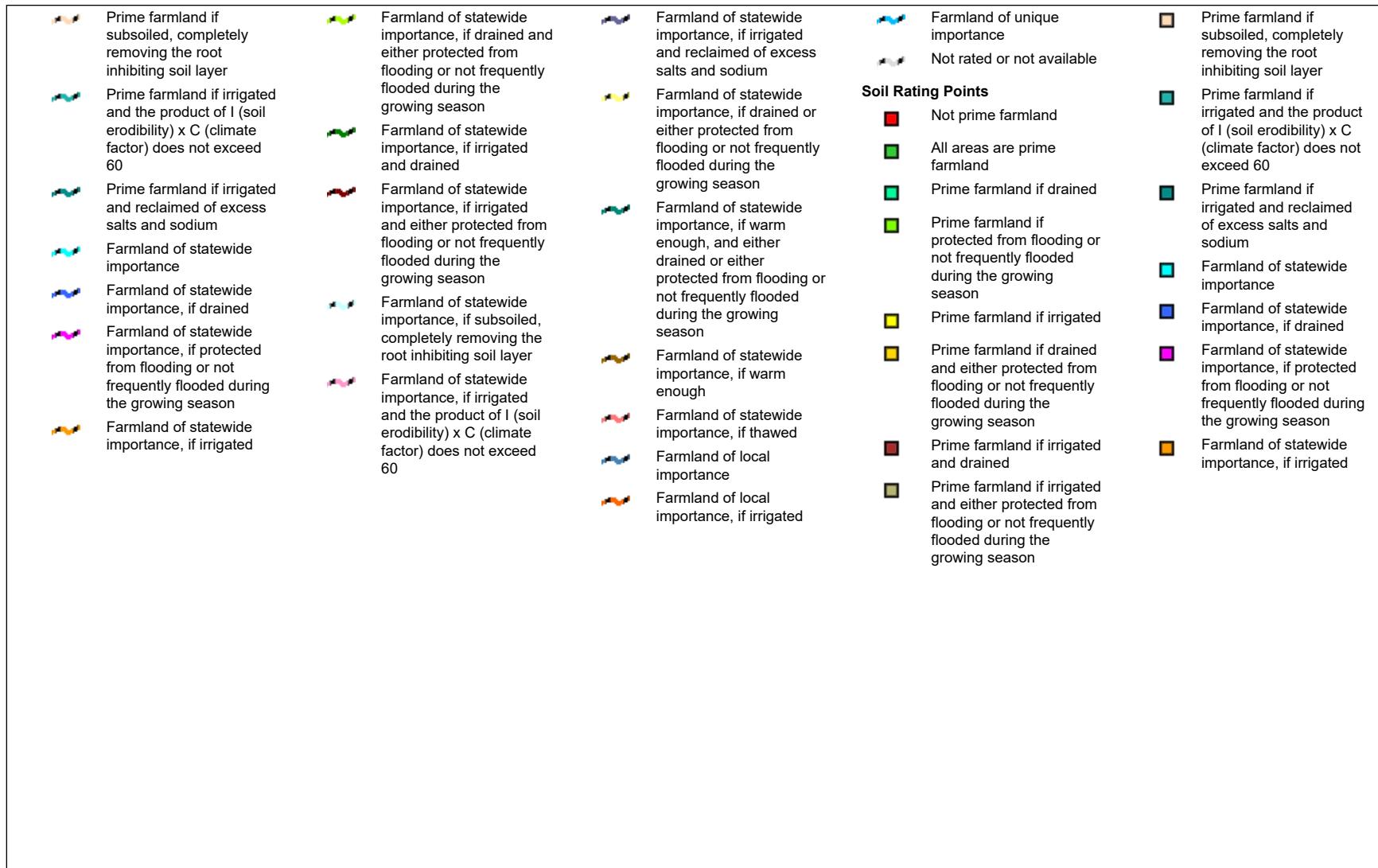
Web Soil Survey
National Cooperative Soil Survey

2/23/2022
Page 1 of 5

Farmland Classification—Franklin County, Virginia
(Mt Brook)



Farmland Classification—Franklin County, Virginia
(Mt Brook)



Farmland Classification—Franklin County, Virginia
(Mt Brook)

 Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season	 Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium	 Farmland of unique importance	The soil surveys that comprise your AOI were mapped at 1:24,000.
 Farmland of statewide importance, if irrigated and drained	 Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	 Not rated or not available	<p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p>
 Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season	 Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season	 Streams and Canals	<p>Please rely on the bar scale on each map sheet for map measurements.</p>
 Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer	 Farmland of statewide importance, if warm enough	 Rails	<p>Source of Map: Natural Resources Conservation Service</p> <p>Web Soil Survey URL: https://websoilsurvey.nrcs.usda.gov/</p> <p>Coordinate System: Web Mercator (EPSG:3857)</p>
 Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	 Farmland of statewide importance, if thawed	 Interstate Highways	<p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p>
	 Farmland of local importance	 US Routes	<p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p>
	 Farmland of local importance, if irrigated	 Major Roads	<p>Soil Survey Area: Franklin County, Virginia</p>
		 Local Roads	<p>Survey Area Data: Version 20, Sep 13, 2021</p>
		 Aerial Photography	<p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p>
			<p>Date(s) aerial images were photographed: Oct 4, 2020—Dec 8, 2020</p>
			<p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7B	Clifford fine sandy loam, 2 to 8 percent slopes	All areas are prime farmland	3.5	1.6%
7C	Clifford fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance	105.6	47.3%
7D	Clifford fine sandy loam, 15 to 25 percent slopes	Farmland of statewide importance	96.0	43.0%
8E	Clifford-Hickoryknob complex, 25 to 45 percent slopes	Not prime farmland	1.0	0.5%
24C	Jackland-Mirerock-Redbrush complex, 8 to 15 percent slopes	Not prime farmland	5.7	2.6%
28D	Minnieville-Orenda-Redbrush complex, 15 to 25 percent slopes	Farmland of statewide importance	11.3	5.1%
Totals for Area of Interest			223.1	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower