

Albemarle County Planning Commission
February 6, 2018

The Albemarle County Planning Commission held a public hearing on Tuesday, February 6, 2018, at 6:00 p.m., at the County Office Building, Lane Auditorium, Second Floor, 401 McIntire Road, Charlottesville, Virginia.

Members attending were Tim Keller, Chair; Julian Bivins, Daphne Spain; Pam Riley, Vice-Chair; Bruce Dotson, Karen Firehock, Jennie More and Bill Palmer, UVA representative.

Other officials present were Scott Clark, Senior Planner; Margaret Maliszewski, Chief of Community Development; Elaine Echols, Chief of Community Development; David Fox, Neighborhood Planner; Rachael Falkenstein, Senior Planner; Tim Padalino, Senior Planner; Sharon Taylor, Clerk to Planning Commission and John Blair, Deputy County Attorney.

Call to Order and Establish Quorum

Mr. Keller, Chair, called the regular meeting to order at 6:00 p.m. and established a quorum.

The meeting moved to the next agenda item.

SP-2017-00018 Rivanna Solar Project

MAGISTERIAL DISTRICT: Scottsville

TAX MAP/PARCEL(S): 09400-00-00-017A0

LOCATION: Southeast of the intersection of Buck Island Road and Rt. 53 at 2631 Buck Island Rd

PROPOSAL: Solar-energy electrical generation facility, with solar panels occupying approximately 90 acres

PETITION: Solar energy system allowed by special use permit under section 10.2.2.58 of the Zoning Ordinance on a 149-acre parcel. No new dwelling units proposed.

ZONING: RA Rural Area - agricultural, forestal, and fishery uses; residential density (0.5 unit/acre in development lots)

OVERLAY DISTRICT(S): Entrance Corridor, Flood Hazard Overlay District

COMPREHENSIVE PLAN: Rural Area – preserve and protect agricultural, forestal, open space, and natural, historic and scenic resources; residential (0.5 unit/ acre in development lots)

(Scott Clark)

Mr. Scott Clark summarized the staff report, with Ms. Margaret Maliszewski, Chief of Planning, in a PowerPoint presentation. This is a special use permit request for a solar-energy electrical generation facility.

DETAILS OF THE PROPOSAL:

- 149-acre site, cleared in commercial timbering operation
- Proposed facility would include approximately 90 acres of passive solar photovoltaic arrays on the 149-acre property.
- Solar panels oriented horizontally, approximately six feet above the ground
- Electricity generated by the facility would be transferred to the adjacent substation
- Solar panel areas would be surrounded by chain-link fences
- Approximately seven inverters (contained in metal boxes approximately 14 feet long, 7.5 feet high, and 3.5 feet wide) and other electrical equipment would be located on the site.
- No buildings would be needed, no on-site staffing.
- It is just north of Buck Island Creek and the floodplain of that creek.
- The majority of the site has been recently cleared in a commercial timbering operation.
- In photos, staff pointed out the areas that have been cleared have been replanted with the small pines.
- Reviewed overall concept plan of the site.
- There is one particular area where the envelopes of the panels would come up close to Route 53 and there is some more detailed screening placed there.
- Pointed out existing substation and the existing powerline easement that crossing through the property and the connection from the proposed equipment yard over to the existing substation to connect to the grid.
- The second sheet of the conceptual plan has a more detailed screen and planting plan for the area that is adjacent to Route 53. Up near the road there is a line of shrubs to be planted which would be effective at interrupting the views from passing drivers and passengers so they are down more at the level of people in vehicles and then stepped back from that back out of the line of road right-of-way and the utility corridor that comes through here are some rows of lower trees and then higher species that are in front of the fencing that would be around this area of panels here.

Factors to be Consider for approving special use permits in this case:

No substantial detriment. The proposed special use will not be a substantial detriment to adjacent lots.

The main issue staff found was the noise from the invertors, which are not tremendously loud but they create:

Inverter noise:

- 70 decibels at a distance of one meter (3.28 feet) – comparable to “radio or TV audio” or a vacuum cleaner
- The decibel level decreases with distance from the source. However, the noise would be continuous during daylight hours

- Staff recommends an inverter setback of at least 100 feet from all property lines
– would reduce noise level to approximately 40 decibels

Harmony. The proposed special use will be in harmony with the purpose and intent of this chapter.

The purposes of the RA zoning district include:

Preservation of agricultural and forestal lands and activities;

- The site could return to agricultural or silvicultural use after the solar facility was no longer needed. The applicant expects up to a 25 to 35 year life span for a facility like this. When it is done all of the equipment can be removed. In fact, staff are recommending separate conditions.
- Recommended conditions require a “decommissioning plan”
 - Removal of both above-ground facilities and below-ground panel supports

Limited service delivery to the rural areas; and

- Little if any demand for emergency services
- No need for drinking-water supply or septic fields.

Consistency with the Comprehensive Plan. The use will be consistent with the Comprehensive Plan.

Rural Areas Plan

- Rural Areas priorities:
 - agricultural and silvicultural uses and activities
 - natural and cultural resources.
- Proposed use would occupy approximately 90 acres of recently-clearcut forest land with an energy-generation use.
- However, the site could return to agricultural or silvicultural use
- Recommended decommissioning plan would ensure that this potential is achieved

Environmental Sustainability

- 1998 Sustainability Accords as important guiding principles.
 - community should “[p]romote the conservation and efficient use of energy resources.”
- Natural Resources chapter
 - County should “continue to demonstrate leadership in energy and carbon reductions at the local level.”
 - Local Climate Action Planning Process recommended that the community “promote wider awareness and adoption of cleaner

sources of electrical energy (e.g., solar photovoltaic, co-generation, biomass, wind).

The proposed facility would be in accord with these policies, as it would supply energy from one of those “cleaner sources.”

Visual Character

- The Rural Areas chapter of the Comprehensive Plan calls for “[r]ural and historic landscapes that enhance the visitor’s experience.”
- The site is located on Route 53, which is a major access route to Monticello and James Monroe’s Highland
- The current conceptual plan shows landscaping and screening reviewed by the ARB.
- The ARB felt this design would effectively screen the most visible portion of the site (especially the portion directly adjacent to Route 53) without attempting to eliminate all possible views of the site. Staff believes that this level of screening is appropriate for protecting the visual character of Route 53.

Review for Compliance with the Comprehensive Plan

- As an electrical generation use that will provide energy to a public utility (Dominion Virginia Power), this proposal is subject to a Compliance with the Comprehensive Plan Review as required by the Code of Virginia (Section 15.2-2232).
- A compliance review considers whether the general location, character, and extent of a proposed public facility are in substantial accord with the adopted Comprehensive Plan.
- It is reviewed by the Planning Commission, and the Commission’s findings are forwarded to the Board of Supervisors for their information. No additional action is required of the Board.
- For the reasons stated above, staff finds that the proposed use is in substantial accord with the Comprehensive Plan.
- Staff recommends that the Commission formally make the finding of substantial accord, in addition to the recommended action on the special use permit proposal itself.

SUMMARY:

Staff has identified the following factors favorable to this proposal:

1. The use is in accord with Comprehensive Plan policies for the Rural Areas and for encouraging use of sustainable energy sources.
2. The site can be returned to agricultural or silvicultural uses, unlike more permanent forms of commercial or utility development.

3. The proposed landscaping and screening effectively reduce the visibility of the site from Route 53, and long-distance visibility of the site from historic sites and the rural landscape in general is significantly limited by topography, distance, and the low-lying nature of the proposed facility.
4. Noise impacts can be managed by equipment setbacks.

Staff has identified no factors unfavorable to this proposal.

RECOMMENDED ACTIONS:

Staff recommends that the Planning Commission find the development of the proposed solar energy facility to be in substantial accord with the Comprehensive Plan.

Staff also recommends approval of SP-2017-00018 Rivanna Solar with the following conditions:

1. Development and use shall be in general accord with the following revised plans prepared by Draper Aden Associates titled "Conceptual Layout, Rivanna Solar Farm" dated January 5, 2018 (hereinafter "Concept Plan") as determined by the Director of Planning and the Zoning Administrator. To be in general accord with the Concept Plan, development and use shall reflect the following major elements as shown on the Concept Plan:
 - a. Location of solar development envelopes;
 - b. Location of access/entrance improvements;
 - c. Location of equipment yard; and
 - d. Retention of wooded vegetation in stream buffers

Minor modifications, with the approval of the Zoning Administrator and the Director of Planning, to the Concept Plan that do not otherwise conflict with the elements listed above may be made to ensure compliance with the Zoning Ordinance.

2. Landscaping and screening shall be substantially as shown on the Conceptual Plan, and shall be planted as shown on a landscaping plan approved by the Director of Planning or his or her designee.
3. All inverters shall be set back at least one hundred (100) feet from property lines and rights-of-way.
4. The applicant shall submit a tree-protection agreement between the applicant and the landowner of Tax Map Parcel 09300-00-00-047E0 with the building permit application. This agreement shall prohibit the removal of shrubs or trees (except for non-native or invasive species) by either party within 475 feet of the rear boundary of this parcel until decommissioning of the solar energy facility on Tax Map Parcel 09400-00-00-017A0 is complete. The tree-protection agreement shall be subject to review and approval by the County Attorney, and shall be in a form and style so that it may be recorded in the office of the Circuit Court of the County of Albemarle. Prior to issuance of a building permit, the tree-protection agreement shall be recorded by the applicant in the office of the Circuit Court of the County of Albemarle.

5. All outdoor lighting shall be only full cut-off fixtures and shielded to reflect light away from all abutting properties.
6. The applicant shall submit a decommissioning and site rehabilitation plan (hereinafter "Decommissioning Plan") with the building permit application that shall include the following items:
 - a. A description of any agreement (e.g. lease) with all landowners regarding decommissioning;
 - b. The identification of the party currently responsible for decommissioning;
 - c. The types of panels and material specifications being utilized at the site;
 - d. Standard procedures for removal of facilities and site rehabilitation, including recompacting and reseeded;
 - e. An estimate of all costs for the removal and disposal of solar panels, structures, cabling, electrical components, roads, fencing, and any other associated facilities above ground or up to thirty-six (36) inches below grade or down to bedrock, whichever is less; and
 - f. An estimate of all costs associated with rehabilitation of the site.

The Decommissioning Plan shall be prepared by a third-party engineer and must be signed off by the party responsible for decommissioning, and all landowners of the property included in the project. The Decommissioning Plan shall be subject to review and approval by the County Attorney and County Engineer, and shall be in a form and style so that it may be recorded in the office of the Circuit Court of the County of Albemarle.

7. Prior to issuance of a building permit, the Decommissioning Plan shall be recorded by the applicant in the office of the Circuit Court of the County of Albemarle.
8. The Decommissioning Plan and estimated costs shall be updated every five years, upon change of ownership of either the property or the project's owner, or upon written request from the Zoning Administrator. Any changes or updates to the Decommissioning Plan shall be recorded in the office of the Circuit Court of the County of Albemarle.
9. The Zoning Administrator shall be notified in writing within 30 days of the abandonment or discontinuance of the use.
10. All physical improvements, materials, and equipment (including fencing) related to solar energy generation shall be removed from above ground and from below ground down to bedrock, or to a depth of at least 36 inches below the ground surface, whichever is less, and the site shall be rehabilitated as described in the Decommissioning Plan, within 180 days of the abandonment or discontinuance of the use.
11. If the use, structure, or activity for which this special use permit is issued is not commenced by [date two years from Board approval], the permit shall be deemed abandoned and the authority granted thereunder shall thereupon terminate.

Mr. Clark noted staff had recommended motions for the Commission and would be happy to answer any questions.

Mr. Keller invited questions for staff from the Commission.

Ms. Spain suggested staff also add for the public that Monticello did approve of this in terms of its effect that it would have little to no effect on the view shed of Monticello and all of the Commissioners got letters to that effect.

Mr. Clark agreed and that they provided a letter to the Commission and the Board to that effect.

Ms. Spain noted that the chain link fence makes me a little nervous and she would like to know how long it would take the planted vegetation to cover the chain link fence.

Mr. Clark replied that the planting height for some of the trees at the front or closest to the road he believed were going to be in the order of 7' foot; that is going to be pretty effective and pretty sizeable trees to be screening of the fence. However, he did not recall whether that front fence is chain link. Mr. Clark noted the applicant could tell you more in detail about that. He said they are required to have fencing for their insurance purposes to protect the equipment in the facility.

Ms. Spain said she can understand that, but, whether it needs to be chain link or some other type fencing just facing Route 53.

Mr. Clark said the screen goal was to see the trees and not the fence.

Ms. Spain noted that would take a while for the trees to grow.

Ms. Maliszewski noted that part of the reason for what looks like that heavy landscaping there along the tree is because there is an Entrance Corridor guideline that says chain link should not be visible from the street. So that is one of the reasons it was not just the visibility of the solar panels but also the visibility of the fence.

Mr. Keller asked if there was further questions for the staff.

Ms. More said that she had a question about condition 5 about outdoor lighting. She said that it sounds like the site is not staffed and how often would there be lighting on the site at nighttime.

Mr. Clark pointed out that is just our standard condition just to make sure that the fixtures are full cut off and my understanding from the applicants is that there would be lighting on the site that could be switched on if they wanted to do repairs at night if something broke. He said but, no, there would not be office facilities or staffing on the site for there need to be constant lighting. However, he was sure the applicant could tell you more about that in more detail.

Ms. More asked if was not a security fixture or something like that; and Mr. Clark replied that he did not believe so but they can ask the applicant.

Mr. Dotson said the question about accessing the site once construction has been completed. He sees on the site plan temporary access would come off from Route 53.

Mr. Clark replied that the construction entrance would be on Route 53, but then that would be closed and would be actually covered up by the proposed landscaping on Route 53. Then a permanent entrance, which again would just be for occasional maintenance would be back here on Buck Island Road.

Mr. Dotson said a related question in terms of operating this facility a certain number of inverters would be involved and are those spread around the site or clustered in one area.

Mr. Clark replied that my understanding is that they are spread around the site but the exact locations will not be known until the final engineering is done on the exact layout on the panels. He said our main concern with those is just to keep them be back to some degree from the nearby residences which is why we are recommending a 100' setback, we are mostly concerned about noise when it came to the inverters.

Mr. Dotson said when you speak about noise that is noise made by the inverters during the hours of operation and you described it as continuous; and Mr. Clark replied that is correct.

Mr. Dotson said in terms of the panels tilting, and maybe this is a question for the applicant, is there however many panels there are here tilting simultaneously does that generate noise.

Mr. Clark said that he recalled asking the applicant about that a few months back. He recalled that the answer was that it happened so slowly that it does not produce much noise because they are talking about tilting from one angle to the other across the other across the entire course of the day, but they can answer that better than he can.

Hearing no other questions, Mr. Keller opened the public hearing and asked the applicant to come forward.

Seth Maughan, Director of Projects with SolUnesco, said his colleagues Joan Hilts and President Glen Telfer who works for J. Breeden who were doing engineering work for us joined him. He said also present is Carolyn Sweeney who is the landowner on this property. He acknowledged all the work the county has done to date; we have been working with them for a year and a half on this project. He said we know it is a new year and we really appreciate off the effort that has been put into responsibly embracing solar development in the county. He said Scott did a great job of giving an overview of

the project. He has a couple of items he would like to ask to talk about somewhat commonly asked questions particularly to this project.

Mr. Maughan said he thinks we have had a good summary of this proposal and if you have questions, he would be happy to answer them. He presented a PowerPoint presentation that he wanted to share; this is a representation of what an 11 megawatts project would look like on the property. He pointed out the roads that Scott showed going north/south here and as he pointed out, they rotate slowly throughout the day and at that speed there is no real noise. He said the one thing Scott that said about the height he wanted to clarify a little bit; that 6'8" height is when they are at a maximum tilt. He said that it is not the height they are when lying flat but are lower to the ground and a very low profile use. He said at the maximum tilt at the end of the day one edge will reach that height and then they will flatten back out for the night.

Mr. Maughan said as Scott mentioned we have worked pretty excessively with the ARB and staff to develop a buffer plan. He said there is a chain link fence there and it is 7' high, which is the reason that we are planting trees that are also 7' high; not all of the trees but a significant amount of the trees so that at implementation there is some decent coverage. He said we are also giving a setback of 85' to the fence and 100' to the panels that is beyond what is required there in addition to an extensive buffer plan that is quite a bit more than industry standard. He said we did this throughout several hearings of the ARB because of the Entrance Corridor. He noted he has learned since then that technically there is no Entrance Corridor standards and with that said we recognize and respect that this is an important street and the rural nature of the street is important to the county. He said we want to be good neighbors so we are not proposing any changes from what we came up with the ARB and we hope will go a long way in creating harmony with this property and the surroundings. He said we have also prepared a couple of simulations of what this buffer plan will look like. He pointed out in a shot from Route 53 with the trees planted after 5 to 10 years of growth; but when planted they will be 7' which is higher than the panels and equal to the height of the fence. He pointed out photos showing before and after. In addition, he said we understand that Albemarle County is known for its view sheds and Scott shared the analysis we had done to the left. In the analysis, the red areas are areas that theoretically have a line of sight to this project. He said one of the notes is that we used 40' average trees for this analysis which is quite a bit below what he understands what the actual average tree height is in Albemarle County. Therefore, this is a very liberal estimate in actuality and it may be very much better than this. He said as Scott pointed out you have to be quite a distance from the site before you get into the hills where you have the elevation where you could theoretically see over the surrounding vegetation. At that distance, we have demonstrated in our application it is very hard to see anything at all let alone matte black panels that are 4' off the ground.

Mr. Maughan said what we have also done is taken pictures from a drone that we had commissioned of the Louisa site in Louisa County. He noted that site is quite a bit larger than the proposed site. The first picture is at 2.7 miles and you can see off in a distance the actual site. Then the picture below is at 4 miles and again this area is the

site that is nearly impossible to see at this distance. In fact, the lower right picture was taken to simulate the approximate distance in height from Monticello. He said we shared this picture with Monticello along with a glare analysis and a lot of other information. He said we have really enjoyed working with them and they were able to endorse this project. He said we were really happy about that.

Mr. Maughan said the big question we always get is decommissioning and rightfully so; he certainly understands the counties don't want to see racks of garden panels that have been left for 50 years and that is certainly not the case here. First, of the entire landowner contract, we have an obligation to the landowner aside from our obligations with the county to decommission and that language is in the contract, which is also included with the application as far as our sight control documentation. He said also we have a number of conditions that have been proposed by the county all of which we are happy to adhere to; the conditions are fairly standard and stuff that we have agreed to in other counties including a decommissioning plan with a third party cost estimate and also updating that plan every 5 years to ensure that conditions have not changed and we can still do the cleanup. Also, with the conditions we are committing to full decommissioning and rehab as described in the application and also in our contract with the landowner within 180 days of this project going off line. He said that is fairly quick, usually we take a year; however, this is a smaller project and we believe that we can meet that. Therefore, we are happy to oblige there as well.

Mr. Maughan said we hope we have been able to effectively demonstrate that these projects pose little risk for negative impact to the county; but, we would also like to highlight some of the benefits that these projects offer the county. Obviously, it is a revenue opportunity for the landowner and a way for the landowner to use their property in a way that generates revenue for them above and beyond what they could otherwise expect to earn off the land through alternative uses. In addition, there is expected to be an increase in real estate tax. Currently, this is in land use so the county will see a small increase. At present day values it is a little over \$6,000 per year plus five years back taxes and so a little bit of cash for the county. In addition, there will be construction jobs for the construction part of this project. These jobs are cropping up all over the state and in Central Virginia Piedmont. A Virginia Community College locally actually has a project now where they are training workers in this field. So we are really glad to see that because it means there is opportunity to actually hire locally for this project. In addition to that, the county can expect that general economic boost especially during construction for services like rock quarries, landscapers and nurseries. There is a local EPC firm that specializes in building these sort of projects here in Charlottesville; they have approached us and are looking forward to bidding on this project when it comes up. Finally, it provides the county with an opportunity to take a leadership role in clean energy role in Virginia. He said we know that is a priority from you based on your Comprehensive Plan and also in participation in the Sol Smart Project you made a dedication to champion renewal energies and this is a great opportunity for you to do so.

Mr. Maughan pointed out there is a lot of due diligence still to come since this is sort of a generic step of a project since right now we are in county permitting and have to work with the state on what is called the DEQ. He said we have to do technical surveys to perform boundary surveys with the Army Corps of Engineers, historical and archaeological surveys and then give reports to the state along with the mitigation measures that we deem necessary. He noted they would have to sign off on this project before it is built. In addition, we will be working with the county actually for the Virginia Stormwater Management Plan on this project for any wastewater management needed. With that, Mr. Maughan thanked the Commission and said he hoped they would agree with staff on the recommendation for the special use permit and was open to any questions they might have.

Mr. Keller invited questions for the applicant.

Ms. Firehock said the plan shows a stream on it with trees and obviously, the landowner left that after completing the forestry operation. She asked the applicant how wide that is and if he plans to maintain that water buffer.

Mr. Maughan replied that there is a stream buffer that shows up in the GIS, which was the main strip in the middle, and per the plan, we are leaving a 100' buffer that matches what is in the county's GIS system where we will not be disturbing anything.

Mr. Bivins asked to speak a little bit about the decommissioning plan. He said the plan right now is that there will be a review every five years.

Mr. Maughan replied that was right and that was actually proposed by the county.

Mr. Bivins asked if that five-year review will include the county attorney and the county engineer and also if there were changes to it.

Mr. Maughan said that he believed the plan is to have a third party do a cost estimate every five years; and if we feel that there are any changes required of the decommissioning plan we will make it at that time and resubmit to the county. However, at a minimum he believed the requirement specifies that we will redo a cost estimate that he believes is the important piece and the one most likely to change.

Mr. Bivins said that would also be recorded as the other plan since my concern is that every time you do a reevaluation that piece makes it through the process set down in 6f to ensure it is put on the plat and gets recorded so that it sets some place so everybody knows what you are doing.

Mr. Maughan suggested that might be a question for Mr. Blair since we are supportive of the conditions, but did not offer them and did not know what the county requires there exactly. He said they would be happy to oblige.

Mr. Blair said obviously we would review all documents that were to be recorded before they would be recorded. He would say this is sort of a novel process; this is the first such facility. The zoning text amendment occurred last year and this is the first facility to come under that special use permit so we have been looking at decommissioning practices across the country. Obviously, we would review these documents before they are recorded by our office as well as the county engineer's office. However, to be frank he said this is sort of a novel process.

Mr. Bivins asked how are you made aware if by some unfortunate moment a panel gets stuck up when it should not be stuck up. In addition, he asked how long it takes someone to come and correct that.

Mr. Maughan replied that there is real time monitoring of these systems through a computer monitoring system that would come to someone's desk and they would send out a dispatch. As far as the response time on that he is not sure, but would assume it is possible because if a panel is not working correctly we are losing money. As far as possible other negative impacts of that he cannot think of one other than we are losing money. He said so even if a panel was stuck in a position that was not facing the sun he did not think that would be a detriment to the county or neighboring properties; it would just be a detriment to us so we would want to fix those as quickly as possible. However, he does not know what the exact response time is.

Ms. Riley asked Mr. Maughan for a little more detailed description of the landscaping and screening plan that you have given the ARB's concerns and if he can talk about what areas in particular were the most challenging and how are you going to treat them.

Mr. Maughan pointed out that this was sort of a tiered approach. He said one of the obstacles we had here was that there is an electrical easement running along the entire frontage. He said this is the only frontage that actually abuts Route 53, which was the Entrance Corridor, and probably will be again soon, so we really wanted to focus on this area. He said what we have here is shrubs directly adjacent to the road, but not within the VDOT easement. He noted that we had a little bit of room there between the VDOT easement and the electrical line easement, and we felt that shrubs are appropriate because they fit and did not have an opportunity to grow up into the lines. He said we worked a lot with the county and the ARB on this matter and kind of agreed that was an appropriate fit for that little strip of land we did have and beyond that we step it up with some higher trees just on the other side and basically back to the fence. There is still a tiered approach with the trees closest to the fence being the tallest where you see the 7' range trees next to the 7' fence. He said those trees of course would get bigger quickly that you saw in the rendering. He pointed out another aspect of the property, as you saw; there are some small pine trees that have been growing for the last 3 or 4 years since it was clear-cut. In our application, we make it clear that we will also keep those in place where possible so in addition to the planted trees we will also have some trees that are currently about this high and will continue to grow that alone certainly do not cut it as far as the screening goes. However, those trees do count for something and we are happy to leave those in place as well. He noted those would be left in place

all around the property and with the joint properties there is a 50' buffer and we will leave those pine trees and anything else that grows in there.

Ms. Spain asked along these lines is there any alternative to that chain link fence abutting 53 or anything that would be as cost effective or would fit with the chain link size that she would assume you would want to keep.

Mr. Maughan replied that we looked into this and understood it was a concern as part of the Entrance Corridor and the ARB issue, and what we found was an alternative solution as far as a different fencing type that was not chain link but we are still taking about a metal fence. He said he cannot remember but Glen looked into it and he thinks it was something like 10X and we abandoned that at that point since it put a lot of financial strain on the project. Instead, we moved the fence back from its original proposed position of 60' to 85' and we added another layer of buffer. Again, this buffer plan is way beyond engineering norms; it is frankly stressing the project as is financially and we are committing to it because that is what the county has asked us to do. However, he firmly believes that it will be adequate and between that and the distance, it will be adequate to screening this from the roadway.

Ms. Spain said the ARB clearly agreed, and Mr. Maughan relied yes.

Mr. Keller opened for public comment.

Ms. Riley said we have three people signed up to speak, but anyone interested can speak. She invited the first person to come forward.

Eric Kirshnick said he had lived in Albemarle County for 53 years and was very familiar with this piece of property. He said Ms. Firehock asked about the stream buffers and pointed out that anything within your 100' is coming to the creek. He pointed out in the first motion the Commission heard about the amount of disturbance to the area, which was minor to the automotive business. He said that with all the people working here this is going to be a major thing and all their pictures from Route 53 he can see a long ways. Mr. Kirshnick said the applicant said it would take 10 to 15 years for the buffer to grow up and let's just say for the 10 years we are going to see this big field of panels. Mr. Kirshnick said the second motion that the Commission heard was about the James River and we want to keep rural area. He said we need to keep it here because this is going to be ungodly and out in the country. He said it might generate some jobs; but for the landowners around it that have beautiful homes this is going to be an unsightly to look at every day. He said the amount of traffic that is going to be coming in and out of there from the workers is going to be dangerous. We just had a death out there and if you go out there and look where their easement there is a pine tree with ribbons on it where people died. He said it is very sad that this is what is going to come out. He said this is just not the place for visitors to come from out of town. He said they have said Monticello has signed off on it but why are all of the pictures from five miles away. He asked are not there some neighbors that get to look at that and why didn't we get to hear from them and the Fluvanna site. He noted that at five miles everything looks a

little out of focus. He said that with 90 acres you are going to see that even if it is lying flat on the ground. He heard them say that a panel makes as much noise as a vacuum cleaner; however, imagine 90 acres of panels and how much noise is that going to be. He said he did not think they were giving us the whole truth. He asked Scott before the meeting what is the damage to the land over the 25 years and was told we are going to be cleaning it up; however, we do not know what is going to be left behind. He said for the homeowners who have a beautiful home next to this property you do not know what it is going to do. He said they want this project to go through; but he bets they are not going to have to look at it. He said he travels 53 a lot and he is using a low estimate that for ten years this is what we are going to have to look at.

Mr. Dotson asked staff to put up the map so speakers could point out where they live.

Brenda Lee Sirvenska said she lives at 2605 and as a neighbor; she pays many taxes of about \$4,500 a year and had moved to the country to be in the country and not next door to some type of situation like the one we are talking about here. The other concern is property value and we have heard noise pollution. She asked are there any contaminants within these panels that would pose any health risks and if so what studies have been done on that. She said also we do not have wells. She pointed out we had an earth quake a few years ago, and for example if we had an earth quake is this company going to protect our water if these panels break. She did not know what type of contaminants or pollutants are within these panels, but if that goes into our groundwater all of the neighbors have wells and what happens to us. She said we do not have any advantages as far as being a neighbor in the county paying the taxes that we do to have this as a neighbor.

Alissa Bryant said she lives at 2655-Buck Island and the solar panels will be actually at my back door. She has no problems with it, and yes there are always accidents on 53 and a lot of it is due to falling asleep, drunk driving or whatever and it will continue to be after the panels go up and before. She said many people do not want them, but it is Ms. Sweeney's land and she has no problem with it. She noted they would be coming right beside my property and at my back door. She said William Kingray who lives two doors down she is sure he has no problem with it. She said that it would be great for jobs and the community.

Ms. Riley invited other public comments.

Calvin Frazier said he lives next door to Alissa and so this project will be in my backyard. He noted that his house was actually built on the farm itself and why you do not see it separated. When he heard about this project going on for the last year and a half he was and still is all for it. However, what he did not understand and the reason he came to this meeting is the notice has been up and 50 neighbors could have come up here tonight and said what they had to say and whether it would affect them or not. But, the only people that are here with us are all for it and the other two people here that are not for it are Ms. Sweeney's stepdaughter, Brenda, and Eric Kirschnick who use to go

with Brenda's daughter and may still be and worked on the farm at one time, but out of all the people who could have come here and contested this projected it had to be her stepdaughter and a friend of her stepdaughter's daughter. He noted that all that boils down to is a family feud and does not have anything to do with this project. He said if it would affect any more neighbors then neighbors would be here to speak their part.

Travis Petrolia, with the Southern Environmental Law Center, thanked the Commission for the chance to comment here tonight and thanked staff for answering some of their questions about the proposal. He said we see this project as a great opportunity to advance the county's goals of pursuing cleaner energy and reducing greenhouse gas emissions and at the same time we determine to help make this project the best it can be especially because it is the first of its kind through the gate and will influence how similar projects are accessed going forward. He said a big part of that is ensuring a careful review and mitigation of its impacts on the rural area. In our respect, we do have some questions about the proposal as well as a few suggestions to strengthen it. As an overarching point, it is a key that all the mitigation commitments that are truly important in the county are captured in the special use permit conditions themselves. With that point in mind, we have a few recommendations. First, the application provides that the ground cover on the site will be grasses and fully permeable. However, that commitment is now made clear in the special use permit commitments. Since this project has a stream flowing through it and when remove large areas of existing vegetation that drain to that stream it is important that these protective measures are specified as actual commitments in the special use permit. Second, the conditions proposed in the special use permit reference tree protection areas being designated in a couple of different locations in the vicinity of Route 53 including the proposed 475' area on the adjacent parcel. We do not see any of these protection areas actually identified on the concept plan and recommend they be added to it. Third, the staff report indicates that the project will still be visible from several approaches along Route 53. We recognize that it may not be visible to completely screen it from view; but based on the ARB's feedback there do appear to be some discreet locations where additional screening would be useful. In those locations, we at least urge you to consider some type of barrier other than a chain link fence if only for particular sections. Finally, we are glad to see language in the special use permit conditions on the decommissioning and rehabilitation process for the site. However, some tweaks to the language particularly condition 10 should be made to more clearly specify that it is the applicant that is responsible for carrying out these activities rather than a passive voice which puts the obligation on no one in particular. In closing, he thanks the Commission for considering these comments and recognizing the importance of getting this one right. Thank you.

Jamie Graves said that he lived one property over from Ms. Sweeney's stepdaughter and just had a couple of questions. He asked what is this project going to do to the property value to the land around it and how long would the construction take from the beginning to the end. He asked how long will people be coming in and out of the property. He asked will the speed limit be lowered on that road because right now the one stretch right now is 55 miles per hour which is too high at this point. He said those were some of the concerns. He asked to reiterate the noise concern because they did

say that at 7 decibels per unit but how many units will there will be. He said if you put 100 units together that would be a lot of noise for the neighbors to hear. He said that was some of the questions that he had.

Mr. Keller said the Commission will have staff address those questions.

Ms. Riley noted there was no other public comment.

Mr. Keller invited the applicant back for rebuttal.

Mr. Maughan said he understands there are some family dynamics going on around here, but also he understands that any sort of new development in your neighborhood can be intimidating and he certainly wants to try to answer as many of the questions as he can. First, he wanted to clarify that those renderings of the buffer plan were 5 to 10 years and not 10 to 15 years. As he stated they are putting them up at 7' at planting many of the trees to deal with this. He pointed out that other counties require 3' at planting. He said that 7' of planting as he keeps saying is above and beyond industry norms and we are committed to doing so because we understand this is important to the county. The panel noise versus inverter noise for clarity he noted that only the investors are what we are talking about with the vacuum cleaner level of noise. He said there are seven of those, as Scott stated, spread throughout the site. As he demonstrated in the application for the spec sheets for these seven invertors that will be spread throughout the site, they met the 70 decibels when you are standing right next to it. When you back up about 50 feet, you are now below what the county requires as far as the noise ordinance, which he believes as 40' or 50', which has been described as a library whisper. Now we have doubled that distance as our minimum and we will obviously adhere to that and probably they will be quite a bit further and so he actually pushed back on the idea that anyone would be able to hear these off site.

Mr. Maughan said the safety about highway 53 all notes that construction is only 3 to 6 months expected on this project and we are going to be doing this in alliance with VDOT to make sure everything is done correctly. In addition, he notes that during logging operations that same path was used as a temporary entrance, which in fact is why we chose it. The idea of contaminants he knows of no verifiable story where panels have broken and spilled contaminants. He said if Ms. Sirvenska has some concerns or reports on that he invites her to share that with me and he would be happy to address that at the Board of Supervisors meeting. But, he knows of no examples of such a thing happening. He said she also spoke about this having no advantages to the neighbor. He said this project could not benefit every single stakeholder. He said what we are obligated to do is to mitigate any impacts and make sure there are no negative impacts on stakeholders and he thinks we have demonstrated that we have done that. So there may not be an advantage or benefit to a neighbor but certainly he thinks we have demonstrated that we have taken reasonable measures to make sure there are no negative impacts on the neighbors. He said in her case we are not doing anything in the northeastern arm there and there is over 1,000 feet of fully vegetated forest between her and the farthest extent that were we are going to be allowed to build based on our

concept plan. Regarding property values, he said there is not a lot of research done for solar. He said there is a lot of research done for wind, which is a much more disturbing use for neighboring properties and that research has come back largely negative. He said rooftop solar is obviously shown and that could make it negative as far as impact on property values. He said he was not aware of any good studies that show that it will have a negative impact on property values and if someone is he would be happy to address that at the Board of Supervisors meeting. He said he would be happy to answer questions.

Mr. Keller invited questions for the applicant.

Mr. Dotson said it has been said that this is something that is new in the county; it is a direction probably that he hopes we are moving nationally but it is a learning opportunity and you have mentioned programs possibly at PVCC relating to this. He asked what are the teaching opportunities of a site like this, he was imaging at one extreme it is a bunch of things in a field, and there is not much to go look at and learn about. On the other hand, he could imagine someone being there with a group of students and watching gauges how they perform in respond to clouds going over, monitoring the grid and other things since he was not knowledgeable. He asked is there a teaching opportunity in facilities like this.

Mr. Maughan replied sure, and in fact in other projects we have even suggested that. He did not know that we have the resources to develop a program with that, but if the county were to approach this project with an idea he totally agrees that there are definitely lessons that we can put on younger generations on the future of energy. Again, we do not have resources to develop a program like that, but we are certainly game if the county wants to present something to us.

Ms. More questioned condition 4 and the tree protection agreement. She said it speaks to 475' on the rear boundary of the parcel and she wondered if attachment F is helpful. She said what is shown in the middle of the property is the stream buffers so we will have the 100' trees that would stay there with the rear boundary. However, she wondered about going up into the point.

Ms. Maughan said as was actually brought up by the Southern Environmental Law Center there was concerns put forth by the ARB about neighboring properties and right now, there is vegetation that blocks any view and distance we argue up to 800' on some of these neighboring properties along the road. However, what we also argue is that on this parcel it is particularly bad because the backyard was clear-cut and the topography does not lend itself well to view sheds. From the road you can somewhat see through this as it stands and if she were to clear cut further or the back area again so we persuaded an easement on the timber and Ms. Sweeney agreed to not cut some of the timber again for the life of this project. The reason that this property was included and the other properties were not was because we have a relationship with the other property owners and most importantly, those properties are better crowned when you look at the topography. Even if they were to clear cut which would not make a whole lot

of sense, but we have to assume that they might, and what we have demonstrated through cutting through sections and looking at the topography this section on it in our applications is that these properties are pretty crowned and there is really not a real risk even if they were clear cut for those properties. With Ms. Sweeney's property it is a little bit different which is why we wanted to put something in place there really to convince the ARB that she can't clear cut. He said so the risk of Ms. Sweeney clear cutting is kind of null and void.

Ms. More asked that he pull up attachment F so they can get a little more specific about the tree protection areas that are designated to clear up when he is talking about the 475'.

Mr. Maughan pointed out there are four properties to the north that run along highway 53 and the second from the left that has some clearing on it already basically the easement would allow those existing pines to continue to grow and that 475' extends about another 100' into the existing vegetation. So really it is the majority of that parcel and we left the front yard alone.

Mr. Clark pointed out it was the rear portion as outlined.

Mr. Maughan explained they came up with a contract that Ms. Sweeney did sign. He said there were some problems identified by the county attorney just in the legally of the document. So that is why this condition is in there asking that the language in the document be tightened up. He said he would work with Ms. Sweeney on that assuming this goes forward.

Ms. Firehock said the only comment she heard from the public he did not answer was people asked about how long construction would take.

Mr. Maughan replied that 3 to 6 months is estimated for a project of this size.

Ms. Riley asked for more explanation on the stream buffer and how the ground cover on either end is going to be protected. She said he said there would be ground cover underneath the panels in general, but could you address the question about the stream buffer more specifically.

Mr. Maughan replied that they were obligated not to touch the stream buffer as he understands and beyond the stream buffer there that they are disturbing they are setting aside 100' on either side basically taking the county's GIS stream buffer and just overlay it on the project and committing not to touch it. Beyond that area, they are disturbing and putting panels there below and around the panels, we describe on page 23 of our application we discuss what is planned for there and that is native wild grasses and/or flowers. We worked with Rhett in the Environmental Division of the county to put together a list of possible grasses and possibly wildflowers that might be a little bit harder as we look at the legalistics involved. However, there are grasses that will grow

under those panels and per our application we have committed to at a minimum using, the wild grasses and we provided a list of possible species that Rhett provided.

Mr. Clark noted the conditions staff has given them that would require those other three strips to remain those don't appear to be mapped streams and don't have water protection ordinance buffers on them. He said whether some later process with the state would do something with those we do not know; but we were focused on protecting the identified stream in the Water Protection Ordinance buffer. He pointed out originally the proposal included the entire section of property up here that would have had not only water impacts on the pond outlet but also visibility impacts up here and working with the applicants they agreed to pull back the envelope to this side of that drainage there so the visibility impacts would also be reduced. He said one thing we might consider in the conditions just to be absolutely sure the way staff worded section d of condition 1 says retention of wooded vegetation and stream buffers we could add the word "existing" before wooded there to make absolutely sure that what we are talking about is keeping the existing trees on those buffers so there is no doubt at all.

Mr. Palmer said just along the storm water vein that we have been talking about if the main entrance for after construction is on Buck Island Road there will be like a stream crossing on that buffered stream.

Mr. Maughan said they have actually engineered around that so it goes up and around it.

Ms. Spain said just a clarifications for the minutes the person you worked with in the county is Rhett Gladly.

Mr. Maughan said he had one question for Mr. Blair on condition 11 it talks about us commencing and he would like to know exactly what that means and if commencing the use means fully operational in two years.

Mr. Blair said it would not mean fully operational and he thinks what we would typically do in that situation is refer to what is called the vested rights status in Virginia, which is 15.2.2307. What we would typically do there is look at have you taken steps that would in fact constitute what we would consider expending funds or due diligent efforts to develop the site in accord with the special use permit.

Mr. Maughan said that they were very satisfied with that.

Mr. Keller said he had a question in terms of clarification. He said he thinks he made a statement that the panels would be 1,000' away from each of the neighboring properties.

Mr. Maughan replied no, it was just from the one neighbor to the west who spoke, Ms. Sivanka just addressing her concerns specifically. He said in general 1000' would be too much for us to commit to, but in that particular case it is just how it worked out for

Ms. Sirvenska. He said as Scott just mentioned we agreed to pull out of that arm for a whole lot of reasons.

Ms. More questioned condition 10 and who would be responsible for carrying out the activities. She said it talks about the decommissioning plan and so it seems in condition 6b the identification of the party currently responsible for decommissioning is identified there. She asked Mr. Blair is he thinks that is adequate in identifying who would be responsible.

Mr. Blair replied yes, it would be spelled out in that decommissioning plan as well as Commissioner Bivins was talking about the updates and he believed that was in section 8. So if any of that changed that would be part of that update to the decommissioning plan.

Ms. More said it would cover condition 10, and Mr. Blair agreed.

Mr. Keller closed the public hearing to bring the request back for discussion and action by the Commission. He noted that they had two motions, the first one dealing with the Comprehensive Plan and the second with the special use permit.

Ms. Firehock said she would like to walk through the criteria for review of new uses in the rural area that is stipulated in our Comprehensive Plan. This is a complicated project that both meets and does not meet some of that criteria. So one of the criteria that it would relate directly to the rural area and need a rural area location in order to be successful; the example given is a farm winery. The challenge here is that while it does not need to be in a rural area to produce solar power there is open space in the urban ring and so the open space that is available for such a use happens to be in a rural location. It must be compatible with and have a negligible impact on natural, cultural and historic resources. That one is another one that is both. It has a negligible

Mr. Keller suggested that this become a model for developing guidelines.

Ms. Riley said she appreciates your comments specifically around location she thinks that really should be something that we really look at. She thinks we may very much be limited by locations at least currently transmission substations being the only locations that these panels can be sited; but, she would be very interested to see what other elements we really want to consider as we consider that for the Comprehensive Plan.

Ms. More agreed with that and thinks Tim made a similar point moving forward that could be something we could consider where what makes a site appropriate and what does not. However, for the motion before us now is about this proposal. Ms. More moved to find the facility proposed in SP-2017-00018 Rivanna Solar Project to be in substantial compliance with the Comprehensive Plan.

Mr. Bivins seconded the motion.

Mr. Keller invited further discussion. Hearing none, he asked for a roll call vote.

The motion was approved unanimously by a vote of 7:0.

Mr. Keller said the Commission was now on to the second request and the specifics for this site.

Ms. More said she was comfortable with the conditions here even though she thinks they have already talked about moving forward and working with the work staff will do to guide us for future applications of this nature. The one thing she did want to bring up that was another comment from the public was about the ground cover or grass that would be planted actually within the panels themselves and she has read this so many times today she was getting all of the conditions mixed up, but does staff feel that is adequately covered in our conditions. She pointed out we talk a lot about plantings, but it is more about screening.

Mr. Clark replied that staff did not apply a specific condition about the ground cover under the panels because there was still a fair amount of uncertainty about what was going to work best. Originally we worked with the applicants and honestly pushed them a little bit about using native species to the greatest extent possible but it seems like the standard practice is to use certain grass mixes under these facilities and we did not want to push one issue with native plants and then have the shading from the panels make those plants not survive and then cause a soil erosion problem because we picked the plants wrong. So we were more leaving the exact choice of ground cover to standard practice in the industry which from what we have gotten from research and talking to the applicants is generally speaking they are going to go and clear stumps and smooth out the surface. It is really not grading but they are going to pull stumps and things like that and then plant grass. It might be native grasses if they can manage it, but we did not feel comfortable enough with being sure that the species we might limit them to were necessarily the right species for long term durability under the shade of the panels.

Ms. More pointed out she certainly would not want to limit it that much, but just wants to ensure that even though it is the industry standard that will happen on the site whatever type.

Mr. Clark noted there is nothing that he has seen that suggests that it will be bare soil that is going to run off. There is grass on the facilities we have seen that is maintained and mowed so it is there to hold the soil in place.

Ms. More asked if anyone else has that concern.

Ms. Firehock said she thinks if you have soil exposed in Virginia stuff grows on it. Therefore, she was not so concerned and would be more concerned that it would be weed choked. However, she thinks that they are going to need to maintain it anyway

just to protect the panels from getting things growing over it so they are going to be out there trimming.

Mr. Dotson said he had three comments that he understands and appreciates some of the land owners being concerned about the impact on property values and we don't really know one way or the other since it may be neutral and have no impact. He said or it may have no impact that is different from the impact of the clearcutting on the site, which has some impact on the value of abutting properties or the substation. So he does not think we can resolve it but he thinks given the significant lengths that the staff and the applicant have gone in trying to mitigate the visibility and noise he is inclined to think that they have mitigated the effect on the property values. He said he did not support totally trying to screen something out of any view from any angle, a total camouflaging or total screening. If it requires total screening then we should not be approving it. It is like in cell towers, sometimes people have suggested let's make it look like a tree – no, it is a cell tower and we need to relate it, it will be seen, but we don't want it to be more than a certain distance above the existing tree line and so forth. Therefore, option b of trying to totally screen it he thinks is not as good as trying to be a good neighbor and he thinks that is what in my mind the various mitigation measures which are substantial amount to as trying to be a good neighbor.

Mr. Keller asked if there was a motion.

Ms. Riley moved to recommend approval of SP-2017-00018 Rivanna Solar Project with the conditions outlined in the staff report.

Ms. Spain seconded the motion.

The motion was approved by a unanimous vote of 7:0.

Mr. Keller thanked the public, staff and the applicant for thoughtful discussion this evening. He said this moves forward to the Board of Supervisors.

Mr. Dotson said he had a quick question of the applicant. He asked if the Board of Supervisors, Planning Commissioner or people in the audience wanted to go see a facility like this could you tell us since he mentioned Louisa County. He asked if that was the closest similar facility.

Mr. Wilkes replied that Louisa County's facility is a little bit bigger than this site, but it uses the exact same technology type. He noted that in Louisa you will see green grass underneath the panels. He said that is 30 miles from here. He said in fact they took the members of the Planning Department out there several months ago and if anyone wanted to go out there he would be happy to escort them. He said it was not one of our sites so we don't have access inside since that one is owned by Dominion at this point. We actually had an appointment with Dominion to tour at one point with planning staff, but it rained that day so when we all went out we just stood at the fence, which he thinks we still got a pretty good view.

Mr. Dotson asked for a particular route or intersection in case they individually wanted to do a drive by.

Mr. Wilkes replied that he did not know off hand.

Mr. Dotson noted that Ms. Maliszewski is nodding that she has the information.

Mr. Keller said they have finished the public hearings and it is the consensus that we would like to take a break before the work session.

The Planning Commission recessed at 8:10 p.m.

The meeting reconvened at 8:21 p.m.