

## DIVISION OF PLANNING AND PERMITTING FREDERICK COUNTY, MARYLAND

Board of Appeals
30 North Market Street • Frederick, Maryland 21701
301-600-2572 • FAX 301-600-2309 • TTY: Use Maryland Relay
www.FrederickCountyMD.gov/planning

### **SPECIAL EXCEPTION**-APPLICATION (BOA)

K	<u>equired for Submission</u>
X	Application is a result from meeting with:  Zoning Planner Craig Terry  Date 11/24/2015
X	20 copies -Justification letter, to include the following information: 1. Address of property. 2. Existing Zoning of Property. 3. Proposed use under the zoning ordinance. 4. Applicable section(s) of the Zoning Ordinance, for Use Proposed. 5. General and or Specific Criteria. 6. Other information relevant to special exception request.
X	1 copy - Of Maryland Department of Assessments and Taxation print out, Phone (301)815-5350, www.dat.state.md.us
X	20 copies-Concept Plan & Illustrative Notes and other supporting documents. (folded 8-1/2 x 11)
Pro Ta Pu	perty Information:  evious Board of Appeals Case # N/A  x Map 0049
	dress / Location: 8300 Biggs Ford Road; Walkersville, MD 21793
	pellant's present legal interest in the above property: leck all that apply)  Owner (including joint ownership)  Lessee  Other (describe)

Petitioner_Biggs Ford Solar Center LLC	Internal use Only	
	BOA#	
Address 321 East Main Street, Suite 321	TM P	
Charlottesville, VA 22902	Filed Date:	
Phone (434) 202-5096	Hearing Date:	
Check one for Determination Letter:	Hearing Date:	
Mail Email rgilchrist@coronalgroup.com	11 =1	
I herby affirm that all of the statements and information cont	ained in or filed with this appeal are true and	
correct.		
Ryan Gilchrist	1/1/1/15	
Printed name Sig	nature of Petitioner Date	
NOTARY PUBLIC		
Subscribed and sworn to before me the day and year from abo	ove written.	
Erin Kath  NOTARY PUBLIC-signature  NOTARY PUBLIC-signature		
My Commission expires of May 31, 2017		

 $\begin{tabular}{l} FEES \\ \textit{Checks made payable to Treasurer of Frederick County-} Additional fees may be due per Fee Ordinance Resolution 13-14 \\ \end{tabular}$ 

Accessory Apartment (ACCAPT)  Total = 825.00	\$ 200.00
All Other Uses (SPCLEXCPT)	\$ 825.00
Activity within FP or Danger Reach Area (FLDANREA)	
Limited Ag Activity (LIMAGACT)	\$ 100.00

		des .
Account	denti	fier:

District - 26 Account Number - 506670

### **Owner Information**

Owner Name:

WHITMORE RALPH W -TRUSTEE ETAL

Use:

AGRICULTURAL

Principal Residence:

NO

Mailing Address:

56 MAPLE AVE

0-0000

WALKERSVILLE MD 21793-8242

Deed Reference:

/07770/ 00288

### **Location & Structure Information**

**Premises Address:** 

8300 BIGGS FORD RD

Legal Description:

61,50 AC

Plat

Map:

Grid: Parcel:

Subdivision:

Section:

Block: Lot: Assessment Plat No:

Year: 2014

0049

0019

0069

Sub

District:

0000

S/S BIGGS FORD RD.

0086/ 0135

Special Tax Areas:

Ref: NONE

Town:

Ad Valorem:

241

Tax Class:

**Primary Structure Built** 

Above Grade Enclosed Area

**Finished Basement Area** 

**Property Land Area** 

**County Use** 

1910

2,940 SF

61.5000 AC

Exterior

Full/Half Bath

Garage

Phase-in Assessments

Last Major Renovation

Stories 2

YES

**Basement** 

Type STANDARD UNIT

FRAME

1 full

### Value Information

Value As of

As of

07/01/2015

As of 07/01/2016

Land:

Total:

147,200

**Base Value** 

163,400

310,600

181,500 308,700

127,200

01/01/2014

308,700

308,700

27,200

Preferential Land:

**Improvements** 

27,200

### **Transfer Information**

Deed1: /07770/ 00288

Deed1: /02395/ 00203

**Exemption Information** 

Seller: WHITMORE, JOHN F. & JULIA R.

Type: NON-ARMS LENGTH OTHER

Date: 03/01/2004

Price: \$0 Deed2:

Seller: WHITMORE, JULIA R., ETAL

Date: 03/24/1998

Price: \$0 Deed2:

Type: NON-ARMS LENGTH OTHER

Date:

Price:

Seller: Type:

Deed1:

Deed2:

Partial Exempt Assessments:

Class

07/01/2015

07/01/2016

County:

State:

000 000

000

0.00

0.00 0.00|0.00

0.00|0.00

Municipal: Tax Exempt:

Special Tax Recapture:

**Exempt Class:** 

AGRICULTURAL TRANSFER TAX

**Homestead Application Information** 

Homestead Application Status: No Application

Craig Terry
Frederick County Office of the Zoning Administrator
30 North Market Street
Frederick, Maryland 21701

### RE: Authorization for Agent to Act on Behalf of Owner

Dear Mr. Terry and Members of the Board of Appeals,

As the owner of the parcel 0049/0069 located at 8300 Biggs Ford Road in Frederick County, MD, I/we grant permission for representatives of Biggs Ford Solar Center LLC and Coronal Development Services LLC to act on our behalf in the request for a Special Exception with the Board of Appeals as well as subsequent permitting action with the Planning Commission to develop and construct a solar farm.

Ralph Whitmore

STATE OF Wary and	) ) ss.
COUNTY OF Wedenck	
On Dea T	20.15 before me. R

AA . . .

personally appeared who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within this affidavit and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the affidavit the person(s), or the entity upon behalf of which the person(s) acted, executed the affidavit.

I certify under PENALTY OF PERJURY under the laws of the State of \_\_\_\_\_\_\_ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public

[SEAL]

MARTHA R. BUSH
Notary Public-Maryland
Frederick County
My Commission Expires
January 30, 2016



B-16-01 Al 16106

Office of the Zoning Administrator 30 North Market Street; Frederick, Maryland 21701

December 11, 2015

RE: Biggs Ford Solar Center LLC; Map 0049 / Parcel 0069
Application for Special Exception for Non-Governmental Utility

To whom it concerns,

Coronal Development Services (CDS) hereby submits the attached application for Special Exception to the Frederick County Board of Appeals. We are confident that our application and proposed use meets all applicable sections of the Zoning Ordinance, including all applicable conditions in sections 1-19-3.210B and 1-19-8.339.

CDS is currently developing multiple ground-mounted solar energy projects throughout 20 states across the continental U.S. We have over 15 years of experience in the renewable energy space and we understand what it takes to develop a successful project that marries the economic needs of the county, the landowner, and our investors.

In addition to the attached application, fee, tax assessor page, 20 copies of the justification statement, and 20 copies of the site plan; you will find 20 copies of Coronal's proprietary resource document entitled "Solar Energy Facilities & Land Use, A Guide For Property Owners & Neighbors."

In addition to the studies required for this application for Special Exception, CDS has already engaged with all of the relevant county, state, and federal-level organizations in order to investigate the full range of potential impacts of the project.

We are excited about the potential to develop a source of renewable energy on this particular property, and excited for the opportunity to expand renewable energy generation in Frederick County.

Thank you for the opportunity to present this Application.

Best regards,

Ryan Gilchrist Project Developer

C 203 804 1207
P 434 202 5096
rgilchrist@coronalgroup.com
Charlottesville, Virginia

Ryan Glehrest



### ABOUT CORONAL DEVELOPMENT SERVICES

Coronal Development Services is a premier U.S. solar development firm with a primary focus on utility scale solar projects. Coronal Development Services began doing business as HelioSage Energy in 2008. Focused on serving utilities, HelioSage became one of the fastest growing solar development firms in the country, executing over 400 megawatts (MW) of power purchase agreements with clients including Gulf Power (FL), Duke Energy (NC), Georgia Power (GA), Pacific Power (OR), and the Tennessee Valley Authority (TN). The CDS management team has been responsible for the financing and construction of over 580 megawatts of renewable energy projects nationally, including New England's largest solar project for Connecticut Light & Power (CL&P) and one of the country's largest Southeastern solar energy portfolios comprised of multiple projects that will sell power to Duke Energy-Progress and the North Carolina Eastern Municipal Agency.

In 2015 Coronal Group, a Panasonic Eco Solutions Partner, acquired HelioSage Energy and formed Coronal Development Services (CDS). The formation of CDS pairs HelioSage's development expertise with the financing, construction and asset management capabilities of Coronal Group, which maintains an exclusive strategic partnership with Panasonic Eco Solutions a division of Panasonic North America - a Fortune 100 company and an \$80 billion entity.

Today, the Coronal-Panasonic platform is among the most trusted names in solar, providing clients and partners across the country with an end-to-end solar development solution that extends from project origination through financing, construction, operation, maintenance and warranty provision. CDS develops projects that benefit investors, ratepayers, and property owners, and has become a recognized leader in utility scale solar development.

To learn more about Coronal Development Services, please visit www.coronaldevelopment.com.

### **OVERVIEW:**

- Energy in 2008
- Coronal Group, a Panasonic Eco Solutions Partner
- 400 MWs in executed
- over 10 states
- Developing the largest solar PV project in Florida



Somers Solar Center; Somers, CT



Fairhaven Landfill; Fairhaven, MA

### **Justification Statement**

Pursuant to application for operation of a non-governmental utility in the Agricultural district at the following parcel:

Map: 0049 / Parcel: 0069

### I. INTRODUCTION:

Biggs Ford Solar Center LLC (the "Applicant") requests this special exception as necessary to establish a nongovernmental utility operates photovoltaic solar farm, to be built on approximately 140 acres of the 151 +/- acre parcel of land located at 8300 Biggs Ford Road, Walkersville, Frederick County, Maryland (the "Property"). The existing zoning of the Property is Agricultural (A).

The Applicant is proposing a solar farm with a generation capacity of approximately fifteen (15) megawatts (MW) alternating current (AC), for delivery of electric power directly to the grid. The panels and racking system would be supported by steel piles driven below grade, with the top of the panels standing no higher than twelve (12) feet. The conversion of sunlight energy into electricity is one of the cleanest and environmentally benign methods for large scale electricity production.

The Property to be utilized for the proposed site is currently in use for agriculture. Only minimal ground disturbance will be initiated, as solar array installations are by nature minimally-invasive. With ground disturbance being substantially limited to trenching for electrical conduit, placement of the racking system piles, minimal grading and placement of fence posts and access roads. The ground surface will remain primarily in its natural state, and meet all necessary standards for state and local stormwater and erosion control measures.

The Board of Appeals has previously granted special exceptions for similar projects in Frederick County.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See Case Nos. B-11-01 (Mt. St. Mary's); B-13-14 (Taneytown Road); B-13-15 (8518 Orndorff Road); B-14-01 (Cremery Road); and B-15-23 (Old Frederick Road).

### II. GENERAL REQUIREMENTS FOR SPECIAL EXCEPTIONS:

Section 1-19-3.210(B) of the Frederick County Zoning Ordinance sets forth the criteria which must be satisfied before the Board of Zoning Appeals may grant a special exception. The Applicant's request satisfies all criteria described as follows:

A. An application for a special exception may be made only by persons with a financial, contractual, or proprietary interest in the property for which a special exception is requested.

The Applicant has entered into an option agreement to lease the Property with the Property owner.

B. (1) The proposed use is consistent with the purpose and intent of the comprehensive development plan and of this chapter.

The proposed use is consistent with the purpose and intent of the Comprehensive Plan and of the applicable provisions of Chapter 1-19 of the Ordinance. Section 1-19-5.310 Use Table indicates that a "Nongovernmental Utility" is allowable in the Agricultural zoning district as a special exception with site development approval. The Property and its general vicinity are primarily designated as Agricultural Land Use in the Comprehensive Plan, with some Rural Residential to the south and east as you approach Walkersville.

B. (2) The nature and intensity of the operations involved in or conducted in connection with it and the size of the site in relation to it are such that the proposed use will be in harmony with the appropriate and orderly development of the neighborhood in which it is located.

The proposed use, a solar farm, is a use that does not create measurable impacts beyond its visible existence, as expanded upon below in section B(3). Accordingly, the impacts to the neighboring properties, which consist of large agricultural tracts with minimal residential usage, will be negligible and will not endanger the public health, safety and welfare of the neighbors or citizenry of the County.

There are approximately seven residential parcels adjacent to the proposed solar farm, located on Buchanan Drive, Reveille Court, and Swallow Falls Court; all of whom have been notified of this application for special exception as required. Given the flat topography of the surrounding area, and the proposed buffer inclusive of vegetative landscape screening, the views from these nearby parcels will be minimally impacted by the proposed development of the solar farm.

The nature and intensity of the solar farm in relation to the size of the Property are such that the Applicant's proposed use will be in harmony with the longstanding existing uses and the appropriate and orderly development of the neighborhood and region in which it is located. The proposed solar farm will utilize a majority of the Property's acreage, similar to its current utilization in active crop production.

B. (3) Operations in connections with any special exception use will not be more objectionable to nearby properties by reason of noise, fumes, vibration, or other characteristics, than would be the operations of any permitted use not requiring special exception approval.

The operation of the proposed solar farm will not be more objectionable to nearby properties by reason of noise, fumes, vibration, or other characteristics than would be the operations of substantially all other permitted uses in the Agricultural zone not requiring a special exception. The Applicant does not anticipate that the facility will generate any objectionable noise, fumes, vibrations, or other nuisance characteristics which would be apparent to any neighbor, other than the visibility of the solar panels.

Solar panels are silent during normal operations. The only sound generated from the electrical equipment at the facility would be from the transformers and inverters at each power center, and such sound would only be at low level emissions measurable only at close proximity. As the operation is passive in nature, there will be almost no noise emission, no airborne emissions, and no vibrations or other characteristics that can be reasonably characterized as having a nuisance value.

B. (4) Parking areas will comply with the off street parking regulation of this chapter and will be screened from adjoining residential uses, and the entrance and exit drives shall be laid out so as to achieve maximum safety.

The proposed solar farm is an unmanned facility and will require minimal staffing for operations and maintenance. Applicant intends to comply with parking regulations, to be specified in the site development process. Multiple entrances and exits to the site exist. Access, together with the parking and screening layout are anticipated to be more particularly addressed during the formal site development process.

B. (5) The road system providing access to the proposed use is adequate to serve the site for the intended use.

The road system providing access to the proposed use is believed to be adequate to serve the site for the intended use. As stated above, multiple entrances and exits to the site exist, including to/from Biggs Ford Road and Dublin Road. As stated above, the proposed solar farm is an unmanned facility and will require minimal staffing for operations and maintenance. Traffic would be limited to maintenance crews for mowing and vegetative maintenance, which would be seasonally dependent. Quarterly maintenance of the solar array components are likely to occur, along with occasional maintenance site visits as needed. Traffic generation and road adequacy issues are anticipated to be more particularly addressed during the formal site development process. The Applicant would reiterate the response noted here and noted in the Introduction above, for the purposes of complying with Section 1-19-200.1(C)(4) of the Zoning Ordinance, also noting that the Applicant is not proposing and special conditions or limitations.

## III. SPECIFIC CONDITIONS FOR NONGOVERMENTAL UTILITIES IN AGRICULTURAL DISTRICTS:

Section 1-19-8.339 of the Zoning Ordinance sets forth the specific provisions that apply to Nongovernmental Utilities in the Agricultural zoning district. This request satisfies all of these specific conditions, as follows:

(A) Minimum setback from all property lines is 50 feet. Structures, fencing or parking are not permitted within the setback area.

As more specifically detailed in the concept plan, the Application complies with these criteria. Satisfaction of the requisite site development criteria will be addressed during the formal site development and review process.

(B) Screening and landscaping is required as approved by the Board of Appeals.

Screening will be provided as may reasonably be deemed necessary by the Board of Appeals, noting however that certain types of plantings may be incompatible with the clear purpose of the solar farm (i.e. to the extent that the future growth may result in any shading of the solar farm area). It is anticipated that a detailed landscape plan will be required as part of the formal site development process.

(C) Within the RC District, the requirements of  $\S$  1-19-7.200 of this Code will be met.

Not applicable, as the project is proposed to be located within the Agricultural zoning district.

(D) When permitted in any residential district, a nongovernmental utility shall have the exterior appearance of residential buildings and shall have suitable landscaping, screen planting and fencing, deemed necessary by the Board of Appeals.

Not applicable, as the project is proposed to be situated within the Agricultural zoning district.

(E) Provide information to indicate the general conditions of use and existing improvements on adjoining properties within a 1,000-foot radius surrounding the subject property.

As shown in Exhibit B, the majority of the 1,000-foot radius surrounding the subject property includes active agricultural land. In addition the 1,000-foot radius includes residences located on Grossnickle Court, Buchanan Drive, Taurus Court, Reveille Court, Jenkins Creek Court, White Ferry Court, Creek Walk Drive, Tylerton Court, and Swallow Falls Court.

(F) When approving a nongovernmental utility use, the Board of Appeals may authorize future changes not requiring further Board of Appeals approval within a 10 year period of the initial special exception approval. Such changes shall be limited to the addition, relocation, or modification of foundations or equipment, or additions to existing buildings, within a fence line approved by the Board of Appeals. The site plan must show initially proposed and future buildings and structures as reasonably expected within 20 years or the foreseeable future.

The Applicant does not anticipate any future expansion or future material changes. The formal Site Plan submission is anticipated only those structures and equipment intended for immediate construction.

(G) A reasonable effort shall be made by the applicant to contact and inform area homeowner associations and community associations of the proposed use together with an informational meeting.

A list of confronting and adjoining property owners was submitted to the Zoning Administrator for the provision of written notice. In addition, the Applicant has already been in contact with neighboring residents.

- (H) Tests to determine mitigation requirements. In the event the Board determines to grant the special exception, the Board shall consider the following areas to determine the extent that impact mitigation measures will be required.
  - (1) The Board shall make findings that the proposed building or structure at the location selected will not endanger the health and safety of workers and residents in the community and will not substantially impair or prove detrimental to neighboring properties.
  - (2) The Board shall make findings regarding adverse effects of the project on the character of the surrounding area including impacts from sound, light, visual appearance, impervious surfaces, traffic impacts, and on forest and wildlife impacts.
  - (3) All applications for nongovernmental utilities before the Board shall be forwarded to the Historic Preservation Commission for review and comment. The Board shall consider comments from the Historic Preservation Commission and shall make findings regarding the project's impacts on any historic district, registered historic property, parks, designated heritage area, and other historic or cultural resource. When there is a finding of negative impact based upon evaluation of the above, the Board shall to the maximum extent practicable require mitigation. Required mitigation may include the construction of fences, barriers, mandatory setbacks, the surfacing of access drives, shielding of lighting, or the establishment of buffers, vegetative screening, or landscaping.

The Applicant intends to discuss with the Board of Appeals any impact mitigation measures the Board may require, and also intends to comply with such measures as may be required.

(I) When permitted in nonresidential zones, a nongovernmental utility shall have an appearance consistent with the surrounding neighborhood.

Given the proposed vegetative landscape screening buffer, the solar arrays will be minimally visible to surrounding properties, thus the proposed solar farm will have an appearance consistent with the surrounding neighborhood.

(J) All applications shall include information as to how the applicant has addressed the visual impact of the nongovernmental utility on neighboring county designated preservation areas, such as rural legacy areas, agricultural preservation areas, critical farms, Monocacy scenic river, Appalachian Trail, designated heritage areas, historic sites and sites eligible for designation.

The Applicant's initial review and investigation of prospective impacts on areas of significance has not resulted in findings of significant concern. There appear to be no neighboring county designated agricultural preservation areas, with the exception of one parcel (Map 0049, Parcel 0103 owned by Grossnickle Farms Inc) adjacent to the north of the subject property.

(K) Provide photographs of the existing conditions of the site and area.

Photographs are included with this Application in Exhibit A.

(L) Provide photo-documentation that a balloon test has taken place at the proposed site location (for substations only).

Not applicable, as the proposed project is not a substation.

### IV. OPERATION DETAILS

All applications for a Special Exception shall include a statement with details explaining how the proposed use is to be operated, along with the following required information:

### a. Days and hours of operation.

The proposed solar facility is an unmanned facility requiring minimal site access, primarily for the purposes of grounds maintenance and occasional equipment maintenance. Maintenance crews will be deployed during normal business hours for mowing and vegetative maintenance, which would be seasonally dependent. Quarterly maintenance of the solar array components are likely to occur, along with occasional maintenance site visits as needed, also to occur during normal business hours.

### b. Number of anticipated employees.

The proposed solar facility is an unmanned facility.

### c. Equipment involved.

Maintenance equipment will include mowers, weed-whackers, and weed-eaters.

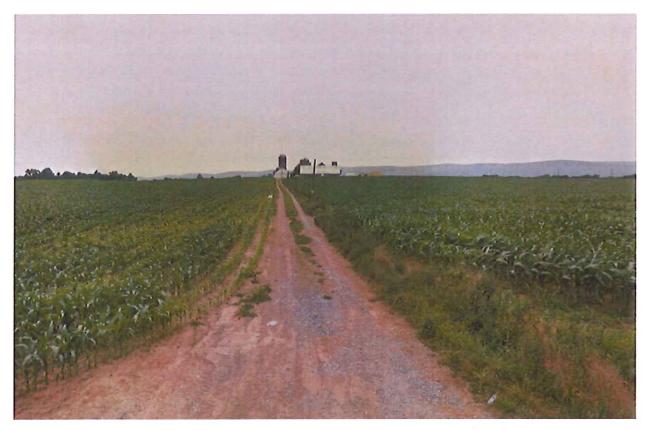
## d. Any special conditions or limitations which the Applicant proposes for adoption by the Board.

The Applicant does not propose any special conditions or limitations at this time.

### V. CONCLUSION

For the above reasons, along with supplemental oral testimony to be offered at the upcoming public hearing before the Board of Appeals, the Applicant submits that all of the applicable requirements of Sections 1-19-3.210 and 1-19-8.339 of the Zoning Ordinance have been satisfied, and requests that the Board of Appeals grant its request for a special exception to allow for he construction and operation of a solar farm by a nongovernmental utility on this property in the Agricultural zoning district.

**Exhibit A:** Photographs of the existing conditions of the site and area.

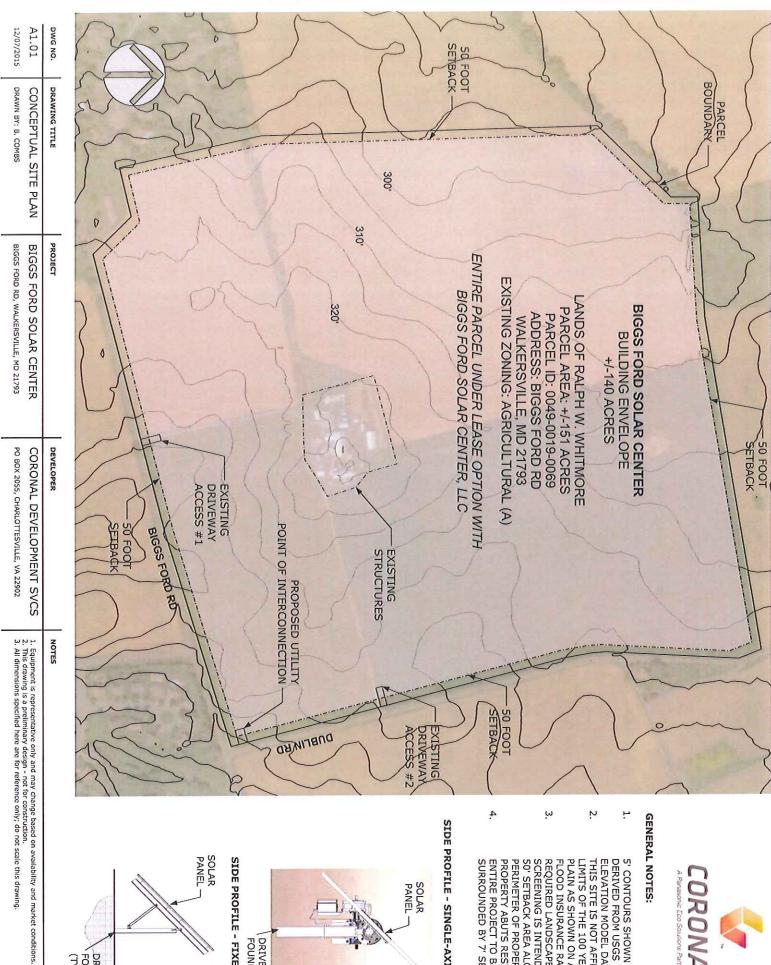




**Exhibit B:** Aerial view of general conditions within 1000' radius.





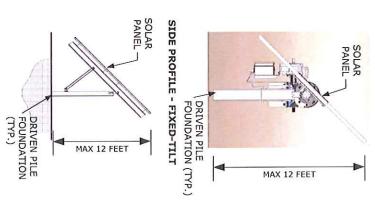


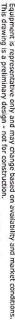


# **GENERAL NOTES:**

- PROPERTY ABUTS RESIDENTIAL USES REQUIRED LANDSCAPE BUFFER AND SCREENING IS INTENDED FOR THE FLOOD INSURANCE RATE MAP. THIS SITE IS NOT AFFECTED BY THE LIMITS OF THE 100 YEAR FLOOR PLAIN AS SHOWN ON APPLICABLE ELEVATION MODEL DATA. DERIVED FROM USGS DIGITAL 5' CONTOURS SHOWN WERE PERIMETER OF PROPERTY, WHERE 50' SETBACK AREA ALONG
- SIDE PROFILE SINGLE-AXIS TRACKER

ENTIRE PROJECT TO BE SURROUNDED BY 7' SECURITY FENCE.







### Solar Energy Facilities & Land Use

A Guide For Property Owners & Neighbors

Coronal Development Services, LLC 321 East Main Street, Suite 300 | Charlottesville, VA 22902 Tel: 434-293-7589 | Fax: 434-293-4749 | www.coronaldevelopment.com



### **About Solar Energy**



Solar energy is a clean, renewable, and reliable source of power. Solar energy is the most abundant energy resource on earth and is rapidly growing in popularity due to falling installation costs and improved efficiency. Utility-scale solar farms allow communities to harness the power of the sun most efficiently and economically.

### Who We Are

Coronal Development Services (CDS), formerly Heliosage, is a leading national developer of commercial and utility scale solar projects, with 70 megawatts operational and a development pipeline totaling more than 900 megawatts across 20 states. We believe in the environmental and economic benefits of solar power and seek to build projects that are harmonious with and beneficial to the local community. Our approach is characterized by honesty, professionalism, and a willingness to partner with local communities to achieve projects that benefit all involved.

### Noise

Solar panels produce no noise while in use. Electrical inverters, used to convert energy from direct current (DC) form to alternating current (AC) form, emit a low hum at about 65 decibels<sup>1</sup>, comparable to the sound of an air conditioning unit.<sup>23</sup> Inverters are inaudible outside of the project perimeter and do not run at night.

### Glare

Solar panels are designed to absorb and utilize sunlight, not reflect it. Most panels use special anti-reflective coating, suppressing reflection to approximately 2% of incoming

<sup>&</sup>lt;sup>1</sup> "Questions and Answers: Ground-Mounted Solar Photovoltaic Systems." Massachusetts Department of

<sup>&</sup>lt;sup>2</sup> "Solar Inverter Decibel Levels: Do Solar Farms Make Noise?" Solar Choice.

http://www.solarchoice.net.au/blog/solar-inverter-decibel-levels-do-solar-farms-make-noise/

<sup>&</sup>lt;sup>3</sup> Outdoor Noise and the Metropolitan Environment, M.C. Branch et al., Department of City Planning, City of Los Angeles



sunlight.<sup>4</sup> Solar arrays are less reflective than windows or still water and will not negatively impact air traffic or homeowners.<sup>5</sup> For example, solar farms are currently operating adjacent to the Denver International Airport and Nellis Airforce Base in Nevada.

### **Ambient Temperature**

When the sun's energy arrives at the Earth's surface it is either reflected or absorbed. The term "heat island" is sometimes used to describe the absorption of sunlight by city hardscapes (buildings, parking lots, etc.) that can result in an increased local temperature. Unlike roofs or roadways, solar panels are designed to absorb solar energy and convert it into electricity. Additionally, solar panels are mounted with space between the panel and the ground underneath, allowing airflow above and below the panels and thus eliminating any "heat island" effect.

### Runoff

Solar fields are generally considered a "permeable" surface, as they cause no additional runoff from the site. Panel racks are driven straight into the ground, with no concrete pads or other barriers to inhibit the flow of water into the ground. The ground underneath solar panels is seeded with native vegetation to control runoff and prevent erosion. Solar panels require occasional cleaning to optimize performance (example, twice per year), but CDS does not use chemicals that may seep into the ground water. While most CDS solar sites were previously used for agriculture and already have adequate drainage measures in place, storm water flow is taken into account during the design of solar arrays and improvements are made where necessary. This design and review process is always conducted in cooperation with local officials responsible for providing land use approvals and construction permits.

### Wetlands & Endangered Species

CDS seeks to avoid siting projects where the disturbance of delicate wetlands or the habitats of endangered species is a possibility. CDS sites are selected for potential development only after a preliminary environmental analysis has been conducted, including a review of federal, state, and local environmental databases. Additional,

<sup>&</sup>lt;sup>4</sup> "Questions and Answers: Ground-Mounted Solar Photovoltaic Systems." Massachusetts Department of Energy Resources.

<sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>7</sup> Ibid.



rigorous environmental screening takes place once CDS applies for site use and construction permits, ensuring that the appropriate remediation measures are in place prior to and during construction and operation.

### **Aesthetics & Property Values**

In addition to a pre-determined setback from adjacent roads and properties, CDS preserves existing vegetation on the property wherever possible to screen the array from view. CDS is open to working with affected homeowners to provide additional screening where necessary. Multiple independent studies have found no negative impact on home values as a result of proximity to a solar site. Based upon CDS's careful site selection process, in most cases solar energy generation is deemed the highest and best use of the land by those parties responsible for authorizing the project under review.

### Siting Solar

Not all properties can support a large solar array. Many factors contribute to the selection of property for solar, including size, topography, proximity to a utility substation, status of local electrical infrastructure, presence of wetlands and sensitive habitats, soil quality, and other characteristics. Solar energy facilities are typically considered a societally beneficial use of land, generating power for local communities in a responsible and sustainable manner. When a site has been selected for potential solar development, it is often unique to the local area and therefore site relocation can be difficult.

### **Local Economic Impact & Jobs**

Solar projects represent multi-million dollar investments in equipment, engineering, construction, and permitting, and trigger a positive economic impact locally. The construction of solar projects creates demand for skilled and unskilled labor on a temporary basis, much of which can be sourced locally. During the design phase, local environmental engineering consulting firms and their vendors are often hired to secure local approvals for construction to begin. During the construction period new economic activity benefits the community's ancillary sectors, such as temporary housing, food

<sup>&</sup>lt;sup>8</sup> "Questions and Answers: Ground-Mounted Solar Photovoltaic Systems." Massachusetts Department of Energy Resources.

<sup>&</sup>lt;sup>9</sup> "Solar Farm Frequently Asked Questions & Information Sheet." Rethink Energy UK. <a href="http://rethink-energy.co.uk/assets/solar-farm-faqs-1.pdf">http://rethink-energy.co.uk/assets/solar-farm-faqs-1.pdf</a>

<sup>10</sup> Kirkland Appraisals, Real Estate Appraisal Report, Commissioned June 2014



service, and entertainment. In addition to these benefits, solar projects generate previously unavailable tax revenue.

### **Price of Energy**

Solar projects do not raise the price of energy in a community. The energy sold from a solar facility to the local utility is often as cheap or cheaper than the same electricity otherwise generated and delivered from a conventional power plant. Solar facilities complement existing power plants and help replace the energy supply that is lost due to the retirement of conventional power plants in the area. Many utilities actively seek to purchase solar power or solar plants in order to diversify energy supply, reduce over reliance on single fuel sources, and enjoy the budgeting certainty that comes with a source of energy generation (sunlight) that is free, limitless, and clean.

## FREDERICK COUNTY BOARD OF APPEALS FREDERICK COUNTY, MARYLAND

### LIST OF ADJOINING AND CONFRONTING PROPERTY OWNERS

Case Number_	
Production State State Continued to the Con-	

Appellant: Biggs Ford Solar Center LLC

Proceedings under the Zoning Ordinance require that notice of public hearing be given.

It is the responsibility of applicants and petitioners to supply ACCURATE names and CORRECT addresses (must have house numbers or P.O. numbers, no route and box numbers, please) of all adjacent and confronting property owners on this form, as shown in current County Land Records.

Court decisions indicate that compliance with notice requirements is essential to jurisdictions of the approving body and therefore to validity of its decision.

### NAME

### **MAILING ADDRESS**

	*
Grossnickle Farms Inc	8816 Devilbiss Bridge Road, Walkersville, MD 21793
Helen Ramsburg	9201 Dublin Road, Walkersville, MD 21793
Cassandra & Richard Keilholtz	9201 Dublin Road, Walkersville, MD 21793
Carroll & Sara Zimmerman	8712 Biggs Ford Road, Walkersville, MD 21793
Andrew & Patricia Barr	206 Swallow Falls Court, Walkersville, MD 217983
Donald & Mary Friend	208 Swallow Falls Court, Walkersville, MD 217983
David & MaryAnn Carraghan	210 Swallow Falls Court, Walkersville, MD 217983
Stephen & Katheryn Shea	209 Swallow Falls Court, Walkersville, MD 217983
Fountain Rock Farm LLC	124 N Market St, Frederick, MD 21701
Sandra Waxter	8235 Biggs Ford Road, Walkersville, MD 21793
William & Barbara Crum	8141 Retreat Road, Walkersville, MD 21793
Judith Schanuel	8211 Reveille Court, Walkersville, MD 21793
Jack Stern	8212 Reveille Court, Walkersville, MD 21793
James & Nancy Main	8210 Reveille Court, Walkersville, MD 21793
Jeffrey & Jessica Hanson	8209 Buchanan Drive, Walkersville, MD 21793
Donald & Linda Friend	8210 Buchanan Drive, Walkersville, MD 21793