Public Hearing Notice

The Clarke County Board of Supervisors will conduct two public hearings in the Berryville Clarke County Government Center Main Meeting Room, 101 Chalmers Court, 2nd Floor, Berryville, VA, on Tuesday, March 19, 2024, at 6:30 pm, or as soon thereafter as the matter may be heard, to hear public comment on the following:

<u>PH2024-</u>04: Horus Virginia I LLC Special Use Permit & Site Development Plan (SUP22-01/SP22-02) Horus Virginia I LLC (applicant) – Bellringer Farm, LLC (owner) request approval of a special use permit and site development plan to construct a 50MW solar power plant on two lots per Section 5.2C of the Zoning Ordinance. The subject properties are identified by tax map numbers 13-A-13 and 13-A-56. They are located on the west side of Westwood Road (Rt 636) with access via proposed entrances on Bellringer Land and Triple J Road (Rt 632), consist of approximately 400 acres, are zoned Agricultural-Open Space-Conservation (AOC), and are within the Russell Election District. On February 2, 2024, the Planning Commission recommended conditional approval of the applications with draft conditions for the special use permit.

Information regarding the above matters is available to the public in the Clarke County Administration office and on the County website. Any person desiring to speak on the above matters should appear at the appointed time and place. Written copies of statements are requested but not required. Clarke County does not discriminate on the basis of handicapped status in admission to its programs and activities. Accommodations will be made for handicapped persons upon prior request.

Chris Boies – County Administrator

SPECIAL USE PERMIT & SITE DEVELOPMENT PLAN (SUP-22-01 / SP-22-02)

March 19, 2024 BOARD OF SUPERVISORS REGULAR MEETING - <u>Public Hearing</u> STAFF REPORT—Department of Planning

The purpose of this staff report is to provide information to the Board of Supervisors to assist them in reviewing this land use request. It may be useful to members of the general public interested in this request.

Case Summary

Applicant:

Horus Virginia I LLC (primary contact: Braden Houston, OPDE / managing director: Luis Polo Gomez)

Agents:

Integrity Federal Services (engineer: Ben Svedlow)

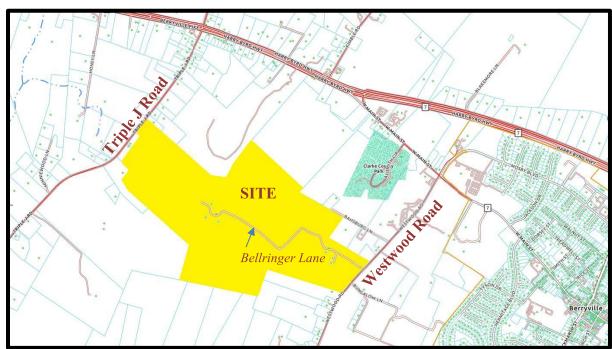
Thomas Moore Lawson of Counsel Williams Mullen (attorney: "Ty" Lawson)

Property Owner:

Bellringer Farm, LLC

Location:

The site is located on Tax Map #s 13-A-13 and 13-A-56, consisting of approximately 400 acres in the AOC (Agricultural-Open Space-Conservation) Zoning District. Existing access to these properties is via Westwood Road (Rt. 636). The proposed Solar Power Plant would include access off of Bellringer Lane (existing driveway) and an entrance off of Triple J Road (Route 632). Both of the subject properties are within the Russell Election District.

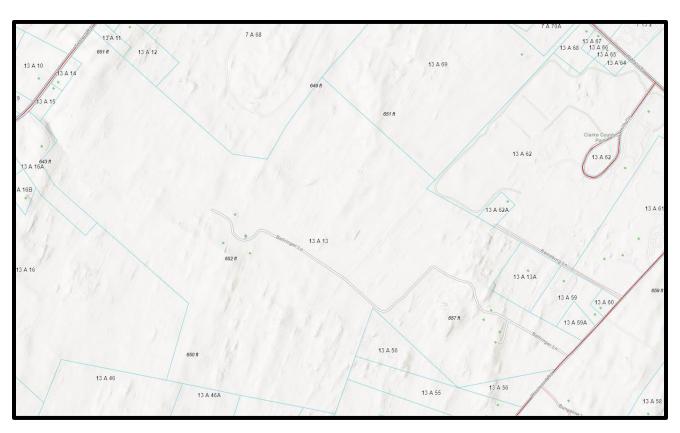


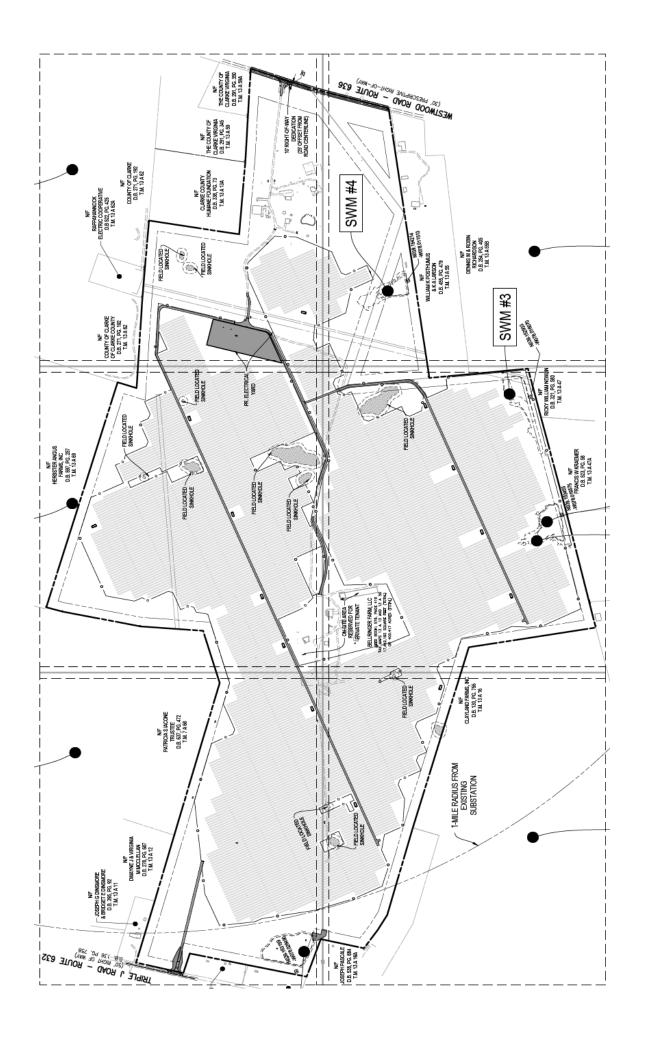
Request:

The Applicant has requested approval of a 50MW Solar Power Plant. Pursuant to Section 5.2C of the Clarke County Zoning Ordinance, Solar Power Plants require approval of a special use permit application. A site development plan application was submitted concurrently with the special use permit application as required by Section 6.3.1B-3a of the Clarke County Zoning Ordinance.

Illustrations & Site Photos:









(a) Picture from existing driveway (Bellringer Lane) about where the solar panels would begin on the property, (b) Picture of the soil in the soybean field in Spring, (c) View looking outward from the property to Triple J Road, (d) Picture of westernmost house existing on the property, (e) Picture of large powerlines that traverse the property.

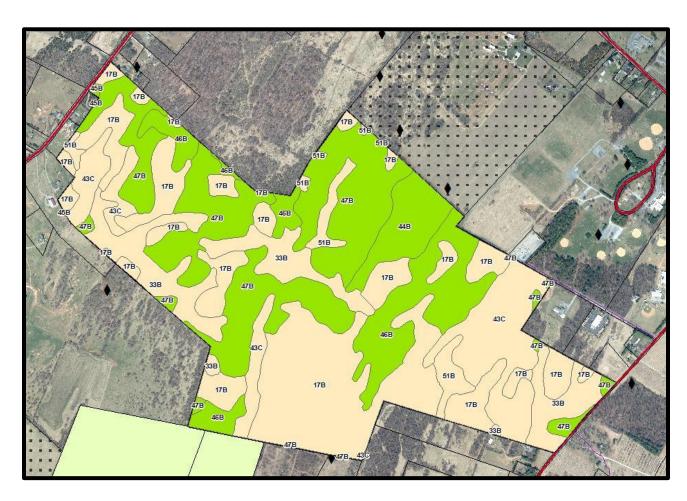
General Site Conditions:

There are multiple dwellings located on the property based on Clarke County real estate, and confirmed by the Applicant. The original DUR allocation given to the lot in 1980 was 12, plus 2 exemptions.

The property currently is not located within the Agricultural and Forestal District and is not located within a conservation easement. It is part of the land use program as it is in active farming use. This includes planted crops and pasture. As commented by the Commissioner of Revenue, rollback taxes would be required if the use is changed to a solar power plant.

The site mixes between gently rolling hills and flat terrain. No floodplains exist on the property. No springs are identified on the property. Several sinkholes are located on the property and identified on the site development plan/karst plan, which was previously reviewed by the County's Karst Consultant. No streams are on the property other than a small portion of an intermittent stream located close to Triple J Road outside of where the solar panels are proposed.

The soils on the property generally include patches of soils identified as prime farmland mixed-in with soils that are not prime farmland. A visual inspection of the property soils suggests they are heavily clayed soils for the most part. Below is a map that identifies the prime (green) and non-prime (tan) farmland soils types located on the property. The Clarke County LESA (Land Evaluation and Site Assessment) score was calculated to be 80.1. Just based on the soil types the land evaluation score calculated to be 76.53.



Application Documents:

The applicant submitted a complete application form, applicable review fees. The additional items listed below have also been submitted for review.

- Special Use Permit Application Narrative. A document of 428 pages submitted with the application. It consists of an executive summary, property information, solar facility use regulations, special use permit review factors, supplemental information, and the following appendix documents:
 - Karst Plan
 - o Phase 1 Environmental Study
 - o Wetland Study
 - o Rare Threatened Endangered Species Letter
 - o Cultural Resource Survey
 - Site Renderings
- Site Development Plan. A large sized document of 51 pages with details on the proposed site improvements, landscaping plan, erosion and sediment control measures, and stormwater management plan.
- Decommissioning Plan. This document was submitted by the Applicant as required by Virginia Code §15.2-2241.2
- Emergency Action Plan. This is a document submitted by the Applicant based on Staff comments that a plan is needed to ensure that procedures are in place to assess and repair solar panels if they become damaged by natural or other causes.
- Economic Benefits Agreement. This is a draft agreement with Clarke County clarifying the applicant's financial obligations for the project. The terms of this agreement are in the drafting stage and shall be finalized by the Board of Supervisors.
- Response letters. Numerous review comments and response letters from the applicant have been provided during the review process of this special use permit and site development plan application.

For the purpose of keeping the agenda packet to a reasonable size the attached site development plan has been reduced to the most relevant pages. In addition the large technical documents and other redundant documents are not included in this agenda packet but are available upon request.

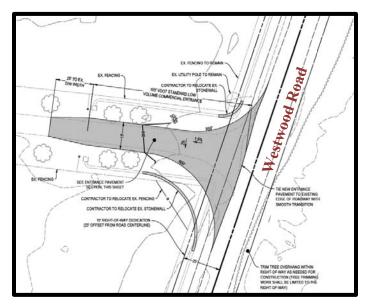
Proposed Improvements:

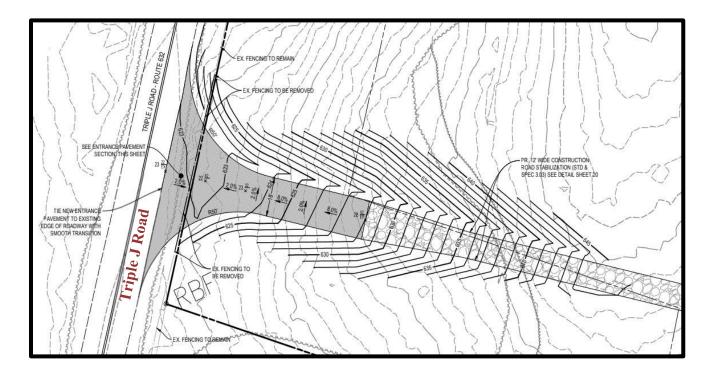
Page 11/51 of the Site Development Plan provides an overall view of the proposed site improvements associated with this application. A small illustration of this is shown above on page 3 of this report. The Applicant intends to use the same type of solar panels that they are utilizing on a solar farm that is under construction in Jefferson County, WV, just outside of the City of Charles Town, WV. Below are a couple pictures taken from this site during a visit of it by the Plans Review Committee of the Planning Commission. At the time of this site visit the project was in the early stages of development but already had some panels installed.





The site development plan for the proposed solar power plant in Clarke County depicts several stormwater basins, fencing around the facility, an electrical yard (recently relocated), landscaping, internal access drives, improvements to the entrance at Westwood Road (Route 636), and a new entrance off of Triple Road (Route 632). The entrance improvements are depicted in detail on pages 49 & 50 of the site development plan. A snapshot of these entrances are shown below and on the top of the following page.





Current Review Status:

The special use permit and site development plan applications have been reviewed by multiple review agencies at this time. The list below provides a list of the review agencies that have reviewed the application and that status of their comments. In brief overview, the applicant has been working with DEQ for over a year to address the stormwater management requirements. As noted further down in this report, the Planning Commission's recommendation was conditional on DEQ final approval being granted before approval of the site development plan. Following the Planning Commission's recommendation DEQ provided an approval letter on February 5, 2024. The County's engineering consulting firm, Hurt & Proffitt, recently reviewed the revised site development plan from the applicant and has issued a letter that is effectively a recommendation of conditional approval, subject to some minor technical issues being addressed. Their role is primarily to review the erosion & sediment control plan. The applicant has revised the site development plan to address the minor comments from Hurt & Proffitt, as documented in their letter dated January 19, 2024. VDOT has no objections with the proposed entrances. In a letter dated January 22, 2023, edited January 23, 2023, the applicant provided responses to Planning Staff's review comments that were previously discussed with the Planning Commission. Updates to these comments are discussed in greater detail later in this report.

• Planning Department.

[See the section below with the header Staff Review Comments for the most recent review comments associated with this special use permit and site development plan. Previous review comments and documentation has been provided in prior reports to the Planning Commission and is available upon request]

• *Hurt & Proffitt.* (engineering consultant – erosion and sediment plan review)
Hurt & Proffitt has recommended approval of the erosion and sediment control plan. In their letter they requested some minor edits which the applicant addressed the following day. [see attached letter dated January 18, 2024 and response letter dated January 19, 2024]

Commissioner of Revenue.

The Commissioner of Revenue reviewed the application and commented that rollback taxes will become due and the property will not qualify for the land use program if developed for a Solar Power Plant. [review letter dated August 8, 2022]

• Sherriff's Office.

The Chief Deputy of the Sheriff's Office review the application and provided the following three comments. [review letter dated August 8, 2022]

- 1. If approved, require a Knox box for emergency services to enter the property if needed.
- 2. This may be more of a VDOT issue. I would suggest that the construction entrance for this project be located off of Westwood Road, not Triple J Road. The area of the property that connects with Triple J Road is residential and a heavily traveled commuter road. Also concerned about sight distance on Triple J Road. Westwood Road is less traveled and the entrance to Bellringer Lane is a short distance from Business 7. In that travel distance, only one house is affected. May also want to consider a time restriction on deliveries on school days so as not to delay school buses and parents picking up / dropping off kids. The afternoon pickup is far busier than the morning drop-off.
- 3. I would try to avoid having any construction vehicles access the portion of the property on Ramsburg Lane. This is a private lane, owned by the County and Rappahannock Electric. I am not sure if the pavement just placed down for the animal shelter is thick enough to handle heavy equipment.

• Virginia Department of Health (VDH).

VDH reviewed the application and had no issues with it since it does not proposed any use that requires water or sewer facilities, nor does it change existing on-site water and sewer facilities of the existing homes. They did request that the plan identify the existing drainfields which the applicant added in a later revision. [review letter dated August 8, 2022]

• Virginia Department of Transportation (VDOT).

VDOT has provided several review comments since the original application was submitted. The most recent communication they provided was that the changes of the plan meet their requirements. [review letter dated August 2, 2023]

• Economic Development.

No comments

• Emergency Services.

No comments

• Building Department.

No comments

• Rappahannock Electric Coop.

No comments

• Virginia Department of Environmental Quality (DEQ).

DEQ recently completed a re-review of the stormwater plan and issued approval on February 5, 2024, after the final public hearing held by the Planning Commission.

Solar Power Plant Regulations:

Section 5.2C of the Clarke County Zoning Ordinance includes the regulations for Solar Power Plants. Solar Power Plants are allowed in the AOC District with approval of a special use permit if thes regulations are complied with. The regulations include a number of specific design requirements and special review factors, including the recently adopted text amendment that limits solar power plants to properties adjacent to the two existing substations in Clarke County.

- 1. <u>Location</u>. If such plant is not part of a "behind-the-meter" solar program, then such plant shall be adjacent to and all facilities located within one mile of the electrical substation located at 234 Double Tollgate Road (Tax Map #27A-4-D) or the electrical substation located at 362 Ramsburg Lane (13-A-62A). For the purposes of this regulation, "behind-the-meter" solar includes onsite consumption of electricity generated by solar panels and the incidental resale of excess electricity through a net metering program.
- Minimum Lot Size. No such plant shall be erected on any lot less than twenty acres in size.
- Setbacks. All above ground facilities associated with such plant (excluding perimeter security fencing) shall be considered a structure for the purposes of determining required setbacks.
- 4. <u>Safety/Access.</u> A security fence (height and material to be established through the special use permit process) shall be placed around the perimeter of the solar power plant and electrical equipment shall be locked. Knox boxes and keys shall be provided at locked entrances for emergency personnel access. Warning signage shall be placed on electrical equipment and plant entrances.
- Noise. No such plant shall exceed sixty-five dBA as measured at the property line or fifty dBA as measured at the nearest neighboring inhabitable building.
- <u>Landscaping</u>. Such a power plant shall be considered a commercial use for the purposes
 of determining landscaping requirements.
- 7. Local, State, and Federal Permits. Such a plant shall be required to obtain all necessary permits from the U.S. Government, Commonwealth of Virginia, and Clarke County, and comply with standards of the major code and safety organizations that apply to generation projects (the National Fire Protection Association (NFPA), Underwriters Laboratories (UL), and Institute of Electrical and Electronics Engineers (IEEE)).
- Electrical Interconnections. All electrical interconnection or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements. Use of above ground transmission lines shall be minimized.
- Additional Special Use Factors. The following additional factors shall be addressed in the Special Use Permit application for such plant:
 - a. <u>Project description and rationale</u>. Identify the type, size, rated power output, performance, safety and noise characteristics of the system, including the name and address of the manufacturer, model. Identify time frame, project life, development phases, likely markets for the generated energy, and possible future expansions.

- b. <u>Economic analysis</u>. Provide economic cost/benefit analysis describing generated property taxes, sales taxes, other taxes, construction dollars spent locally, estimated construction jobs and construction payroll, estimated permanent jobs and continuing payroll, and costs associated with impact on roads and other county infrastructure in the area.
- c. <u>Visual impacts</u>, appearance and scenic view sheds. Provide visual simulations providing vantage points considering a three hundred sixty degree view of the project site.
- d. Wildlife habitat areas and migration patterns. Address potential impact on wildlife especially endangered or threatened species, on the site and in a biologically significant area surrounding the site.
- e. <u>Environmental analysis</u>. Identify impact analysis on historic, cultural and archaeological resources, soil erosion, flora in the project area, water quality and water supply in the area, dust from project activities, and cumulative impacts of other adjacent power plant projects.
- Waste. Identify solid waste or hazardous waste generated by the project and methods of disposal.
- <u>Lighting</u>. Provide lighting plan showing impacts on adjacent properties.
- h. <u>Transportation plan</u>. Provide access plan during construction and operation phases. Show proposed project service road ingress and egress access onto primary and secondary routes, layout of the plant service road system and degree of upgrade plan to new and existing roads, anticipated volume and route for traffic, including oversized and heavy equipment needed for construction, maintenance and repairs, methodology of repairs and maintenance of roads and bridges used for the project, and related public pedestrian and vehicular access and associated fencing.
- Public safety. Identify emergency and normal shutdown procedures. Identify
 potential hazards to adjacent properties, public roadways, communities, aviation,
 etc., that may be created and address response to such hazards.
- Noise limitations. Identify noise levels at the property line of the project boundary.
- Telecommunications interference. Identify electromagnetic fields and communications interference generated by the project.
- <u>Life of the project and final reclamation</u>. Describe the decommissioning and final
 land reclamation plan after anticipated useful life or abandonment or termination
 of the project, including evidence of an agreement with the property owner that
 ensures proper final removal of power generating equipment.

Special Use Permit Review Criteria:

Section 6.3.1C-2 of the Clarke County Zoning Ordinance specifies review criteria for the Planning Commission and Board of Supervisors to consider when reviewing special use permit applications. These review criteria are listed below with comments from Staff.

a. Consistency with the Clarke County Comprehensive Plan and any applicable implementing component plans.

In 2010 the Board of Supervisors adopted regulations to allow "Solar Power Plants" as a special use in the AOC District. These regulations were retained in later updates to the Zoning Ordinance, including the comprehensive re-write of the Zoning Ordinance that was adopted in 2021.

The following goals of the Comprehensive Plan were referenced in support of the original text amendment, as adopted in 2010. These goals were retained in the 2022 update of the Comprehensive Plan, although the wording of Goal 4 included a minor wording change, modifying "...to the greatest extent possible" to "whenever possible" when describing the utilization of renewable energy.

- Goal 3 "Encourage and maintain a diverse and viable local economy compatible with the County's size and character." (page II-1)
- Goal 4 "Exercise stewardship over resources so as to reduce the consumption of nonrenewable resources, utilizing renewable energy whenever possible; and foster within the private sector of the County a culture of resource conservation." (page II-1)

The Board's original resolution also stated that "with appropriate zoning regulation, Large Photovoltaic Solar Power Plants can be allowed in a manner that protects the agricultural character of the County and that protects the health, safety, and welfare of the general citizenry of the County as well as the residents adjacent to the site of such a power plant."

- Objective 7 Resource Conservation and Sustainability
 Encourage sustainable development by promoting renewable energy and resources, energy conservation, and preservation of natural resources within the context of the County's land use philosophy. Ensure that the needs of the present generation are met without compromising the ability of future generations to meet their own needs. (page II-13)
 - **Policy 2** Encourage the use of active and passive renewable energy systems. Develop policies that address potential impact of such systems on scenic viewsheds, agricultural and natural resources, and historic resources (e.g., windmills and solar panels). (page II-13)

The County's Agricultural Land Plan is also relevant in context with the subject application. Additional information has been requested from the Applicant to evaluate how the proposed Solar Power Plant will impact the soils on the property. The information requested includes more details on the type and maintenance of the proposed solar panels to provide assurance that they will not present a risk of heavy metal contamination into the soils or groundwater. More information on the construction process is also forthcoming to evaluate potential risks of erosion.

A condition is recommended by Staff to ensure that the type of panels used are crystalline types that have minimal environmental risk. This is consistent with the type of panels proposed for the other solar power plant project in Clarke County.

A condition is recommended by Staff after discussion with the applicant that will include additional procedures that the applicant will follow during the construction process to reduce the risk of erosion and runoff. This includes preservation of additional wooded areas, phasing of the project in two phases, and construction of the stormwater management facilities up-front.

Other conditions to help ensure the environment is protected include karst monitoring, stormwater management facility monitoring, general maintenance obligations, and a pre-construction meeting with Planning Dept. Staff.

b. Will not have an undue adverse impact on the short-term and long-term fiscal resources of the County for education, water, sewage, fire, police, rescue, solid waste disposal or other services, and will be compatible with the capital improvement goals and objectives of the Comprehensive Plan, to the end that growth of the community will be consonant with the efficient and economic use of public funds.

The proposed facility will not require public water or public sewer and will have no onsite private water or sewer facilities. There will be no impact to the school system and minimal if any impact on solid waste disposal after construction is complete. As such, there will be no impact to the County's capital improvement goals and objectives.

Similar to the other Solar Power Plant in Clarke County a condition is recommended to ensure that the applicant is committed to providing an emergency planning manual to be developed in coordination with County fire and emergency services staff along with incident training.

c. Will not cause an undue adverse impact that would reduce the conservation value of adjacent or nearby agricultural or forestal land or would impede the operations of an active agricultural or forestal operation.

Staff does not identify an issue associated with this request that would impact conservation values of adjacent or nearby agricultural or forestall land.

d. Compliance with Virginia Department of Transportation (VDOT) regulations and recommendations of VDOT deemed necessary for safe and efficient movement of traffic.

VDOT reviewed this application and reported no issues or additional requirements.

e. No destruction of or encroachment upon historic or archeological sites, particularly properties under historic easement.

A Phase 1 ESA and Cultural Resource Reconnaissance Survey were submitted with the application. It concludes that there is no evidence of recognized environmental conditions in connection with the property.

The Applicant states in their narrative that the project will not encroach on any historic or archaeological sites. A Cultural Resource Assessment of the property was provided by the Applicant. It identifies that the eastern portion of the property towards Westwood Road is within the study area of the Battle of Berryville area, a potential candidate for a historic district. The report does assess the potential of finding archeological findings if a physical search was conducted and includes a map

of the property showing areas of interest. It concludes that the majority of the site has a low chance to discover archeological findings. It does identify small areas where the chance is higher. This includes areas immediately around old farmsteads and a low landform area on the far western end of the property.

Per review comments received from the County's Historical Consultant, a special use permit condition is recommended that a metal detector survey be completed by the applicant prior to starting construction or land disturbance. This would be only within the eastern portion of the property that is identified within the Battle of Berryville area. The Applicant has indicated to Staff that they have no objections to completing this.

- f. Will not cause an undue adverse impact on the following important resources located on the subject property or surrounding properties:
 - Surface or groundwater resources including but not limited to mitigation of pollution of such resources.
 - Natural areas such as unique geological features, rare plant habitats, or wildlife nesting areas.
 - Areas designated for conservation, recreation, or natural preservation including but not limited to properties under permanent conservation easement, State-designated scenic byways, scenic rivers, Blandy Experimental Farm, and the Appalachian National Scenic Trail corridor.

The Applicant's Karst plan has been reviewed and approved by the County's consultant and demonstrates no hazards to adjacent groundwater supplies. Ongoing monitoring of the site is recommended by Staff and will be factored into the recommended SUP conditions.

g. Will not cause undue noise, light or glare, dust, odor, fumes, or vibration.

The applicant notes in their narrative that the project would result in a reduction of noise, dust, odor, fumes and vibrations and that lighting will be minimal and shielded. A condition that limits the time of construction activities is recommended by Staff to reduce impacts such as noise during the construction process. Blasting has been strongly discouraged by Staff. The applicant indicates that blasting may be needed for the stormwater basin near Triple J Road, identified as SWM basin #1. Staff has recommended a condition that blasting shall be restricted on the property except for this area and that a blasting permit shall be obtained for that area.

Based on a conversation with the applicant's agent on Sept. 27th it was explained that a major part of the reason for relocating the electrical yard is to avoid areas with more rock outcroppings that may require blasting.

h. Availability of sufficient water for foreseeable needs.

Regular usage of water is not proposed or required for the facility.

i. No unreasonable depletion of or other undue adverse effect on the water source(s) serving existing development(s) in adjacent areas.

Regular usage of water is not proposed or required for the facility.

j. Effective screening and buffering is provided, or the proposed development will be situated away from adjacent properties, in a manner to avoid causing detrimental visual impacts.

Screening is proposed by the Applicant and provided around the perimeter of the property. It consists of the preservation of existing trees and planting of new trees where existing trees are inadequate. The previous comments provided have not been addressed by the Applicant concerning recommended improvements to the landscaping plan. Conditions regarding landscaping have been recommended. In addition to the normal requirements this includes that additional areas of trees outside of the solar power plant facility areas be protected.

Planning Department Review Comments:

Unresolved review comments from Planning Department Staff were previously documented in the review letter dated July 12, 2023, as well as an email dated January 23, 2023, and after the site visit in West Virginia, in an email dated August 16, 2023. These were identified in previous staff reports to the Planning Commission. The comments listed below include the preliminary review comments from the previous staff reports and has been updated to reflect updates since that time. At this time the only unresolved review comments appear to be that DEQ has not yet approved the stormwater plan and the Economic Benefits Agreement has not been finalized. The applicant's recent response letters are attached to this staff report for information purposes.

- 1) **Erosion from Construction Process.** Information to demonstrate that the site construction in Clarke County will not be similar to the vast acreage of bare soil excavated at the site in West Virginia. This was expressed as a concern after the site visit to West Virginia, of which a couple pictures are provided above. The concern is in regards to erosion; not only management, but concern that the bare earth will remove existing topsoil that would reduce the viability of using it for farming in the future after the site is decommissioned.
 - <u>Update</u>: Condition #17 was added which includes additional requirements to help ensure that erosion during the construction process is better managed.
- 2) **Blasting.** The applicant has indicating that they are in the process of evaluating if blasting will be proposed. Staff has recommended that this be avoided and potentially restricted in the SUP conditions. Blasting could potentially impact adjacent properties and structures.
 - <u>Update</u>: Condition #7 is recommended to restrict blasting on the property except for the area the Applicant indicates where blasting can not be avoided. This is the stormwater management basin located near Triple J Road, identified as SWM basin #1 on the site development plan.
- Noise. Noise created during the construction process is a significant concern that will need to be evaluated further during the review process with the applicant. Limitations can be added to the special use permit conditions to mitigate these potential impacts.
 - <u>Update</u>: Condition #9 is added that will restrict construction activities so they are limited to 7AM 7PM. It also restricts construction activities during federal holidays and on Sundays to further lessen noise impacts that may be associated with the construction process.

4) **Decommissioning Plan.** A large number of comments/concerns are noted in Staff's July 12th review letter regarding the decommissioning plan. It is expected that these issues need to be resolved before approval is granted.

<u>Update</u>: Condition #5 includes reference to the required decommissioning plan as reviewed by Staff and the County Attorney. Similar to the other solar power plant project in Clarke County a development surety is required to be held by Clarke County to ensure that funds will be available to decommission the site if it is abandoned by the applicant or future permit holder. The language of the decommissioning plan is nearly identical to that used with the Hecate Solar Project with only minor differences, such as the security amount is higher proportional to the larger scale of this project and the criteria for determining what constitutes abandonment of the project by the applicant has been slightly modified to reflect certain things that may arise that are outside of control by the applicant. These were determined to be very minor changes by the County Attorney.

Landscaping Plan. The landscaping plan in the northeastern portion of the property needs improvement after a stormwater basin was added to meet DEQ requirements. Staff has concern that the area of trees to be removed is not realistic given the grading shown. There also appears to be more opportunity to add trees to buffer this area after the construction is completed of the stormwater basin.

<u>Update</u>: Condition #13 includes a recommended condition regarding landscaping, including the code required maintenance bond requirements. The applicant appears to have adequately address previous review comments regarding the landscaping plan.

6) **Emergency Action Plan.** Staff commented that the applicant should provide a plan that ensures procedures will be taken to repair damaged panels if an event occurs that causes damage to them, such as but not limited to a hurricane. Research suggests that if panels are damaged and not repaired they may present a risk of heavy metals leaching in to the ground and groundwater. The applicant submitted an emergency action plan but it does not address the stated concern. Instead, it is related to employee safety practices.

<u>Update</u>: Condition #4 is recommended that is the same general maintenance obligational requirements placed on the Hecate solar project except that the emergency action plan was added to it which includes details that obligate the applicant to be responsible for assessing and repairing damage that may occur during emergency situations (earthquake, tornado, etc.). The applicant's submitted emergency action plan is included as an exhibit to the recommended conditions along with the economic benefits agreement (draft) and decommissioning plan.

7) **Siting Agreement or Economic Benefits Agreement.** Virginia Code § 15.2-2316.7 requires that applicants of solar projects negotiate a siting agreement with the locality. This agreement may include terms that mitigate impacts of the solar project, provide financial compensation to the host locality to address capital needs, or offer assistance in the development of broadband. The Clarke County solar power regulations also require that the applicant submit an economic analysis that includes the evaluation of tax revenue, among other factors as described under Section 5.2C of the Clarke County Zoning Ordinance.

<u>Update</u>: Recommended condition #14 includes reference to the payment agreement offered by the Applicant to the County. The applicant is currently looking at making revisions to this document as requested by County Staff to clarify/require that machinery and tools tax is required in addition to the fee amounts specified.

8) **Erosion and Sediment Control Plan.** Hurt & Proffitt is currently reviewing the revised erosion and sediment control plan that they previously recommended approval of. The rereview was necessary due to the entrance off of Triple J Road that was recently added.

<u>Update</u>: The County's erosion and sediment control consultant recently reviewed and issued a recommendation of approval of the erosion and sediment control plan. Their letter notes a few minor issues which the applicant addressed on January 19, 2024.

9) **Lot merger.** Tax Map 13-A-56 is required to be merged or adjusted out of the solar power plant due to its size of less than 20 acres. This is a requirement of Section 5.2C of the Clarke County Zoning Ordinance that prohibits lots of less than 20 acres of being part of a solar power plant. The applicant has been notified of this on multiple occasions and review letters.

<u>Update</u>: Condition #18 specifies that a boundary line adjustment or lot merger is required to exclude tax map #13-A-56 from the solar power plant project. This would be required prior to the beginning of construction or land disturbance. This recommended condition is to ensure that the minimum lot size regulations of the Clarke County Zoning Ordinance as they relate to solar power plants are complied with.

10) **Electrical Yard.** Information has been requested to demonstrate that the proposed electrical yard will not be used as a substation. A substation requires a separate special use permit that has not been applied for.

<u>Update</u>: The applicant has clarified in their responses that the electrical yard shall not be used as a substation.

11) **Details of the Panels** – **Heavy Metals.** Technical details of the panels have been requested along with information that supports that they present a minimal risk of heavy metal contamination. Research indicates that certain types of solar panel should be avoided to prevent heavy metal leaching into the soil. The site development plan should clearly indicate that the proposed panels are the safest type available and provide the specifications.

<u>Update</u>: The applicant has submitted general details of the type of solar panels they are proposing to use which is incorporated into the recommended condition #19. These are the same type used by Hecate. While the exact manufacturer details have not been selected yet the applicant would be obligated to use either monocrystalline or polycrystalline types of solar panels. Other types of panels, such as "Thin Film" panels that utilize potentially more harmful metals and have been noted to catch fire are prohibited. Condition #20 was added partly to verify the type of panels during a required pre-construction meeting with the contractor.

12) **Sinkhole buffer - Certification**. Engineering certification is required where the smaller buffer area of 25 feet is proposed from sinkholes (versus 100 feet).

<u>Update</u>: The applicant has added acceptable engineering language to the site development plan that is required by County regulations regarding the reduced buffer distance of 25 feet in certain locations.

13) **Errors**. Some editorial errors and incorrect or missing information has been commented on. These are minor in scope but should be corrected on the future revised site development plan.

<u>Update</u>: Previously identified errors have been corrected by the Applicant in the recent submittal.

14) **Triple J Road Access.** Staff supports the Sheriff Office's comments regarding the appropriateness to limit access off of Triple J Road. Initially no access was proposed off of Triple J. Road. However, the applicant has recently revised the plans to include an entrance there. The stated purpose of this entrance is to allow larger trucks to enter the site to stock the staging area during construction activities. Improvements are also proposed at the entrance of Westwood Road that will accommodate large trucks entering the site from that location.

<u>Update</u>: The applicant has proposed the entrance off of Triple J Road despite the general recommendation that it be excluded if possible by the Sheriff's Office. The site development plan was revised to include a gate at the entrance as previously discussed with Planning Commissioners. Condition #22 is recommended to reference the addition of the gate and specify that it is required to be gated during the operation of the solar power plant. The applicant indicated that they will likely have it gated during construction also for added security reasons.

Recommended Special Use Permit Conditions:

Below is a draft of the special use permit conditions that were recommended by the Planning Commission during their meeting on February 2, 2024.

SPECIAL USE PERMIT (SUP-22-01)

An application submitted by: Horus Virginia I LLC

- 1. Special Use Permit purpose; nontransferable. This Special Use Permit is issued for the operation of a "solar power plant" solely for the Applicant, Horus Virginia I LLC, on the subject property, as presently identified by tax map #s 13-A-13 and 13-A-56. The Special Use Permit shall not be transferable to any other person or entity without prior approval of the Board of Supervisors as an amendment to the approved Special Use Permit conditions, such approval not to be unreasonably withheld. Development pursuant to this Special Use Permit shall comply with the approved site development plan (SP-22-02) titled "Beckett 50MW Solar Project." Substantial deviations to the approved site development plan shall require submission of a special use permit amendment (SUP-A) and site development plan amendment (SPA) as required under Sections 6.3.2 and 6.2.3 of the Clarke County Zoning Ordinance, respectively.
- 2. Applicant and Property Owner ("Owner") to sign list of adopted permit conditions; provision of revised site development plan. The Applicant and the Owner, or authorized representative, shall sign the list of adopted conditions to indicate receipt of the conditions and the intention to comply fully with the conditions for the life of the special use permit. A signed copy of the conditions shall be provided to Planning Department Staff ("Staff") within thirty (30) days of the Applicant's and Owner's receipt of the adopted conditions. Copies of the final site development plan shall be provided to Staff for final signature within thirty (30) days of the date of the Board of Supervisors' approval of this Special Use Permit.

- 3. Access for inspections required. Staff and other County officials shall have access to the property with 24 hour notice to the Applicant in order to conduct periodic compliance inspections of the facility and the subject property throughout the life of the permit.
- **4. Ongoing maintenance of site features.** The following site features as depicted on the approved site development plan (SP-22-02) shall be properly maintained throughout the life of the permit:
 - Vegetated property buffer including existing trees and shrubs and supplemental plantings as depicted on the approved landscaping plan per Zoning Ordinance requirements.
 - Fences and gates.
 - Outdoor lighting fixtures to ensure compliance with Zoning Ordinance requirements.
 - Warning signage.
 - Knox box for fire, emergency services, and law enforcement access.
 - Stormwater management facilities to ensure adequate drainage.
 - Solar panels and/or other ancillary facilities of the solar power plant. In addition to regular ongoing maintenance, when such solar panels and/or other ancillary facilities are damaged as the result of a fire, extreme weather, geological event or other emergency condition the Applicant shall comply with the Emergency Action Plan (Exhibit A).
- Power Plant at the end of its lifespan, or when the solar power plant is not generating electricity for a period of twelve (12) consecutive months, unless the cause of the failure to generate electricity is (i) a repair, restoration or improvement to an integral part of the solar power plant that affects the generation of electricity and that repair, restoration or improvement is being diligently pursued by the Owner; (ii) temporary inability of the electrical transmission system to accept electrical power generated by the Facility; or (iii) an event of Force Majeure (each, a "Triggering Event"), as further detailed in the decommissioning plan. The decommissioning shall include the removal and proper disposal of all solar energy equipment, facilities, or devices from the property for the reasonable restoration of the property upon which the equipment, facilities, or devices were located. In this regard, the Applicant agrees to follow and comply with the attached Decommissioning Plan, herein referred to as **Exhibit B**.

Prior to, and contingent upon, the issuance of a building permit by the County, the Applicant shall provide financial assurance to the County in an amount sufficient for the County to perform decommissioning in the event that the Applicant fails to do so. Such financial assurance shall be held by the County for the life of the project and through the decommissioning process. The financial assurance shall be in a form acceptable to the County and in accordance with Va. Code §15.2-2241.2. The financial assurance shall be provided in a dollar amount equal to the estimated cost to decommission the site on the property, plus an additional 25% for administrative costs that may be associated with the decommissioning of the Solar Power Plant on the property. Every five (5) years this estimate shall be reevaluated by the Applicant and County to determine if any adjustments are needed to account for inflation or other factors that impact the estimated cost to decommission the site on the property. If adjustments are found to be needed, the Applicant shall adjust the financial assurance to match the new estimate. Projected salvage value shall not be applied as a credit against the estimated cost to decommission the site for the purpose of determining the amount of financial assurance required.

- **6. Removal of debris.** All trash and debris left over from the construction process, or other activities, shall be removed from the property and disposed of at an approved waste management facility prior to issuance of a certificate of occupancy. No trash, debris, or construction materials shall be buried or burned on site.
- **7. Blasting.** Blasting shall be prohibited except for the construction of the stormwater management basin identified as SWM Basin #1 on the site development plan. Prior to blasting the Applicant shall be responsible for obtaining a blasting permit pursuant to the requirements of Chapter 86 of the Clarke County Code.
- 8. Fire & EMS. The Applicant shall work proactively with the Chief of Fire & Emergency Services to develop and implement an agreed-upon set of procedures, protocols and training for managing the response to fire or other emergencies that may occur at the solar power plant. This shall include the development of a Fire & Emergency Services Manual for Clarke County that shall be completed by the Applicant and accepted by the Director of Fire & Emergency Services or Staff prior to the operation of the solar power plant for the production of electricity and prior to the issuance of a certificate of occupancy. At a minimum, the manual shall address the following factors:
 - Identification of the roles that each responsible party shall have during the event of a fire or other emergency at the site, including clear statements about how decisions will be made during emergency responses.
 - Identification of key points of contact during emergency situations and protocols for communication with them during such emergency events.
 - Conditions to allow for the special training of fire and emergency services personnel including a tour of the site to provide awareness of the site and equipment that is present as well as points of ingress/egress.
 - Designated shutoff procedures and locations for equipment shutoff.
 - Maps outlining the location of key equipment, such as, but not limited to the following:
 - o Location of lock box
 - o Inverters
 - o Transformers
 - o System/electrical cut-off switches
 - o Points of ingress/egress at the facility
 - o Cleared access around the site
- **Noise.** The use of the property for a solar power plant shall comply with Chapter 120 of the Clarke County Code related to noise. In addition, the following conditions shall apply:
 - **Construction noise.** All construction activities shall be limited to 7:00AM to 7:00PM in order to limit noise impacts on adjacent and nearby properties. Furthermore, construction activities shall be ceased on Sundays and during days that are recognized as holidays by the federal government.
 - **Facility equipment.** Prior to issuance of a building permit, the Applicant shall provide technical documentation for all facility equipment that may generate noise to verify that the manufacturer's noise specifications do not exceed Zoning Ordinance requirements.
- **10. Entrance requirements.** The following conditions shall apply to the property entrances.

- **VDOT compliance.** The Applicant shall comply with all VDOT requirements for use of the property entrances throughout the operation of the solar power plant.
- **Potential damage to adjoining properties.** In the event that there is damage to adjoining properties as a result of ingress/egress of construction vehicles, the Applicant shall remedy all damage in full prior to issuance of a certificate of occupancy.
- **Triple J road entrance.** The entrance off of Triple J Road shall be gated prior to operation of the solar power plant.
- Additional parking and storage setback from public roads. The parking of vehicles, equipment or storage shall be prohibited within 1000 feet of Westwood Road, or 500 feet from Triple J. Road, except as necessary to construct, repair or maintain the improvements within or adjacent to these areas.
- 11. State and Federal permits. The Applicant shall provide copies of all applicable State and Federal permits to Staff prior to issuance of a building permit.
- **12. Karst monitoring.** Ongoing inspections for Karst activity shall be conducted by the Applicant according to the following schedule and requirements:
 - <u>Initial Inspection Period</u>. Site inspections shall be performed annually by the Applicant's engineer beginning one year from the completion of the solar power plant. This Initial Inspection Period shall continue until five years from the date of completion of the solar power plant.
 - <u>Ten-Year Inspection Period</u>. If no solution activity is identified during the Initial Inspection Period, then inspections shall be conducted once every two years for the next ten years.
 - <u>Ongoing Inspection Period</u>. If no solution activity is identified during the Ten-Year inspection Period, then inspections shall be conducted once every five years for the remaining life of the project.
 - Inspection dates shall coincide with the date of issuance of a certificate of occupancy allowing the facility or Phases of the facility to begin producing electric power.
 - Written reports for each inspection shall be provided to the County Planning Department according to this schedule. Staff reserves the right to have the reports reviewed by the County's Karst engineer. The Applicant shall be responsible for reimbursing the County for the reasonable cost of engineering review of the report(s).
 - The County reserves the right to request intermittent inspections as deemed necessary or if suspected solution activity is reported.
 - In the event that an inspection reveals an issue that in the opinion of the County's Karst engineer requires specific remediation activities, the Applicant shall be responsible for completing such activities within a timeframe deemed acceptable buy the Zoning Administrator and the County's Karst engineer.

13. Landscaping.

• Compliance with Site Development Plan. Prior to issuance of a certificate of occupancy or operation of the solar power plant, the applicant is responsible to comply with Section 7.2.4B-3 of the Clarke County Zoning Ordinance. This includes having a professional landscape architect, or certain other designated landscaping professionals, to inspect and certify in writing that all plantings are planted in compliance with the approved site development plan. This certification shall be

- provided to the Department of Planning before issuance of a certificate of occupancy or operation of the solar power plant.
- **Maintenance Guarantee.** The Applicant shall provide a maintenance guarantee and shall comply with all provisions of Section 8.2 of the Clarke County Zoning Ordinance. Such maintenance guarantee is required prior to issuance of a certificate of occupancy or operation of the solar power plant.
- Minor deviations from approved landscaping plan. In the event that the Applicant requests a minor deviation from the approved landscaping, as shown on the approved landscaping plan, in order to avoid conflicts with the placement of panels that would adversely impact their effectiveness, or to move plantings to more effective locations on the site, such deviation shall be provided on a revised landscaping plan sheet for review and approval by Staff. Additionally, Staff may request minor deviations from the approved landscaping plan, including provision of additional plantings, in order to ensure that supplemental landscaping provides effective screening of the facility from adjacent properties. Staff may consult with the Planning Commission's Plans Review Committee to determine whether such minor deviations, requested either by the Applicant or by Staff, is consistent with the special use permit and site development plan approvals.
- **14. Payment Agreement.** Horus Virginia I LLC entered into an Economic Benefits Agreement with the Board of Supervisors of Clarke County dated ________, providing for payments to the County. Such agreement is attached hereto, and referred to as **Exhibit C**. The applicant, Horus Virginia I LLC, shall take responsibility for the payments specified under said agreement. Compliance with said agreement shall be a condition of this Special Use Permit.
- **15. Revocation of Special Use Permit.** The Board of Supervisors may take action to revoke this Special Use Permit in accordance with the revocation procedures and any of the reasons for revocation listed under Section 6.3.1E of the Clarke County Zoning Ordinance. In addition, the Board of Supervisors may take action to revoke this Special Use Permit if the applicant does not comply with the following deadlines for construction and permitting.
 - All permits for construction of the solar power plant shall be obtained by the Applicant within 24 months of approval of this Special Use Permit.
 - Construction of the solar power plant shall be completed within 36 months of approval of this Special Use Permit.
- 16. Stormwater drainage monitoring. Ongoing inspections of stormwater drainage facilities on the Applicant's property shall be conducted by the Applicant. The purpose of these inspections shall be to determine if stormwater drainage facilities on the property are functioning as intended and without negative impact to neighboring properties. Written reports of each inspection shall be provided to the County Planning Department at the same frequency and schedule as the Karst monitoring inspections (see condition #12). This includes, but is not limited to, the County reserving the right to conduct intermittent inspections as deemed necessary. Furthermore, the Applicant agrees to compensate the County for any reasonable costs that may be associated with engineering review of the written reports. The Applicant shall be responsible for remediation activities determined necessary to address any issues identified in the written reports, and shall complete such activities within a timeframe deemed acceptable by the Zoning Administrator.

- 17. Additional erosion and sediment control measures. To further minimize the potential of soil erosion and sediment runoff during the construction process the Applicant shall construct the solar power plant using the following procedures and requirements:
 - All stormwater management facilities and erosion and sediment control measures shall be constructed and inspected prior to land disturbance or construction for the solar panels and ancillary facilities for the solar power plant.
 - After such stormwater management facilities and erosion and sediment control measures have been completed, the construction of the solar power plant shall be divided into two phases, as shown on page 14 of 51 of the site development plan. Construction and land disturbance activities shall begin in phase 1. Construction and land disturbance activities for phase 2 shall not take place until phase 1 has been satisfactorily completed and the soils have been stabilized within it, as determined by the Zoning Administrator. The Applicant shall notify the Zoning Administrator upon completion of phase 1 to conduct an inspection of the work for compliance with this condition. The Zoning Administrator shall consult with the Building Department, and may consult with other local or state officials or consultants prior to making a determination of completion for phase 1. The Applicant shall pay all fees that may be associated with the review of phase 1 by the County's erosion & sediment control consultant.
 - Existing wooded areas surrounding the site and within the forested open space easements shown on the stormwater management plan, as approved by the Department of Environmental Quality and County, shall remain undisturbed during the construction and operation of the solar power plant.
- 18. Boundary Line Adjustment or Lot Merger required. For the purpose of complying with the minimum lot size requirements of Section 5.2C-2 of the Clarke County Zoning Ordinance, a complete application shall be submitted for a lot merger or boundary line adjustment to remove the lot identified as tax map #13-A-56 from the solar power plant project. For the purpose of this requirement, removal from the solar power plant project shall mean that no site improvements for the solar power plant, as identified on the site development plan, shall be located on the lot. The plat associated with the application shall be in compliance with the County's zoning and subdivision ordinances applicable for boundary line adjustments or lot mergers, and shall be approved and recorded prior to the commencement of construction or land disturbance activities.
- 19. Solar Panel Type. All solar panels used as part of the solar power plant shall be of the type of solar panels classified as monocrystalline or polycrystalline, either P or N type. "Thin Film" type solar panels shall be prohibited.
- **20. Pre-construction meeting with Planning Department Staff.** The Applicant shall require the contractor for the project to meet with County Planning Department Staff before land disturbance or construction activities begin. Such required pre-construction meeting shall be held no longer than 30 days from the anticipated date that construction or land disturbance begins.
- 21. Metal Detector Survey Battle of Berryville area. Prior to beginning land disturbance or construction of the solar power plant the Applicant shall provide the County with a metal detector survey of the eastern part of the property, as delineated in Figure 7-1 of Dutton and Associate's report, as it lies within the area of the Battle of Berryville.

22. Gate at Triple J Road entrance. The entrance off of Triple J Road shall be gated during the operation of the solar power plant after construction is completed.

Exhibit A: Emergency Action Plan Exhibit B: Decommissioning Plan

Exhibit C: Economic Benefits Agreement

Planning Commission Recommendation:

On February 2, 2024 the Planning Commission held a continued public hearing on these applications. No members of the public spoke at this public hearing.

The Planning Commission passed a motion for the recommendation of conditional approval of the special use permit application, including the SUP conditions noted in this report, and conditioned that the Economic Benefits Agreement be finalized and accepted by the Board of Supervisors prior to approval.

The Planning Commission's recommendation for the site development plan was conditional approval, conditioned that DEQ grant approval of the stormwater management plan prior to final approval. As noted above in this report, DEQ issued approval a few days after the Planning Commission made this motion, thereby addressing the condition.

Update:

Since the application was presented to the Board of Supervisors on February 20, 2024, and the public hearing was scheduled, the applicant submitted minor revisions to the Narrative and Emergency Action Plan. The changes were minor corrections and typographical errors noted in the initial meeting. Staff also met with the Applicant's attorney and discussed certain changes to the Economic Benefits Agreement (siting agreement), including language that clarifies that the agreement only covers the 25 year period and will need to be renegotiated at the end of that time period. The revised draft is attached with this report as Exhibit C.

Conclusion:

A public hearing is scheduled for the March 19, 2024 Board of Supervisor's Meeting for consideration of the proposed Special Use Permit (SUP-22-01) and Site Development Plan (SP-22-02). A separate public hearing is also scheduled for consideration of the Economic Benefits Agreement to comply with the Virginia Code requirements for siting agreements. Staff recommends that if the Board of Supervisors decide to approve the Special Use Permit and Site Development Plan applications that such approval include the recommended conditions of the Planning Commission and be done once the terms of the Economic Benefits Agreement (siting agreement) are satisfactory to the Board of Supervisors.

History:

May 5, 2022	Pre-application meeting.
May 25, 2022	Special Use Permit and Site Development Plan applications submitted.
July 11, 2022	Hurt & Proffitt Review Letter (ESC).
August 1, 2022	CTL Review Letter (Karst).
August 8, 2022	Initial Staff Review Letter.
August 17, 2022	Response Letter 1 from Integrity Federal Services.
September 2022	Revised Narrative & Site Development Plan (SP).
January 19, 2023	Hurt & Proffitt Review Letter 2.
January 23, 2023	Staff review email.
February 28, 2023	VDOT review comment letter.
April 4, 2023	Response Letter 2 from Integrity Federal Services.
April 18, 2023	Submission of Decommissioning Plan & Emergency Action Plan.
May 19, 2023	Hurt & Proffitt Approval Letter.
June 22, 2023	DEQ review status letter.
June 27, 2023	Resubmission of Site Development Plan (w/ new entrance off of Triple J Road).
July 12, 2023	Staff Review Letter.
August 1, 2023	Plans Review Committee.
August 11, 2023	VDOT Approval Letter. Plans Review Committee Site Visit and example WV Site tour.
August 11, 2023 August 16, 2023	Staff comments - site visit tour follow up.
August 29, 2023	Planning Commission Work Session Meeting.
September 1, 2023	Planning Commission Business Meeting – Set Public Hearing.
TBD	Hurt & Proffitt Review Letter 4.
September 25, 2023	Deferral request provided by the Applicant's agent. Applicant explained intent to
September 23, 2023	modify the location of the equipment yard area.
November 16, 2023	Deferral requested by the Applicant.
November 28, 2023	Scheduled Planning Commission Work Session Meeting.
November 30, 2023	Applicant submitted new documents for review, including decommissioning plan draft,
,	economic benefits agreement draft, emergency action plan draft, and swm agreement
	draft.
December 1, 2023	Deferral requested by the Applicant.
December 8, 2023	Applicant submitted new documents for review, including site plan revision and
	response letters to Planning Staff and Hurt & Proffitt.
December 11, 2023	Transmitted to Hurt & Proffitt for review.
December 13, 2023	Hurt & Profitt review to commence following payment of review fee.
December 15/18, 2023	Correspondence with applicant regarding incomplete review comments.
December 26, 2023	Deferral requested by the Applicant.
January 2, 2024	Scheduled Planning Commission work session.
January 5, 2024	Scheduled Planning Commission Business Meeting / Deferral by Applicant.
January 9, 2024	County Attorney review comment letter regarding decommissioning plan.
January 16, 2024	DEQ review comments on revised site plan.
January 18, 2024	Hurt & Proffitt's review comment letter received for plan changes.
January 19, 2024	Applicant's response letter to DEQ's 1/16/2024 review comments.
I 22 2024	Applicant's response letter to E&S Consultant's review comments.
January 22, 2024	Applicant's response letter to Planning Dept. review comments.
Innuamy 22, 2024	Revised site development plan submittal with minor changes to address comments. Information submittal from applicant to address solar panel type comment.
January 23, 2024 January 24, 2024	
January 30, 2024	email from DEQ received clarifying their current review status. Scheduled Planning Commission work session.
February 1, 2024	Revised EBA submitted by the Applicant increasing fee amount to x5 that of Hecate so
1 CD1 uai y 1, 2027	they are proportionally the same.
February 2, 2024	Scheduled Planning Commission Business Meeting / Continued Public Hearing.
February 5, 2024	DEQ Approval Letter received.
February 20, 2024	BOS initial meeting – public hearing schedule
February 28, 2024	Minor edits to narrative and emergency action plan submitted. Meeting held with the
	Applicant's attorney regarding edits to the EBA to address review comments of it.
March 19, 2024	BOS Public Hearing
·	

Exhibit A



LEVEL: OPDENERGY

FUNCTION: HEALTH & SAFETY

DOCUMENT CODE: E-OPD-HS-P-0001 **VERSION**: 01 **DATE**: 1/23/24

REVISION CONTROL VERSION DATE PARAGRAPH DESCRIPTION 01 1/23/24 - New edition document

EMERGENCY ACTION PLAN

In the event of any structural damage to the panels following a fire, extreme weather or geological event or other such emergency condition, the operator will immediately assess the situation and implement the following action plan:

- 1. Once the event has ceased, the operator will contact the connecting utility and receive written verification that the entire site has been de-energized, no back-feed power is present, and that the site has been electrically isolated from the electrical grid following proper lock-out, tag-out procedures
- 2. Once the site has been confirmed as electrically safe, a representative from the owner/operator will survey the site and assess the damage. This assessment will focus on two areas in sequence:
 - a. Possibility of immediate health and safety concerns relating to physical injury for clean up workers (falling panels, sharp damaged equipment...) All such concerns will be dealt with first in accordance with standard safety protocols to render the site safe for the clean-up crews
 - b. Damaged panels and other equipment will be surveyed for repair or replacement. A comprehensive plan will be compiled for both repair and replacement.
 - i. It will be determined for panels that are to be repaired whether they will be re paired in situ or will be taken to a repair facility. Presumably these panels will only be slightly damaged, and will have main tained the integrity of their seal and would therefore pose no possibility of any leaching materials
 - ii. Panels that are damaged beyond repair will be removed from site (non-operational)
- 4. Non-operational panels will be transported from the site as soon as possible. If the damaged panels are staged for anything but immediate pick-up they will be placed on containment material that will prevent the leeching of any of the panel's materials from reaching the soil. Once the panels are all removed, the containment material will be removed and disposed of in accordance with current regulations.

The timing of this process following an event is difficult to predict with any degree of certainty due to myriad factors, such as flooding, fire suppression, fallen trees..., but the Owner/Operator would expect to contact the Utility within hours of the event's culmination. Depending on how damaging and widespread the specific event was the utility could take from hours to weeks to electrically isolate the project. Once isolated however, the operator would be able to assess the site within one to two days and create a repair/replacement plan. With the plan in place, the same factors relating to the amount and severity of the specific devastation, along with the volume of clean-up, will dictate how quickly crews can be contracted and the site returned to good working order.

The Owner/Operator will be responsible for the proper clean-up of the site following any such event that requires the repair or replacement of any such panels.

Periodic inspections of the panels are continuously conducted throughout the operational life of the project. Any damage to the panel housing will be detected and if required the panel will be removed and replaced. A log book of inspections will be kept in the operations building and can be made available to the County upon request.

Approved by:

Corporate Safety & Health

(edited 2/28/2024)

OPDEnergy

Beckett Solar Facility

Decommissioning Plan

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LIST OF APPENDICES

Appendix A. Site Restoration and Decommissioning Cost Estimate

DECOMMISSIONING

This Exhibit addresses the requirements specified in Code of Virginia 15.2-2241.2.

(a) Statement of Performance Criteria for Site Restoration

The Beckett Solar Facility (the Facility), located at 1030 Bellringer Lane, Berryville, VA 22621, is anticipated to reliably and safely operate for an excess of thirty years.

The land leasing arrangement for the approximately 385-acre property on which the Facility is proposed (the Facility Area) is for up to 40 years of operation and could be extended further if the parties agree. Upon termination of the lease, it requires the Applicant to remove Facility components and return the land to substantially the same condition as currently exists. The performance criteria discussed below are meant for Facility decommissioning/restoration, but also will apply in the event that the Facility cannot be completed.

(1) Safety and the Removal of Hazardous Conditions during Decommissioning

The contractor(s) engaged to commence the decommissioning process will be required to provide a safety plan prior to mobilizing that includes site safety orientation training for all on-site workers. The contractor(s) also will be required to establish a Spill Prevention Control and Countermeasure Plan.

The only hazardous material to be used by the Facility during operation will be the cooling oil contained in the transformers. That oil will be drained and recycled or disposed of in accordance with regulations. During the decommissioning work, some vehicle fuel and lubricating oils may be present on-site for the work tools and equipment. The storage and handling of the fuel and lube oil will be managed in accordance with the Spill Prevention Control and Countermeasure Plan.

(2) Environmental Impacts

During the decommissioning work, the contractor will be required to assign a Health, Safety and Environment Manager to monitor the work in compliance with the permits.

Prior to decommissioning, the Applicant will notify in writing Clarke County of their intention to begin decommissioning. The Applicant will engage an environmental consultant to monitor the decommissioning activities and potential environmental impacts. The decommissioning work is expected to have insignificant impacts on the environment. The decommissioning work will not involve any further clearing.

(3) Aesthetics

Landscaping will be left in place to continue its screening function and avoid changing the visual perspective.

(4) Salvage and Recycling

Most of the Facility systems and components are recyclable. Publicly available data shows a market price for scrap materials, indicating these can be profitably recycled by the Applicant or the decommissioning contractor. The major components and their expected scrap codes are outlined in Table 1.

Table 1. Major Components and Scrap Codes

Facility Component					
Inverters - Chint CPS SCH125KTL or similar					
Transformers - Cooper 3MVA and 2.5MVA or similar					
PV Modules – photovoltaic - supplier to be determined based on availability					
Racking Frame (Single Axis)					
Racking Posts					
Tracker Motors					
LV Wiring - #10, 2/0, #2 bare, 500MCM					
MV Wiring - 2/0 Bare, 500MCM					
Chain Link Fence Fabric & posts					
Disconnect Switches					
Electronic Controls					
Road Stone					

The photovoltaic (PV) solar modules contain recyclable material (silicon, metal). PV manufacturers are establishing programs to receive recycled PV modules, however PV modules are anticipated to have residual value as a complete component.

The following general statements can be made about the present state of the salvage market with regards to crystalline silicon PV modules:

- The United States has a robust market for the salvage, recycling, and re-sale of industrial materials including the aluminum frame, glass fronts, and silicon which comprise the majority of a PV module.
- A number of websites post publicly available data on the scrap values of industrial materials in different regions of the United States. Example websites for pricing include: priceofscrapmetals.com, scrapmonster.com, rockawayrecycling.com, and recycleinme.com.
- Decommissioned PV modules from the Facility can be resold as industrial materials in the national salvage market. Possible salvage operations include: Cleanlites, ECS, Metal & Catalyst Resources, and Morgen Industries.
- PV modules also may be resold as functional modules for power production. PV Modules will continue to operate after years of use, though producing less power than their initial ratings. The industry has observed a degradation rate of 0.2-1% per year, with 0.7% used as an industry-wide assumption in the United States. Based on a 0.7% degradation rate, a 400-watt (WJ PV module would be rated at 335-W after 25 years of operation. The module would need to be tested prior to re-sale to verify the new ratings.
- PV power plants may be re-powered at "end-of-life" with new inverter systems or may be decommissioned with PV modules re-sold for use at another plant.

The PV modules residual value is conservatively assumed to be priced at 5% of original value.

(5) Potential Future Uses for the Facility Area

The Applicant may consider extending the Facility life or repowering the Facility, subject to required regulatory approvals. The cabling systems and tracker structures may provide reuse in situ and allow replacement of PV modules and inverters thereby repowering as a refreshed solar project. The Applicant will obtain any required approvals for repowering.

Upon the Facility Area being restored after Facility operation Is terminated, the land may be used as permitted by applicable codes and ordinances. The planned Facility Implementation and decommissioning will not inhibit any of those possible uses.

(6) Decommissioning and Restoration Plan

The draft plan for decommissioning and restoration is provided below. The Facility decommissioning cost estimate is provided as Appendix A. It is expected that the salvage value of the components and material will far exceed the decommissioning and restoration costs. It is noted that even if the salvage value of PV modules is excluded from the decommissioning estimate, the remaining Facility salvage value is greater than the cost of Facility decommissioning and site restoration. However, with respect to Code of Virginia Title 15.2-2241.2, the Applicant shall provide financial assurance of such performance to the locality in the event the Applicant does not decommission the site after the project is considered inactive.

The financial assurance will be in the form acceptable to Clarke County per Title 15.2-2241. The costs will be allocated to Clarke County based on the estimated cost associated withremoval of the facilities and restoration of the Project area Identified in Exhibit A. The cost for security shall Include 25% additional total estimate value to include Clarke County Administrative Costs per Section 8 of the Zoning Ordinance. Finally, the security shall include a Landscaping Maintenance Guarantee pursuant to 8.2 of the Clarke County Zoning Ordinance. The estimates shall be updated to reflect inflation and any other changes every fifth year after commercial operation. Inflationary adjustments to cost estimates will be evaluated using the Consumer Price Index (CPI). Updated estimates will be filed with Clarke County every fifth year after commercial operation.

Upon decommissioning the Facility, the Applicant will engage one or more reputable contractors to perform the Facility decommissioning. The decommissioning and restoration work will generally involve the following:

- Planning, permitting, and consultation;
- Disassemble and recycle PV panels;
- Remove and recycle inverter stations, combiner boxes, and switchboards;
- Remove transformers and transport to a licensed facility for draining, disassembly, and recycling;
- Remove circuit breakers and transport to a licensed facility for degassing, disassembly, and recycling;
- Disassemble and recycle tracker steel components;
- Disassemble and recycle substation steel and components;
- · Remove and recycle tracker I-beam posts;
- · Remove, crush and recycle concrete foundations (substation components and inverter skids);
- Remove and recycle selected stone roads;
- · Remove and recycle perimeter fencing;

- Collect and dispose of non-recyclable materials (loose debris, road filter fabric, select substation components, above ground PVC conduits);
- Regrading and decompaction as needed and any holes will be filled with appropriate fill in consultation with Clarke County; and
- · Clean up and inspection.

The contractor will be required to properly manifest all material leaving the site and properly dispose to licensed recycling and disposal programs.

The decommissioning is anticipated to be completed over a six (6) month period, most likely during a summer season that provides drier conditions. The workforce may consist of up to a peak of about 40 on-site workers sourced primarily locally. Restoration of the site will begin during the decommissioning process and monitored for a full year following completion of all decommissioning activities to ensure success of re-vegetated areas.

Project decommissioning is generally triggered only by an event such as when the Project components reach the end of their operational life (although select components will likely be updated as technology improves over time). The Project will be considered to be inactive if the Project is not generating any electricity for a period of twelve (12) consecutive months unless the cause of the failure to generate electricity is (i) a repair, restoration or improvement to an integral part of the Project that affects the generation of electricity and that repair, restoration or improvement is being diligently pursued by the Owner; (ii) temporary inability of the electrical transmission system to accept electrical power generated by the Facility; or (iii) an event of Force Majeure (each, a "Triggering Event").

Force Majeure includes, but is not limited to, causes or events beyond the reasonable control of, and without the fault of negligence of the Company, including, without limitation, acts of God, sudden actions of the elements such as floods, earthquakes, hurricanes, or tornadoes; sabotage; terrorism; war; riots; explosion; blockades; pandemic; and insurrection. In the event that the Owner anticipates that corrective options (regarding energy output) will extend beyond the aforementioned 12-month period, It will file a notice to Clarke County, describing the circumstance and provide updates regarding the estimated amount of time required for those actions. If properly maintained, the expected lifetime of a utility-scale solar panel Is approximately 35 years with an opportunity for a project lifetime of 50 years or more with equipment replacement and repowering. Depending on market conditions and project viability, solar arrays may be retrofitted with updated components (e.g., panels, frame, tracking system, etc.) to extend the life of a project. In the event that the modules are retrofitted, the original modules would be sold as resale or salvage, depending on the market at that time. At the end of the Project's useful life, the panels and associated components will be decommissioned and removed from the Project.

In the event the Owner fails to perform necessary Decommissioning and/or Restoration activities (when required) and Clarke County has to carry out such Decommissioning and/or Restoration activities in accordance with the terms herewith, the Applicant hereby acknowledges and agrees that it will use its commercially reasonable efforts to ensure Clarke County has the necessary access rights to carry out such Decommissioning and/or Restoration, including granting Clarke County the right to use the Company's easements and access rights to carry out any Decommissioning and/or Restoration.

Preparation

Prior to the start of decommissioning work, the Facility Area will be assessed for existing conditions to ensure proper planning and management of the disassembly and movement of materials is done while

protecting	surrounding	natural	resources.	Accordingly,	erosion	and	sedimentation	Best	Management

Practices will be installed prior to the commencement of the decommissioning activities pursuant to any applicable permits.

The Applicant will make arrangements for the disposal and recycling programs that will receive the decommissioned materials. The Applicant will require the decommissioning contractor, its haulers, and the receiving facilities to maintain proper documentation in order to manifest and track the disposed materials.

(i) Site Mobilization

Existing access roads will be suitable for the decommissioning work. The site perimeter fencing will be maintained until the last stages of the work. If desired by the landowner, the site fencing may be left in place. During the active on-site decommissioning activity, the main gate entrance will be secured at night. If theft events occur, the Applicant may establish nighttime security presence, patrols, or other measures.

Prior to decommissioning, the Applicant will coordinate with the electric utility to de-energize the Facility and process the substation disconnection and closure. The main electric disconnect switches will be verified and secured open with lock-out / tag-out procedures. The contractor will lock-out and tag all the Facility inverter stations and combiner boxes, thereby de-energizing the entire Facility alternating current (AC) power system. Work will mainly occur during daytime hours

(ii) System Removal

The contractor will first systematically disconnect all PV modules, thereby disassembling the direct current collection system and rendering the entire Facility safely de-energized. As portions of the Facility Area are fully de-energized, the work crews will begin disassembly of the Facility infrastructure. The contractor will systematically disassemble the PV panels, tracker components, inverter stations, and substation equipment.

The demolition debris and removed equipment may be cut or dismantled into smaller pieces that can be safely lifted or carried by the deconstruction equipment being used. The majority of glass and steel and aluminum will be processed for transportation and delivery to an off-site recycling center. Minimal non-recyclable materials are anticipated; these will be properly disposed of at a qualified disposal facility. Demolition debris will be placed in temporary on-site storage areas until final transportation and disposal/recycling. PV modules will be packaged and resold in the secondary market for reuse.

The direct current/alternating current power collection system will be dismantled and removed. All cables and conduits that are removed will be recycled. All aboveground cables and electrical interconnections will be disconnected. The low voltage underground cables planned at a depth of about 36 inches will be easily pulled out and removed while the deeper medium voltage cables planned at about 48 inches depth will be abandoned in place. Cable and conduit stub ups will be cut at least 30 inches below ground.

The overhead feeder line that leads Into the Facility's offsite interconnection will be removed unless the landowner determines that the electrical service line will be beneficial for future use of the site, in which case, after notification to the Utility, the line may remain after decommissioning.

There will be very few concrete foundations on-site, primarily for the small number of transformers. The concrete foundations will be removed and disposed of in a licensed landfill. Steel I-beam type posts or piles that support the trackers will be mechanically removed and salvaged. The area will be lightly graded to match preexisting site soil conditions.

(iii) Transport

The Applicant will require the contractor to organize the decommissioning work in a staged and systematic fashion providing tracking of the material leaving the Facility Area. Designated material collection areas will be established on-site where the material will be collected and packaged as needed for truck transport offsite. The material shipped off-site will be firmly secured to comply with the State's Department of Motor Vehicles regulations. Any loose material loads must be covered. The contractor will ensure all trucks and trailers are safe, road worthy, and meet all Department of Motor Vehicles permit requirements, including current valid registration and inspection requirements.

All material leaving the Facility Area will be manifested to identify the destination disposal or recycling center to which the material will be delivered.

(iv) Site Restoration

The facility area will be restored as set forth in the Code of Virginia 15.2-2241.2. The owner will stabilize the soil and re-vegetate the ground cover of the real property disturbed by the installation of such equipment, facilities, or devices.

(v) Facility Closeout

Upon completion of the decommissioning and site restoration, the Applicant, the contractor, and a Clarke County representative will conduct a final walk-through inspection and the contractor will correct any remaining punch list items. Unless otherwise agreed with the landowner, all permits required for the decommissioning will be closed out, and all temporary erosion and sediment control measures (silt fence, etc.) will be removed.

Upon final completion, the Applicant will provide the landowner with a completion letter including as-built drawings of any facility features left in place such as roads and deep underground cables. No live circuits will exist after Facility is de-energized.

Upon final completion, the Applicant will send a notice of Facility Closeout lo Clarke County and DEQ.

(b) Subsurface Drainage Improvement Accounting

There are no known active subsurface drainage tile in the agricultural fields. As the Facility Area is generally open and flat, relatively limited grading is planned for the Facility. Therefore, the Facility drainage design established for the solar Facility will be generally maintained after decommissioning to continue stable site conditions. After decommissioning and site restoration, the site drainage patterns should remain as is. Prior to decommissioning, the Applicant will evaluate the site drainage design and update it if needed for the Facility Area after restoration.

(c) Planned Notifications Regarding Decommissioning

The Applicant will continue their coordination and communication with the landowner and formally provide the landowner with advanced notice of the planned decommissioning in accordance with the lease agreements.

At least 120 days prior to beginning the decommissioning work, the Applicant will consult with local County representatives to discuss the planned decommissioning and possible reuses of the Facility Area. Consideration may be given to preserving select Facility components that may be reused for future development at the Facility Area. The Applicant will review the decommissioning plans and schedule a meeting with local officials and incorporate applicable feedback.

The notification will include an updated Decommissioning Plan, discussion of schedule, planned activities, where and how the material will be recycled and disposed of, estimated workforce. The Applicant will consult with the state and local authorities having jurisdiction regarding the planned decommissioning activities and possible uses of the Facility Area after decommissioning.

Appendix A. Site Restoration and Decommissioning Cost Estimate

acres/mw	project size mw ac	acres	S	depos	it/acre	Decommissioning I	Bond amount	percentage of Bo	nd payment	opdenergy:	annual bo	life of bond	lifetim	e cost
	- 5	0				\$	1,862,362		1%	\$	18,624	40	\$	744,945
Calculation of the	e Decommissioning Cost							https://www.prid	ceofscrapme	tals.com/ala	abama/			
Total cost of Dem	nolition	Valu	e	Dispo	sal Cost	Net Disposal Cost		Current scrap pric	ce	1.	1/8/2022			
Panel Dispos	al by Weight	NO						per unit/lb/ton		Tons per MI	W	Project Weight in Tons	Curren	t scrap value
Scrap Value o	of Panels (unit)	\$	*	\$	215,104	\$	215,104	\$	× .					
Scrap Value o	of Concrete (Ton)	\$		\$	170,560	\$	170,560	\$						
Scrap Value o	of Copper (Ton)	\$	-	\$	38,500	\$	38,500	\$	3.17		7.70		\$	2,440,900
	of Steel (Ton)	\$	-	\$	92,400	\$	92,400	\$	280.00		61.60	3,080	\$	862,400
	of Aluminum (Ton)	\$		\$	31,350	\$	31,350	\$	0.91		20.90	1,045	\$	1,901,900
Scrap Value o	of Inverters (unit)	\$	-	\$	4,566	\$	4,566	\$						
												Total	\$	5,205,200
Total Disposal Co	st					\$	552,480							
Total Labor Cost						\$	638,400							
Total Equipment	Cost					\$	190,000							
Removal of Misc	(Shed and utility poles)					\$	10,000							
Misc Tools, Const	umables, Rentals and Equip	ment				\$	20,000							
Sub Total						\$	1,410,880							
Contractor Premi	lum		10%	5		\$	141,088							
Contracted Sub T	otal					\$	1,551,969							
Contingency			20%	5		\$	310,394							
Grand Total for D	ecommissioning					S	1,862,362							

Site Restoration		
Re-grading and filling of holes/	depressions	\$ 78,400
Road Removal		\$ 55,200
Fence Removal		\$ 24,300
Re-seeding		\$ 11,000
Planting of Misc Landscaping		\$ 5,000
Total Restoration Cost		\$ 173,900
Contingency	20%	\$ 34,780
Grand Total for Site Restoration		\$ 208,680
Total Cost for all Decommissioning	and Restoration	\$ 2,071,042

Exhibit C DRAFT

ECONOMIC BENEFITS AGREEMENT

This Economic Benefits Agreement ("Agreement"), dated this _____ day of ______, 2024, is by and between the BOARD OF SUPERVISORS OF CLARKE COUNTY, VIRGINIA ("County"), party of the first part, whose mailing address is 101 Chalmers Court, Suite B, Berryville, Virginia 22611 and HORUS VIRGINIA 1, LLC, its successors or assigns ("Horus"), party of the second part, whose mailing address is 615 Crescent Executive Court, Suite 130, Lake Mary, FL 32746.

RECITALS:

WHEREAS, Horus made application for a special use permit applicable to a parcel of real estate ("the Parcel"), specifically identified as Tax Map #13-A-13 and #13-A-56, for a 50 - megawatt solar photovoltaic project ("Project"), a solar energy facility within the meaning of the Clarke County Zoning Ordinance, allowed by special use permit in the agricultural district in which the Parcel lies; and

Whereas, changing the use of the Parcel from agricultural use to a solar energy facility in accordance with the application may eliminate or reduce various personal property taxes including, but not limited to, taxes on the personal property installed in connection with the project which may not be assessed as a result of Code of Virginia §58.1-3660, which was enacted after Horus began its effort to obtain zoning clearance for its project and which eliminated certain economic benefits which both parties expected the County to realize from the Project; and

Whereas, the Code of Virginia §15.2-2316.8 allows the County to enter into a siting agreement with the applicant to include financial compensation to the County for certain capital, budgeting, fiscal fund balance, and deployment of broadband needs; and

Whereas, the special use permit (SUP-22-01) was approved by the County, which special use permit contains a condition which provides that the applicant shall take responsibility for the payments specified under said agreement; and

Whereas, Horus wishes and offers to ameliorate any possible negative economic consequences of its Project, including, but not limited to, those caused by Code of Virginia §58.1-3660, and to enter into this agreement in compliance with of SUP-22-01.

NOW, THEREFORE, the parties agree as follows:

- 1. Horus will be responsible for the payment of Roll Back taxes to the County as a result of the Parcel being no longer eligible for land use real estate tax treatment, the Roll Back taxes being estimated to be \$79,971;
- 2. Horus shall pay the County annually upon commencement of the Project, for a period of twenty-five (25) years, the minimum sum shown on attached Schedule A, which sum shall not include the annual real estate taxes payable on the Parcel for those areas of the Parcel outside of the solar project ("Good Neighbor Payments" (GNP)). Commencement of

the project shall be defined as the point when the applicant applies for a land disturbance permit.

3. The term of this Agreement covers twenty-five (25) years which starts at the commencement of the Project. The parties to this Agreement agree that at the conclusion of the term of this Agreement, they shall make all reasonable and good faith efforts to negotiate a new economic benefits agreement to cover a new term and to address the continuance of the megawatt photovoltaic project on the Parcel.

Witness the following signatures and seals:

BOARD OF SUPERVISORS OF
CLARKE COUNTY, VIRGINIA

By:	
	County Administrator
	Date
HOR	US VIRGINIA 1, LLC
By:	
Its: _	

Date

SCHEDULE A

Annual payments pursuant to agreed Economic Benefits Agreement

0010 500
\$212,500
\$104,960
\$106,985
\$109,070
\$111,205
\$113,380
\$115,600
\$117,910
\$120,265
\$122,670
\$125,120
\$127,620
\$130,170
\$132,775
\$135,430
\$138,135
\$140,895
\$143,710
\$146,585
\$149,515
\$152,500
\$155,550
\$158,660
\$161,830
\$165,065
\$168,365
\$3,566,470

It is the agreement of Horus and the County that the above stated schedule and agreed upon Economic Benefits Agreement shall be the sole amount collected by the County and paid by Horus for a period of the twenty-five years commencing upon the date of completion of the installation of the commercial solar field and the delivery of power to First Energy from the commercial solar field. The County does agree that these payments and the above payment schedule shall be in lieu of any other payments required to be paid to the County whether they be by way of real property taxes, personal property taxes, machine and tool taxes, or any other County tax for the portions of the property containing the solar project.

Original Application

CLARKE COUNTY LAND DEVELOPMENT APPLICATION

Applicant HORUS	VIRGINIA I	LLC			CLARKE
	110 FRONT S	TREET.	- SUITE 30	0	4 Too
	JUPITER	FL	33477		AGINIA 183
A 12 (2 EDA (1 A 1)	City	State	Zip Code		
Applicant's E-Mail Add		*		Dhana 204 725 0	AEC
Agent (Contact Person) Agent's Company INTE		RVICES		Phone <u>304-725-8</u>	450
Agent's Address 148 S	OUEFN STREET S	SUITE 201	MARTINSRIIRG	VAA/ 25401	
Current Property Owner			WARTINODORO,	VVV 23401	
Owner's Address P.O.		, LLO		Phone	
Correspondence to be se		cant	Owner	X Agent	Other
Tax Map Parcel Number			gisterial District		
General Project Location				(gross/net acreage)	400.42
Check Appropriate Reques PLANNING COMMISSIG Major Subdivisio Minor Subdivisio Administrative St Boundary Line A X Site Plan Site Plan Amendr Erosion & Sedime Storm Water Plan Maximum Lot Siz	ON in on (1 or 2 lots) ubdivision (parcels > 10 djustment ment ent Plan		X Special U Comprehe Zoning O		lment
BOARD OF ZONING AP Administrative A Variance Special Exception	ppeal 1		Administr Variance	IC & WELL APPEA ative Appeal	
BERRYVILLE AREA DE Site Plan Site Plan Amendr		ORITY		ERVATION COMMI e of Appropriateness	ISSION
Complete as applicable: Name of Subdivision, Dev Proposal/Request CONS Existing Zoning AOC	STRUCT SOLAR FAR	RM	SOLAR # of Propos	sed Lots N/A	
	ents of the Health Officia e, or conditionally appro	al or Zoning we that for w	Administrator will	be carried out at my . I certify that all pr	percolation tests, topographi expense. I understand that the operty corners have been te
Planning Department and o	inderstand that further suless an Exploratory Sket	ubdivision of tch Plan is su	this property will bmitted with this a	not be permitted with pplication. Furtherm y and make such inve	in twelve (12) months of ore, I grant permission to the
101 Chalmers Court Berryville, VA 22611		www.clar	kecounty.gov		(540) 955-5132 Fax (540) 955-5180

Application fee (minus 3rd party review fees)

Clarke County Government TREASURERS OFFICE 101 Chalmers Ct Berryville, VA 22611 (540) 955-5160 Welcome

004821-0023 Tracy W.

05/25/2022 03:18PM

MISCELLANEOUS

Engineering Pass Through Fees (PTPLN) 2022 Item: PTPLN 1.0 @ 8,400.00 Engineering Pass

Through Fees (PTPLN)

8,400.00

8,400,00

PERMITS / INSPECTIONS

Site Plan AOC/FOC/NP -

FEE 2022

Item: SP-22-02|SPA

Balance due: 0.00 Balance unpaid: 0.00

2,500,00

Special Use AOC/FOC - FEE 2022 Item: SUP-22-01/SUPA

Balance due: 0.00

Balance unpaid: 0.00

826 or

3,325.00

Subtotal Total

11,725.00 11,725.00

CHECK

11 700 00

Check Number1446

11,725.00

Change due

0.00

Paid by: INTEGRITY FEDERAL SERVICES INC

Thank you for your payment

CUSTOMER COPY

BECKETT SOLAR ENERGY FACILITY

SPECIAL USE PERMIT

CLARKE COUNTY VIRGINIA

APRIL 2022 Revised February 2024

Prepared By: INTEGRITY FEDERAL SERVICES

Prepared For: OPDEnergy

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Part 5 Supplemental Information

SUPPLEMENTAL INFORMATION

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Appendix B – Phase 1 Environmental Study

Appendix C – Wetland Study

Appendix D – Rare Threatened Endangered

Species Letter

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Part 1 – Executive Summary

On behalf of OPDEnergy, Integrity Federal Services is pleased to submit the requisite information for the review and approval of a Special Use Permit and Land Development Site Plan Application Process as required by Clarke County Planning and Zoning Department.

The Special Use Permit has been prepared in conformance with the 2021 Edition of the Zoning Ordinance, adopted August 17th, 2021.

The SUP is for a 50-megawatt solar PV power plant. The site is adjacent to an existing substation and will limit the installation of the solar panels to a radius of 1 mile from the substation.

The project is being proposed by OPDEnergy, international experts in the development of renewable energy including solar photovoltaic and onshore wind energy production. They will permit, design, construct and manage the project.

The properties selected for the 50 MW Photovoltaic Facility are 400± acres located within the Agricultural-Open Space-Conservation District (AOC Zoning) of Clarke County, Virginia.

The facility will be constructed in accordance with all applicable rules and regulations including those related to setbacks, screening, and protection of environmental features.



Project Site - Aerial Photo

Part 2 – Property Information

PARCELS

The project site includes two contiguous parcels. Parcel informtion is as follows:

Parcel #1

Tax Map – 13 A 13 Address – 1030 Bellringer Lane DB 579 Page 419 389.66 acres

Parcel #2

Tax Map – 13 A 56 Address – 1030 Bellringer Lane DB 579 Page 419 16.35 acres

ZONING

Both parcels are located n the Argiculture Conservation District (AOC).

SIZE

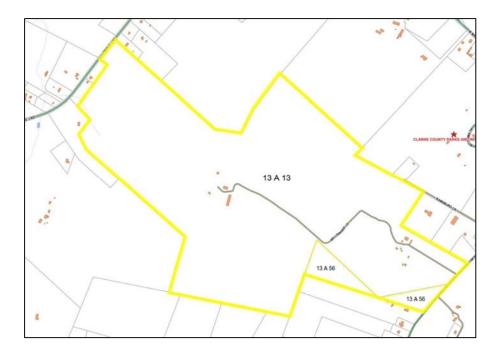
The applicant has complete a boundary survey for the two parcels, per this survey the combined size of both parcels is 400.4 acres.

The parcel is currently used for several different uses as permitted in the AOC district. The largest portion of the Property is used for pasture land and hay production. The properties also include land used for crop production, residential structures, agricultural outbuildings and portions of the site in a forested condition.

SITE CHARACTERISTICS

The parcels are relatively flat and do not include large areas of steep slopes. Some rock outcroppings can be found on the properties and the applicant has completed a geotechnical evaluation of the site. The properties are located in a limestone area and mitigation is proposed for karst features on the Property.

The Property is well screened from adjacent uses and roadways.



CURRENT USE

 Location. If such plant is not part of a "behindthe-meter" program, then such plant shall be adjacent to and all facilities located within one mile of a pre-existing electrical substation of 138 kV or higher voltage.

The proposed project is adjacent to a pre-existing electrical substation of 138kV or higher voltage.



2. Minimum Lot Size. No such plant shall be erected on any lot less than twenty acres in size.

The project includes 2 lots with a combined size of 400.4 acres. There are no solar panels proposed for the smaller parcel, although it will be used to meet the storm water requirements for the project.

 Setbacks. All above ground facilities associated with such plant (excluding perimeter security fencing) shall be considered a structure for the purposes of determining required setbacks.

Setbacks for structures will be provided per Clarke County regulations

- 75' from Property line
- 100' from centerline of secondary highway
- 100'/25' from sinkholes this setback can be modified to 25' per section 6-H-15-d.2

For the purposes of this application 13 A 56 and 13 A 13 are treated as a single parcel with no setbacks from internal Property lines.

Section 7.2.7 describes the requirements for a Karst Plan in Clarke County. Per Section 7.2.7 D.2.b the setback for structures from sinkholes can be reduces the 25' with engineering to ensure structural stability.

The setback requirement serves to protect structures from subsidence associated with sinkholes. For solar panels the risk is minimal since the hydrology of the site has very minimal change as part of the development of the solar facility.

Mitigation for solar panels will be conducted in the field at the time of installation. The intent of the mitigation is to protect the buffer area from traffic, prevent sediment from entering the sinkhole and to maintain preconstruction surface drainage patterns. See Part 5 for mitigation strategy.

Solar panels have a minimal impact on the land. Typically, these installation impact less than 0.5% of the area. The following generally describes the installation practices that will be used.

The panels will be supported on W6x7, W6x9, and W6x15 driven H-piles with a minimum embed depth of 8 feet. The piles will be pre-drilled where required due to shallow bedrock conditions. The site soils are anticipated to be predominantly moderate to high plasticity clay (CL, CH), and shallow rock is likely to be encountered across portions of the site.

For "engineering to ensure structural stability" within the 25 to 100 foot setback zone of the Class I sinkholes, the panels will be supported on steel Hpile deep foundations which are considered minimally invasive in the karst conditions. Piles which require pre-drilling into rock will be grouted in place after pile installation. Pile driving within the parapet limits of the sinkhole is not permitted in order to avoid disturbance of the soils at equilibrium closer than the County required 25 foot setback limitation. Additionally, engineering controls will be utilized during all pile driving operations to prevent petroleum product spills and equipment leaks from entering the subsurface.

4. Safety/Access. A security fence (height and material to be established through the special use permit process) shall be placed around the perimeter of the solar power plant and electrical

equipment shall be locked. Knox boxes and keys shall be provided at locked entrances for emergency personnel access. Warning signage shall be placed on electrical equipment and plant entrances.

All solar equipment and structures will be placed within areas secured by 6' chain link fencing. A minimum of 2 entrances will be placed per section (see Site Plan). Construction of the security fencing will be installed concurrently with the installation of the solar panels. OPDEnergy will coordinate with Clarke County emergency personal and other stakeholders to provide Knox Box keys and to ensure that all parties understand where and how to access these areas. Access to the residential uses will not be gated.

Noise. No such plant shall exceed sixty-five dBA as measured at the Property line or fifty dBA as measured at the nearest neighboring inhabitable building.

<u>Construction (noise</u>)The construction of the project will occur over about 8-12 months and may include the following stages.

- Equipment Mobilization
- Installing steel racking, trenching electrical cabling
- Install inverters, PV modules, electrical equipment
- Commissioning, testing, and startup

During the early stage of installing the steel racking piers, there may be noise from the driving equipment. This work will only be performed during the daytime, no offsite work is required.

Operation (noise): The Project operation will comply with the County ordinance requirement to limit noise from the facility. The ordinance requires noise be limited tobelow a level of 65 dBA at the Property line and below 50 dBA at nearest receptor orinhabitable building. The facility noise is anticipated to be well below the ordinance limit. Solar power projects have very limited moving or operating equipment. The PV

panels do not emit noise. It should be noted that the solar power facility will only operate during daytime and will not contribute to noise during quiet nighttime periods

The potential noise sources during operation may include inverters (which convert DCpower to AC power) and associated transformers that will be packaged on small equipment skids. The development will consist of approximately 17 inverter/transformers which will be dispersed among the solar panel arrays throughout the site. The inverter packages are expected to emit a noise less than 79 dBA at about 3 feet distance. The equipment will be located in central areas, away from Property lines and will be shielded by the PV panel arrays. The location of each inverter will be based on the final facility design, final placement of the packages will most likely be located at a distance greater than 200 feet from any Property line. At that distance the noise contribution from the inverter/transformers are expected to be less than 50 dBA, far less than the required 65 dBA. The noise contribution from the equipment will dissipate with distance and belower than the required noise at the nearest receptors. The selection and design of the inverters and location on the site will ensure noise meets Clarke County requirements. In the event, any operational noise is deemed noncompliant (above the 65 dBA), Horus Virginia 1 LLC would provide suitable measures to mitigate noise within or below the 65 dBA ordinance requirement.

Landscaping. Such a power plant shall be considered a commercial use for the purposes of determining landscaping requirements.

Commercial buffering and screening have been provided on the Site Plan. Existing trees, shrubs and forest has been preserved to contribute to the landscaping. The Site Plan will comply with the Clarke County Zoning Ordinance.

 Local, State, and Federal Permits. Such a plant shall be required to obtain all necessary permits from the U.S. Government, Commonwealth of Virginia, and Clarke County, and comply with

standards of the major code and safety organizations that apply to generation projects (the National Fire Protection Association (NFPA), Underwriters Laboratories (UL), and Institute of Electrical and Electronics Engineers (IEEE)).

The project will comply with all local, state and Federals regulatory requirements and acquire the necessary permits.

 Electrical Interconnections. All electrical interconnection or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements. Use of above ground transmission lines shall be minimized.

Horus Virginia 1 LLC entered the PJM Transmission Interconnection and was assign ed a queue position AGI-415 known as Double Tollg ate-Old Chapel 138 kV. The Fo rm of Generation Interconnection Feasibility Study Agreement with PJM identifies its plan to interconnectwith the APS system by tapping the Double Toll Gate — Old Chapel 138 kV line with a three-breaker ring bus interconnection substation and loop the Double Toll Gate — Old Chapel 138 kV line into the new substation. The transmission line tap will be located approximately 9.71 miles from Double Toll Gate substation and 0 .11 miles from Old Chapel substation. The installed facilities will have a total generating capability of 50.0 MW AC.

All electrical interconnection or distribution lines will comply with all applicable codes and standard commercial large-scale utility requirements. Use of above ground transmission lines shall be minimized to the extent possible.

9. Project description and rationale. Identify the type, size, rated power output, performance, safety and noise characteristics of the system, including the name and address of the manufacturer, model. Identify time frame, project life, development phases, likely markets for the generated energy, and possible future expansions.

Project Type	Solar PV (polycrystalline PV modules on trackers)
Project Size	50-megawatts AC
Rated Power Output	50-megawatts AC
Safety	Equipment will be UL listed/comply with applicable electric codes
Noise Characteristics	Inverters/transformers generate minimal noise which will be virtually inaudible from project boundaries
Manufacturers	Manufacturers of key equipment (e.g., PV modules, inverters, racks) have not yet been finalized but will be finalized during final construction design
	(late Q1/early Q4 2022). Only high-quality, bankable equipment will be selected (Tier 1)
Project Timeline/ Development Phases	 Permitting: Q2 2021 – Q1 2022 Site prep: Q4 2022 Construction: Q4 2022 – Q4 2023 Project completion/interconnection: Q4 2023 – Q1 2024
Project Life	25 years
Likely Markets for Generated Energy	N/A
Possible Future Expansion	N/A

10. Economic analysis. Provide economic cost/benefit analysis describing generated Property taxes, sales taxes, other taxes, construction dollars spent locally, estimated construction jobs and construction payroll, estimated permanent jobs and continuing payroll, and costs associated with impact on roads and other county infrastructure in the area.

The Project will represent a significant capital investment into the community. Estimated Project capital investment is expected to be up to approximately \$40 million dollars. Additionally, annual lease payments to the landowner will result in increased tax revenue to the Commonwealth and the County.

The Project will comply with all local and County tax laws currently in place. Discussions are continuing with the County Assessor to determine those values andare dependent on actual dollars spent as well as current Commonwealth laws and determinations by the Assessor. As noted below, the following local jobs will be expected during development, construction, and operations.

Horus Virginia 1 LLC will have an Engineering Construction and Procurement company to manage the acquisition of equipment and the construction process. Much of the construction activities will be performed by local contractors, to the extent those qualified contractors are

available. This will include electrical work, civil and construction work and landscaping activities.

During the operation of the Project, it is expected that most operations and maintenance activities will be conducted by local Clarke County firms. While the majority of Operations and Maintenance activities relate to the maintenance of vegetation and plantings, project roadways, there are additional opportunities to perform routine maintenance. Horus Virginia 1 LLC believes that it is in the best interest to perform these activities with local contractors.

With regard to local infrastructure, the development, construction and operation of the Project is expected to have little or no impact on roads or other County services. The Project will be designed according to all laws and ordinances but operates as a benign system requiring no additional County services. Very minimal water is required during the operation of the system (e.g., for occasional PV panel washing) and it is possible that water could be sourced from off the Property (e.g., trucked in). The Project will produce no emissions as would be produced by a fossil fuel plant, thus there will be no additional reporting requirements that the County may be required to report to various Commonwealth and State Agencies. Further, there will be a reduction in stormwater runoff impacts as the project will require minimal pesticides as compared to the quantity of pesticide/fertilizer use currently taking place due to farming activities.

Position	Number of Jobs
Construction	60
Electrician	10
Earthworks	10
Communications	2

Position	Number of Jobs
Operations	5
Maintenance	5

11. Visual impacts, appearance and scenic view sheds. Provide visual simulations providing vantage points considering a three hundred sixty degree view of the project site.

See Appendix F

12. Wildlife habitat areas and migration patterns.

Address potential impact on wildlife especially endangered or threatened species, on the site and in a biologically significant area surrounding the site.

See Appendix D

13. Environmental analysis. Identify impact analysis on historic, cultural and archaeological resources, soil erosion, flora in the project area, water quality and water supply in the area, dust from project activities, and cumulative impacts of other adjacent power plant projects.

Identify impact analysis on historic, cultural and archaeological resources.

See Appendix E - Cultural Resource Assessment

Soil erosion

Refer to Site Plan for erosion and sediment control practices and calculations. Soil erosion will be controlled during all stages of construction.

Flora in the project area

See Appendix D

Water quality and water supply in the area

The project will implement storm water and E&S measures to mitigate any impacts to the quality of water leaving the site. Project will be permitted through DQE. The project has no new wells that would impact water supply in the area.

Dust from project activities

Dust from project activities will be controlled during construction as required by Clarke County and applicable regulatory agencies. Once construction is complete and the site is fully stabilized there will be minimal generation of dust from project activities.

Cumulative impacts of other adjacent power plant projects.

There are no other adjacent power plants and no cumulative impact from the project.

14. Waste. Identify solid waste or hazardous waste generated by the project and methods of disposal.

The Facility will contain no hazardous material; however, the decommissioning procedures will include verification and site assessments confirming absence of hazardous conditions.

15. Lighting. Provide lighting plan showing impacts on adjacent properties.

See Site Plan for lighting. Lighting will be placed to minimize visibility from adjacent properties and be shielded to reduce light trespass. Refer to the Site Plan for the lighting plan.

16. Transportation plan. Provide access plan during construction and operation phases. Show proposed project service road ingress and egress access onto primary and secondary routes layout of the plant service road system and degree of upgrade plan to new and existing roads, anticipated volume and route for traffic, including oversized and heavy equipment needed for construction, maintenance and repairs, methodology of repairs and maintenance of roads and bridges used for the project, and related public pedestrian and vehicular access and associated fencing.

The Property is located between Westwood Road (Route 636) and Triple J Road (Route 632). These roads provide are currently used for site access, although the majority of traffic utilizes Westwood Road. The Triple J access is historically associated with the agricultural uses on the subject properties. Both of these roads are suitable to accommodate construction traffic and will be permitted through VDOT as required to meet their regulatory requirements.

The entry from Westwood Road will continue to be used by the residential tenants on the Property

during and after construction. OPDEnergy will maintain both entrances during and after construction to allow for inspection of the solar facilities and maintenance. As required, they will maintain access to the Property by residents and to the power easement granted to Allegheny Power.

The perimeter of all photovoltaic equipment areas will be fenced to prevent trespass. These areas will be accessed via internal gates as well as a gate off of Triple J Road. Perimeter fencing will have appropriate safety and contact information as required by Clarke County. Onsite residential properties will not have access to the photovoltaic areas.

 Show proposed project service road ingress and egress access onto primary and secondary routes

Ingress and egress routes are shown on the Site Plan.

- Layout of the plant service road system
 Refer to the Site Plan for the layout of internal roads
- Upgrade plan to new and existing roads
 The existing site entries will be upgraded to
 meet VDOT standards for a construction
 entrance used by heavy trucks and
 equipment. Additional roadway upgrades are
 not anticipated. This will be coordinated with
 VDOT.
- Anticipated volume and route for traffic (construction and post construction)
 See Site Plan for traffic routes and volumes
- Anticipated volume and route for traffic for heavy equipment (construction and post construction)

See Site Plan for traffic routes and volumes

- Methodology of repairs and maintenance of roads and bridges used for the project The applicant will conduct a preconstruction survey of existing roads with VDOT and applicable County personnel. Roads will be repaired during construction as required by VDOT. Once construction is complete the Applicant will conduct a post construction survey of existing roads with VDOT and applicable County personnel. Roads damaged during construction by traffic associated with the solar facility will be repaired by OPDEnergy as directed by VDOT.
- Public pedestrian plan and associated fencing
 There are no pedestrian crosswalks or trails in
 the vicinity of the construction entrance. The
 Applicant will coordinate with the upper and
 lower DG Cooley Elementary School campuses
 to accommodate buses and parent pick
 up/drop off traffic. Additional signage may be
 required to ensure efficient traffic flow, this
 will be coordinated with VDOT.
- 17. Public safety. Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public roadways, communities, aviation, etc., that may be created and address response to such hazards. Noise limitations. Identify noise levels at the Property line of the project boundary.

Horus Virginia 1 LLC will work proactively with local Fire Authorities to develop an agreed-upon set of procedures and protocols for managing risk of fire and for responding in the unlikely event of a fire at the solar PV facility. Generally speaking, the risk of fire at solar PV sites is very low. Typically, the inverters and transformers at the project site present the area's primary risk. Due to their solid state construction, it is rare for fire to initiate at the PV modules. Horus Virginia 1 LLC will ensure adequate clearance around any inverter and transformer equipment to address fire risk and to provideadequate space for responding to any emergencies. It is customary to provide training to the local emergency responders during and after construction, which will be sponsored by Horus

Virginia 1 LLC, so that any potential risks can be properly and swiftly mitigated.

Horus Virginia 1 LLC will develop a Fire Emergency Services Manual for Clarke County in conjunction with input from local Fire Authorities before the project reaches its operation phase. The Manual will specify the roles of responsible parties in the event of a fire at the PV site. The plan will include:

- 1. Clear statements on the responsibility for fire response decision making
- 2. Related emergency communications direction as well as Emergency phone numbers and key points of contact
- Special training for f ire personnel and a tour of the site to ensure up front awareness of the site and equipment as well as point of ingress/egress
- 4. Designated shutoff procedure and location for equipment shutoff.
- Maps outlining location of key equipment including:
 - location of lock box (or if desired the Fire Authorities will be provided with a key to the facility in advance)
 - inverters
 - transformers
 - system/electrical cut-off switches
 - points of ingress/egress at the facility
 - cleared access around the site
- **18.** Noise limitations. Identify noise levels at the Property line of the project boundary.

A pre-construction survey of noise levels at the Property lines will be completed and submitted to Clarke County for their records.

19. Telecommunications interference. Identify electromagnetic fields and communications interference generated by the project.

EMF is associated with very high voltage lines, the solar project will have lower voltage lines.

20. Life of the project and final reclamation. Describe the decommissioning and final land reclamation plan after anticipated useful life or abandonment or termination of the project, including evidence of an agreement with the Property owner that ensures proper final removal of power generating equipment.

The solar power Facility will be designed for a life span exceeding 35-40 years and under prudent utility industry practices. With exception of certain electrical equipment such as inverters, tracker motors, communications equipment, and weather station instruments (all of which reflect a relatively small portion of the Project costs), the majority of the solar Facility infrastructure will last 35- 40 years or more. The key components of the Facility; transformer, steel racking support structures, and the photovoltaic PV panels carry long-term performance and workmanship guarantees. The steel racking may require some resurfacing/painting after 15 years but will easily last past 40 year service life. The PV panels carry industry standard performance guarantees past 25 years, yet it is anticipated to last much longer. Today there are solar power facilities that have remained in service after 40 years of operation.

The efficiency of PV solar panels is expected to degrade less than ½ percent per year of service. The Project's operation forecasts and financing models conservatively assume a higher degradation consistent with PV supplier guarantees (15% reduction over 15 years). After 15 years, the Project will very likely continue operation; given the relatively good retention efficiency, the paid off Project debt, and low operating costs. Even with the degraded PV panel efficiency, the Project will continue to be productive. However, the efficiency gained with new panel replacement may likely be considered after 15-40 years.

The very favorable historical PV solar industry results, significant advancements in manufacturing and panel durability, the long-term panel efficiencies, and the low long-term operating costs are all factors driving the implementation of renewable solar power generation that will ultimately provide significant economic and

society benefits in the future. Therefore, it is anticipated the Project operation will continue well past its initial 15 year term and very likely beyond 40 years given prudent industry maintenance.

Decommissioning

Upon the end of the useful life of the solar Facility (i.e., 40+ years), the Facility and site will be decommissioned. Decommissioning will include the removal of all equipment, PV panels, electrical equipment, transformers, switchgear, steel structural components (i.e., racking), DC/AC wiring, fencing, steel skids and concrete pads, footings, and all other above ground features. All material will be salvaged and recycled as much as possible. Underground utilities will be disconnected below ground and may be salvaged. Signage and other ancillary features will be removed. Once equipment is removed, areas onsite will be graded as required to a natural grade leaving in place any wetland protections and natural vegetation, as well as appropriate erosion and storm water control features. Decommissioning methods will be performed to minimize impact local area wetlands, streams, and/or other habitat surrounding the Facility.

The decommissioning cost will be relatively small compared to the installation cost (i.e., excluding equipment). A significant portion of the components and material will have substantial salvage value, including the wiring, PV panels, inverters, cabinets, and steel racking. This salvage value will more than offset the cost of decommissioning and site restoration. Any unsalvageable material will be disposed of in licensed landfill in accordance with local and state regulations. The Facility will contain no hazardous material; however, the decommissioning procedures will include verification and site assessments confirming absence of hazardous conditions.

Decommissioning of the Project will also be required in the long-term lease between the landowner and Horus Virginia 1 LLC. Prior to starting any decommissioning work, the Project will officially inform the County staff and the State

Department of Environmental Quality and will prepare a decommissioning plan including any necessary permits/reviews required.

Redevelopment Opportunities

At least 6 months prior to decommissioning, the Project owner will consult County staff to explore reuse and redevelopment alternatives and will support County efforts to redevelop the site, including its return to agricultural use. The Project owner will coordinate with local community economic development agencies to evaluate future potential development opportunities on the site, and may preserve certain site features such as fencing, entrance road, and utility services in order to maximize the site value for potential redevelopment with the permission of the current landowner. The site will have an established utility substation that will provide high voltage power service that will likely be attractive to new development. The Project will support local economic development agency efforts to promote the site for redevelopment.

The following section addresses the Clarke County Zoning Ordinance review factors found in Section 6.3.1 Special Use Permit (SUP)

1. Consistency with the Clarke County Comprehensive Plan and any applicable implementing component plans.

The Zoning ordinance regulates the location of utility scale solar facilities on lands within the AOC Zone, it was adopted after review and consultation with the Comprehensive Plan. The following evaluation of comprehensive plan focuses on those sections where the proposed facility could have a impact.

- Environmental Resources— the project will not impact environmental resources in Clarke County. The site is well suited for the proposed development and all construction related activity will be permitted through Virginia DEQ's special solar facility liaison. The applicant has completed an evaluation of these resources and has included this study in the application.
- History and Historic Resources the project will not impact the history or historic resources of Clarke County. The applicant has completed an evaluation of these resources and has included this study in the application.
- Approach to Growth Management the applicant has reviewed this section of the Comprehensive Plan and submits that the proposed development does not impact Clarke County's strategy. The site will result in the addition of no population to Clarke County.
- Environmental Limitations and
 Considerations (Karst) the applicant has
 completed a study on the karst limitations
 and considerations on the Property. The
 study has identified karst features and
 proposed methods to protect them during
 and after construction. By replacing row
 cropping and pastureland with the proposed
 use the Applicant is reducing the possibility of
 groundwater contamination by chemicals,
 fertilizers and cattle manure. The project

complies with the Clarke County Sinkhole Ordinance, E&S Ordinance and Stormwater Ordinance.

- Environmental Limitations and Considerations (Soils/Agriculture) – the project does not result in a permanent impact to agricultural soils. Upon removal of the solar panels agricultural activities can resume onsite.
- Agriculture the construction of a solar facility represents a temporary removal of land from agricultural production, unlike residential development with results in permanent removal. The agricultural lands will be preserved under the solar facility for future generations.
- Natural Resources the project will have limited impacts on the natural resources of Clarke County. Any impacts will be mitigated as required by applicable regulations including the Sinkhole Ordinance and the Virginia DEQ requirements.
- Energy Conservation and Sustainability the comprehensive plan supports the development of renewable energy.
- Economic Development the proposed development will result in a significant investment in Clarke County and have a positive impact on the tax collections of the County. The project does not have many of the negative impacts of most economic development opportunities such as traffic and lighting, nor does it require any water or sanitary sewer treatment.
- Transportation the are no traffic improvements required for the project and no long term increases to the volume of traffic in Clarke County.
- SUP will not have an undue adverse impact on the short-term and long-term fiscal resources of the County for education, water, sewage, fire, police, rescue, solid waste disposal or other services, and will be compatible with the capital improvement goals and objectives of the Comprehensive Plan, to the end that growth of

the community will be consonant with the efficient and economic use of public funds.

The project will have a positive impact on Clarke County resources through the generation of additional taxes. The project will not result in any impacts that might require the fiscal resources of the County and is an efficient and economical use of the subject Property.

Temporary utility connections during construction may be sought by the contractor. Existing utilities and services will be maintained for onsite residents.

Project will not require any utility service from Clarke County.

 Will not cause an undue adverse impact that would reduce the conservation value of adjacent or nearby agricultural or forestal land or would impede the operations of an active agricultural or forestal operation.

The project will have no impact on adjacent or nearby agricultural or forestal land.

4. Compliance with Virginia Department of Transportation (VDOT) regulations and recommendations of VDOT deemed necessary for safe and efficient movement of traffic.

The project will have no long term impact on VDOT or their roads. Site access will use existing site entries that will be upgraded as required. Short term construction impacts will be coordinated and permitted through VDOT.

5. No destruction of or encroachment upon historic or archeological sites, particularly properties under historic easement.

The project will not encroach on any historic or archaeological sites. An analysis of historical nature of the Property was prepared by the Applicant and is included in this submission. The Clarke County GIS mapping shows two historic buildings on the east side of the Property. These buildings are outside of the area to be developed and will not be impacted by the solar facility.

6. Will not cause an undue adverse impact on the following important resources located on the subject Property or surrounding properties: Surface or groundwater resources including but not limited to mitigation of pollution of such resources.

The project will not impact onsite/offsite surface or groundwater resources. Karst features will be protected during construction to mitigate any potential groundwater pollution. Details related to the protection of these resources are included in the Site Plan.

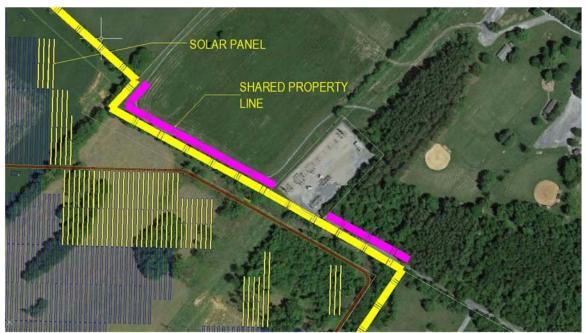
7. Will not cause an undue adverse impact on the following important resources located on the subject Property or surrounding properties: Natural areas such as unique geological features, rare plant habitats, or wildlife nesting areas.

There are no know natural areas, unique geological features or rare plants on the subject Property. All clearing of existing trees will be completed in accordance with applicable regulations as it relates to bat and/or bird habitat.

8. Will not cause an undue adverse impact on the following important resources located on the subject Property or surrounding properties: Areas designated for conservation, recreation, or natural preservation including but not limited to properties under permanent conservation easement, State-designated scenic byways, scenic rivers, Blandy Experimental Farm, and the Appalachian National Scenic Trail corridor.

The project shares a common boundary with the Clarke County Parks and Recreation Property. The proposed solar panels will be screened by existing trees along the Property line or wooded areas. The panels are outside of the 75' setback and the Site Plan includes additional screening.

The Property abuts the Clarke County Parks and Recreation Property for approximately 1,300'.



9. Will not cause undue noise, light or glare, dust, odor, fumes, or vibration.

Once completed the project will result in a reduction of noise, dust, odor, fumes and vibrations related to normal agricultural production that exists on the Property today. Any lighting associated with the project will be minimal and fully shielded to prevent light trespass.

Solar panels are design to capture light, not reflect it resulting in glare. Existing trees, forested areas and the proposed screening will mitigate any issues related to the solar panels. The construction phase of the project will be regulated by Clarke County, their rules have been written to minimize the impact of construction related activities.

10. Availability of sufficient water for foreseeable needs.

The project will have no water requirements and will not impact water use or supply.

11. No unreasonable depletion of or other undue adverse effect on the water source(s) serving existing development(s) in adjacent areas.

The project will have no water requirements and will not impact existing developments in adjacent areas

12. Effective screening and buffering is provided, or the proposed development will be situated away from adjacent properties, in a manner to avoid causing detrimental visual impacts.

The site will be effectively screened/buffered from adjacent properties. The screening design is provided on the Site Plan, the following highlight the most important aspects of the plan.

- The project will not be visible from the Westwood Road or Triple J Road.
- The existing Property is almost 100% screened from adjacent properties by existing trees and wooded areas. Much of the screening vegetation will remain.
- All solar panels have a 75' setback from the Property line.

- Additional screening has been designed and can be found in the Site Plan.
- There are 6 abutting properties with residences. The closest is more than 200' from a solar panel with all others separated by 400' or more.

As part of the design development the site was evaluated from the adjacent roadways. The images below show the points of analysis and the post construction impact. This exercise demonstrated the impact the proposed project will have on public views from the adjacent roads.



Location Map - Photo1, Photo 2, Photo

Photo 1 – simulated post construction view from Triple J Road. The photo analysis did indicate that the solar panels might be partially visible above the driveway leading to the house (the area within the red oval). It is only visible when the photo is greatly enlarged.

The analysis does not include the additional screening that would be included as part of the project, or the existing trees at the Property line.



Photo 2 – post construction view from Triple J Road. Solar panels will be fully screened by the dense vegetation at the Property line.



Photo 3 - post construction view from Westwood Road. Solar panels are located behind the ridge in the background of the photo.



13. Special use permit applications involving private access easements

The project requires no private access easements.

Part 5 – Supplemental Information

OPDEnergy is an international leader in the development and operation of photovoltaic facilities.

They have multiple facilities under development in the United States, including the one in Clarke County. The proposed facility will be a 50MW.

Alternating Current (AC) solar photovoltaic facility utilizing the latest Self-Powered tracking technology. The site will be constructed at one time and will not be phased.

OPDEnergy will lease a portion of the parcels from Bellringer Farm LLC for the construction and maintenance of the photovoltaic facility. There is an agreement in place related to this lease under an existing written contract.

There are several current land uses on the 400± acre Property. These uses include residential, crop cultivation, forested areas, and pasture. There are five residential structures on the subject Property that are occupied by tenants. These structures and tenants will remain on the Property as part of the proposed solar facility.

Construction on the Property will principally consist of the installation of footing for the solar panels and the installation of supporting infrastructure. While the land will be cleared for the installation of the solar panels the terrain will largely remain in its existing condition. The majority of the solar panel supports will be driven into the soil, where rock is present the supports will be drilled.

The Property is approximately 0.5 miles from the western municipal limits of the Town of Berryville.

Karst Plan and Mitigation

Section 7.2.7 of the Clarke County Zoning ordinance provides the regulatory requirements as they related to construction in Karst areas. The applicant has engaged a professional geotechnical engineer and prepared a Karst Plan that is attached to the Special Use Permit. The geotechnical engineer has recommended a 25' setback for the solar panels.

The Clarke County regulations permit structures to be within 25'-100' of a sinkhole as long as supplemental engineering is provided that ensures structural stability. The risk of structural issues for solar panels are very low, they are not heavy structures and are not

supported by a broad foundation (such as a house) that is susceptible to sinkhole related damage. Further they are not inhabitable structures or structures that that would be occupied by people.

As it relates to sinkholes on the subject Property:

- Construction fencing will be used to establish a 100' buffer and 25' buffer around each sinkhole.
- During the construction of solar panels within 25'-100', the outer ring of construction fencing will be removed.
- No construction of land disturbance shall occur within a minimum buffer distance of 25'.
- A geotechnical engineer shall monitor the installation of all solar panels within 100' of any sinkhole.
- Upon completion of construction within 100' of a sinkhole the construction fencing will be replaced to prevent any further activity within the area.
- All sinkholes within agricultural areas will be revegetated
- Any posts that require drilling within 100' of a sinkhole will be grouted upon completion.
- No skids, converters or equipment used to support the facility will be located within 100' of a sinkhole
- Upon completion of construction signage will be placed to keep vehicles outside of the 25' buffer.
 This area will not be mowed, although trees and shrubs may be removed including all invasive plant species.



DEQ Approval Letter

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219 P.O. Box 1105, Richmond, Virginia 23218 (800) 592-5482 www.deq.virginia.gov

Travis A. Voyles Secretary of Natural and Historic Resources Michael S. Rolband, PE, PWD, PWS Emeritus Director (804) 698-4020

February 5, 2024

Horus Virginia 1, LLC Braden Houston 110 Front Street, Suite 300 Jupiter, FL 33477

RE: Beckett Solar

Clarke County, Virginia

DEQ Plan Review #: 2022-0176

Stormwater Management Plan – Approval

Transmitted electronically: bhouston@opdenergy.com

Dear Mr. Houston:

The Department of Environmental Quality (DEQ or Department) has reviewed the Stormwater Management (SWM) Plan titled Beckett 50MW Solar Project and dated and design-sealed January 31, 2024. The plan was received on January 31, 2024 in accordance with the *Virginia Stormwater Management Act* and the *Virginia Stormwater Management Program (VSMP) Regulations*. The aforementioned SWM Plan is hereby approved and a copy is enclosed. **No changes may be made to the approved SWM Plan without obtaining prior approval from DEQ.**

Additionally, approval of the SWM Plan does not relieve the operator from complying with all other federal, state, or local laws and regulations, including obtaining project-specific Erosion & Sediment Control (ESC) Plan approval from Clarke County. Please note that ESC Plan approval is required prior to obtaining coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10).

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty (30) days from the date you received this decision within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Virginia Department of Environmental Quality.

February 5, 2024 Re: DEQ Plan #: 2022-0176 Page 2 of 2

At your earliest convenience, **please submit one digital copy (PDF preferred)** of the approved SWM Plan and accompanying specifications to DEQ at the following address:

Department of Environmental Quality
Valley Regional Office
Attn: Eric Millard
4411 Early Road
Harrisonburg, VA 22801
Eric.millard@deq.virginia.gov

It is the responsibility of the owner and/or operator to ensure that the project is constructed in accordance with the approved SWM Plan and accompanying specifications. Upon completion of the project, the owner and/or operator will be required to submit a construction record drawing for all permanent stormwater management facilities (i.e., post-development best management practices) constructed in accordance with the approved SWM Plan.

Prior to the commencement of construction, all land-disturbing activities equal to or greater than one acre, or less than one acre and part of a larger common plan of development or sale, must register for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10). A copy of the General Permit registration statement can be obtained from DEQ's website at the following location:

 $\frac{https://ris.dls.virginia.gov/uploads/9VAC25/forms/CGP\%20Registration\%20Statement\%202019-20201215174140.pdf$

DEQ acknowledges the receipt of the draft Stormwater Management Inspection & Maintenance Agreement for this project. Comments on this agreement will be provided under separate cover. Please note that the recordation of this agreement in the local land records will be required prior to submitting a Notice of Termination under the General Permit.

Please contact swplanreviewers@deq.virginia.gov if you have any questions about this letter.

Sincerely,

April Rhodes,
Plan Review Manager
Office of Stormwater Manage

Office of Stormwater Management

april Rhodes

Cc: Eric Millard, DEQ-VRO
Jeremy Camp, Clarke County
Ben Svedlow, IFS
Pete Cloutier, IFS
File



January 18, 2024

Hurt & Proffitt Approval Recommendation (ESC)

Mr. Jeremy F. Camp Senior Planner / Zoning Administrator Department of Planning Clarke County, Virginia 101 Chalmers Court, Suite B Berryville, VA 22611

> Re: Beckett 50MW Solar Project E&SC Plan Review Electrical Yard Revision H&P JN 20221079

Dear Mr. Camp:

Thank you for providing Hurt & Proffitt (H&P) with the opportunity to deliver plan review services to Clarke County for this important project. Based on our review, we recommend the County approve the E&SC portions of the project, with the needed adjustments to address the following review comments. No further review is needed.

Background

On June 6, 2022, H&P received a copy of the Plans and Special Use Permit for the proposed Beckett 50MW Solar Project, dated April 2022, prepared by Integrity Federal Services on behalf of OPDEnergy. H&P reviewed these Plans and Special Use Permit based on the requirements of the Clarke County, VA Zoning Ordinance (Sections 5, 6, and 8) and the Virginia Erosion and Sediment Control Regulations. H&P provided a review Comment Letter based on this 1st Submittal on July 11, 2022.

On December 14, 2022, H&P received the 2nd Submittal of the Plans and Special Use Permit, dated August 15, 2022, and September 2022, respectively, and a Comment Response Letter, dated August 17, 2022. H&P provided a review Comment letter based on this 2nd Submittal on January 19, 2023.

On April 18, 2023, H&P received the 3rd Submittal of the Plans and Special Use Permit, dated April 3, 2023, and September 2022, respectively, and a Comment Response Letter, dated April 4, 2023. H&P recommended approval on May 14, 2023, with a note about the drainage area size for the sediment basin.

On July 12, 2023, H&P received the 4th Submittal of the Plans, dated June 27, 2023, with revisions including a newly proposed site entrance. H&P recommended denial of approval on September 28, 2023, and requested revisions to the E&SC portions of the newly proposed entrance.

Page 1 of 2

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On December 13, 2023, H&P received the 5th Submittal of the Plans and a Comment Response Letter, both dated December 8, 2023. These plans have been reviewed and comments are provided below.

Comments

- 1. Page 12: Adjust circulation pattern at proposed Electrical Yard to follow proposed gravel roads to ensure vehicular traffic is remaining on gravel surface.
- 2. Page 16: Adjust SSF. It appears to be shown crossing the gravel access road two times at the south end of the yard. Pull back SSF on electrical Yard side to edge of road.
- 3. Page 16: Adjust LOD line to fully encompass new gravel road extension to the east of proposed Electrical Yard.
- 4. Pages 16 and 36: Page 16 shows an existing drainage divide line through the proposed Electrical Yard, however Page 36 shows a HUC divide line around the proposed Electrical Yard. These lines do not match. Will grading be part of the electrical yard plan?. It is unclear where the stormwater will be leaving the site. ESC law, 9VAC840-40-19n states that the water quantity leaving the site shall meet the minimum standards of 9VAC25-870-66 of the Virginia Stormwater Management Program (VSMP). DEQ is reviewing the project for stormwater management compliance and adequate downstream channel compliance falls under both SWM and ESC regulations. Due to the large and complex nature of the project, H&P will defer to DEQ for comments regarding any water leaving the site, the design revision to no longer propose SWM Facility #5, and adjustment of the HUC line in this submittal, as this will need to be in compliance with VSMP regulations.

This is the extent of H&P's comments at this time. Please contact me with any questions.

Sincerely,

Hurt & Proffitt

Scott Cramer, P.E. Project Manager

CC: Kacie Hodges, Keith Boyd – H&P

County Attorney review letter Re: Decommissioning Plan

HALL, MONAHAN, ENGLE, MAHAN & MITCHELL

A PARTNERSHIP OF PROFESSIONAL CORPORATIONS

ATTORNEYS AT LAW

WILBUR C. HALL (1892-1972) THOMAS V. MONAHAN (1924-1999) SAMUEL D. ENGLE (RETIRED) O. LELAND MAHAN ROBERT T. MITCHELL, JR. JAMES A. KLENKAR

LEESBURG, VIRGINIA

307 EAST MARKET STREET 9 EAST BOSCAWEN STREET WINCHESTER, VIRGINIA TELEPHONE 703-777-1050 TELEPHONE 540-662-3200 FAX 540-662-4304 E-MAIL:

lawyers@hallmonahan.com

PLEASE REPLY TO:

P. O. Box 848

WINCHESTER, VIRGINIA 22604-0848

January 9, 2024

VIA EMAIL

Jeremy F. Camp, Senior Planner/ Zoning Administrator Department of Planning 101 Chalmers Court, Suite B Berryville, VA 22611

Re: Horus VA Decommissioning Plan

Dear Jeremy:

I have reviewed the Staff Report and the "Beckett Solar Facility Decommissioning Plan" which you provided to me.

My review of the Decommissioning Plan does not indicate any adverse legal issues with the Plan. As you noted, the Plan is virtually identical to the Hecate Energy plan, which I reviewed and which was approved.

With kind regards,

Very truly yours,

RTM/ks

Wed, Aug 02, 2023 08:28 AM

VDOT approval letter

Clarke- Route 636 & 632- Beckett Solar Project

From : Boyce, Arthur (VDOT)

<Bobby.Boyce@VDOT.Virginia.gov>

Subject: Clarke- Route 636 & 632- Beckett Solar Project

To: jgerhart@ifs-ae.com

Cc: Connor Hill <chill@ifs-ae.com>, Ben Svedlow

<bsvedlow@ifs-ae.com>, Funkhouser, Rhonda (VDOT)

<Rhonda.Funkhouser@VDOT.Virginia.gov>, Johnson,

Joseph (VDOT) < JosephW.Johnson@vdot.virginia.gov>,

Jeremy Camp (jcamp@clarkecounty.gov)

<jcamp@clarkecounty.gov>

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

Staunton/Edinburg Land Development 14031 Old Valley Pike Edinburg, VA 22824

Dear Mr. Jason P. Gerhart, PE:

This is to acknowledge receipt of your revised plans dated July 21, 2023 for the subject project. The plans appear satisfactory and are approved. Please advise the developer accordingly.

I offer the following comments:

- Our review and comments are general in nature. Should details be overlooked during plan review or conditions in the field exist such that additional measures are warranted, such measures shall be completed to the satisfaction of the Department.
 - Materials used and methods of construction shall adhere to the current observed VDOT Road and Bridge Specifications, Road and Bridge Standards, Manual on Uniform Traffic Control Devises, and Land Use Permit Special Provisions.
 - A preconstruction conference should be held by the engineer and/or developer with the attendance of the contractor, county agencies, and VDOT prior to initiation of work.
 - All drainage is to be carried within the right-of-way in ditch lines or gutters along the street to a pipe or drainage easement.
 - Any construction related changes to the approved plan must come through the design engineer to VDOT for approval. Please allow a minimum of 5 business days for VDOT review.
 - A Land Use Permit shall be obtained before any work is performed on the State's right-of-way. The permit is issued by this office and will require a \$300 application fee and \$25,000 surety bond coverage. You may make application for this permit

CTL approval recommendation - Karst Plan

CTL Engineering of WV, Inc. 1091 Chaplin Rd., Morgantown, WV 26508 Phone: 304-292-1135

www.ctleng.com

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August 1, 2022

Brandon Stidham Director of Planning Clarke County 101 Chalmers Court, Suite B Berryville, VA 22611

Re:

Review of Karst Geophysical Survey Report Beckett Solar Energy Facility, OPDEnergy Tax Map Parcels 13-A-13 & 13-A-56 1030 Bellinger Rd., Berryville, Clarke Co., VA CTL Project No. 22050035MORF

Dear Mr. Stidham,

This letter report is in response to your request for CTL to review the above referenced Karst / Geophysical Report submitted to your office to determine if it meets the intent of the recently updated and adopted Clarke County Special Use Ordinance. Please note that CTL did not perform any field verification of the data in the provided report.

Report Reviewed:

BECKETT SOLAR ENERGY FACILITY SPECIAL USE PERMIT CLARKE COUNTY VIRGINIA APRIL 2022 Prepared By: INTEGRITY FEDERAL SERVICES Prepared For: OPDEnergy

The Ordinance requires that the geophysical survey report include requirements that are listed below. The Special Use Permit application (SUP) provided extensive detailed information relative to this project. The SUP contained a Geotechnical and Karst Evaluation report by ECS MID-ATLANTIC LLC that included 22 Electric Resistivity Imaging Transects at each of the 10 identified sinkhole areas. The investigation of the property generally stated:

"Karst characteristics observed during the reconnaissance walk included bedrock outcrops with solution widened joints and fractures, surface depressions and obvious sinkholes. Ten (10) features were field located by ECS, in conjunction with published maps, and deemed to be Class I Sinkholes, per County Ordinance definition. Five (5) other features were identified during this phase of the project, but were either along the property boundary and outside of the planned development area, or mapped by others and could not be located for observation. Two (2) of the identified sinkholes (#4 and #15) contained debris, rubbish, and trash. ERI Lines were established over the ten (10) features deemed to be Class I Sinkholes to image the potential subsurface karst development."

The recommendations contained within the SUP relative to site construction within 100 feet of the karst features are to avoid any drainage discharge or site grading at the sinkhole locations. The report states:

CLIENT: Clarke County, VA

PROJECT: Beckett Solar Farm SUP review

August 1, 2022

Page 2

"As required, County Zoning setback requirements should be maintained. Encroachment within the mandated 100 foot setback, to within 25 feet, of the discernible edge, or parapet, of the mapped Class I Sinkholes can be accomplished with appropriate engineering control for the solar panel foundations, per the Ordinance. Minimally invasive driven and pre-drilled/grouted steel H-piles are considered suitable for the requisite engineering that ensures structural stability" as mandated by the Ordinance."

We have completed a review of the 22 ERI survey transects, and agree with the ECS findings relative to the type and condition of each of the karst features. Additionally, the ECS report recommends the following:

"The limits of potential subsurface karst conditions in the area of proposed development should be explored upon availability of detailed grading plans. Soil and rock test borings, in conjunction with pneumatic hammer "rock probes" may be included in the subsequent phases of investigation for this project if additional karst risk reduction is desired."

This statement will be applicable during construction also if site conditions differ from those identified in the current report. The extent and condition of each unforeseen of changed karst features must be investigated and a plan of action established to address the condition.

In summary, we have provided our professional opinion whether the report meets with the requirements of the Clarke Co. Ordinance:

Dipole-dipole electrical resistivity survey	Minimum Requirement Complian		
Two lines each area	Yes		
Perpendicular to strike	Yes		
Minimum depth of 20 feet at edges	Yes		
Minimum 200 soundings	Yes		
Minimum 40 feet depth	Yes		

	Report	Minimum Requirement Compliance
0	Directional orientation and plan maps	Yes
	Color profiles identifying hazards, consistent color scale, treatment area indicated	Yes
0	Amount of Overburden	Yes
٥	Elevations	Yes
	Report	Minimum Requirement Compliance
٥	Geologic structure	Yes
6	Low, moderate, high risk	Yes, Low
0	Other	N/A

The geophysical survey report included two electrical resistivity lines across the existing karst feature. Depths to bedrock appear to be about near ground surface to more than 50 feet below the ground surface. Potential deep seated karst receptors were imaged along numerous alignments and



CLIENT: Clarke County, VA

PROJECT: Beckett Solar Farm SUP review

August 1, 2022

Page 3

several smaller receptors, at higher elevations, were identified as well. Discontinuities in the bedrock, including fractures, joints and/or bedding planes, were inferred along the alignments, which may serve as groundwater conduits that could impact karst development. Several potential deep seated karst receptors were imaged that may have continuity to the surface through solution fractures, joints, fissures, and channels. Images around the identified sinkholes are consistent with the observable features at these locations and indicate well developed karst conditions underlying these areas, which likely serve as the groundwater pathway developing these features.

The geophysical survey report reviewed meets the intent of the County Ordinance and general industry practice.

We hold our opinions to a reasonable degree of scientific certainty and/or probability, and we also reserve the right to modify this report based upon receipt of new information that differs from that used in preparing this report. We appreciate the opportunity to be of service and if you have any questions, please contact us.

Respectfully submitted,

CTL ENGINEERING, INC.

Patrick E. Gallagher, PE, PS, CPGS

Project Consultant

CK Satyapriya, PE Technical Reviewer



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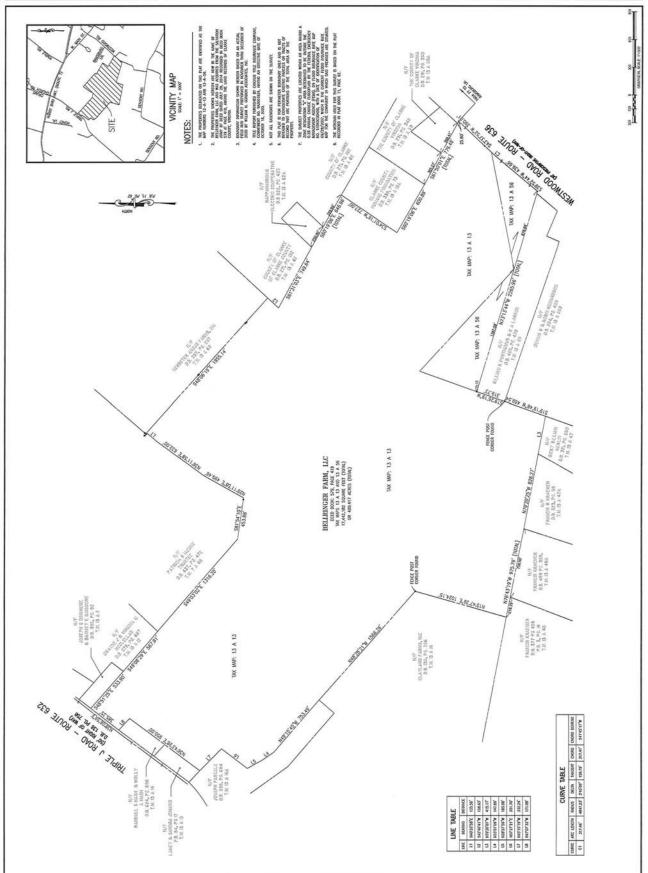


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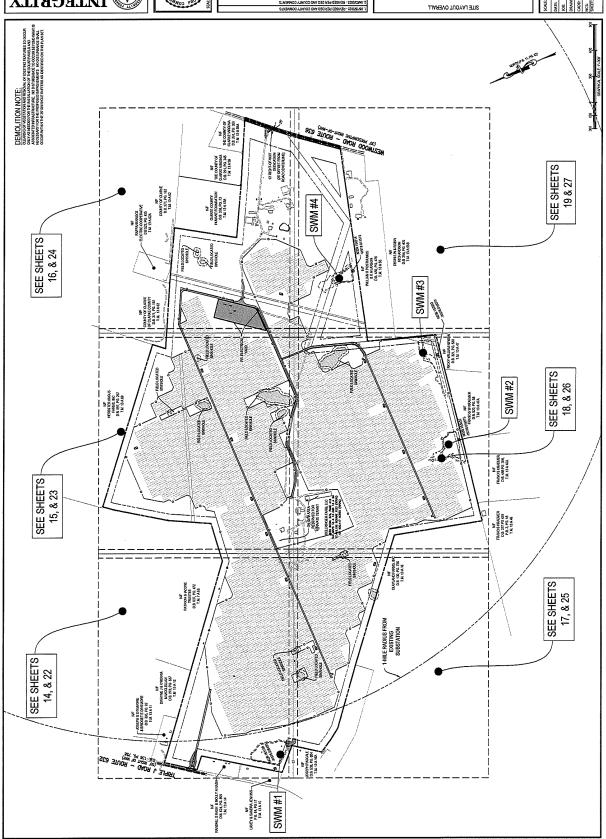






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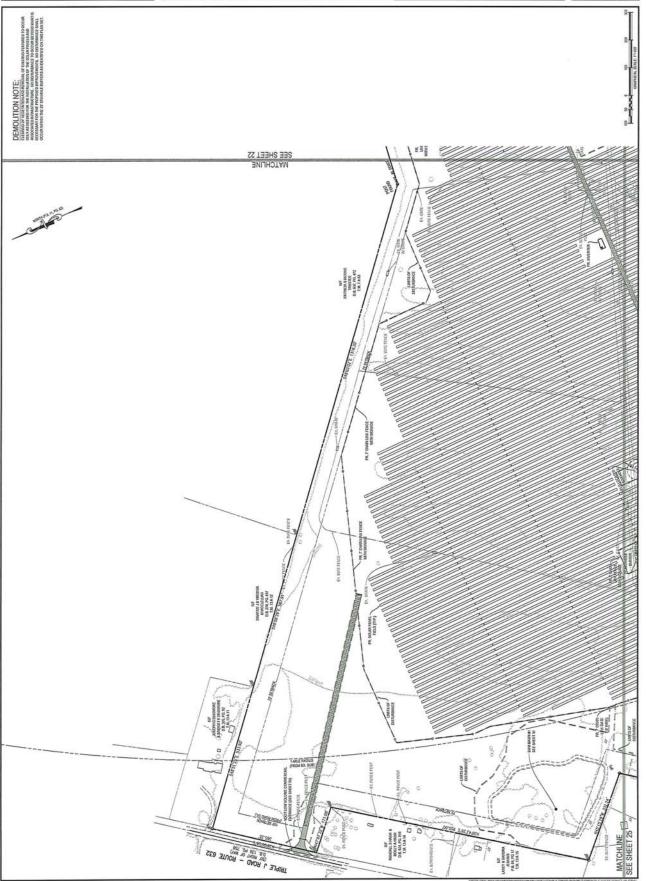


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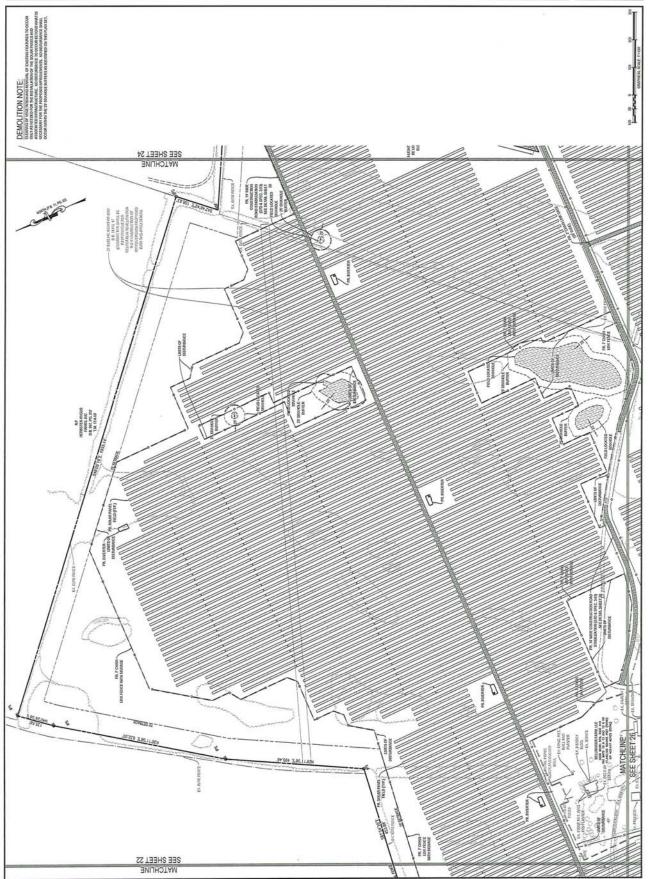


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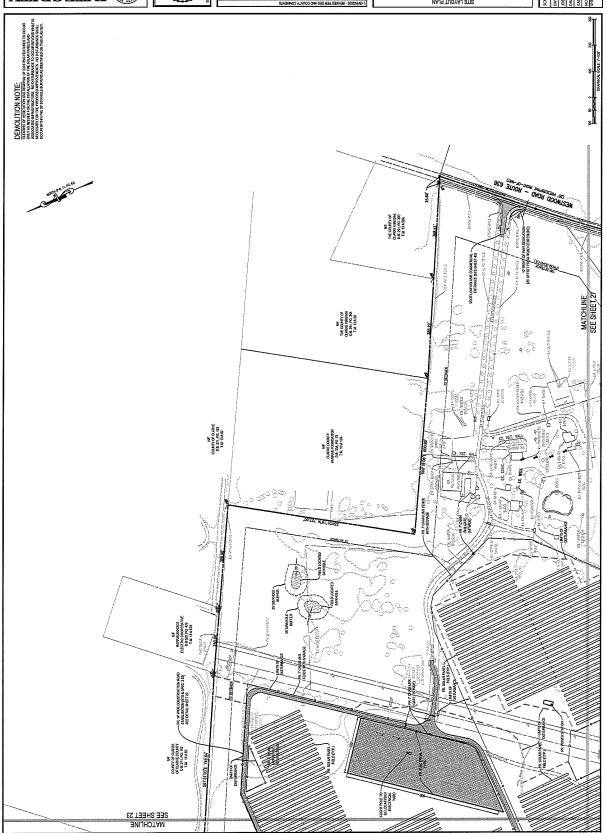


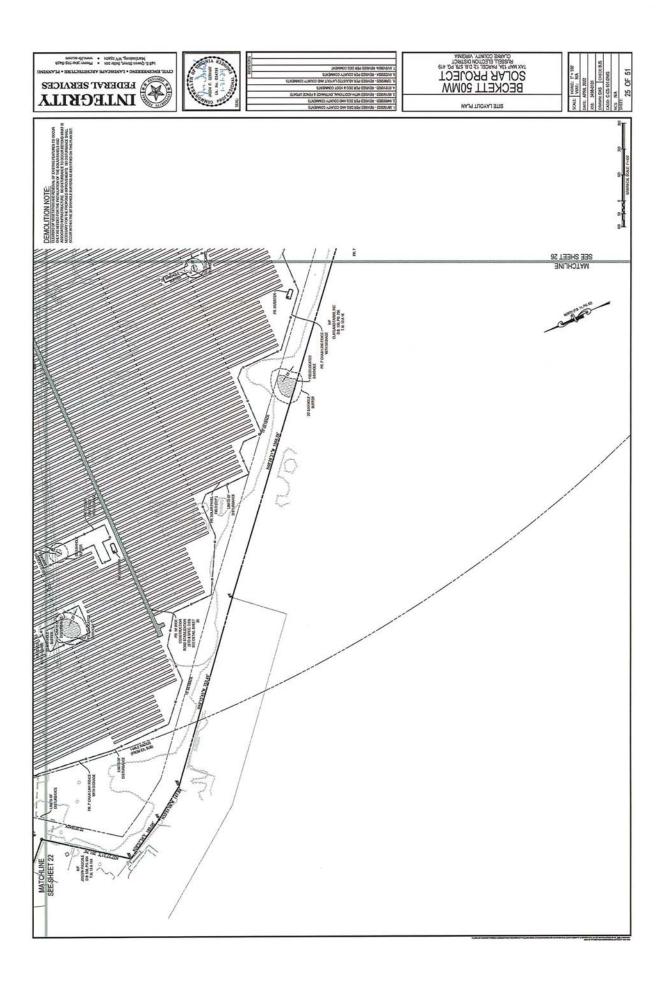
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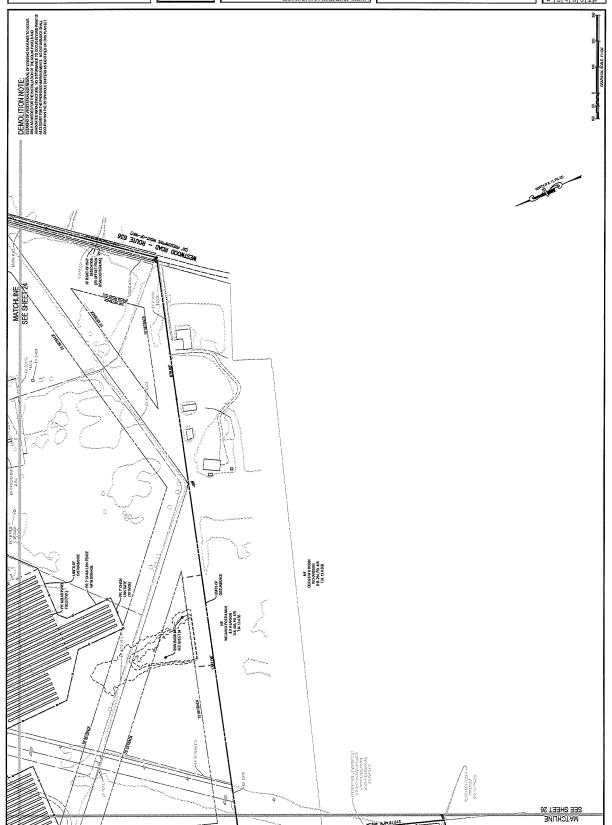


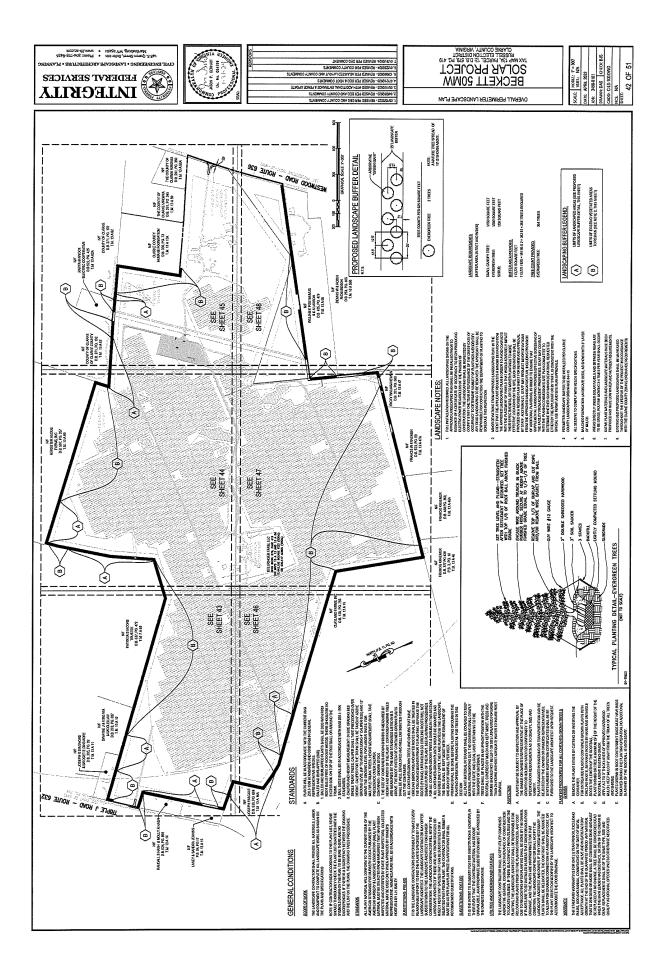
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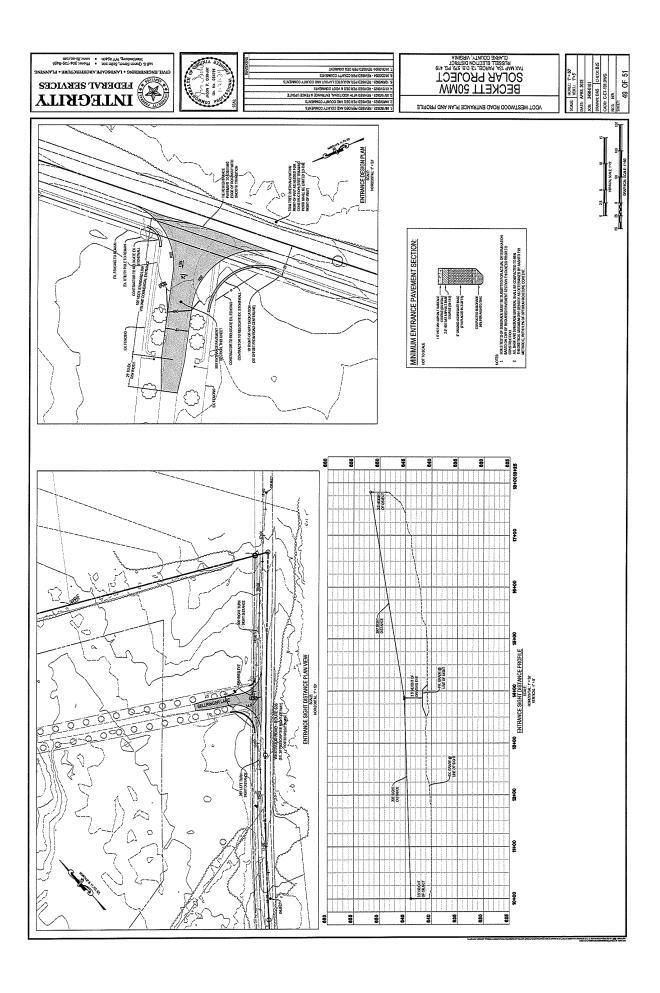
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