



Buckingham County Planning Commission Agenda
Monday, October 23, 2023 6:00PM
County Administration Building
Peter Francisco Meeting Room

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<https://youtube.com/live/8-kESq8O8UY?feature=share>

1. Call to Order by Chairman
2. Invocation
 - Pledge of Allegiance
 - Establishment of Quorums
3. Approval of Agenda
4. Approval of Minutes
 - A. September 18, 2023 Work Session
 - B. September 25, 2023 Regular Meeting
5. Public Comment
6. Old Business
 - 1. Public Hearing Case 23-SUP331 Buckingham Solar 1 LLC
 - 2. Public Hearing Case 23-SUP332 CWJ Properties LLC
6. New Business
 - 1. Introduction Case 23-SUP333 Verizon Wireless/Stuart Squier Ranson Road Tower
 - 2. Introduction Case 23-SUP334 Hodson Energy Mountain Pine Arvonía LLC & Mountain Pine Arvonía II LLC
 - 3. Introduction Case 23-ZMA335 Buckingham County
7. Reports
 - A. Building Permits Report
 - B. Zoning Administrator Report

8. Commission Matters and Concerns

9. Adjournment

**Buckingham County
Planning Commission
Work Session
September 18, 2023**

At a work session of the Buckingham County Planning Commission held on Monday, September 18, 2023 at 6:00 p.m. in the Peter Francisco Auditorium located in the Buckingham County Administration Complex, the following members were present: John Bickford, Chairman; Ashley Shumaker, Vice-Chairman; Joyce Gooden; Pete Kapuscinski; Stephen Taylor; Steve Dorrier and Danny R. Allen. James D. Crews, III was absent. Also present were Cheryl T. “Nicci” Edmondston, Zoning Administrator and E.M. Wright, Jr., County Attorney.

Re: Call to Order

Chairman Bickford called the meeting to order.

Re: Invocation and Pledge of Allegiance

The invocation was given by Commissioner Gooden. The Pledge of Allegiance was led by Pete Kapuscinski.

Re: Establishment of a Quorum

Chairman Bickford certified there was a quorum, seven of eight members were present and the meeting could continue.

Re: Approval of Agenda

Bickford: Are there any changes to the agenda Nicci?

Edmondston: No, sir. Mr. Chairman.

Bickford: Do I have a motion to approve as presented?

Gooden: So moved.

Kapuscinski: Second.

Bickford: We have a motion and a second to approve as presented. Any further discussion? All in favor raise your right hand.

Commissioner Gooden moved, Commissioner Kapuscinski seconded and was unanimously carried by the Planning Commission to approve the agenda for the September 18, 2023 work session as presented.

Re: Discussion Topic: Comprehensive Plan with Commonwealth Regional Council

Bickford: That brings us to Discussion Topic, our Comprehensive Plan with the Commonwealth Regional Council. Todd, if you will come forward, I'll turn the meeting over to you, sir.

Todd Fortune: And I believe Lauren was going to try to participate virtually. I don't know if she's on yet. But good evening, everybody. What you have before you are the first two sections of the draft Comprehensive Plan. Draft being the key word here. I am going to go over those with you tonight and see what changes you would like to have made. The first section is real straightforward. It's just very brief about why you're preparing a Comprehensive Plan. I will skip over to Page 3 under Methods of Identifying Issues and Number 2 citizen opinion survey. I will tell you that as of this morning, we received one paper survey and 188 online surveys for a total of 189 so far. That's of this morning. Just to give you an update. And just to remind everybody, October 6 is the deadline for people to complete surveys. So we still have I think it's about three more weeks for people to get those in. So hopefully everyone's had a chance to look at draft Section 1. Did anybody have any concerns? Any questions? Anything that you'd like to see changed on draft Section 1?

Gooden: Mr. Chairman?

Bickford: Yes, ma'am.

Gooden: Okay, I have some more surveys for you.

Fortune: Thank you.

Gooden: Just for the record, I've given out about 160. I've not collected 160. And by the way, mine is not in that stack that I just gave you. Thank you My question I think is in Part 2. Some of the counties that you are comparing Buckingham with in the graphs. What determines, what are you using?

Fortune: Are you referring to let's stock figures 13 and 14?

Gooden: Somewhere...

Fortune: Figures 12 stuff like that.

Gooden: I'm searching for the actual figures because some of the comparisons looked, made sense to me and some of them didn't. The first figure where we're comparing the population trends and surrounding counties.

Fortune: Okay, those are the seven counties that are in Planning District 14.

Gooden: Okay, you use Planning District, okay. I don't know what you're using to what counties because I think I saw one of the charts I saw Dinwiddie in there. And see, this is the Piedmont Health District I'm looking at. Planning District 14?

Fortune: Right Planning District 14, That's Amelia, Buckingham, Charlotte, Cumberland, Lunenburg, Nottoway and Prince Edward.

Gooden: Okay, that is also the Piedmont Health District. So that's why I recognized it.

Fortune: We will actually get into that in a second. Did anyone have anything for draft Section 1? Okay. Draft Section 2 is as Ms. Gooden and I just discussed on a number of these charts, you'll see comparisons with Planning District 14. I will note, it looks like we do have an error on page 23 and Figure 20. Top 10 places workers in Buckingham are commuting to. We're going to correct that for next time. I think it goes without saying that Charlottesville and Albemarle County should probably be on that list. And we will correct that for next time. But draft Section 2 just to remind everyone, it starts off with regional setting in history. And we included just some blurbs there about some of the highlights of Buckingham County's history. And we include a couple of maps for reference. And then we get into population and we have quite a bit of data here. Population, birth and death rates, population estimates which are from the Weldon Cooper Center. We get into population projections also from the Weldon Cooper Center. We use a lot of data from either US Census or from the US Census American Community Survey. We also as we get further in we have educational data from the Virginia Department of Education. We have income data from the census. We have employment data from the Virginia Employment Commission. There's a lot to digest here. So hopefully you've had a chance to look at it. I'll turn the floor over to the Commission. Well, before I do, I will note the next section of the plan, Section 3, is where we get into housing, and we'll get into community facilities and services. And we'll also get into transportation. But for this section, we're just focusing on the history of the regional setting, and then some of the population, education and deployment data. So at this point, I will turn it over to the Planning Commission to see what changes, questions, etc. they have.

Bickford: Thank you, Todd.

Gooden: Mr. Chairman, I was looking at the places that were compared. And what I would like to see, I don't mind seeing the Piedmont Health District, I keep referring to the Piedmont Health District. I know it because I used to work it in every county and that's why I was asking about which district were you using. But I would also like to see who travels to Lynchburg to work from Buckingham or Nelson the next...the surrounding counties because 10 places people are commuting from work in to work in Buckingham. Fairfax, somebody's coming down here from Fairfax to work?

Fortune: That's what the VEC says. I can't. I mean, I don't disagree with you. It does seem far to come. But that that's from the Virginia Employment Commission.

Gooden: Okay. So but I would like to know if anybody is coming from I know people who are in Buckingham and work in Charlottesville and work in Albemarle County and shop in Albemarle County.

And then, but I don't know of that many people commuting from Albemarle County to work in Buckingham. But so I would rather see data from those surrounding...compare me to the people in my area.

Fortune: So instead of giving a rank ranking of the top 10, you'd rather see surrounding counties how many people are...

Gooden: And I'm just looking, and like I said, I do want to know where people from Buckingham are going to. But I still prefer, rather see who's coming to Buckingham to work. That should tell us something, and also telling us where people are going to. So they don't have to be the same counties. Are you...does that make sense?

Fortune: I think so. I'm just trying to figure out the best way to handle that.

Edmondston: Joyce? Ms. Gooden? And I'm sorry, I didn't mean to address you inappropriately. I apologize. The Virginia Employment Commission, if you go to their website, they have a community profile, which is what CRC has gotten their information from, they only use the top 10. So they show the top 10 counties that residents are commuting to for work and then where others are commuting from. Now some of the counties that you've listed aren't ranked here so they don't fall within the top 10. But it does show as Todd has indicated in the draft, those counties but past the top 10. That's why some of the counties that you mentioned in reference such as Nelson there, they're not captured. This is strictly for employment, not for the retail experience and shopping dollars and that type of thing just strictly for employment trends, inflow and outflow.

Gooden: And all right, I see what you're saying and that helps.

Fortune: I would like you to take a particularly, pay particularly close look at the bottom of page 28 going to page 30 to figure 26, the top employers. This data is from the Virginia Employment Commission. However, we've experienced from past Comprehensive Plans just because the Virginia Employment Commission shows it being an employer based in the county doesn't mean it's here. It could be an issue of the businesses no longer in business. They've closed their doors. It could also be a case where, believe it or not, many years ago they were showing Applebee's as being an employer in Lunenburg County and if you've been in Lunenburg County you know Applebee's does not have presence there. So they do sometimes get it wrong. So pay particular attention to that table and if you see anything looks funny, let us know. I will point out, a little more halfway down page 29, Dolgin Corp LLC, that's the company that owns Dollar General. In case anybody's wondering. Correct me if I'm wrong Nicci, the Employment Commission used to actually list the sizes or give a range of numbers of employees. I don't think they do that anymore.

Edmondston: What type if they offer up to how many employees but it doesn't have, it doesn't look to have a specific breakdown by employer to employee number. It'll do it by industry.

Gooden: You're saying these listed in order from one to...?

Fortune: They're supposed to be listed in order from largest to smallest. Correct.

Bickford: Yes, sir.

Kapuscinski: Statistics are projected 2024 did that come from...

Fortune: I'm sorry. What page are you on?

Kapuscinski: Page 25.

Fortune: Page 25. Yep. Are you talking about Figure, I guess that's Figures 21 and 22? Yeah, those are also from the Virginia Employment Commission. I just actually jumped ahead because I kind of wanted the group to take a look, but I do want to hear from the group of anything else in that particular section. There's a lot of data there. But I wanted to bring that one to your attention in particular. As the last couple of Comp Plan's we've worked on whenever we get to that table there's always something that's incorrect.

Kapuscinski: Figure 25 is basically Buckingham County, right? Only?

Fortune: Yes. Pages 26 and 27. We'll try and clean that up a little bit. But there's a lot of white space there we'll try and get that fixed for next time. So Ms. Gooden, back to your question. Well actually it's not, you were asking about the population data where we compare Buckingham to the other counties in Planning District 14. We have actually worked on Comp Plans in the past where we have done it a little differently. We've compared, of course they requested we do it this way, we actually compare them to surrounding counties which are not necessarily in the Planning District.

Kapuscinski: Last time?

Fortune: When you say last time, you mean last time with Buckingham or last time last time I worked on...

Kapuscinski: Last time, did you use the Planning District the way you're using it here?

Fortune: Well for if you're talking about the last time we worked on this, we did the Planning District like we have it here. The previous one, we did it differently. We just did the counties that surround it. So we've done it both ways.

Kapuscinski: For the last Comp Plan...

Fortune: The one in Buckingham, I honestly don't recall that was back in 2015. I'd have to go back and look and see what we did.

Kapuscinski: No, I'm talking about the very last one we did, five years ago, right?

Fortune: Buckingham...the last time we worked on Buckingham was 2015. So I can't help.

Kapuscinski: So you don't know what we're comparing to here?

Fortune: So I can't really I can't speak to what was done since we finished the last plan.

Kapuscinski: Wouldn't it make sense to do it the same way so that we can understand what the growth or shrinkage is?

Fortune: I'll defer to the group on that.

Gooden: Mr. Chairman?

Bickford: Yes, ma'am.

Gooden: I think it's, don't we get to choose what it's compared to? What we compare it to? Do we get to recommend what to compare it to?

Bickford: You get to recommend. If they have the data. That's a problem you got to watch how you recommend because they have to be able to pull the data.

Fortune: Well, with the census data, if you're looking at figure one population, we could do that either way. And that's broken down by county. So it does depend on the type of data we're talking about. Generally, with population data, you can get it for just about any county in Virginia. Skip ahead here. And the same story for the income and poverty data.

Bickford: Yes, go ahead, Steve.

Dorrier: On page 29, is this all of your businesses that are in the county?

Fortune: No. This is not no, this is not meant to be an all-inclusive list. Okay, that's just your top 50 according to the VEC.

Dorrier: Okay.

Fortune: I apologize, if I confused anyone by jumping ahead, but that did kind of jump to my mind. Does the Commissioner have a preference as far as the population data, as far as what counties we're comparing it to? Leave it like we have it or? Well, I'm referring to page 8, page 18, 19, and 20.

Kapuscinski: And you don't know if these were the same ones that were compared to...

Fortune: I'd have to go back and look at what we did in the 2015 plan. But that's the last time we worked on Buckingham's plan.

Kapuscinski: Okay, I guess I'm trying to get down to, I mean, if we're doing some statistical studies here, then what's sense does it make for this particular statistic versus the one in 2015? I mean, why would you change it?

Fortune: Okay, again, I don't want to have to go back. I don't recall what we did in 2015. I'd have to go back. And look, if we did change, I don't know. I just know what we started doing is at some point, we started making comparisons to give an idea of what one county looks like, as opposed to other counties in the region. Again, but I don't remember, I have to go back and look at the 2015 to see what we did on 2015.

Kapuscinski: But if I look at this thing, you're saying this is a group of counties that represent a particular district?

Fortune: Right.

Kapuscinski: Whereas in 2015, it may not have represented a particular district?

Fortune: Right. Again, I mean, I had to put...yeah.

Kapuscinski: I'm just trying to get down a bit. Okay. Fine.

Fortune: Okay.

Bickford: There's been some question as to whether you wanted to change this, the counties that comparison? I just indicated that so I guess I'm asking does anybody want to? To me, I think it makes sense because it's surrounding counties favorable to comparison. If you go north and cross river you get into Fluvanna, Albemarle, Nelson, and which I think is not a real good comparison. But I'm opening it for discussion.

Gooden: I like the one where the Piedmont Health District is and that's on Page 8. I like that because I'm familiar with that. But then it's missing the Albemarle, it's missing Nelson, those surrounding counties, we know people, so we're still going to have to look at the people who go to Lynchburg to work. We're still going to have to look at the people who work in Albemarle County. And I think that information needs to be included because we need to know why they're leaving the county to work. If they're going to Fluvanna to work, to school, my neighbor works at school system in Fluvanna. And I used to work the school system in Fluvanna.

Bickford: Yeah, I don't have a problem with that. I don't think Todd would either. I guess it's more it's just statistical data of the population.

Gooden: Okay. Just specifically the statistical data on the population? I want Piedmont Health District.

Bickford: Right, which I think is primarily what we're doing.

Gooden: Okay. We're just looking at this one chart. Figure 1, the statistical data. I want Piedmont Health District. Which you had. Okay. I like that one. And that's Page 8. I like those comparisons. Does that make sense, Mr. Chairman?

Fortune: Okay.

Bickford: Yes, ma'am. I think if you go north, you're going to, the statistics are not going to be as reliable because of Charlottesville, and Albemarle County and of course the influence on Nelson County as well as Fluvanna with Zion's Crossroads and the closeness to Charlottesville. I don't think it would be as far as these parameters or statistics of them. So I have no problem on that. I think it's a good idea.

Fortune: But...I'm sorry, so I'm having them to actually check the last Comp Plan. It looks like on the charts where we are comparing counties it is comparison is Planning District 14.

Bickford: Same thing.

Kapuscinski: Mr. Chairman, I'd argue that you keep it the same.

Bickford: Well, that's basically what we've done. That's what Joyce has agreed, said to leave it as is for those statistical parameters. Does any other Commissioner see anything you want to question in this Section?

Shumaker: In figure 22, I know this is more of formatting, I was just thinking of ways to make things look a little more consistent and presentable, for the categories that are just marked with asterisks across with no data, is there a general purpose for including those if there's no data from previous or projected?

Fortune: Well, only that the VEC lists them there as declining occupations. You might notice that paragraph up above. They don't believe, the VEC doesn't believe they can disclose the data, which is why the asterisks are there, but as far as why they're in there, because they were identified as declining occupations, which I know is not a great answer. But...

Shumaker: Right. And it looks like if there was no data from 10 years ago, and none projected in the future, it seems...

Fortune: Yeah, there's data, unfortunately, the VEC doesn't feel they can disclose it. So that's how they addressed it by putting in the asterisks. And honestly, I don't know why they don't feel like they can disclose the data. That's a question I have to put the VEC.

Kapuscinski: Mr. Chairman, I'll ask again, and I hate to be a pest about this, but again, comparing to the last Comp Plan, are these occupations, both growth and declining the same as what was looked at in the old plan? I just want to make sure that we're you know...

Bickford: You want to be consistent.

Kapuscinski: Well, I want to know if that information is good or not. But are there any exclusions or additions? You want to be consistent report to report. So the question I would ask is, are there any that were considered improving in the old Comp Plan that are now declining? I guess that's the question I'm trying to get to.

Edmondston was talking but mic was off so didn't pick up.

Kapuscinski: I'm asking whether or not any of those who were considered inclining then are now declining? But I mean, I don't care if you have the answer or not. I just if we're going to do a comparison, then I think that's what we'd like to know. I'd like to know if they' were...

Edmondston again, did not pick up.

Fortune: Well, I mean, we hadn't actually envisioned it that way. But I mean, we could go back and compare and see what the trends are. If that's what you're asking.

Kapuscinski: That would be an interesting statistic, I think.

Fortune: So Nicci, I think what he's asking is to compare what we had last time with what we have now and see what the trends are,

Edmondston: Well, you have it in Figure 21 versus what's on Page 44 of the existing Comprehensive Plan, the different occupations within the health care support and the personal care. None of these are proving to be declining. They're continuing to be in a growth segment. But the classifications are just different. It looks like the figures that you brought today, Todd, are more encompassing of the existing...

Fortune: And that is entirely possible that they've changed the classification somewhat.

Edmondston: I think they just include more occupations to be honest with you.

Fortune: And you may be right. We could, I can note in there that the classifications have changed.

Allen: Would you want to write down all the ones that you had on here before? Like Number 20 on Page 44 says Sollite Corporation, Number 19, Pearson Johnson Lumber Company. They're not around here now. I mean, it's another lumber company. It's not Pearson Johnson.

Fortune: Mr. Allen, on what table or what figure are you on?

Allen: This is page 44.

Fortune: Of the existing plan or the current plan?

Allen: Comp Plan. Yeah, it's the Comp Plan.

Fortune: Are you talking about a list of occupations or a list of employers?

Allen: Buckingham County Top 20 Employers.

Edmondston: What page is that on?

Allen: Page 44. Chapter 2. Demographics.

Fortune: It's entirely possible, Mr. Allen, that the top employers have changed. In fact, in this one, in the current draft that we're working on, we actually have more than 25, grossing the top 50. So if you see something that's not on the list, and we can definitely look into it.

Allen: I just thought you were talking about, you know, using the names that you had in here before and upgrade them.

Fortune: What we did, as far as top employers, we pulled the most recent data that we had from the Virginia Employment Commission. What I was saying earlier was this data is from the VEC but every now and again, we find that it's not 100% accurate. So you might see someone listed on this list, that doesn't belong for whatever reason, either they've gone out of business. Or like I said, at one time, they were listing Applebee's, as a top employer in Lunenburg County, which is, if you've ever been to Lunenburg County, you know, it's not correct.

Edmondston: Mr. Allen, in the Comprehensive Plan on page 45, it does talk about the top 20 employers that were from the first quarter of 2014. And Pearson Johnson, I believe is listed there.

Allen: I'm sorry, I did say 44 didn't I?

Edmondston: The Discovery School is also listed there. So in this new information that Todd presented tonight from draft Section 2 showing the top 50 Pierce Johnson of course, is no longer in existence, and that's gone, along with the Discovery School is no longer a top so the Virginia Employment Commission has updated that information. So what he would put in the next one would be updated top employer information. 50 instead of 20 but...

Fortune: We did expand to the top 50 this time but...

Edmondston: It looks like it's definitely updated in that top 50 now.

Fortune: All I'm saying there is if you see something that looks off, just the examples, just let me know and we'll look into it.

Allen: Yeah, I messed up, I gave you the number the top of the page instead of the bottom.

Fortune: That's okay. No problem. So going back to the, just so I'm clear, going back to the growth occupations and the declining occupations, do we need to make a note in the verbiage that the VEC has changed some of the classifications. So making comparison to what we had before is going to be difficult is that...

Bickford: I think it makes sense. If you don't have the data, I don't know how you're gonna compare.

Fortune: I'm looking at 24 and 25. Does anybody else see anything else that causes concern in the draft Section 2.

Gooden: Mr. Chairman, the ones that aren't clear, like employment by industry...

Fortune: You're referring to Figure 25?

Gooden: Let's see what, it's on page 48, there are a couple of these that are causing me to think I need my eyeglass prescription change.

Fortune: There's a little bit of a formatting issue there. We're going to try and clean it up for next time. And hopefully when we do that, we can make that table a little bit bigger.

Gooden: Okay, if you can't make it clearer than this, and you know, you have no need to put it in the chart.

Fortune: I'll see what we can do on that.

Gooden: Yeah, if it's if this is clearest it can be, as far as I'm concerned, there's no need to put it in, because I can't even read it.

Fortune: Is the group in agreement on that?

Kapuscinski: I like it. It makes sense to me.

Gooden: Is it clear? Then I need to check my glasses.

Fortune: Like I said there is a little formatting here which I obviously missed when I sent this out. And we're going to try and clean that up. And hopefully, when we do, we can make this a little bit bigger. So make a little bit clearer.

Kapuscinski: And, Mr. Chairman, I would even argue, I think this is good data. And I'd love to see what was the situation back in 2014? Was this same chart available? I mean, some of this doesn't make sense to me, unless I know what I'm comparing against.

Bickford: While she's looking that...

Fortune: We're actually formatting things a little differently too because we were last time we relied a lot on tables. And this time, we're using charts.

Kapuscinski: You didn't have it that way.

Fortune: Right. We felt like doing charts would be a little more visual and possibly easier read.

Kapuscinski: I would still like to see employment by industry between 2014 and now. I mean, if you had to do it in a table, I think that's key data. I'd like to know what happened in the various industries in this county. Then we could ask why?

Bickford: I think it would make sense that way. You can see if there was either a positive change or negative. On your chart, on your tables on page 25, 24 & 25, I know sometimes you don't have the change. You don't have that. But I've seen negative, could you, how much trouble would be that to color coded red just make a change from positive to negative?

Fortune: So you mean like on a table of Figure 22, like we want down at the bottom machines, cashiers, secretaries, make those make those sales red then is that...

Bickford: Yeah, that would indicate it was negative and you can put a little color code to say red is negative. It might help people understand a little bit better.

Fortune: Okay. I'll make a note to do that.

Shumaker: While we're talking about the difference in the tabular version of the previous Comp Plan, I do appreciate the visuals. I'm looking at page 13 in your draft section now. Figure 7, the different age groups, it just looks like a lot on that particular pie chart. But when I look at the tabular version on page 26, in the previous Comp Plan, that makes a little more sense to me than this pie chart. Specifically, that other tab, or that other table, it was Table 9 in the previous Comp Plan, had information like median age, where this, this visual doesn't. And maybe that's something we can include in the text on page 12, instead of you know, requiring a full page of a table. But I find that also to be pretty key data.

Fortune: A clear blurb about median age. And so would you like us to replace Figure 7 with an actual table instead of a pie chart then. Is that what I'm hearing?

Shumaker: It is, so I'm looking at this one, I hate that it takes up a full page of the Comp Plan. But seeing the trend between you know, in this particular one, it was the trend from 2000 to 2010. But seeing that I think is helpful when we consider certain projects that come through the Planning Commission. But I guess that's up to other members too. I don't know if a table or this age pie chart.

Kapuscinski: You are spot on there.

Fortune: Does the rest of the group agree with that?

Bickford: Is it the consensus of the Commission? I have no problem with that.

Fortune: So basically replacing that pie chart with the table.

Shumaker: And again, that's more to see the trend than to see the current data.

Fortune: So would you also like us, when we're replacing the table to show what the figures were from 10 years ago, or I guess 12 years ago now?

Shumaker: That's what I found most helpful about Table 9 of the previous Comp Plan.

Bickford: Todd, after you make these changes, if you'll bring these back before the next work session.

Fortune: Yeah, so the plan is, we're going to bring these changes back. And we also want to divide Section 3 but it's just because how much data comes in Section 3. So we'll bring these changes back and give you the first half of Section 3 to review. And again, Section 3 is going to be your housing statistics and talk about your community facilities and services, your natural resources, stuff like that.

Bickford: Will you have at our next work session any tabulations on the surveys?

Fortune: At the very least, I guess it depends on what it is and how many surveys we receive. Because it will take some time to tabulate them. But we're hoping at the very least to have some general data for you.

Kapuscinski: Mr. Chairman, I asked this question last time, I'd like to ask it again. When you bring documents in here that have or that represent changes, could we have a red line? I'd appreciate that. Also, with regard to the population that I'm looking at here, does that include or exclude prison population?

Fortune: The state changed that recently. I can't remember if the state or the census that was changed recently. I need to double check and be sure. I'm drawing a blank on that one. I'm thinking no. Does the recent population include prison? There was a change not too long ago. I was thinking it no longer includes that.

Kapuscinski: When I'm looking at 2030 projections, I'm looking at 16, roughly 250 and that excludes prison population correct? And all the other statistics with regard to age demographics and what not, exclude prison population? Am I correct?

Edmondston: There was a change statewide in the counting of individuals in the correctional center. So they are only counted in the population in which they were residing prior to being at the correctional facility. That we would only have the population counted of those that were citizens of Buckingham prior to their incarceration,

Kapuscinski: Prior to their incarceration. Okay. All right. And that would be the same with the job statistics and all that other right? I was wondering too, Mr. Chairman, can we have that noted in this?

Bickford: About the prison population?

Kapuscinski: Yeah, we're actually looking at population outside correctional institute.

Fortune: I actually have a note I was going to make a note on the first paragraph on Page 8 to note that there was a change in how the prison population is counted.

Bickford: I think that works for the citizens to know that.

Kapuscinski: When we are looking at projects, we'd like to know exact population outside the correctional institutes.

Bickford: Any other Commissioners have anything else at this time? Well, as Todd indicated, we bring these changes back for our next work session. So we'll get a chance to look at it again. Make sure the corrections, the changes are correct. And also in the meantime, maybe pick up on something else that might need to be changed.

Fortune: Like I said, the first half of Section 3. That's the plan.

Bickford: Very good. Well, if we have no other questions or comments, Todd, I'll let you close out then.

Fortune: We do need to, I guess, set the date for the next work session.

Edmondston: It should be October 16, let me check my calendar.

Bickford: October 16. Monday.

Edmondston: October 16 should be the third Monday.

Fortune: But other than that, yeah, unless somebody else has anything. I think I'm done.

Bickford: Okay. Very good, Todd. Thank you so much.

Fortune: Okay, thank you everybody.

Kapuscinski: Mr. Chairman?

Bickford: Yes, sir.

Kapuscinski: When do we get into the discussion on zoning?

Bickford: That'll be in phase...

Fortune: Section 4. Section four. So this Section 3 will be your housing, Natural Resources, community facility services, transportation. Section 4 is gonna be your land use.

Re: Commission Matters and Concerns

Bickford: That brings us to Commission Matters and Concerns. Does any of the Commissioners have anything they'd like to talk about?

Kapuscinski: I have a question Mr. Chairman.

Bickford: Yes, sir.

Kapuscinski: Mr. Allen? At the last board meeting, I guess it was decided that we're gonna go to 7500 acres. I know you voted against that. I remember, but I don't quite understand is that considered inside the fence and is that specified? Is it panels only? Does that mean all of the landscape and holding panels would be outside the fence?

Allen: Right. They are only counting what's inside the fence.

Kapuscinski: It's been, you know, 4500 acres was total, correct?

Allen: Yes.

Kapuscinski: So what they've done is they've expanded it by significantly more than 3000 acres. And is there any number that can be put on that? In other words, is that another third or another two thirds?

Allen: Well, it's whatever the people doing it tell you. It's nothing surveyed. So it's not official. It's just unofficial. You know, they're gonna say I got 20 acres, I got 50 acres. I think last time we talked to Nicci, I think it's right now it's like 1600 in the fence.

Kapuscinski: 1600 in the fence? So out of the additional 3000 acres that they're asking for only 1600 would be in the fence?

Allen: No, up to now it's up 1600. Is that right?

Kapuscinski: I'm sorry. That's what could be accounted for now. Okay.

Allen: And right now, it would have been 3400 over 3400.

Kapuscinski: All right. But I guess the concern I have is we heard all kinds of statistics about how much land is being used for solar farming. We heard 7500 acres. First we heard 4500 acres. The fact is, if

there's another third or two thirds, we're not looking at 7500 acres, we're probably looking maybe closer to 10,000 acres. So it becomes more than 5% of the total land, you know, available in accounting. I'm not, I'm not against solar farming. But what I'm arguing here is that I don't think anybody put pencil to paper about how many jobs are going to be displaced when we take 10,000 acres of agriculture and timberland out of the county, to put in solar farms, which may very well be necessary. But I don't think you're going to replace the number of employees that you would employ on 10,000 acres with 10,000 acres of solar farms. And I don't know that anybody put the pencil to paper on that. I heard Mr. Miles talk about how much revenue that's going to bring in. First of all, we haven't had any. Secondly, you know, they've already raised taxes this year. We'll raise it again next year. So we're not going to see any immediate benefits. And we don't really know, we haven't even finished a solar farm yet. And so my concern is, are we are we really talking about 10,000 acres? Are we talking about 7500 acres?

Allen: 7500 is only in the fence right now. Instead of 3400 acres, it's already somewhere around 16.

Kapuscinski: You know, this is getting to be so large, Mr. Chairman. I'm wondering, that's why I keep asking about zoning. You know, there's all kinds that when you look at our solar policy, there was, you know, there were gradation statistics that were that were quoted. In other words, they didn't want to build these things on hills. There were distances from bordering properties, and distances from roads and all these other things. I can tell you that are to be BlackRock, I don't think they're within those particular policy limits. I've done some reading, and I need to bring that up maybe at the Planning Commission, but I will tell you that it concerns me, maybe we should be looking at zoning, specifically, types of land for solar farms, so that we're looking at flat land, maybe away from streams, you know, maybe away from other, you know, other bordering properties, I just am throwing that out as a as a suggestion for us to consider because we're getting now way beyond 4%.

Bickford: I understand you're throw on zoning on it, but I don't know if that's gonna be a very practical way to go at it. You probably be better with your application process that you set tighter parameters. The logistics of the, really referring to the largest solar farms, not too small ones.

Kapuscinski: Right, the large, the large industrial solar farms.

Bickford: The large solar farms, their logistics of it require that they have to be around. You'll be able to connect to a main transmission line. So that's going on move it all around in the county versus trying to designate an area. So I think your better route would be, is to look at maybe perhaps tightening up or adding more conditions.

Kapuscinski: I'm wondering too, because you know, we're gonna, I understand that, you know, the pine...

Bickford: The Dominion Project is coming back.

Kapuscinski: Dominion Project is coming back. And the last time I looked at that land, there was a significant degradation to that property. In fact, the five or six farmers that were generational farmers

down below, we're still concerned about that. Because, you know, that they don't want their soil washed away. They'd have to buy the hay for their cattle. That's a concern, I think for those farmers.

Allen: It's 2200 acres that they would have in but they're not gonna have fenced in. According to what they said about 900 Correct.

Kapuscinski: And then in 2025, you know, what is it, the I think it's EPA is going to require a different kind of holding ponds for some of these because they're creating, what they're doing is they're creating a law that says all these panels are now impervious. So they're like, they're like pavements. And so they're going to have, they want different, I just wonder whether or not we ought to get ahead of this thing as a county. Again, I'm not against putting solar farms in the county but I'm wondering whether or not we're being half hazard here.

Allen: Anything below 5 megawatts we don't get money out of. I know, that was one of the things that they were saying to me that we need to solar come in here so we could get money to help keep from raising taxes. If it's below 5 megawatts, you are not getting any money. If it's above 5 megawatts, they did say before, it was like \$1400 you get per megawatt but not it's changed for the better. But you gotta wait, I mean, the first one down at Sollite, still ain't got...I don't know, all their parts done. But I know, they had to wait a long time to get the permit to get started. Over a year and a half after we approved it, I think.

Kapuscinski: Are we getting any money from Apex?

Allen: The one on 60? I don't know. I'd have to go back and see what they say.

Bickford: I don't know. I'd assume it is. It's operational. I'm assuming the county is receiving some tax benefits from it.

Allen: I think they will before that came out. So you might not get none.

Bickford: You talking about the siting agreement? Yeah, that I don't know about that. I don't know.

Allen: It came out before we made any good rules. That's why everybody sees it a little different. Anyway, but we vote for the whole total acreage and whatever is in the fence. To me, I look at it different.

Bickford: Okay.

Kapuscinski: Thank you.

Bickford: Any other Commissioners have anything?

Re: Adjournment

Bickford: Seeing none, do I have a motion to adjourn.

Kapuscinski: So moved.

Allen: Second.

Bickford: All in favor, raise your right hand. We are adjourned. Thank you.

Commissioner Kapuscinski moved, Supervisor/Commissioner Allen seconded, and was unanimously carried by the Planning Commission to adjourn the August 18, 2023 work session.

Attest:

Cheryl T. “Nicci” Edmondston
Zoning Administrator/Planner

John E. Bickford
Chairman

**Buckingham County
Planning Commission
Monthly Meeting
S, 2023**

At a regular monthly meeting of the Buckingham County Planning Commission held on Monday, September 25, 2023 at 6:00 p.m. in the Peter Francisco Auditorium located in the Buckingham County Administration Complex, the following members were present: John E. Bickford, Chairman; Ashley Shumaker, Vice-Chairman; Pete Kapuscinski; James D. Crews, III; Steve Dorrier; Joyce Gooden, Stephen Taylor and Danny R. Allen. Ashley Shumaker was absent. Also present were Cheryl T. “Nicci” Edmondston, Zoning Administrator/Planner and E.M. Wright, Jr., County Attorney.

Re: Call to Order

Chairman Bickford called the meeting to order.

Re: Invocation and Pledge of Allegiance

Commissioner Gooden gave the invocation and the Pledge of Allegiance was said by all who were in attendance.

Re: Establishment of a Quorum

Chairman Bickford certified that there was a quorum. Seven of eight members present and the meeting could continue.

Re: Approval of Agenda

Bickford: Nicci, are there any changes to the agenda?

Edmondston: No, sir, Mr. Chairman.

Bickford: Seeing none, do I have a motion to approve as presented.

Allen: So moved.

Gooden: Second.

Bickford: We have a motion and a second to approve the agenda as presented. All in favor raise our right hand. Agenda is approved.

Supervisor/Commissioner Allen moved, Commissioner Gooden seconded and was unanimously carried by the Planning Commission to approve the agenda as presented.

Re: Approval of Minutes

Bickford: That brings us to Approval of Minutes. We have August 21 work session. Do I have a motion to approve as presented or is there any changes?

Gooden: So moved.

Allen: Second.

Bickford: I have a motion and a second to approve as presented. Any discussion? All in favor raise your right hand. That passes.

Commissioner Gooden moved, Supervisor/Commissioner Allen seconded and was unanimously carried by the Planning Commission to approve the minutes of the August 21, 2023 Planning Commission Work Session as presented.

Bickford: That brings us to the August 28, 2023 Regular meeting. Do I have a motion to approve as presented or does someone have changes?

Gooden: So moved.

Allen: Second.

Bickford: I have a motion and a second to approve as presented. Any discussion? All in favor raise your right hand. That passes.

Commissioner Gooden moved, Supervisor/Commissioner Allen seconded and was unanimously carried by the Planning Commission to approve the minutes of the August 28, 2023 Planning Commission Regular meeting as presented.

Re: Public Comments

Bickford: That brings us to public comment period. Do we have any people signed up?

Edmondston: Yes, sir. Mr. Chairman. We have three individuals signed up. The first would be John Snoddy followed by Kenda Hanuman.

Bickford: Okay, thank you. Please remember you have three minutes. State your name and address.

John Snoddy: Good evening, my name is John Snoddy. I am the Environmental and Safety Director at Kyanite Mining Corporation, 30 Willis Mountain Plant Lane, Dillwyn, Virginia. On behalf of Kyanite Mining, thank you all for the work you're undertaking to review the County's Comprehensive Plan. Over the last few weeks I've spoken with many of my 125 coworkers about the Comprehensive Plan review. A recurring request from my coworkers and here I am making that request of you all is to ensure that

mining continues to be recognized in the plan as the vitally important land use that it's been in Buckingham County for the last couple of centuries. As I just noted, there are 125 families, 126 when you include mine, who depend on their good paying jobs in the mining industry, right here in Buckingham County. Related to that number of mining jobs. Kyanite Mining Corporation respectfully requests that the data presented to you for inclusion in the draft plan be reviewed for accuracy. Last week, when you folks were presented a table entitled employment by industry, that was Figure 25 in the draft plan, I'm afraid you were given inaccurate information. The table indicated that mining and quarrying only provided 64 jobs in this county. Kyanite Mining provides 126 jobs in this county alone. When you add the 21 jobs provided by Boxley and the 15 at James River Slate, the actual number of mining jobs in Buckingham is more than 160. Since you'll be using demographic and employment data as a tool to review the Comprehensive Plan, we respectfully request that the data be accurate. Earlier I alluded to the fact that mining is woven into the very fabric of Buckingham County. I presented each of you with an informational summary from a study performed by Virginia Tech just this year. The summary is entitled "The Economic Contribution of Construction Aggregates and Industrial Mineral Mining in Virginia". Two or three items on that front page are worth mentioning. First, mining contributes 6769 jobs in this state. Further, mining contributes \$132 million in state and local taxes in the Commonwealth. Finally, if you look at the graphic at the bottom of the page, you'll see that the 10 county region of which Buckingham is apart, mining contributes \$63 million in economic vitality. In closing, ladies and gentlemen, I'm here to remind you of mining's positive impacts my family and I experience those impacts every day and request that mining continues to be recognized as the beneficial land use that it's been for many a generation of Buckingham families. Thank you.

Bickford: Thank you, sir.

Snoddy: You're welcome.

Edmondston: Kenda Hanuman and Swami Dayananda will be next.

Kenda Hanuman, District 5: Good evening. Kenda Hanuman, District 5. I heard, well, Mr. Snoddy's comment about land use. I think it's really important. And I really care about that too. I think when Commissioner Kapuscinski asked regarding the policy for industrial scale solar, if anybody had put pen to paper, I don't know if that was ever accomplished. Supervisor Miles suggested that there will be 7500 acres in the fenced area only counted. So all of that outside the fence would amount to approximately 18,600 acres that would be removed from agricultural use or basically timbering. That's greater than the 2% that Supervisor Miles portrayed. He said that would be 2% of Buckingham County. It would be more about 5% of the total County and it will be a higher percentage if you only consider the land that's in timber production. So that's a lot of land use for industrial scale solar, I'm sure you can see. "The Economic Impact of the Agriculture and Forest Industries in Virginia" by Terence Rephann, PhD from

Weldon Cooper says every job created in the agriculture and forest industries results in another 1.6 jobs in the Virginia economy. Every dollar generated in value added results in another \$1.39 value added to the Virginia economy. So I usually talk to you about gold but tonight I'm talking to you about timber and land use and industrial scale solar. Thank you for listening.

Bickford: Thank you, ma'am.

Edmondston: And Swami Dayananda will be the last one signed up for public comment, Mr. Chairman.

Swami Dayananda, District 5: Good evening. I wanted to come and thank you all and to say how happy I have been to be living in Buckingham. I just noted this year that it's been 40 years since I came to Buckingham from New York City. And I live as a Monastic at Yogaville Satchidananda Ashram for 30 years of the 40 that I have lived. The last 10 years on Warminster Church Road where my mother left 30 acres of land for me to take care of. And I had no idea that I would become a farmer. Using a little part of this 30 acres, I have grown vegetables, and medicinal herbs. And I continue. I'm hoping to build a pizza kiln which is halfway done, and lots of tomatoes for tomato sauce. So, in Buckingham, I had no idea what wonderful soil it has. I've been having a very good success in different kinds of vegetables. And I come here today to say that I hope to continue growing many medicinal herbs and vegetables, and to share more regenerative way, better way to use the soil to create healthier soil. And to share that with others. I do vermiculture which is to grow worms, and making compost, which is a wonderful way to. I'm sure some of you probably know better than myself about farming, I'm still learning. And so in regard to the Comprehensive Plan, I don't have anything specific, but just to hope and to be part of healthy, environmentally safe, economic growth for Buckingham. And I would love to be a part of any project or anything that can promote more farming, as well as tree planting, and so on. And I hope in the future, that I have an opportunity to speak with you more. And thank you all for your service, very much appreciated. And Yogaville, by the way, when I came, it was a family of five. And now it is 250 or more people with adults and children with many, many new homes built. And this is wonderful for Yogaville Village Center, which I hope will remain and expand under your guidance. Thank you so much.

Bickford: Thank you, ma'am. That's all the people who signed up, Nicci?

Edmondston: Yes, sir. That's all.

Bickford: I will close public comment period.

Re: Old Business: Public Hearing Case 23-SUP320 RWE Energy-Blue Rock Solar

Bickford: We'll move to Old Business and that's the public hearing case for Blue Rock Solar.

Edmondston: Yes, sir. That Case is 23-SUP329. Landowners are Blue Rock Resources LLC and JAMN Limited Partnership LLP. The applicant is Blue Rock Solar LLC. And of course, their request first came to you in July. And that is to obtain a special use permit to allow for the construction and operation of a solar photovoltaic PV models to produce up to 100 megawatt utility scale solar facility on approximately 1,127 acres in Buckingham County. Our applicants are here with us this evening. They do have a presentation. And as far as the public hearing is concerned, I do not have anyone signed up to speak during the public hearing. But we did receive an email from a citizen today who was unable to attend. She asked that I forward that email to all of the Planning Commission, which I did earlier today.

Below are conditions that you may consider attaching to the request if approved:

1. **Inspections.** BLUE ROCK SOLAR LLC or any successors, assignees, current or future lessee, sub-lessee, or owner of the solar energy facility (the "Applicant") consent to annual administrative inspections by Planning Department Staff for verification of compliance with the requirements of this SUP after the completion of the construction of the Project. During construction of the Project, the County and its assigns and designees shall have access to the site for inspections and to assure compliance with the conditions of the SUP.
2. **Compliance with Conditions.** The Applicant shall sign the list of the adopted conditions for this SUP signifying acceptance and intent to comply with these conditions.
3. **Compliance with Laws; Erosion and Sediment Control and Stormwater.** That all federal, state, and local laws, regulations, permit requirements and ordinances will be adhered to including but not limited to:
 - a. All active solar systems and solar equipment used in this Project shall meet the requirements of the National Electrical Code (NEC), National Electrical Safety Code (NESC), American Society of Civil Engineers (ASCE), American National Standards Institute (ANSI), Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), or International Electrotechnical Commission(IEC) as applicable and comply with state building code and shall be inspected by a County building inspector through the building permit process.
 - b. An Erosion and Sediment Control Plan must be submitted to the County and approved by the Soil and Water Conservation District and the Virginia Department of Environmental Quality prior to any land disturbance. Prior to Applicant's submission of the Erosion and Sediment Control Plan, the Applicant will contact the County's erosion and sediment control reviewer and use reasonable efforts to arrange a meeting on the Property with the Applicant's engineer. The County may obtain an independent third party review of the Erosion and Sediment Control Plan at the expense of the Applicant.
 - c. The erosion and sediment control plan shall be prepared in accordance with the Virginia Erosion and Sediment Control Handbook. As an additional precaution, the erosion and sediment control plan will be implemented as a sequential progression, demonstrating that not more than 25% of the Maximum Extents (a "Phase") be initially disturbed during construction without temporary seeding or

other stabilization in accordance with the Virginia Erosion and Sediment Control Handbook. Temporary seeding or other stabilization in accordance with the Virginia Erosion and Sediment Control Handbook shall be implemented as soon as possible, and no more than 7 days after final grading in a Phase is complete. As soon as the stabilization of a phase, as referenced in sentence 2 of this condition, has been completed, construction activity (disturbance) may commence in a subsequent Phase. This condition shall not prevent continued construction activities in a previous Phase after a previous Phase has been stabilized in accordance with the Virginia Erosion and Sediment Control Handbook, and such stabilized areas will not be subject to the 25% limitation of sentence 2 of this condition; however continued construction activities, excluding maintenance of erosion and sediment control and stormwater management features or associated activities, shall not be re-initiated in a previous Phase until at least 50% vegetative cover (as determined by an independent inspector) has been established in that Phase or 60 days after a Phase has been temporarily stabilized, whichever is sooner. During this period, the applicant shall take continued action implementing best management practices to promote successful establishment of vegetative cover in a Phase. The erosion and sediment control plan will provide the means and measures in accordance with the Virginia Erosion and Sediment Control Handbook to achieve stabilization of the disturbed areas and to comply with this condition.

d. During the construction of the Project, the Applicant shall require the following:

- (1) All Erosion and Sediment Control facilities will be inspected by a qualified third party inspector: (i) at least every four calendar days; or (ii) at least once every five calendar days and within 48 hours following any runoff producing storm event. Any discrepancies should be noted and corrective action should be taken to ensure facilities are operating properly. Corrective measures include regularly cleaning out sediment basins and traps, stabilizing eroded banks or spillway structures, cleaning inlets and outlets and repairing damaged silt fence shall be prioritized.
- (2) Runoff at stormwater outfalls will also be observed just as often for characteristics listed in the land disturbance permit (clarity, solids, etc.).
- (3) A record of the amount of rainfall at the Project during land disturbing activities.
- (4) A record of major land disturbing activities, including dates when clearing, grading and excavating occurred in each Phase. Dates when construction activities are either temporarily or permanently ceased in the Phase should be recorded along with stabilization areas.

e. The County may inspect the Project during construction as determined by the County and shall retain all enforcement rights under applicable law.

f. A Stormwater Management Plan must be submitted to the Virginia Department of Environmental Quality (VDEQ) and approved by VDEQ prior to any land disturbance. The Applicant will obtain approval of a Stormwater Pollution Prevention Plan ("SWPPP"). The Applicant and its contractor will have operational day-to-day control of the Project and must implement the SWPPP measures. The Applicant will cause the active up-to-date SWPPP to be made publicly available either electronically or at a location viewable not less than once per month upon request by the public. The Applicant and its contractors will ensure that the applicable subcontractors are trained on appropriate best management practices and requirements in the SWPPP.

g. The Project shall fully comply with all applicable provisions of the Buckingham County Zoning Ordinance, to the extent not modified herein, throughout the life of this SUP.

4. **Expiration.** The building permit application must be submitted within 2 years of obtaining the Special Use Permit and the commercial generation of solar electricity shall begin within 24 months of the approval of the building permit or this SUP shall be null and void. The building permit deadline will

be extended for 12 months (3 years total), and the construction time period extended by 12 months (30 months total) by administrative approval of the County Administrator after consultation with the Board of Supervisors due to delays in state permits, interconnection approval, or other good cause demonstrated by the Applicant. Any timeframe under which the Commonwealth is under an Executive Order of the Governor declaring a statewide emergency will toll the timeframe specified in this condition.

5. **Definitions.** All racking, solar modules, inverters, breakers, switches, cabling, communications components, and other ancillary components necessary to convert solar energy to electricity and interconnect to the electrical transmission are considered “Solar Equipment” and subject to the requirements for such, together with setback requirements of that district and other requirements, unless otherwise stated in these conditions. Solar Equipment shall not include access roads and transmission lines and poles. “Project Area” shall include all areas within the Property line boundary that include, but not limited to the following: Solar Equipment, ingress/egress, access roads, fencing, parking, laydown areas, setbacks, buffers, storage area, wetlands, erosion and sediment control features, storm water management features, and other ancillary components. Battery storage and other energy storage methods are not approved as part of this SUP and will require separate special use permitting. The “Maximum Extents” shall not exceed 718 total acres, 686 total acres in Buckingham County, and is depicted on the General Plan. The “Property” is defined as 1,127.2-acres consisting of the following parcels situated in Buckingham County Tax Map 202 Parcel 70 approximately 796.67 acres, Tax Map 207 Parcel 41 approximately 108 acres, and Tax Map 207 Parcel 40 approximately 192.91 acres.

6. **Binding Obligation.** This SUP shall be binding on the Applicant or any successors, assignees, current or future lessee, sub-lessee, or owner of the solar energy facility.

7. **General Plan.** The construction of the Project shall be in substantial conformance with these conditions and in general conformance with the Special Use Preliminary Site Plan prepared by RWE Clean Energy dated June 26, 2023 (the “General Plan”). The Solar Equipment and accompanying storm water features shall be limited to no more than the 718 acres (686 acres in Buckingham County) of the 1,127.2-acre Property as shown on the General Plan. Modifications to the General Plan shall be permitted at the time of building permit based on state and federal approvals and final engineering and design requirements that comply with these conditions.

8. **Construction Hours.** All site activity required for the construction and operation of the solar energy facility shall be limited to the following:

a. All pile driving activity shall be limited to the hours from the earlier of sunrise or 8 a.m. to the later of 6 p.m. or sunset, Monday through Friday. Applicant may request permission from the Zoning Administrator to conduct piling driving activity on Saturday or Sunday, but such permission will be granted or denied at the sole discretion of the Zoning Administrator; and

b. All other construction activity within the Project Area shall be limited to the hours from the earlier of sunrise or 8 a.m. to the later of 6 p.m. or sunset, Monday through Sunday in accordance with the provisions of the County’s Noise Ordinance and shall not be unreasonably loud for a sustained duration of time as monitored at the property line of the Project Area.

9. **Noise.** After completion of construction, the solar energy facility, during normal operation, but excluding maintenance, shall not produce noise that exceeds 50 dbA as measured at the property lines of the Project Area boundary, unless the owner of the adjoining affected property has given written agreement to a higher level.

10. **Setback from Existing Residential Dwellings.** A minimum three hundred and fifty (350) foot setback shall be maintained from Solar Equipment to any adjoining or adjacent residential dwellings (and not the property line) that exist at the time of the approval by the Board of Supervisors. This requirement may be reduced or waived for the life of the solar energy facility, if agreed to, in writing, by the owner of the residence. Transmission lines and poles, security fence, and project roads may be located within the setbacks only where necessary. During construction, the setback may be used for the staging of materials and parking if the buffer is not disturbed. The Applicant shall retain and maintain existing vegetation and timber in the setback that are under the control of the Applicant and located on the Property.

11. **Setback to Property Lines and Rights of Way.**

a. **Property Line.** A minimum of a fifty (50) foot setback from Solar Equipment to the property line shall be provided around the perimeter of the Solar Equipment where it is adjacent to property not owned by the same property owner as covered in the SUP at the time of the approval by the Board of Supervisors.

b. **Right of Way.** The Applicant shall provide a minimum of a seventy-five (75) foot setback from Solar Equipment to any adjoining public right of way.

c. Transmission Lines and poles, security fence, and project roads may be located within the setbacks only where necessary.

12. **Setback to Perennial Streams and Connected Wetlands.** As an additional erosion and sediment control and stormwater management precaution, a minimum fifty (50) foot setback shall be maintained from Solar Equipment to the edge of all perennial streams and connected wetlands located within the Project Area. Transmission lines and poles, project roads, erosion and sediment control and stormwater management features may be located within the setbacks where necessary.

13. **Buffer.**

a. Within the setback, the Applicant shall retain at least a fifty (50) foot buffer of existing vegetation and timber with the intent to substantially obscure from view the Solar Equipment and security fence from the property line. Along the property line where there is no vegetation or timber to retain, the Applicant will supplement the buffer with new plantings in the fifty (50) foot buffer.

b. Along existing public right-of-way (ROW) where there is existing timber, the Applicant shall retain at least a fifty (50) foot buffer of existing vegetation and timber with the intent to substantially obscure from view the Solar Equipment and security fence from the public right-of-way. Along existing public rights-of-way where there is not at least 50' of vegetation and timber remaining to substantially obscure from view the Solar Equipment and security fence, the Applicant will create a buffer of at least fifty (50) feet. The new buffer will include timber, evergreens, cedars or other vegetation as determined by the Applicant with the advice of a professional arborist and subject to the prior written approval of the Zoning Administrator prior to the issuance of a building permit. All plantings installed in the buffer

shall have an anticipated five-year height of six (6) to eight (8) feet after planting and an anticipated mature height of at least twenty (20) feet. Any new plantings shall be planted during the appropriate time of year after the completion of construction of the Project. The buffer may be included in the setback area.

c. The Applicant will maintain all buffer areas with the advice and support of a professional arborist or forester for the duration of the Project's operational life. Such maintenance may include thinning, trimming, seeding or other modifications to the buffer to ensure the health of the vegetated buffer areas, public safety, and the energy efficiency of the Project. In the event the health of the vegetation within the buffer area is compromised and no longer substantially obscures the visibility of the Solar Equipment and security fence, the Applicant will plant a new buffer, or supplement the remaining buffer, including timber, evergreens, cedars or other vegetation as determined by the Applicant with the advice of a professional arborist or forester.

d. A performance bond reflecting the estimated costs of anticipated landscaping maintenance, as determined by the Applicant with the advice of a professional arborist or forester, shall be posted by the Applicant prior to construction. This ensures buffer landscaping is adequately maintained for the life of the Project.

14. **Fencing.** The Applicant shall install a security fence around the Solar Equipment that is a minimum six (6) feet in height. Fencing must be installed on the interior of the vegetative buffer required in this section so that it is screened from the ground level view of adjacent property owners. The fencing shall be always maintained while the facility is in operation.

15. **Lighting.** Construction lighting shall be minimized and shall be directed downward. Post-construction lighting shall be limited to security lighting only and shall be full cut-off lighting pointed in a down direction. All post-construction lighting shall be dark sky compliant.

16. **Interconnection.** The Project shall not receive a building permit until evidence has been given to Buckingham County that the electric utility company has a signed an interim interconnection service agreement or interconnection service agreement with the permittee.

17. **Decommissioning.** If the solar energy facility is inactive completely or substantially discontinuing the delivery of electricity to an electrical grid) for a continuous twelve (12) month period, it shall be considered abandoned. The Applicant shall provide notice to County Administrator immediately upon the Project becoming abandoned, inactive and/or shutting down operation. The Applicant or its successor and/or assign ("Project Owner") shall decommission the Project within twelve (12) months abandonment, inactivity, or substantially discontinuing the delivery of electricity to an electrical grid, whichever occurs first. The decommissioning shall be in accordance with a Decommissioning Agreement between the Applicant, Project Owner and the County. If the Project (or relevant part) is not removed within the specified time, the County may cause the removal of the Project with costs being borne by the Project Owner as will be provided for in the approved Decommissioning Agreement. The costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to a bond, letter of credit, cash, or a parent guarantee by an investment grade entity. The Applicant's cost estimate of the decommissioning shall not include the salvage value of the Solar Equipment. The cost estimate of the decommissioning shall be updated by the Applicant every five (5) years and be provided to the County. At its option, the County may require

the surety amount be increased based on the new cost of decommissioning. The Decommissioning Agreement shall be agreed upon and the surety shall be provided before the issuance of the building permit.

18. **Decommissioning Timeframe.** The Project shall be decommissioned within twelve (12) months. The decommissioning shall require (i) the removal of any Project facilities installed or constructed thereupon, (ii) the filling in and compacting of all trenches or other borings or excavations made in association with the Project and (iii) the removal of all debris caused by the Project from the surface and 36" below the surface of the Property.

19. **Training of Emergency Services.** The Applicant shall coordinate with the County's emergency services staff to provide materials, education, and/or training to the departments serving the solar energy facility regarding how to safely respond to on-site emergencies. Prior to construction, the Applicant shall ensure that emergency services staff has keys and other access to the Property and the Applicant shall provide the County and emergency services with safety data sheets (SDSs) on the Solar Equipment for the life of the project.

20. **Access Roads and Signage.** Access roads are to be marked by the Applicant with identifying signage. The manufacturers' or installers' identification and appropriate warning signage shall be posted on or near the panels in a clearly visible manner. The signage must identify the owner and provide a 24-hour emergency contact phone number. Each access gate must also have the signage that identifies the owner and provides a 24-hour emergency contact phone number.

21. **Construction Management.** The following measures will be taken:

- a. A Construction Traffic Management Plan and mitigation measures shall be developed by the Applicant and submitted to the Virginia Department of Transportation (VDOT) and Buckingham County for review. The Plan shall address traffic control measures, an industry standard pre- and post-construction road evaluation, proposed work zones and delivery locations, and any necessary localized repairs (i.e., potholes, wash-boarding of gravel, shoulder rutting, culvert crushing, etc.) to the public road that are required as a result of damage from the Project.
- b. During construction, each project entrance will have a dedicated wash station to mitigate natural debris from unintentionally leaving the Project Area. The Applicant will take all reasonable precautions to minimize impact and damage to public roads including regular maintenance, washing and sweeping. If a traffic issue arises during the construction of the Project, the Applicant shall immediately develop with input from the County and VDOT and implement appropriate measures to mitigate the issue.
- c. During construction, the Applicant will hold a Town Hall every quarter within the County, inviting county officials, neighboring landowners, and the broader Buckingham community. During these Town Hall's, the Applicant will provide a report on the Project's construction progress from the previous quarter and summarize construction activity to occur in the subsequent quarter, and provide an opportunity to receive citizen comments.

22. **Parking.** Parking of vehicles or staging of equipment or materials related construction or decommissioning of the Project shall be limited to the Project Area.

23. **Glare.** All panels will use anti reflective coatings. Exterior surfaces of the collectors and related equipment shall have a non-reflective finish and solar panels shall be designed and installed to limit glare to a degree that no after image would occur, towards vehicular traffic and any adjacent building.

24. **Height.** No aspect of the Solar Equipment shall exceed 17 feet in height, as measured from grade at the base of the structure to its highest point. Such height restriction shall not apply to electrical distribution facilities, substations, or transmission lines.

25. **No County Obligations.** Nothing in this SUP shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.

26. **Severability of Conditions.** If any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable.

27. **Enforcement.** Any infraction of the above-mentioned conditions could lead to a stop order and discontinuation or revocation of the special use permit in accordance with Virginia law.

28. **Solar Panel Technology.** The Applicant will be restricted from utilizing photovoltaic panels with internal components containing cadmium telluride. Only silicon type panels, or those other panels that have been established as optimal standard best practice shall be utilized by the Applicant.

29. **Ground Cover; Pollinators.** Prior to the start of construction, the Applicant will perform no less than 10 soil tests in areas across the Project Area to achieve an appropriate sample size of Project Area. The soil tests will be used to inform and develop a comprehensive and detailed vegetative management plan with the intended effect to revegetate the Project Area with ground cover. The vegetative management plan may include the optimal seed types, fertilizer rates, and liming rates (if necessary) to be used for temporary and permanent stabilization. Once operational, the Applicant will maintain ground cover in good condition throughout the operation of the Project. Where grubbing is not required for the construction or operation of the solar farm, or for the installation of erosion control and stormwater management features, existing stumps shall remain in place. The Applicant will consider implementation of Pollinator Habitats where appropriate and in accordance with applicable laws and regulations.

Bickford: Well, I'll tell you what, let's hold that and I'll get you read that. But Mr. McNeely, do you want to do your presentation first before the public hearing? We only got that one. Do you come on forward and do your presentation, sir?

McNeely: Good evening, Chairman, thank you. Running through, yeah, you can go ahead and start.

Blue Rock Solar Project

Presentation to the Buckingham County Planning Commission

September 25, 2023

Blue Rock Solar is seeking a recommendation of approval from the Planning Commission for the SUP application

The project aligns with the Buckingham County Comprehensive Plan as well as conditions of the Special Use Permit.

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Project Overview

- The project is a proposed 100- megawatt photovoltaic solar facility located in southeast Buckingham County, with a small portion in Cumberland County
 - Situated near the intersection of Route 683 and Route 636, east of Sheppards
 - The Project will span three (3) parcels of land, which are owned by two different owners
- Total Project area (leased area) includes approximately 1,127.2 acres of forested and agricultural land currently being managed for timber production or farmed
- The Solar Project development area will be limited to approximately 718 total acres and 686 acres in Buckingham
- At the end of the Project's life, the land may be converted back to commercial forestry or used for agriculture.



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So I'm gonna skip over the nuances of what we've already talked about. And I think I want to follow up on a couple of questions from Pete on the last time we were here and then just reiterate some of the items that we've previously talked about. I know there's been some discussion at the county around an ordinance. I know there was some additional discussion around a cap and maybe a change in the proposed cap. I'll just walk through a high level. Pete, last time we were here you asked about two things. So the topo map, we looked back the topo was included. It was an exhibit in the application, I believe it was Exhibit C 6. I've got that I'll show that in a little bit. We also went back about the VDOT and you had some concerns about traffic entering in through the south proposed entrance. We did go back through the application there was a VDOT consultation in there, which essentially just requires us to go through a full traffic management plan. We did confirm that that is both incorporating comments and review from VDOT and also Buckingham County. So even though think Mr. Allen mentioned it was a public road or county or state road. Buckingham County will get input into that. So any

signage, stop, stoplight or anything that may be required on a temporary basis for use of that, you know, we will obviously incorporate all those comments, thank you for your review. The bulk of today is, like I mentioned, to go over some of the highlights of the project and reiterate that, you know, RW wants to be a good neighbor. And we think we've selected a site that is, you know, really ideal for large scale solar. And we want to just reiterate some facts that we believe this gives the county a very real prospect, at potential revenue, both from a tax side, but then also what's created during the construction phase of the project.

Benefits of Blue Rock Solar project for Buckingham County

- **Economic and Fiscal Impact**
 - Increase in annual real estate taxes: \$5,300 current use vs \$34,000 for solar use
 - Revenue Share: \$1,540/MW/year annual revenue share contribution
 - Siting Agreement: project will contribute millions through Siting Agreement to be negotiated upon SUP approval
- **Near-Term Project Viability**
 - One of the most viable prospects for near-term economic benefit due to its position at the top of the PJM interconnection queue
 - \$0 Network Upgrades allocated to our queue position

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In there, so you guys are all familiar with the location of the project. So some of the economic and fiscal benefits, so when we look at the economic benefits of the project, in the application, we talked about it. It will contribute roughly \$3.2 million and associated local wages and benefits, and another \$15 million in local economic output during the construction phase. During operations, we estimate that there's roughly \$1.2 million dollars in local benefit. And then the project itself will generate approximately \$9.6

million in local tax revenue. That's not in addition to the additional tax revenue or additional citing agreement revenue that we assume will be required as part of the conditional use or special use permit. One of the facts I know you guys have been back and forth on an acreage cap. And so and I know you guys have been presented, you know, a handful of these projects. When we look at the PJM queue. So what has been proposed for projects coming through PJM and so this excludes what may be smaller scale with Dominion. We believe our project provides you with the highest probability to actually see those tax benefits received. Go to the next slide, I can show you why.

Advanced PJM Position Compared to Other Proposed Projects

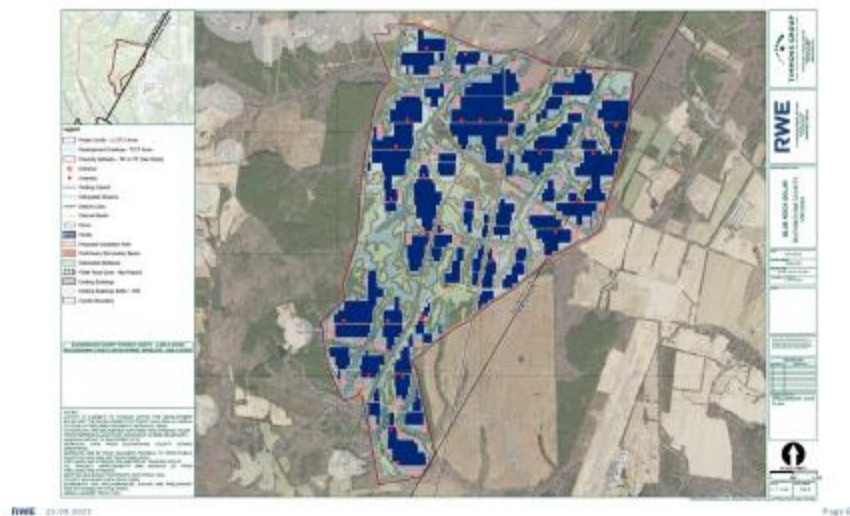
Alt #	Location	Size	Status	Owner	2023	2024	2025	2026	2027	Notes
Alt 100	Bremo-Scottdale 120 MW	120 MW	In Service	Engineering and Design	ADP	140.5	140.5	80.7		GA
Alt 219	Cardville-Mills 120 MW	120 MW	Active	Dominion	200	200	50			Facilities Study (Fast Lane)
Alt 220	Bremo-Scottdale 120 MW	120 MW	Active	ADP	140.5	0	1.1			MS (Transition Cycle 1)
Alt 221	Cardville-Mills 120 MW	120 MW	Active	Dominion	200	200	120			MS (Transition Cycle 1)
Alt 222	Cardville-Mills 120 MW	120 MW	Active	Dominion	200	20	20			MS (Transition Cycle 1)
Alt 223	Buckingham-Bremo 230 MW	230 MW	Active	Dominion	70	70	45.037			Feasibility Study (Transition Cycle 2)
Alt 224	Scottdale - CIRC Delivery 68 MW	68 MW	Active	ADP	45	45	27			Feasibility Study (Transition Cycle 2)
Alt 225	Scottdale - Bremo 130 MW	130 MW	Active	ADP	50	50	50			Feasibility Study (Transition Cycle 2)
Alt 226	Scottdale - Bremo 130 MW	130 MW	Active	ADP	50	50	20			Feasibility Study (Transition Cycle 2)
Alt 227	Cardville-Mills 120 MW	120 MW	Active	Dominion	200	0	80			Feasibility Study (Transition Cycle 2)
Alt 228	Bremo-Buff-Buckingham 230 MW	230 MW	Active	Dominion	50	50	33.5			Feasibility Study (Transition Cycle 2)
Alt 229	Bremo - Buckingham 230 MW	230 MW	Active	Dominion	70.8	70.8	47.8			Feasibility Study (Transition Cycle 2)
Alt 230	Scottdale - CIRC Delivery 68 MW	68 MW	Active	ADP	70.8	70.8	17.8			Feasibility Study (Transition Cycle 2)
Alt 231	Buckingham-Bremo 230 MW	230 MW	Active	Dominion	200	200	50			Feasibility Study (Transition Cycle 2)
Alt 232	Buckingham-Bremo 230 MW	230 MW	Active	Dominion	50	50	50			Feasibility Study (Transition Cycle 2)
Alt 233	Scottdale - Bremo Buff 130 MW	130 MW	Active	ADP	140.5	0	10			Feasibility Study (Transition Cycle 2)
Alt 234	Cardville-Mills 120 MW	120 MW	Active	Dominion	200	0	30.8			Feasibility Study (Transition Cycle 2)

TIME 23-09-2023 Subject matter of the presentation, which can also be very long

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This is all public information. So this was pulled directly from PJM's website. So when you look at the interconnection queue, you've got two projects that are ahead of us that are either active or in service. Those two projects, one was the Apex project. The other is your 20 megawatt project that's on Route 60 that's built. We are third in line. We talked about when we expect this product to be online. And we said the earliest it could come online would be 2026. PJM just recently went through key reform. So I highlighted in three colors where those other projects are. We also put a column in there to show you what attributed network upgrades will be associated with those projects that are behind us in the interconnection queue. If you look at where we are at, we have \$0 in network upgrades associated with the project. So I know there's sensitivity around how much industrial scale solar comes into the county. I can say, you know, factually, based on these numbers that are where they're currently sitting, that our project is probably the only one that is viable right now. And that's not to say the other studies change. But it is certain that other projects are going to struggle to achieve economics that will actually be able to be built and financed. Additionally, the color code talks about just based on the PJM key reform, when in reality, those projects could come online. So the bulk of the projects that have been presented in the county don't have a likelihood of coming online before the end of 27/28 for 4 projects that are behind

us. And then the bulk of the projects don't have a shot at coming online based on the PJM cube reform process until the end of 2020. So closer to 2030.



Project Considerations with Solar Siting Guidance

- **Viewshed**
 - There will be virtually no viewshed from the road and no viewshed from residences given project location relative to dwellings and structures
- **Traffic Impact and Road Use**
 - Few neighbors near project entrance/in surrounding area
 - Construction and operations will have minimal impact to traffic flow and school bus routes due to location near County line
- **Decommissioning**
 - Decommissioning requirement will be for entire leased acreage of the project. County will be named in Decommissioning Bond

So in previous discussions, I think we've talked about a couple of different things and understanding the set demands that we've heard from the county, I think one of the biggest items is view shed. And I think we've picked a location and I think we've presented that where it is, you know, highly protected from any view shed issues, obviously not bisected by major road. It's on the edge of the county. What that does, you know, for impacts to your guy's traffic route impacts, schools. We've been through that. There's no churches on that road, or in close proximity. And so we really do feel that it's ideal. We've also talked about decommissioning what happens to land, you know, as we've been over before, over 938 acres of this project is leased. There's only 194 acres that we purchased with the addition of maybe 5 acres for the substation that will be required to be deeded over to Dominion. But the bulk of that land, under the lease obligations has a decommissioning bond requirement. So will be restored at the end of

the useful life of the project. In addition, we've talked about naming the county, I think we'd like to stick to that. Have that as a condition if we ever get approved for a special use permit.



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We've talked about other projects in the state, this is just one of our other projects, I think it's called Pleasant Hill believe it's in Suffolk County.

Visual simulations of viewshed from Stage Coach Road



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Again, just on the view shed, so we want to be a good neighbor. We want to be out of sight out of mind. I think we've picked that location.

Viewshed from Stage Coach Road – 5-year growth



So if you flip through these, with the exception of the entrance for the substation is probably the only place you'll see it. We've done five year growths.

Viewshed from Stage Coach Road – 10-year growth



And then a 10-year growth plan to show that, you know, our intention is to make sure this thing stays out of sight out of mind.

Viewshed from Stage Coach Road (no visibility from road)



Very little visibility along Stagecoach Road as you keep going.

Viewshed from Mohele Road (no visibility from road)





In addition, natural resources and wildlife and so the incorporation was wildlife corridors. We've touched on that before, you know each individually fenced to allow for that.

Environmental Design Considerations

- **Stormwater Design**
 - Detailed civil design for stormwater management facilities/erosion & sediment control will be performed reviewed and approved by all appropriate regulatory agencies including Buckingham County, Peter Francisco Soil and Water Conservation District and the Virginia Department of Environmental Quality prior to the issuance of a Land Disturbance Permit for the project
- **Environmentally-Friendly Design**
 - Wildlife corridors incorporated into design
 - Will implement pollinator-friendly plants and seeds
- **Site Topography**
 - Site is relatively flat and will require minimal grading, which will minimize water runoff and leave the soil in better condition for future land use

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Next slide, please. And then stormwater design being a big one. So just to reiterate, you know, the detailed civil design will have to go through the erosion and sediment control both for temporary measures, and then permanent measures, again, reviewed by the state and the county.



And then, this is a picture of that switch grass project and construction page, just so you could see what those mitigation measures look like, with the buffers around the wetlands in the water basins to catch any runoff and filter that down.

Kapuscinski: Sorry, where is that?

McNeely: That is the Pleasant Hill project of ours in Suffolk County. During its construction phase, that pictures about a year and a half.

Kapuscinski: Just I don't mean to interrupt your presentation. But what's the buffer distance there?

McNeely: I don't have that offhand.

Kapuscinski: Thank you.



McNeely: This is the topo map. So when we talk about why we select the slide in comparison to all the other sites in Buckingham County, you know, the site is extremely flat comparatively. I think if you, we had mentioned there's a couple areas where the slope got over a tolerable amount for solar, those are highlighted in yellow and orange. So as you can see, very flat site overall.

VDOT Processes

[illegible]

Construction Management Conditions:

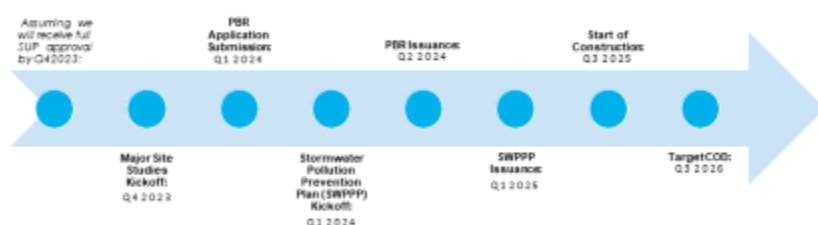
- A Construction Traffic Management Plan and mitigations measures will be developed by the Applicant and submitted to both VDOT and Buckingham County for review
- Plan will address:
 - Traffic control measures
 - An industry standard pre- and post-construction road evaluation
 - Proposed work zones and delivery locations
 - Any necessary localized repairs (i.e., potholes, wash-boarding of gravel, shoulder rutting, culvert crushing, etc.) to the public road that are required as a result of damage from the Project

The VDOT process. To reiterate what I was mentioned earlier, Pete, this initial consultation letter was included in the application. Again, any further process, the traffic management plan will need to be done in collaboration with VDOT and Buckingham County.

Kapuscinski: Does that has to be done before you're permitted?

McNeely: That has to be done before we start construction. And so typically, it would be done during the PBR process. Lauren, correct me if I'm wrong. Yeah, so we need we would need the state permit to be issued before we can finalize our civil design. And there may be some changes required during the state review process. Obviously, they'd have to be, you know, confined within the limits of whatever the county approves. And then once you have that, and you can have your civil design completed. Then you need that before you can start construction.

Project Timeline



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And that's it. And so just one more time to reiterate, when you look at all the other projects that have been presented, you know, we've given you an aggressive schedule that shows that we can actually be online by 2026 and contribute real dollars to the county comparatively, you know, and genuinely. We believe that. I think the facts show that. So, you know, we do request, you know, you guys put forward a motion to approve this project to the Board of Supervisors.

RWE

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Bickford: Any questions from the Commissioners?

Kapuscinski: I've got a couple if you don't mind that. First is, I look at the book and in 4.1, you suggest that setback from existing residential dwellings by a minimum of 828 feet from the site plan, I would assume that's from the fence. And then in your application, you're citing 300 feet. So the question is, which is it? Are you...

McNeely: So the 300 feet, I think is in line with what previous conditions were set on other projects. I think what we were saying with the 800 feet is when you look at the actual conceptual project design that we've showed you, and you, I think we had a map in there that showed the distances from the actual residences, that's 800 feet.

Kapuscinski: And you don't intend to encroach any further.

McNeely: We would stay within the confines of the property. I think just physically, you cannot, right, because of how far a lot of those residences are. Okay. But obviously, one of the things that we'd like to do is maintain that condition, the 300-foot condition, regardless of how the panels may shift during the state permit process.

Kapuscinski: Are your holding ponds inside or outside the fence?

McNeely: So there's a mix, I believe, correct me if I'm wrong, Lauren. It's a mix.

Kapuscinski: So if you've got a condition, a setback condition, to the fence line of 50 feet, and you're suggesting as well that you're going to have 50 feet of dead, vegetative buffering, how would you do that plus a holding pond in that 50 foot?

McNeely: Irregardless and you correct me if I'm wrong, Lauren, it would be 50 foot to the start of the retention pond. So you would just have, it would just be an additional buffer. You'd have a greater than a 50-foot buffer from...

Kapuscinski: So what your condition is is 50 foot of vegetative beyond the holding pond? So you take the fence plus the holding pond and then you'd have 50 foot or you'd make sure that that would not encroach on the property line?

McNeely: Correct.

Kapuscinski: The distance to right away apparently is 75 feet. But with regard to wetlands and streams, I thought I read something where you were going to allow 50 foot from wetlands and streams. Did I read

that correctly? And I don't know if the proposal from the county has anything specifically stated. Mr. Allen, is there a proposal, in the proposal, in the draft, I thought I read it but I couldn't find it again. Is there a minimum requirement to a wetland or stream?

Allen: Not sure.

Bickford: There is a distance from the stream. They delineate the wetlands, and they don't disturb it. Other than if that's what you're asking?

Kapuscinski: The reason I'm asking is because I think there was a, I'm curious to find out what's in the...I mean, I thought I read 75 foot in the county proposal. But what I want to point out, Mr. Chairman, is that in the county proposal, in in the draft, right, the minimum requirements are set out. As an example distance from dwellings is set out at 500 feet. Distance to a wetland is not certain to me, I thought it was 75 feet, distance to a fence line to 75 feet, vegetative buffers 50 and distance right away 75 feet. I think some of these are being met, not just in this particular project, but in other projects that come before us. But there are as in this project, minimums that are not being met. So the question I'm asking you, sir, is shouldn't we be recommending at least, conditions that meet the minimums in this draft proposal? Otherwise, what sense is there in a draft proposal?

Bickford: Well, what we put forward is the 30 conditions of the previous solar farms. And that's what the county has agreed on. And they have met all of those criteria. The draft, I assume was changed to meet as we discussed those previous applications. So what you're asking is, do we want to ask them to have larger buffers?

Kapuscinski: Yeah, in other words, I think for my part, I would recommend and be willing to make a motion, that on a minimum basis, the conditions that are being offered by any project owner, at least meet those minimum requirements that are in the draft proposal. Otherwise, I have no idea why we even want to have a draft proposal.

Bickford: Well, I can't explain why that changed. I just know in the process of the previous applications; this is what the county ended up with. Primarily they came if I recall from Riverstone, wasn't it, Nicci, that we made those changes,

Kapuscinski: And we understand that.

Bickford: So they've been brought forward. So what you're asking is, do we want to go back to the original draft, I assume, the County had prior to those applications?

Kapuscinski: What I'm saying is that we have a draft proposal from the county that sets out minimums, as an example, distance from dwellings of 500 feet, as an example of distance to the wetland is not certain, I thought it was 75 feet distance, the fence line 75 feet. And I'm suggesting to you that in this project as well as other projects, those minimums aren't being met. So my question to you is, should we be recommending conditions that align with this draft proposal?

Bickford: I will answer it this way is that the draft proposal was altered for those previous applications. And the 30 conditions that now the county has been working with did change those minimums. So what you would be doing now is going back and asking any future applications to increase those buffers? As...

Kapuscinski: I'm asking them to at least meet the minimums that are in the draft proposal. That's all I'm asking. I mean, am I out of line here?

Allen: The draft proposal hadn't been approved yet. So it, I know what, it's out there. But the only thing is approved on it is the acreage. And that's changed from the total acreage to the acres inside that fence.

Kapuscinski: I totally understand that. But then my question is, why would it be, I guess I don't understand why you would have included it in a draft proposal, if you wouldn't at least want us to look at it, and determine whether or not those minimums are being met. The whole thing is confusing to me. So I mean, if you want me to totally disregard all of the things except the acreage in the draft proposal then say so. I mean, because, you know, I've already said I thought, you know, the, the use of the land and the area where RW wants to put this thing is optimal, right. I told you that I thought it was really good. But the question I'm asking you is, should we be looking at those minimums that are in that draft proposal that's been published? I've got it here in front of me when we look at these projects.

Gooden: I'm saying it's a draft proposal. So it's looking at what they are thinking it's going to be. Our job is to look like at what we actually have. And it's like saying whatever they've got in committee, we think we're going to do that. So we need to adjust to what we think they're going to put out. And that's the draft. And why would we, there's so many ideas about a draft. I'm just confused why we would be addressing what's in the draft proposal rather than what we've already done?

Kapuscinski: Because they wouldn't be interested in having that minimum if they hadn't put it in the draft. So if the Board of Supervisors is talking about putting those minimums, and they've drafted that, why wouldn't we be considering it? Why wouldn't it be a condition that we would consider?

Gooden: Mr. Chairman?

Bickford: Yes, ma'am.

Gooden: And it just reminds me, and this is just an anecdote. I did a paper and the paper was on breastfeeding. And my instructor marked my paper down. And it was based on her unpublished works, that I had my paper marked down. And I'm looking at a draft for what they have a draft proposal is information that's there. But it's a draft. And, and that's like me looking at her unpublished works. It's not out there yet. Information may be out there. We talk, we know what's in committee, but because it's in committee. This is what we think they're going to do. So we need to set the standard here. I think we need to look at what the standard is now and not the draft, and the 30 points that we've already set forward is what we're going by. So I'm not understanding why I need to look at a draft now and say, Oh, they gonna draft it. So I'm gonna set it this way, because I think that's what they're going to do.

Bickford: Well, the other point is that this applicant came under the assumption of the minimums that we'd already had in our conditions. And although it is being considered by the Board of Supervisors, I really don't think it's fair to come back on this applicant now saying, "Look, we might do this in the future so you need to do it", because they've already constructed their project and everything based on the 30 conditions and limitations and minimums we have. I really don't feel like it's fair now to come and ask them to do increase it. You know, even though that may be the future policy that comes from the Board of Supervisors. So my thinking is, we don't try to institute that on this application, because they've already done all this work and prepared based on the information the county gave them.

Gooden: I agree with that. Mr. Chairman, just one other point. I'd like to go back to that chart that you had and what I want is the chart, I can't see it on my...all I see are tiny and I guess I've had visual problems. Is there a way I can get print of that? I don't know if anybody else wants one. I just want to be able to read what the chart says. Can we can you help me?

McNeely: So Ms. Gooden, this information is all publicly available via PJM.

Edmondston: I've forwarded the PowerPoint presentation to all the Commissioners.

Gooden: All right, the other charts and graphs were already in our presentation. I think most of them are already in the other slides. Most of those, this one I just did not remember seeing. I just want to be able to read it. We so in listening to the minutes from your guy's previous sessions, between the last time we spoke with you guys, we understand, you know, you guys have had, you know, a lot of projects come forth before you. We understand there's a little bit of fatigue. But we also realize that the benefit that we're talking about as far as potential revenue to the county, is real on our project in comparison to a lot of the other ones that have said that they want to come in and construct. You know, we started this project in 2017. So we optioned the land in 2018. The reason why we're only coming forth now is because the project has matured through the interconnection process. And so if you look at it, you know, these are ordered sequentially on when these projects were submitted to PJM for interconnection studies.

You can see that the only two that are in front of us that are active and not have not pulled out of the process is our project. Right and then all the other ones follow in.

Gooden: I hear what you are saying. My point only is I want to be able to read this chart and see for myself. I don't need more words. Okay. Quite simply, I just want to read the chart.

Bickford: While Nicci is getting that printout, does any other Commissioners have any questions whatsoever? Let's do this. Mr. McNeely you sit on down, and when Nicci gets back she'll hand that paper to the Commissioners and then we'll do the public hearing and then any questions before we make a decision I'll call you back up. That'll give you time.

Open Public Hearing:

We are now going to open the public hearing. If you would read the email that you got for public record, please.

Edmondston: Yes, sir Mr. Chairman. The one email that I've received this evening is from Kristin Ghee of 1275 Holland Road. And her email states: In support for Blue Rock Solar Development. Dear Members of the Planning Commission, I'm writing to express my strong support for the Blue Rock Solar Project in Buckingham County. As a concerned resident and advocate for renewable energy initiatives, I believe that this project offers numerous benefits for our community, the environment and our local economy. 1. Sustainability. This project's proposed location is ideal for solar both because of its proximity to major power lines, and because of its relative flatness compared to much of Buckingham County. Its proposed design would honor the lands existing natural resources and rural character while avoiding negative impacts to wildlife. With proper buffers that will be virtually unnoticeable for passersby. 2. Tax Revenues. Solar projects generate property tax revenue for the county, which can be reinvested into essential services such as education, health care and infrastructure. The project owner estimates the project would generate \$9.6 million in County revenue over its anticipated 40-year operational life. 3. Job Creation. Large scale solar projects create jobs and stimulate economic growth in the local community. During construction, these projects generate employment opportunities in various sectors including engineering, construction and maintenance. Furthermore, the presence of renewable energy infrastructure can attract new businesses investments to our county, leading to increase tax revenue and improve local infrastructure. 4. Environmental Benefits. Solar energy is a clean and sustainable power source that has minimal impact on the environment. Unlike fossil fuel power plants, solar installations do not produce air or water pollution, making them an environmentally responsible choice. Additionally, the preservation of open space and natural habitats can be achieved with solar developments by promoting responsible land use practices. 5. Energy Security. Investing in solar energy enhances our energy security by diversifying our energy sources. Solar power is abundant and can be harnessed locally reducing our dependence on distant and sometimes unstable sources of

energy. This stability can help protect our community from energy price fluctuations and supply disruptions. Long term sustainability. Solar installations have a light long lifespan and require minimal ongoing maintenance. The project will provide clean energy for decades, ensuring a sustainable energy future for generations to come. At the end of the project's life, the land can be converted back to existing land uses. I understand that all development projects must be thoroughly reviewed and meet regulatory requirements to ensure their compliance with local laws and standards. However, I believe that the benefits outlined above, combined with a responsible approach to development make the solar project a valuable addition to our county. I kindly request that you consider the positive impact that this solar development can have on our community and provide your support for its approval. By embracing clean energy solutions like solar power, we can create a brighter, more sustainable future for Buckingham County. Thank you for your time and attention to this matter. I look forward to seeing our community take a significant step towards a greener, more prosperous future. Sincerely, Kristin Ghee. District 3.

Bickford: Thank you, Nicci.

Close Public Hearing:

Bickford: I close the public comment period, public hearing, excuse me, and move it back to questions to the Commissioners. Joyce, do you have any in regards to the paper?

Gooden: I'm good.

Bickford: Any other commissioners have any questions for the applicant before we make a decision?

Dorrier: I don't have a question for the applicant. But I have a question. I noticed that we're trying to fulfill on 18,000 acres of acreage now since they've increased the inner and outer part of the fence. Are we just trying to fill a quota here? Or are we trying to help the county? What is going to do to the forest land? And I haven't seen any results of the solar farms and I know this is a great presentation. I appreciate it. But I just hadn't seen anything from any of our projects that we've put in progress. What are we gonna do? What's happening for the county? So I'm just in a little doubt. I mean, if I had something to go on, I'd say yeah, let's do it right now. But we haven't gotten any results back from any of our projects that we've approved. So that's just the way I feel.

Bickford: Okay. I can only address that or just say that it is a time issue that you don't see the money until the project gets completed. And they rely heavily on the Dominion Power of the hookup and that's usually the hold up. The connection. So. If it does go through, it does benefit the county with just economic data that you've been given. Any other questions or anything for the applicant?

Allen: I think it takes about a year or so at least to get all the permits and everything done.

Bickford: It's a lengthy process. The Commission needs to make a decision whether to move this forward or not. If you don't have any other questions, what's the pleasure of the Commission?

Allen: Make a motion to approve it as is and send it to the board.

Gooden: Second.

Bickford: Okay, we have a motion and second to approve and move this forward to the Board of Supervisors. Any further discussion? All in favor, raise your right hand. It passes.

Supervisor/Commissioner Allen moved, Commissioner Gooden seconded and was unanimously carried by the Board to approve Case 23-SUP329 RWE Energy-Blue Rock Solar to the Board of Supervisors.

Bickford: Board of Supervisors for Mr. McNeely, when will that be?

Edmondston: October 10th at 6:00 p.m. It's a Tuesday at 6pm because the 9th is a holiday.

Re: Old Business: Case 23-SUP331 New Energy Equity-Buckingham Solar 1 LLC

Bickford: Now bring us to our second case which is Buckingham Solar 1 LLC.

Edmondston: Yes, our next case is 23-SUP331. And the landowners are Ivan and Deborah Davis at 106 Whetstone Lane, Dillwyn. The applicant is Buckingham Solar 1 LLC, which is a division of New Energy Equity LLC. The Tax Map 151 Parcel 17 contains approximately 166.62 acres located at or near 106 Whetstone Lane. This case came before the Planning Commission in July. The Planning Commission did ask the applicant to hold a community meeting. Their request is to obtain a special use permit to allow for the construction and 35-year operation of a 5 megawatt solar community solar garden. The applicant is back now to update the Planning Commission and the general public regarding those community meetings and to schedule a public hearing for the request. If it is the pleasure of the Planning Commission to hold a public hearing, October 23, 2023 6:00 p.m. would be the next regularly scheduled Planning Commission meeting. Our applicant is here this evening.

Bickford: Okay, will the applicant come forward and give us a summary of the project anything you want to add plus also your public meeting.

Jesse Diamond: Good evening, my name is Jesse Diamond. Again, I'm with New Energy Equity. We held two neighborhood meetings, one on the 22nd and one on the 29th, both from 4:30 to 6:30 p.m. at the Buckingham Recreation Center. Our outreach was we sent letters to all adjacent neighbors. Myself and the landowner have approach most of the neighboring landowners to introduce ourselves. I've handed out multiple business cards so that they know who to contact if they have any questions in the future. Had great conversations. Couple of good questions. Mostly just curiosity. We've we did put an ad in the newspaper on both the 18th and the 25th of September to give some notice to the general public. And then again, we had that meeting on the 22nd where we had a representative and the landowner and nobody from the public attended. On the 29th, Cameron Gilliam from District 2 Board of Supervisors attended. He was the only person outside of the landowner and myself. We discussed just kind of a general introduction of the project, site layout and location. And then he just wanted to understand a little bit better about the benefits of shared solar since you hear a lot about utility scale. And there are some specifics about shared solar that are a little bit different. Any questions on the neighborhood meetings? When we last spoke, Pete, you had a question. You asked how we come up with having an economic impact of \$5 million for the county. So I got to work. In our paperwork in our narrative, we do describe economic impact and kind of some of that. So, if it's alright with you, I'm just going to read a couple of paragraphs which I've shrunk down just a little bit. Is that all right?

Bickford: That will be fine, sir.

Diamond: So in our narrative, we state that in an economic impact is a change in employment income, and the output in an area based on an activity that affects the local economy, such as construction, and operation of shared solar facilities. Economic Impact includes three components, direct impacts, indirect impacts, and induced impacts. The direct impacts include the changes in employment, worker income, and total economic activity directly related to the shared solar facility. The induced impacts are the effects resulting from changes in spending by employees of the shared solar facility of employees and other businesses indirectly affected by these facilities by landowners receiving lease payments, and by consumers who spend money they saved by subscribing to the shared solar facilities. The indirect and induced effect, which is measured how much money ripples through the sectors of the economy is also referred to as the economic multiplier effect. These impacts can be measured three different ways through employment, labor income, and output. If you want to read more about that, that's on pages 26 and 27 of our narrative, and its Section 11 Economic Impact Analysis. So to get to the \$5 million. There's the development phase, which is hard to quantify a specific dollar amount, but there are engineering services, I use a local engineer to Virginia, I stay locally, I spend, I rent cars locally, I eat locally. It does have a smaller impact. But the construction phase, I estimated about \$1.637 million, operational phase is \$2.653 million, signing agreement, generally 4 or 5 megawatts, somewhere between about \$300,000 to \$400,000 of direct impact. And then economic savings from subscriptions, what the community should save on our project, is about \$5.25 million. And so all of that together, is probably just under \$10 million. And so a large portion of that is going to be for Buckingham specifically. And so

that's where I come up with approximately \$5 million of economic impact. And other than that, those are the two items that I wanted to address specifically. Again, my intent tonight is just to request that we can have a public forum in October so that I can address any public comments and get your opinion on whether or not this is a good project to move forward. So if you have any questions, I'd love to answer them now.

Bickford: Go ahead and sit down, Mr. Diamond. I'll turn it to the Commission? Does anybody have questions for the applicant before he sits down?

Allen: Your acreage to be fenced in will be 24 acres? Is that what it will be? 24.08? That to fenced in acreage? I'm just checking just to make sure. 5 megawatts all together. I like that.

Bickford: Any other questions from the Commissioners? Mr. Diamond, you can go ahead and sit down. We'll discuss it now. Thank you, sir. What is the pleasure of the Commission? Are we gonna move this forward to public hearing?

Allen: So moved.

Kapuscinski: Second.

Bickford: We have a motion and a second. Any further discussion? All in favor, raise your right hand? Moves forward. We'll see you in October.

Edmondston: October 23rd.

Bickford: October 23rd. Thank you, sir.

Re: New Business: Introduction of Case 23-SUP332 CWJ Properties LLC

Bickford: That brings us to a new business CWJ Properties LLC.

Edmondston: Yes, sir. We have a new case and introduction before us of Case 23-SUP332. Our landowner is Jessie M. Woodson-Johnson of 3781 Petersville Church Road, New Canton. Applicant is CWJ Properties LLC. Tax Map is 86 Parcel 9 and contains approximately 1 acre and is located at 3973 Petersville Church Road, New Canton, which is State Route 613 in the Marshall Magisterial District. This is an A-1 zoning district and the applicant wishes to obtain a special use permit to operate an adult home, assisted living facility. The applicant is asking the Planning Commission to schedule a public hearing for this request. There are 10 conditions that are conditions that you may consider, as you review and evaluate this permit request. The applicant is with us this evening. And the question before

you would be, would it be the pleasure of the Planning Commission to schedule a public hearing for this requests? October 23, 2023 at 6:00 p.m. is the next regularly scheduled Planning Commission meeting.

Bickford: Will the applicant come forward please? Would you just give us a quick overview of what you provided on your application for us, please?

Jessie Woodson-Johnson: Good evening. My name is Jessie Woodson-Johnson and this is my husband, Lonnie Johnson. What we would like to do is own and operate in adult assisted living facility. We would like to start off being private under the Social Services regulations to be a private adult assisted living facility. In that business, you have to have no more than three residents. It's our desire that we will be able to get our licensure through the state, so that we'll be able to house more than three people. Right now, there are no adult or assisted living facilities in Buckingham County. The last one that I knew was Mary's Rest Home. And now they are called, I want to say Divine Diversity or something like that, but they house individuals that have developmental delay. So I proposed business is for adult people. People that are of age, and people that are disabled. We already have a modular home there. And Pete came by today to look at and tour the home. It is very quiet. We may have 10 or less cars that travel our road every day. And sometimes they're the, you know, the repeaters that live down the road from us. It used to be a home where I was raised. My father built the home sometime in the 1950s. And a couple of years ago, we took the home down because nobody has lived in it since 1994. And that was when my father was living in it. And then he moved in with my husband and I and we took care of him for seven years. Toward the end, he was bedridden and we had to do everything for him. A couple of years ago, my husband's father moved in with us. And we took care him from October of 2019 through May of 2020. And he missed by two weeks, I believe it was from being 100 years old. And so we took care of him. We have four children, and they will be involved, you know in this operation. So it's going to be a family business. And we will like, you know, the opportunity to start this home. As you know, people are living to be much older. And so this is going to be a need for it. Not everyone is qualified to, you know, be admitted into a nursing home because that's a higher level of care. We're looking for people that are still able to feed, bathe and dress themselves. And we will provide shelter, food, and also, you know, do the laundry for them and also help them with their medication. And if they need transportation to go to their local doctor, then you know, we can provide that or in the event, the families are not able to provide or take them to the medical appointments. We are currently about 15 minutes from the Health Center, Central Virginia Community Health Center. We are probably about 17 or 18 minutes from the rescue building in Arvon, about 20 minutes, 15 to 20 minutes from Dillwyn rescue squad, the ambulance services and the fire departments. We are very close to the Cumberland County line. In fact, we can walk to the Cumberland County line. And, in terms of what we planned, you know, there's other things that we're planning to do. we plan to provide them with recreation. You know, we have a church, that's a half a mile from our home, and, you know, they can either attend services there or relatives can pick them up and take them to their, you know, home churches. If one of the residents, you know, has a car and still, you know, driving, you know, they'll be

able to do that. We're just wanting to provide, you know, shelter, food, and do their laundry, and make sure that they're in a safe environment. I've worked my present job for 43 years, and I've advocated for the elderly, those that are disabled. There have been many homes I have gone into, and found that there's elderly people living in the home alone, or they're living, you know, in the home with loved ones or loved ones living with them, but they're left alone, because they have to go to work. And the way things are now, you know, there's so many scammers and, you know, people breaking into people's homes, at least, you know, they will be with us and they can be in a safe environment. The home is located on one acre of land. Where we live is right behind the proposed home. And so, you know, we plan to well, my husband and I, we will be the ones doing the work. And then once we've reached the age where or the inability to take care of the home, we're going to hire someone to do what we normally would do. And we will like to be able to expand. That's why, you know, one of the reasons why we're going to get our license through the state because we have property, more property there that we can also locate another, you know, house on. Not sure whether or not we can add to the current home that we have because it's on one acre of land and it's four bedrooms. The largest bedroom will have up to two people in it. And that could be, you know, a couple. Then the other bedrooms, it could be you know, individual person. Two of the bedrooms we may be able to get two people in the room. But I was kind of looking at myself personally. You know if I were to go into an adult home assisted living facility, I would like to be in a room, you know, alone, but we know that in adult homes and assisted living facilities there are like two people, at least two people in the room. So we do know that one of the bedrooms are not large enough to have two people, but we believe that the other two are. Well, actually the other three are. If you have any questions?

Bickford: Okay, I'll turn it over to the Commissioners at this point for questions.

Allen: Oh, I was just looking, how you doing good to see you, so you got three homes in front of you. So you're just going to use one?

Woodson-Johnson: No we don't have but one in front of us. I did have a double wide, that's no longer there. And then that was a single wide that my nieces own. They're no longer there. And then there was my father's home, which we took down and put the modular home there. So there's only one house in front of us.

Allen: I saw another picture that somebody was showing me the other day that somebody was taking care of the folks like you were talking about, but they had a whole bunch of smaller homes in a row. Trying to take care of them.

Woodson-Johnson: That space in front of us, we would like to, you know, to be able to put at least two more homes in front of us. That is, you know, that's the reason why we want to go ahead and get a license to the state to be able to, you know, expand.

Allen: I'm glad to see you looking out for people. I think it's good.

Kapuscinski: First of all, I'd like to compliment you. I saw the property. It's absolutely gorgeous. And I saw what you did with your modular home. I mean, it's just remarkable. Very nice. Thank you. The question I would ask you and I would add, I'm gonna defer a little bit here to Ms. Gooden, I know that I didn't see any fire extinguishers in your house. I'm assuming you're going to have some of those just in case.

Woodson-Johnson: I believe we do have one that's in the utility room.

Kapuscinski: Okay. What about and I'm, again, I'm gonna defer to this to Ms. Gooden, but what about a defibrillator unit? Is that something that's common in a house that tells people who are either elderly or...should there be somebody there trained to use it?

Gooden: Mr. Chairman, may I speak? First, my background is pediatrics. But I think he's referring to an AED that would have a safety. So there would be safety checks, I'm sure. And that you would meet ADA regulation so if someone was there with a wheelchair, so that would be in your licensure, some outline delineating what kind of health and safety checks that are required. So if they require a fire extinguisher, or if they require an AED, or if they require somebody to know CPR? Those were you know, that's it. But I'm thinking AED would be a nice to have thing. You know, knowing CPR would be nice, but all babysitters should know CPR to but they don't. And so I don't know if that's a requirement. My only regulations have been with daycares with pediatrics on military bases, which I stopped in 1994. When I retired.

Kapuscinski: So the suggestion is that it would be up to the licensor.

Gooden: I don't know the regulations. But just from her background, I'm going with it, she's going by the regulation and since she's going to the state, she would know what is required. And also I would not anticipate her doing just the minimum. As she was talking about the bedrooms. She said well, could put two people in there, but I'm thinking one person would go there. So I'm thinking she's talking about comfort. So I just don't envision her doing the bare minimum. Okay.

Kapuscinski: Well, other than that, I those are the only two questions but I thought I thought it was excellent.

Bickford: Mrs. Johnson, do you know, have you done enough investigating to know how long the process will take to perhaps get licensed so you can expand?

Woodson-Johnson: Yes, I contacted the state. And since Buckingham is in the region with Roanoke, I had to call the Roanoke office and you know, had a conversation about, you know, expanding and licensure. And I was told it's a three-month process.

Bickford: Three months. Okay. I was just curious on that.

Gooden: Mr. Chairman?

Bickford: Yes, Ma'am.

Gooden: Mrs. Woodson-Johnson, I'm going to out you because I don't think the Commissioners all know, that you want served on this Board. And so I really don't anticipate you doing the bare minimum, because you have sat here in our position and done the work that we're doing. And so you know, what it takes to get something done. And like I said, I don't anticipate you doing just the bare minimum. Your work on the Board before has spoken for itself. You know, I didn't know if you knew that. She was a Planning Commissioner, unless she told you today or something? She's been a Planning Commissioner, and on the Board of Supervisors, so she's not going to give a shoddy work. Okay.

Bickford: All right. Very good. Any other questions for applicant? You can go ahead and sit down. Thank you. All right. I'll turn this application over to the Commissioners. Do we want to move this forward to public hearing?

Kapuscinski: I'd make that motion. Mr. Chairman.

Allen: Second.

Bickford: Okay. We have a motion and a second to move this forward to public hearing. Any further discussion? Seeing none, all in favor raise your right hand? Very good. We'll see you October 23. Okay, thank you, ma'am.

Commissioner Kapuscinski moved, Supervisor/Commissioner Allen seconded and was unanimously carried by the Planning Commission to move Case 23-SUP332 to public hearing at the October 23, 2023 Planning Commission meeting.

Re: Reports

Bickford: Okay, that brings us to your building reports and everything.

Edmondston: Yes, sir. Mr. Chairman, the building permit report is there for informational purposes.

Re: Zoning Administrator Report

Edmondston: I don't have anything as Zoning Administrator this evening.

Re: Commission Matters and Concerns

Bickford: Okay, very good. All right, Commission matters of concern. Any Commissioners?

Gooden: Mr. Chairman? Yes, Mr. Chairman, I do have some concerns. And it has to do with the public comment section. And we have county emails accounts for public comments that we can get emails there. And I'm quite willing to read those messages. My question is, how do I stop the emails from people who just happen to have my personal email account and decide they're going to email me at home, so to speak? That's one. You want all of them, Nicci?

Edmondston: Let me just reiterate, the first question is, in regards to your personal email?

Gooden: Right. I'm getting messages and one of the reasons we have the county, I use the county is for FOIA and if I got stuff in my personal, then that makes all of that subject. I don't want that.

Edmondston: Well, do not engage on your personal email and redirect them to your county email. If any information is exchanged, or there's a discussion amongst that particular individual and your email and there is a FOIA request, yes, your personal email, but you can direct them. There is no communication regarding county work and policies on this email, please contact me at jgooden@buckinghamcounty.virginia.gov.

Gooden: Okay, thank you. Also if a person is making a public comment, there is no need to give me the copy of the comment that they're making. And that's just my personal thing, because I'm listening to the comments anyway. And then I'm also taking notes as I'm listening. I'm making notations. So to give me and then the public comments are put in a minutes. So there's no reason to give me a copy of what you're saying. So I think we're kind of burning trees on that. It's just redundant. And if there's additional information, just like we got copies of the chart today, and the additional information that Mr. Snoddy gave us, that was something different. But even with that, if they could, if we could have that, because by the time they walk here and give each one of us, that kind of takes time and we all move at different speeds and we're southern and there's conversation and moving down. So I would like to have, if it's okay with you, Nicci, any other handouts that they come through you if there are any other additional handouts and if there's something else that the person doing the public comments did not think of, you know, to include and then I've got this, that it comes through you because that kind of speeds up the process. And I say that only we had a few, only a few comments tonight. But I've sat through public comments, and I'm looking at my numbers, and I think I hit what did I hit at 80? You

remember that night was making, I was like, what number are we now? You know, and everybody gives handouts. Sometimes it can get quite tedious. So I'm just looking for a more efficient way. And if it's up here when I come in, I can go oh, look at this, this is something additional. So I would appreciate that. Those are my comments. And that's just me. I don't know how the rest of the board feels about that?

Bickford: Well, I will say it would be beneficial to have additional information that handout prior to them handed before to speak. So maybe what we could do is when they have a sign up, is if they have a handout they want to give the Commissioners is give that to you, or have it stated on the signup page. That way they know to hand it to you and you can put it on us and we may have a chance to look at a prior to them speaking. It would be beneficial that way, you know, what they're going towards? As far as, I don't know how you could you could ask them just to email the second issue you had with handing out what they say. You could just ask them to, I don't know, I don't know how you really resolve that other than what you could say is just email that prior to public comment period. And maybe that'll work? I don't know. It doesn't say they will do it. It just says that's an option.

Gooden: And I agree, because I read G's email. Earlier, it was in our...we had already been sent that. You know, we'd already been sent that. So I had already read those comments. I appreciate you reading them into the minutes. And I'm not talking about that part. But if it comes to me, I read it.

Edmondston: When they're actually speaking their comment and then hand you a copy of it as well. I think it's probably a courtesy, maybe it gives you time to take it home and digest it.

Bickford: And look at it closer.

Edmondston: Then we could, you know, do some very courteous housekeeping so that it doesn't inconvenience the speaker the night of that. And that may help them as well, because then if they're able to give it to us just a little bit prior that will help you all understand that and not so much engage in a dialogue during the comment period. But certainly you'd be able to contact them afterwards or they would be able to contact you on your county email just to encourage further discussion from their representative. So I'm sure there's a way to address and manage that appropriately. And I will do all I can.

Bickford: Okay, that's all we can ask. Any other Commissioners before we adjourn? I do want to make one announcement. In October, there will be a solar farm coming from my district, New Canton. They're having a community meeting at the Arvon Fire House on Wednesday, October the 11th between 5:00 and 7:00. I am a minority owner on one of the properties. So I will have to abstain from participating. I've already told Ashley and so she'll be taking over that meeting. That's October the 11th, Wednesday, October the 11th from 5:00 to 7:00 at the Arvon Firehouse which is right to the west of 15. And it will be in the older old building. They've got a new building but it'll be an old building.

They'll have charts and everything set up like all the other sites, but I just wanted to announce that for you.

Re: Adjournment

Bickford: Alright, if no one else has anything, do I have a motion to adjourn?

Crews: So moved.

Dorrier: Second.

Bickford: Any discussion? I didn't think so. All right. We are adjourned.

Commissioner Crews moved, Commissioner Dorrier seconded and was unanimously carried by the Planning Commission to adjourn the September 25, 2023 meeting of the Buckingham County Planning Commission.

ATTEST:

Cheryl T. "Nicci" Edmondston
Zoning Administrator/Planner

John E. Bickford
Chairman

Public Hearing Case 23-SUP331

Applicant Buckingham Solar 1 LLC
New Energy Equity LLC
2670 Patton Road
Roseville MN 55113

Zoning District: Agricultural District (A-1)

Background/Zoning Information: The parcel is located near on Route 60 at or near 106 Whetstone Lane Dillwyn VA 23936, Curdsville Magisterial District. Tax Map 151 Parcel 17 containing approximately 166.62 acres. The landowners are Ivan P Davis, Jr and Deborah B Davis, and the applicant is Buckingham Solar 1 LLC, a subsidiary of New Energy Equity LLC. This property is zoned Agriculture (A-1). The Zoning Ordinance does not permit a Public Utility Generating Plant as a Permitted Use. However, Within the A-1 Agricultural District, Public utility generating plants, public utility booster or relay stations, transformer substations, meters and other facilities, including railroads and facilities, and water and sewage facilities may be permitted by the Buckingham County Board of Supervisors by a Special Use Permit following recommendation by the Planning Commission in accordance with this ordinance and the Code of Virginia. The Planning Commission may recommend and the Board may impose conditions to ensure protection of the district if the Special Use Permit is approved. Buckingham Solar 1 LLC (the “Applicant”) requests a Special Use Permit (“SUP”) to allow for the construction and 35-year operation of a 5 MW AC photovoltaic community solar garden (the “Project”) on approximately 24.08 acres of a parcel totaling 166.62 acres of private land in Buckingham County, Virginia (the “Property”). The application is attached.

Below are conditions that you may consider attaching to the request if approved:

1. Inspections. Buckingham Solar 1 LLC or any successors, assignees, current or future lessee, sub-lessee, or owner of the solar energy facility (the "Applicant") consent to annual administrative inspections by Planning Department Staff for verification of compliance with the requirements for this SUP after the completion of the construction of the Project. During construction of the Project, the county and its assigns and designees shall have access to the site for inspections and to assure compliance with the conditions of the SUP.

2. Compliance with Conditions. The Applicant shall sign the list of the adopted conditions for this SUP signifying acceptance and intent to comply with these conditions.

3. Compliance with Laws; Erosion and Sediment Control and Stormwater. That all federal, state, and local laws, regulations, permit requirements and ordinances will be adhered to including but not limited to: a. All active solar systems and solar equipment used in this Project shall meet the requirements of the National Electrical Code (NEC), National Electrical Safety Code (NESC), American Society of Civil Engineers (ASCE), American National Standards Institute (ANSI), Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), or International Electrotechnical Commission (IEC) as applicable and comply with state building code and shall be inspected by a county building inspector through the building permit process.

b. An Erosion and Sediment Control Plan must be submitted to the County and approved by the Soil and Water Conservation District prior to any land disturbance. Prior to Applicant's submission of the Erosion and Sediment Control Plan, the Applicant will contact the County's erosion and sediment control reviewer and use reasonable efforts to arrange a meeting on the Property with the Applicant's engineer. The County may obtain an independent third party review of the Erosion and Sediment Control Plan at the expense of the Applicant.

c. The erosion and sediment control plan shall be prepared in accordance with the Virginia Erosion and Sediment Control Handbook. As an additional precaution, the erosion and sediment control plan will be implemented as a sequential progression, demonstrating that not more than 25% of the Project Area be disturbed at any one time during construction without temporary seeding or other stabilization in accordance with the Virginia Erosion and Sediment Control Handbook. Nothing in this condition shall prevent continued construction activities after areas have been stabilized in accordance with the Virginia Erosion and Sediment Control Handbook, and such stabilized areas will not be subject to the 25% limitation in sentence 2 of this condition; however continued construction activities, excluding maintenance of erosion and sediment control and stormwater management features or associated activities, shall not be re-initiated in a previous Phase until at least 50% vegetative cover (as determined by an independent inspector) has been established in that Phase or 60 days after a Phase has been temporarily stabilized, whichever is sooner. During this period, the applicant shall take continued action implementing best management practices to promote successful establishment of vegetative cover in a Phase. The erosion and sediment control plan will provide the means and measures in accordance with the Virginia Erosion and Sediment Control Handbook to achieve stabilization of the disturbed areas and to comply with this condition.

d. During the construction of the Project, the Applicant shall require the following:

i. All Erosion and Sediment control facilities will be inspected by a qualified third party inspector: (i) at least every four calendar days; or (ii) at least once every five calendar days and within 24 hours following any runoff producing storm event. Any discrepancies should be noted and corrective action should be taken to ensure facilities are operating properly. Corrective measures include regularly cleaning out sediment basins and traps, stabilizing eroded banks or spillway structures, cleaning inlets and outlets and repairing damaged silt fence shall be prioritized.

- ii. Runoff at stormwater outfalls will also be observed just as often for characteristic land disturbance permit (clarity, solids, etc.)
- iii. A record of the amount of rainfall at the Project during land disturbing activities.
- iv. A record of major land disturbing activities, including dates when clearing, grading and excavating occurred in each Phase. Dates when construction activities are either temporarily or permanently ceased in the Phase should be recorded along with stabilization areas.
- e. The County may inspect the Project during construction as determined by the County and shall retain all enforcement rights under applicable law.
- f. A Stormwater Management Plan must be submitted to the Virginia Department of Environmental Quality (VDEQ) and approved by VDEQ prior to any land disturbance. The Applicant will obtain approval of a Stormwater Pollution Prevention Plan ("SWPPP"). The Applicant and its contractor will have operational day-to-day control of the Project and must implement the SWPPP measures. The Applicant and its contractors will ensure that the applicable subcontractors are trained on appropriate best management practices and requirements in the SWPPP.
- g. The Project shall fully comply with all applicable provisions of the Buckingham County Zoning Ordinance, to the extent not modified herein, throughout the life of this SUP.

4. **Expiration.** The building permit application must be submitted within 2 years of obtaining the Special Use Permit and the commercial generation of solar electricity shall begin within 24 months of the approval of the building permit or this SUP shall be null and void. The building permit deadline will be extended for 12 months (3 years total), and the construction time period extended by 12 months (30 months total) by administrative approval of the County Administrator after consultation with the Board of Supervisors due to delays in state permits, interconnection approval, or other good cause demonstrated by the Applicant. Any timeframe under which the Commonwealth is under an Executive Order of the Governor declaring a statewide emergency will toll the timeframe specified in this condition.

5. **Definitions.** All racking, solar modules, inverters, breakers, switches, cabling, communications components, and other ancillary components necessary to convert solar energy to electricity and interconnect to the electrical transmission are considered "Solar Equipment" and subject to the requirements for such, together with setback requirements of that district and other requirements, unless otherwise stated in these conditions. Solar Equipment shall not include access roads and transmission lines and poles. "Project Area" shall include all areas within the Property line boundary that include, but not limited to the following: Solar Equipment, ingress/egress, access roads, fencing, parking, laydown areas, setbacks, buffers, storage area, wetlands, erosion and sediment control features, storm water management features, and other ancillary components. Battery storage and other energy storage methods are not approved as part of this SUP and will require separate special use permitting. The Project will not exceed 5MWac in capacity.

6. **Binding Obligation.** This SUP shall be binding on the Applicant or any successors, assignees, current or future lessee, sub-lessee, or owner of the solar energy facility.

7. **General Plan.** The construction of the Project shall be in substantial conformance with these conditions and in general conformance with the Special Use Preliminary Site Plan prepared by New Equity Energy dated May 12, 2023 (the "General Plan"). Modifications to the General Plan shall be permitted at the time of building permit based on state and federal approvals and final engineering and design requirements that comply with these conditions. The Solar Equipment and accompanying stormwater features shall be limited to no more than 24.08 Fenced Area (acreage) of the 166.62 acres Property (county parcel 151-17), as depicted on the General Plan.

8. Construction Hours. All site activity required for the construction and operation of the solar energy facility shall be limited to the following:

- a. All pile driving activity shall be limited to the hours from the earlier of sunrise or 8 a.m. to the later of 6 p.m. or sunset, Monday through Saturday. Applicant may request permission from the Zoning Administrator to conduct piling driving activity on Sunday, but such permission will be granted or denied at the sole discretion of the Zoning Administrator; and
- b. All other construction activity within the Project Area shall be limited to the hours from the earlier of sunrise or 8 a.m. to the later of 6 p.m. or sunset, Monday through Sunday in accordance with the provisions of the County's Noise Ordinance and shall not be unreasonably loud for a sustained duration of time as monitored at the property line of the Project Area.

9. Sound. After completion of construction, the solar energy facility, during normal operation, but excluding maintenance, shall not produce noise that exceeds 50 dbA as measured at the property lines of the project boundary, unless the owner of the adjoining affected property has given written agreement to a higher level.

10. Setback from Existing Residential Dwellings. A minimum five hundred (500) foot setback shall be maintained from Solar Equipment to any adjoining or adjacent residential dwellings that exist at the time of the approval by the Board of Supervisors. This requirement may be reduced or waived for the life of the solar energy facility, if agreed to, in writing, by the owner of the residence. Transmission lines and poles, security fence, and project roads may be located within the setbacks only where necessary. During construction, the setback may be used for the staging of materials and parking if the buffer is not disturbed. The Applicant shall retain and maintain existing vegetation and timber in the setback that are under the control of the Applicant and located on the Property.

11. Setback to Property Lines and Rights of Way.

- a. **Property Line.** A minimum of a fifty (50) foot setback from Solar Equipment to the property line shall be provided around the perimeter of the Solar Equipment where it is adjacent to property not owned by the same property owner as covered in the SUP at the time of the approval by the Board of Supervisors.
- b. **Right of Way.** The Applicant shall provide a minimum of a seventy-five (75) foot setback from Solar Equipment to any adjoining public right of way.
- c. Transmission lines and poles, security fence, and project roads may be located within the setbacks only where necessary.

12. Setback to Perennial Streams and Connected Wetlands. As an additional erosion and sediment control and stormwater management precaution, a minimum fifty (50) foot setback shall be maintained from Solar Equipment to the edge of all perennial streams and connected wetlands located within the Project Area. Transmission lines and poles, project roads, erosion and sediment control and stormwater management features may be located within the setbacks where necessary.

13. Buffer.

- a. Within the setback, the Applicant shall retain at least a fifty (50) foot buffer of existing vegetation and timber with the intent to substantially obscure from view the Solar Equipment and

security fence from the property line. Along the property line if there is no vegetation or timber to retain the Applicant will supplement the buffer with new plantings in the fifty (50) foot buffer.

b. Along existing public right-of-way (ROW) where there is existing timber, the Applicant shall retain at least a fifty (50) foot buffer of existing vegetation and timber with the intent to substantially obscure from view the Solar Equipment and security fence from the public right-of-way. Along existing public rights-of-way where there is not at least 50' of vegetation and timber remaining to substantially obscure from view the Solar Equipment and security fence, the Applicant will create a buffer of at least fifty (50) feet. The new buffer will include timber, evergreens, cedars or other vegetation as determined by the Applicant with the advice of a professional arborist and subject to the prior written approval of the Zoning Administrator prior to the issuance of a building permit. All plantings installed in the buffer shall have an anticipated five-year height of six (6) to eight (8) feet after planting and an anticipated mature height of at least twenty (20) feet. Any new plantings shall be planted during the appropriate time of year after the completion of construction of the Project. The buffer may be included in the setback area.

c. The Applicant will maintain all buffer areas with the advice and support of a professional arborist or forester for the duration of the Project's operational life. Such maintenance may include thinning, trimming, seeding, or other modifications to the buffer to ensure the health of the vegetated buffer areas, public safety, and the energy efficiency of the Project. In the event the health of the vegetation with the buffer area is compromised and no longer substantially obscures the visibility of the Solar Equipment and security fence, the Applicant will plant a new buffer, or supplement the remaining buffer, including timber, evergreens, cedars, or other vegetation as determined by the Applicant with the advice of a professional arborist or forester.

d. A performance bond reflecting the estimated costs of anticipated landscaping maintenance, as determined by the Applicant with the advice of a professional arborist or forester, shall be posted by the Applicant prior to construction. This ensures buffer landscaping is adequately maintained for the life of the Project.

14. **Fencing.** The Applicant shall install a security fence around the Solar Equipment that is a minimum six (6) feet in height. Fencing must be installed on the interior of the vegetative buffer required in this section so that it is screened from the ground level view of adjacent property owners. The fencing shall be always maintained while the facility is in operation.

15. **Lighting.** Construction lighting shall be minimized and shall be directed downward. Post-construction lighting shall be limited to security lighting only and shall be full cut-off lighting pointed in a down direction.

16. **Interconnection.** The Project shall not receive a building permit until evidence has been given to Buckingham County that the electric utility company has a signed an interim interconnection service agreement or interconnection service agreement with the permittee.

17. **Payments.** The Applicant proposes to offer payments in the amount of \$1,400/MWac over the operational life of the project. There are two avenues by which this may be accomplished at the County's sole discretion:

a. The County may amend its current Revenue Share Ordinance by removing the exemption of solar projects that are 5MW or less to comply with Va. Code § 58.1-2606.1. Local taxation for solar photovoltaic projects five megawatts or less; or

b. The Applicant will make substantial cash payments in accordance with Va. Code 15.2-2288.8 and Exhibit D below, less any Machinery and Tools ("M&T") tax assessed. During any year after the solar facility commences commercial operations, should the M&T Tax levied against the project amount to a sum less than the substantial cash payment amounts set forth for that year in the Maximum Annual Payment column of Exhibit D, then the Owner shall pay to the County the difference between the Annual Payment in Exhibit D and the amount paid for M&T Tax. In the event the M&T Tax is greater than the Annual Payment, then no Annual Payment shall be owed. Exhibit D attached hereto is incorporated into this condition. In the event that the actual installed MWac capacity of the Project as of the Commercial Operation Date varies from that amount indicated in Exhibit D, then Exhibit D shall be amended and the Annual Payments therein shall be adjusted pro rata.

c. Any payments in excess of the Machinery and Tools Tax are substantial cash payments (2022 Va. Code § 15.2-2288.8. *Special exceptions for solar photovoltaic projects*) made by the Owner to the County and are intended for substantial public improvements, the need for which is not generated solely by the granting of this permit, so long as such conditions are reasonably related to the solar facility that is the subject of this permit. The Owner and the County acknowledge and agree that the county may identify in future budget years qualifying substantial public improvements that will be funded by any annual substantial cash payments in the sole discretion of the County.

18. Decommissioning. If the solar energy facility is inactive completely for a continuous twelve (12) month period it shall be considered abandoned. The Applicant shall provide notice to County Administrator immediately upon the Project becoming abandoned, inactive and/or shutting down operation. The Applicant or its successor and/or assign ("Project Owner") shall decommission the Project within twelve (12) months of abandonment. The decommissioning shall be in accordance with a Decommissioning Agreement between the Applicant, Project Owner and the County. If the Project (or relevant part) is not removed within the specified time, the County may cause the removal of the Project with costs being borne by the Project Owner as will be provided for in the approved Decommissioning Agreement. The costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to a bond, letter of credit, cash, or a parent guarantee by an investment grade entity. The Applicant's cost estimate of the decommissioning shall not include the salvage value of the Solar Equipment. If the solar energy facility is sold to any entity that is not a public service corporation, the SUP shall not transfer to the purchaser until such time as the adequate surety is provided. If a surety is required, the cost estimates of the decommissioning shall be updated by the Applicant every five (5) years and be provided to the County. At its option, the County may require the surety amount be increased based on the net cost of decommissioning which includes the estimated salvage value of the equipment. The Decommissioning Agreement shall be agreed upon and the surety shall be provided before the issuance of the building permit.

19. Decommissioning Timeframe. The Project shall be decommissioned within twelve (12) months. The decommissioning shall require (i) the removal of any Project facilities installed or constructed thereupon, (ii) the filling in and compacting of all trenches or other borings or excavations made in association with the Project and (iii) the removal of all debris caused by the Project from the surface and 36" below the surface of the Property.

20. Training of Emergency Services. The Applicant shall coordinate with the County's emergency services staff to provide materials, education, and/or training to the departments serving the solar energy facility regarding how to safely respond to on-site emergencies. Prior to construction, the Applicant shall ensure

that emergency services staff has keys and other access to the Property and the Applicant shall provide the County and emergency services with safety data sheets (SDSs) on the Solar Equipment for the life of the project.

21. Access Roads and Signage. Access roads are to be marked by the Applicant with identifying signage. The manufacturers' or installers' identification and appropriate warning signage shall be posted on or near the panels in a clearly visible manner. The signage must identify the owner and provide a 24-hour emergency contact phone number. Each access gate must also have the signage that identifies the owner and provides a 24-hour emergency contact phone number.

22. Construction Management. The following measures will be taken:

a. A Construction Traffic Management Plan and mitigation measures shall be developed by the Applicant and submitted to the Virginia Department of Transportation (VDOT) and Buckingham County for review. The Plan shall address traffic control measures, an industry standard pre- and post-construction road evaluation, and any necessary localized repairs (i.e., potholes, wash-boarding of gravel, shoulder rutting, culvert crushing, etc.) to the public road that are required as a result of damage from the Project.

b. During construction, each project entrance will have a dedicated wash station to mitigate natural debris from unintentionally leaving the Project Area. The Applicant will take all reasonable precautions to minimize impact and damage to public roads including regular maintenance, washing and sweeping. If a traffic issue arises during the construction of the Project, the Applicant shall immediately develop with input from the County and VDOT and implement appropriate measures to mitigate the issue.

23. Parking. Parking of vehicles or staging of equipment or materials related construction or decommissioning of the Project shall be limited to the Project Area.

24. Glare. All panels will use anti reflective coatings. Exterior surfaces of the collectors and related equipment shall have a non-reflective finish and solar panels shall be designed and installed to limit glare to a degree that no after image would occur, towards vehicular traffic and any adjacent building.

25. Height. No aspect of the Solar Equipment shall exceed 17 feet in height, as measured from grade at the base of the structure to its highest point. Such height restriction shall not apply to electrical distribution facilities, substations, or transmission lines.

26. No County Obligations. Nothing in this SUP shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.

27. Severability of Conditions. If any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable.

28. Enforcement. That any infraction of the above-mentioned conditions could lead to a stop order and discontinuation or revocation of the special use permit in accordance with Virginia law.

29. **Solar Panel Technology.** The Applicant will be restricted from utilizing photovoltaic panels with internal components containing cadmium telluride. Only silicon type panels, or those other panels that have been established as optimal standard best practice shall be utilized by the Applicant.

30. **Ground Cover; Pollinators.** Prior to the start of construction, the Applicant will perform no less than 10 soil tests in areas across the Project Area to achieve an appropriate sample size of Project Area. The soil tests will be used to inform and develop a comprehensive and detailed vegetative management plan with the intended effect to revegetate the Project Area with ground cover. The vegetative management plan may include the optimal seed types, fertilizer rates, and liming rates (if necessary) to be used for temporary and permanent stabilization. Once operational, the Applicant will maintain ground cover in good condition throughout the operation of the Project. Where grubbing is not required for the construction or operation of the solar farm, or for the installation of erosion control and stormwater management features, existing stumps shall remain in place. Applicant will consider implementation of Pollinator Habitats where appropriate and in accordance with applicable laws and regulations.

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: 3.16.2023

Special Use Permit Request: New Energy Equity is requesting a Special Use Permit for a period of 35
years to construct a 5 MW AC photovoltaic community solar garden

Purpose of Special Use Permit: to construct a 5 MW AC photovoltaic community solar garden on
approximately 24.08 acres of land in Buckingham County

Zoning District: A1 Agricultural Number of Acres: 166.62

Tax Map Section: _____ Parcel: 151 Lot: 17 Subdivision: _____ Magisterial Dist.: _____

Street Address: Unassigned

Directions from the County Administration Building to the Proposed Site: Head N toward US-60 (246 ft),
turn right onto US-60 E (5.7 mi), turn left onto Whetstone Ln (0.1 mi), slight right (440 ft)

Name of Applicant: Buckingham Solar 1 LLC, a subsidiary of New Energy Equity, LLC (New Energy Equity)
Mailing Address: 2670 Patton Road, Roseville, MN 55113

Daytime Phone: (651) 333-0541 Cell Phone: _____

Email: development@newenergyequity.com Fax: _____

Name of Property Owner: Ivan P Davis, Jr. and Deborah B. Davis

Mailing Address: 106 Whetstone Ln, Dillwyn, ^{VA}PA 23936

Daytime Phone: (434) 315-4212 Cell Phone: _____

Email: N/A Fax: _____

Signature of Owner:  Date: 7-7-2023

Signature of Applicant:  Jamie Borell (May 11, 2023 09:35 CDT) Date: May 11, 2023

Please indicate to whom correspondence should be sent:
☐ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer
☒ Applicant Contact person: Jesse Dimond

SIGNAGE AT PROPERTY

The Buckingham County Zoning Ordinance requires the following:

The applicant in any case which requires a public hearing shall post signs furnished by the agent on each parcel involved at least 21 days prior to the public hearing indicating that a public hearing is eminent, the date, a rezoning issue, and a County contact number. The signs shall be placed on the VDOT right-of-way closest to the applicant's property line and shall be clearly visible from the road with bottom of the sign not less than one and one half feet above the ground. If more than one public road abuts the property, the signs shall be placed in the same manner as above for each abutting road. If no road abuts a property, then the agent shall define an area for the signs. The agent may ask the applicant that the sign be moved to another area either on the property to achieve greater public visibility. The applicant shall be responsible for keeping the signs free from grass, weeds, and any other plants or vines that may obstruct the public's view. The applicant shall contact the Virginia Department of Transportation for any information concerning where the right-of-way is located. The applicant shall be responsible for the signs should VDOT or their contractor conduct mowing or clearing of the right-of-way in the area where the sign is located.

Any signs required shall be maintained at all times by the applicant up to the time of the final public hearing. No person, except the applicant or the agent or an authorized agent of either, shall remove or tamper with any sign furnished during the period it is required to be maintained under this section. All signs erected under this ordinance shall be removed by the applicant within 15 days following a decision at the final public hearing and shall be returned to the agent. The applicant shall purchase the signs at a fee as determined by the Board of Supervisors and shall be non-refundable. The applicant shall be responsible for the replacement of the sign(s) and shall contact the agent as soon as possible for another sign to be replaced as the manner described above. Should the sign(s) have to be replaced more than twice, this section shall no longer be forced upon the applicant.

I have read, understand and agree to the above requirements.

Applicant/Owner: _____

Date: 3.16.2023

SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

On this 7th day of JULY, in the year of 2023,
I IVAN P. DAVIS, JR. the owner of 151-17
(printed name of landowner) (Tax Map Number)

Hereby make, constitute, and appoint Applicant: Buckingham Solar 1 LLC and Agent Jesse Dimond
(printed name)

my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/her said full power and authority to do and perform all acts and make all representation necessary, without limitation whatsoever, to make application for said zoning. The right, powers, and authority of said attorney-in-fact herein granted shall commence and be in full force and effect on the day 7th of the month JULY in the year of 2023 and shall remain in full force and effect thereafter until actual notice by certified mail with return receipt requested is received by the Zoning / Planning Office of Buckingham County stating that the terms of this power have been revoked or modified.

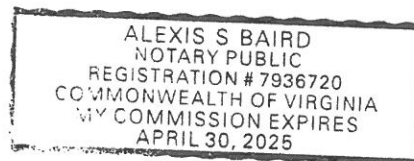
Signature of Landowner (to be signed in front of Notary Public):

[Signature]

NOTARY PUBLIC
County of Buckingham State of Virginia

Subscribed and sworn before me on the 7 day of July
in the year 2023. My commission expires Apr 30 2025.

Signature of Notary Public: Alexis S. Baird
Stamp:



INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA

COUNTY OF BUCKINGHAM, VIRGINIA

On this 7th day of JULY, of the year 2023

I IVAN B. DAVIS, JR. (printed name of owner)
hereby make oath that no member of the Buckingham County Board of Supervisors nor
the Buckingham County Planning Commission has interest in such property either
individually, or by ownership of stock in a corporation owning such land, or by
partnership, or as a holder of ten percent (10%) or more of the outstanding shares of
stock in or as a director or officer of any corporation owning such land, directly or
indirectly by such members of his/her immediate household, except as follows:

Signature of Owner. (to be signed in front of notary public)

Ivan B. Davis, Jr.

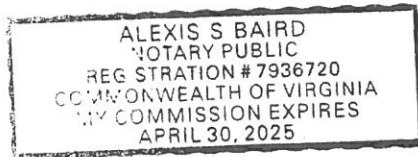
NOTARY PUBLIC

COUNTY OF Buckingham STATE OF Virginia

Subscribed and sworn to me on this 7 day of July

of the year 2023. My commission expires Apr 30 2025.

Notary Public Signature: Alexis S. Baird
Stamp:



ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

This 7th day of JULY, year 2023,

I IVAN P. DAVIS, JR. hereby make oath that
(printed name of owner/contract purchaser/authorized agent)

the list of adjoining landowners is a true and accurate list as submitted with my application.

Signed: (to be signed in front of notary public)

Ivan P. Davis, Jr.
(owner / ~~contract purchaser~~ / authorized agent – please circle one)

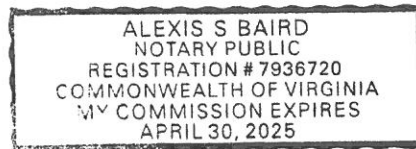
NOTARY:
COMMONWEALTH OF VIRGINIA

COUNTY OF Buckingham

STATE OF Virginia

Subscribed and sworn to me on the 7 day of July,
of the year 2023. My Commission expires on Apr 30 2025

Notary Public Signature: Alexis S. Baird
Stamp:



SPECIAL USE PERMIT APPLICATION CHECKLIST
BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINIMUM SUBMISSION
REQUIREMENTS

The following table lists the information necessary to review a special use application. All items are required, unless otherwise stated, and must be submitted in order for the application to be accepted for review. This completed checklist must be submitted with the application.

Adjacent Property Owners List and Affidavit (pages 4, 5 & 6 attached). This list can be obtained from the Clerk of Courts Office: ☒ YES ☐ NO

Completed application for special use permit (page 3 attached). If not signed by the owner, a Power of Attorney must accompany the application: ☒ YES ☐ NO

Interest Disclosure Affidavit (page 7 attached). Must be signed by the owner: ☒ YES ☐ NO

Power of Attorney (page 10 attached). Required if anyone other than the owner is signing the application form or proffer statement on behalf of the owner: YES ☒ NO

Written Narrative (page 11 guidance in preparing the Written Narrative): ☒ YES ☐ NO

Fees: ☒ YES ☐ NO

Deed: YES ☒ NO

Plat (15 copies). The plat information may be incorporated into the Special Use Permit General Site Plan, in which case, copies of a separate plat are not required. The plat must be prepared by a certified land surveyor or licensed civil engineer and contain the following:

- A. Bearings and distances of a scale of 1" = 100' or less for all property lines and existing and proposed zoning lines: ☒ YES ☐ NO
- B. Area of land proposed for consideration, in square feet or acres: ☒ YES ☐ NO
- C. Scale and north point: ☒ YES ☐ NO
- D. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES ☐ NO

Tax Map (15 copies). Identify property that special use is being considered for and identify by name all adjacent landowners.

Special Use General Site Plan (15 copies) The General Site Plan must contain the following:

1. Vicinity Map – Please show scale: ☒ YES NO N/A
2. Owner and Project Name: ☒ YES NO N/A
3. Parcel Identification numbers, name, present zoning, and zoning and use of all abutting or adjoining parcels: ☒ YES NO N/A
4. Property lines of existing and proposed zoning district lines: ☒ YES NO N/A
5. Area of land proposed for consideration, in square feet or acres: ☒ YES NO N/A
6. Scale and north point: ☒ YES NO N/A
7. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES NO N/A
8. Easements and encumbrances, if present on the property: ☒ YES NO N/A
9. Topography indicated by contour lines: ☒ YES NO N/A
10. Areas having slopes of 15% to 25% and areas having slopes of 25% or greater clearly indicated by separate shading devices (or written indication of “no areas having slopes of 15% to 25% or greater”): YES ☒ NO N/A
11. Water Courses to include the approximate location of the 100 year floodplain (if applicable) based on FEMA maps (or written indication of “not in floodplain”): ☒ YES NO N/A
12. Delineation of existing mature tree lines or written indication of “no mature tree lines”: YES ☒ NO N/A
13. Proposed roads with right-of-way width that will connect with or pass through the subject property: ☒ YES NO N/A
14. General locations of major access points to existing streets: ☒ YES NO N/A
15. List of the proposed density for each dwelling unit type, and/or intensity of each non-residential use: YES NO ☒ N/A
16. Location of any open space and buffer areas, woodland conservation areas, storm water management facilities, and community and public facilities: ☒ YES NO N/A
17. Location of existing and proposed utilities, above or underground: ☒ YES NO N/A
18. Vehicular and pedestrian circulation plan, including traffic counts and typical street sections, right-of-way improvements, access points, travel ways, parking, loading, stacking, sidewalks, and trails: ☒ YES NO N/A
19. Layouts and orientation of buildings and improvements, building use, height, setbacks from property lines and restriction lines: ☒ YES NO N/A
20. Location and design of screening and landscaping: ☒ YES NO N/A
21. Building architecture: YES NO ☒ N/A
22. Site lighting proposed: YES NO ☒ N/A
23. Area of land disturbance in square feet and acres: ☒ YES NO N/A
24. Erosion and Sediment Control Plan submitted (10,000 square feet or more): YES ☒ NO N/A
An erosion and sediment control plan will be provided for review and approval by County prior to building permit completion
25. Historical sites or gravesites on general site plan: YES NO ☒ N/A
26. Show impact of development of historical or gravesite areas: YES NO ☒ N/A
27. A copy of the current status of all real estate taxes of all property owned in Buckingham County. If real estate taxes are not current, an explanation in writing and signed by the owner shall accompany this application. Any liens or other judgments against property shall also be explained in writing and signed by the owner: YES NO ☒ N/A

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: 3.16.2023

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Purpose of Special Use Permit: to construct a 5 MW AC photovoltaic community solar garden on
approximately 24.08 acres of land in Buckingham County

Zoning District: A1 Agricultural Number of Acres: 166.62

Tax Map Section: _____ Parcel: 151 Lot: 17 Subdivision: _____ Magisterial Dist.: _____

Street Address: Unassigned

Directions from the County Administration Building to the Proposed Site: Head N toward US-60 (246 ft),
turn right onto US-60 E (5.7 mi), turn left onto Whetstone Ln (0.1 mi), slight right (440 ft)

Name of Applicant: Buckingham Solar 1 LLC, a subsidiary of New Energy Equity, LLC (New Energy Equity)

Mailing Address: 2670 Patton Road, Roseville, MN 55113

Daytime Phone: (651) 333-0541 Cell Phone: _____

Email: development@newenergyequity.com Fax: _____

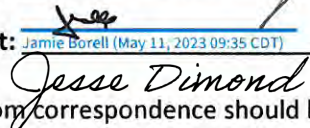
Name of Property Owner: Ivan P Davis, Jr. and Deborah B. Davis

Mailing Address: 106 Whetstone Ln, Dillwyn, ^{VA}PA 23936

Daytime Phone: (434) 315-4212 Cell Phone: _____

Email: N/A Fax: _____

Signature of Owner:  Date: 7-7-2023

Signature of Applicant:  Date: May 11, 2023
Jamie Borell (May 11, 2023 09:35 CDT) 7/7/2023

Please indicate to whom correspondence should be sent:

☐ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer
☒ Applicant Contact person: Jesse Dimond

ADJACENT PROPERTY OWNER'S LIST

(Required)

The applicant shall provide a list of all adjoining landowners, including subject property and all property immediately across the street/road from the subject property. Any body of water does not constitute a boundary line for this purpose, therefore a body of water and the property adjoining the subject property but separated by a body of water is still considered an adjoining landowner. County boundary lines and those adjoining property owners in the next County are considered adjoining property owners if the land adjoins the subject's property. Adjoining landowners can be verified through the Buckingham County Clerk of Courts or the Clerk's Office in the adjoining County, or by personal contact. The list shall include the name, address, town/city, zip code, road route number, tax map section number, parcel number, lot number, and subdivision. The list shall be typewritten or printed legibly. Failure to list all adjoining landowners could delay the process.

1. Name: Bernard A Wright Jr and Dian Dunn PID: 138-82

Mailing Address: 109 Darden Dr, Poquoson, VA 23662

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 138 Lot: 82 Subdivision: _____

2. Name: Raymond Jee Dunn, Jr PID: 138-84

Mailing Address: 30 Haughton, Newport News, VA 23606

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 138 Lot: 84 Subdivision: _____

3. Name: Edward C and Elaine M K Selfridge PID: 138-85A

Mailing Address: 18125 E James Anderson Highway

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 138 Lot: 85A Subdivision: _____

4. Name: Amos K and Naomi B Beiler PID: 151-15

Mailing Address: 115 Anchor Point Ln, Dillwyn, VA 23936

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 15 Subdivision: _____

6. Name: Ivan P Davis Jr and Deborah B Davis PID: 151-18

Mailing Address: 106 Whetstone Ln, Dillwyn VA 23936

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 18 Subdivision: _____

7. Name: Ivan P Davis Jr and Deborah B Davis Living Trust PID: 151-19

Mailing Address: 106 Whetstone Ln, Dillwyn VA 23936

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 19 Subdivision: _____

8. Name: Ivan P Davis, Jr Exec PID: 151-21

Mailing Address: 106 Whetstone Ln, Dillwyn, VA 23936

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 21 Subdivision: _____

9. Name: Ivan P Davis, Jr Exec PID: 138-69

Mailing Address: 106 Whetston Ln, Dillwyn VA 23936

Physical Address: Off Rt 15

Tax Map Section: _____ Parcel: 138 Lot: 69 Subdivision: _____

10. Name: Ivan P Davis, Jr and Deborah B Davis Living Trust PID: 138-80

Mailing Address: 106 Whetstone Ln, Dillwyn, VA 23936

Physical Address: Rt T1001

Tax Map Section: _____ Parcel: 139 Lot: 80 Subdivision: _____

11. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

Name: Weyerhaeuser Company PID: 151-14

Mailing Address: 205 Perry Lane Road, Brunswick, GA 31525

Physical Address: RTS 15-60 - 1 MI E OF SPROUSES CORNER 579.732 AC

Tax Map Section: _____ Parcel: 151 Lot: 14 Subdivision: _____

Name: Central Virginia Produce Auction PID: 151-15A

Mailing Address: 18440 E James Anderson Hwy, Dillwyn, VA 23936

Physical Address: RT 60 - 1 MI E OF SPROUSES CORNER 7.63 AC

Tax Map Section: _____ Parcel: 151 Lot: 15A Subdivision: _____

Name: John E King & Barbara S King PID: 151-15A2

Mailing Address: 1579 New Store Road, Dillwyn, VA 23936

Physical Address: RT 60 - 1 MI E OF SPROUSES CORNER LOT 2 5.44 AC

Tax Map Section: _____ Parcel: 151 Lot: 15A2 Subdivision: _____

Name: Townsedge Hardware LLC PID: 151-15A1

Mailing Address: 1039 Banton Shop Road, Dillwyn, VA 23936

Physical Address: RT 60 - 1 MI E OF SPROUSES CORNER LOT 1 6.93 AC

Tax Map Section: _____ Parcel: 151 Lot: 15A1 Subdivision: _____

ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

This 7th day of JULY, year 2023,

I IVAN P. DAVIS, JR. hereby make oath that
(printed name of owner/contract purchaser/authorized agent)

the list of adjoining landowners is a true and accurate list as submitted with my application.

Signed: (to be signed in front of notary public)

[Signature]
(owner / ~~contract purchaser~~ / authorized agent – please circle one)

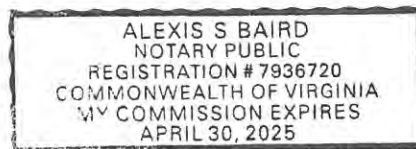
NOTARY:
COMMONWEALTH OF VIRGINIA

COUNTY OF Buckingham

STATE OF Virginia

Subscribed and sworn to me on the 7 day of July,
of the year 2023. My Commission expires on Apr 30 2025

Notary Public Signature: Alexis S. Baird
Stamp:



INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA

COUNTY OF BUCKINGHAM, VIRGINIA

On this 7th day of JULY, of the year 2023

I IVAN B. DAVIS, JR. (printed name of owner)
hereby make oath that no member of the Buckingham County Board of Supervisors nor
the Buckingham County Planning Commission has interest in such property either
individually, or by ownership of stock in a corporation owning such land, or by
partnership, or as a holder of ten percent (10%) or more of the outstanding shares of
stock in or as a director or officer of any corporation owning such land, directly or
indirectly by such members of his/her immediate household, except as follows:

Signature of Owner. (to be signed in front of notary public)

Ivan B. Davis, Jr.

NOTARY PUBLIC

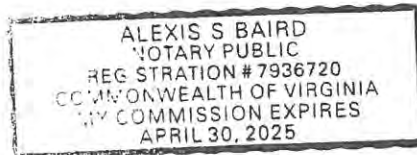
COUNTY OF Buckingham STATE OF Virginia

Subscribed and sworn to me on this 7 day of July

of the year 2023. My commission expires Apr 30 2025.

Notary Public Signature: Alexis S. Baird

Stamp:



**CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR
PENDING DEVELOPMENT APPLICATIONS**

Case Number / File Name: See Attached.

Visual Inspection Findings (describe what is on the property now):

This property has been partially wooded with mature trees and grasslands for the last 30+
years. The grassland is a pasture, which is currently used for cattle grazing.

County Records Check (describe the history of this property):

No historical properties, cemeteries, or other significant historical markers were found on
this property. County records, deeds, and the landowner records were reviewed.

Were any historical sites or gravesites found on site, or be suspected by a reasonable person to be on the site? Yes _____ No X

If yes, please explain and show on the site plan the location of such and explain any historical significance:

N/A

Will this proposal have any impact on the historical site or gravesite? Yes ____ No X

If yes, please explain any impact:

N/A

Owner/Applicant Signature: Jesse Dimond Date: 7/6/23

Printed Name: Jesse dimond Title: Senior Solar developer

APPLICATION FOR A TRAFFIC IMPACT DETERMINATION

Please fill out the following information before presenting to VDOT:

Case Number / File Name: _____

Applicant: Buckingham Solar 1 LLC

Location: Parcel 151-17

Proposed Use: 5 MW AC shared solar array

For VDOT use only:

☐ A Traffic Impact Statement is required per 24 VAC 30-155-60.

☒ A Traffic Impact Statement is not required. The traffic generated by the proposed zoning change / development does not exceed normal thresholds.

☐ The Traffic Impact Analysis has been waived by the Zoning / Planning Department for the following reasons:

Does the existing entrance meet VDOT requirements for the proposed use?
Yes ☐ No ☒ If no, please explain the necessary steps to bring into compliance with the requirements for the proposed use:

An entrance to access the property will need to be designed and constructed in accordance with VDOT Low Volume Commercial Entrance standards. Minimum sight distance requirements are achievable at this location and owner will need to acquire a VDOT Land use permit prior to construction.

Signature of VDOT Resident Engineer: [Signature]

Printed Name: Charles D. Edwards Date: 6/28/23

SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

On this 7th day of JULY, in the year of 2023,
I IVAN P. DAVIS, JR the owner of 151-17
(printed name of landowner) (Tax Map Number)

Hereby make, constitute, and appoint Applicant: Buckingham Solar 1 LLC and Agent Jesse Dimond
(printed name)

my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/her said full power and authority to do and perform all acts and make all representation necessary, without limitation whatsoever, to make application for said zoning. The right, powers, and authority of said attorney-in-fact herein granted shall commence and be in full force and effect on the day 7th of the month JULY in the year of 2023 and shall remain in full force and effect thereafter until actual notice by certified mail with return receipt requested is received by the Zoning / Planning Office of Buckingham County stating that the terms of this power have been revoked or modified.

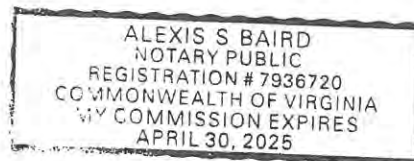
Signature of Landowner (to be signed in front of Notary Public):

[Signature]

NOTARY PUBLIC
County of Buckingham State of Virginia

Subscribed and sworn before me on the 7 day of July
in the year 2023. My commission expires Apr 30 2025.

Signature of Notary Public: Alexis S. Baird
Stamp:



WRITTEN NARRATIVE

The Written Narrative shall describe the relationship of the proposed project to the relevant components of the Comprehensive Plan. Please be very detailed and describe in depth each and every component 1 through 15. The following outline is provided to aid you in preparing the written narrative:

1. Land Use
2. Community Design
3. Cultural Resources
4. Economic Development
5. Environment
6. Fire and Rescue, Law Enforcement
7. Housing
8. Libraries
9. Parks and Open Spaces
10. Potable Water
11. Sewage
12. Schools
13. Telecommunications
14. Transportation
15. Solid Waste

If this proposal is for an event, describe the handling of the entire event, including but not limited to: number of participants, schedule of events, police, security, food, beverages, water, sanitation, emergencies, crowd control, entrances and exits, traffic control, signage, advertisement, parking, fee collection, control of animals, trash disposal, site clean-up, fighting, alcohol, abuse of alcohol and/or illegal substances

SIGNAGE AT PROPERTY

The Buckingham County Zoning Ordinance requires the following:

The applicant in any case which requires a public hearing shall post signs furnished by the agent on each parcel involved at least 21 days prior to the public hearing indicating that a public hearing is eminent, the date, a rezoning issue, and a County contact number. The signs shall be placed on the VDOT right-of-way closest to the applicant's property line and shall be clearly visible from the road with bottom of the sign not less than one and one half feet above the ground. If more than one public road abuts the property, the signs shall be placed in the same manner as above for each abutting road. If no road abuts a property, then the agent shall define an area for the signs. The agent may ask the applicant that the sign be moved to another area either on the property to achieve greater public visibility. The applicant shall be responsible for keeping the signs free from grass, weeds, and any other plants or vines that may obstruct the public's view. The applicant shall contact the Virginia Department of Transportation for any information concerning where the right-of-way is located. The applicant shall be responsible for the signs should VDOT or their contractor conduct mowing or clearing of the right-of-way in the area where the sign is located.

Any signs required shall be maintained at all times by the applicant up to the time of the final public hearing. No person, except the applicant or the agent or an authorized agent of either, shall remove or tamper with any sign furnished during the period it is required to be maintained under this section. All signs erected under this ordinance shall be removed by the applicant within 15 days following a decision at the final public hearing and shall be returned to the agent. The applicant shall purchase the signs at a fee as determined by the Board of Supervisors and shall be non-refundable. The applicant shall be responsible for the replacement of the sign(s) and shall contact the agent as soon as possible for another sign to be replaced as the manner described above. Should the sign(s) have to be replaced more than twice, this section shall no longer be forced upon the applicant.

I have read, understand and agree to the above requirements.

Applicant/Owner: _____

Date: 3.16.2023

TENTATIVE SCHEDULE FOR A SPECIAL USE PERMIT

The application, site plan, written narrative, and all information requested in this application must be filled out in its entirety and supplied to the Buckingham Zoning / Planning Office and the fee must be paid before this case will be allowed to move forward.

Case will be introduced at a regularly scheduled Planning Commission meeting held on the fourth Monday of every month. Planning Commission may set a Public Hearing at this time to be held during a regularly scheduled meeting. Public Hearings offer an opportunity for citizens to speak concerning the case.

Following the Planning Commission Public Hearing, the Planning Commission may make a recommendation to approve / deny / or table the case for more information. Once the Planning Commission makes a recommendation to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. The Board of Supervisors meetings are held on the second Monday of every month. The Board of Supervisors may set a Public Hearing at this time to be held during a regularly scheduled meeting. The Board of Supervisors will make the final decision to approve or deny the application after the public hearing.

Example Timeline:

January 25	Case is introduced to Planning Commission. Planning Commission sets Public Hearing for next regularly scheduled meeting on February 22.
February 22	Planning Commission Public Hearing. Planning Commission recommends to approve / deny / or table for more information. Once the Planning Commission reaches a decision to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting.
March 8	Case is introduced to Board of Supervisors.
April 12	Board of Supervisors may approve / deny / table for more information.

The Planning Commission and the Board of Supervisors has a right to call extra public hearings at their discretion if the Board(s) decide they are needed.

You or your agent are encouraged to attend these meetings to answer any questions that may arise concerning your application / proposal. The County strongly encourages the applicant to visit the area around his proposed site and understand what the adjoining landowner concerns are.

Whispering Creek – Historical Data



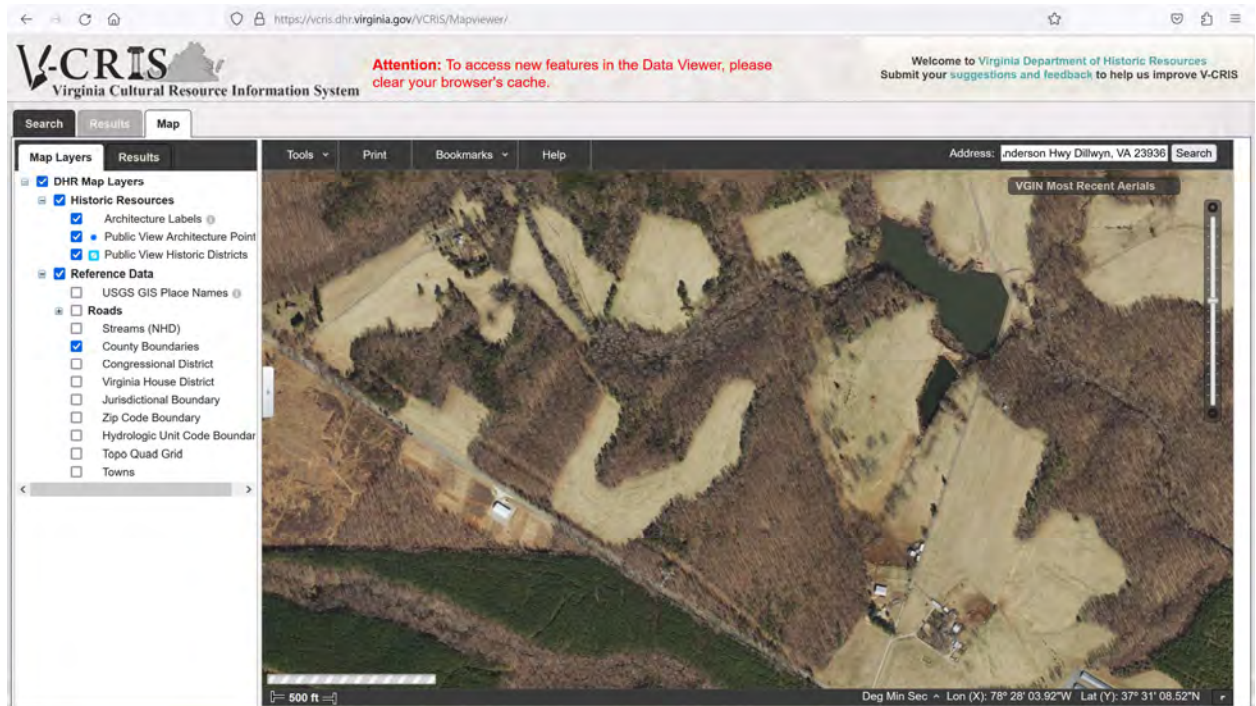
Source: Buckingham County GIS – Location Map



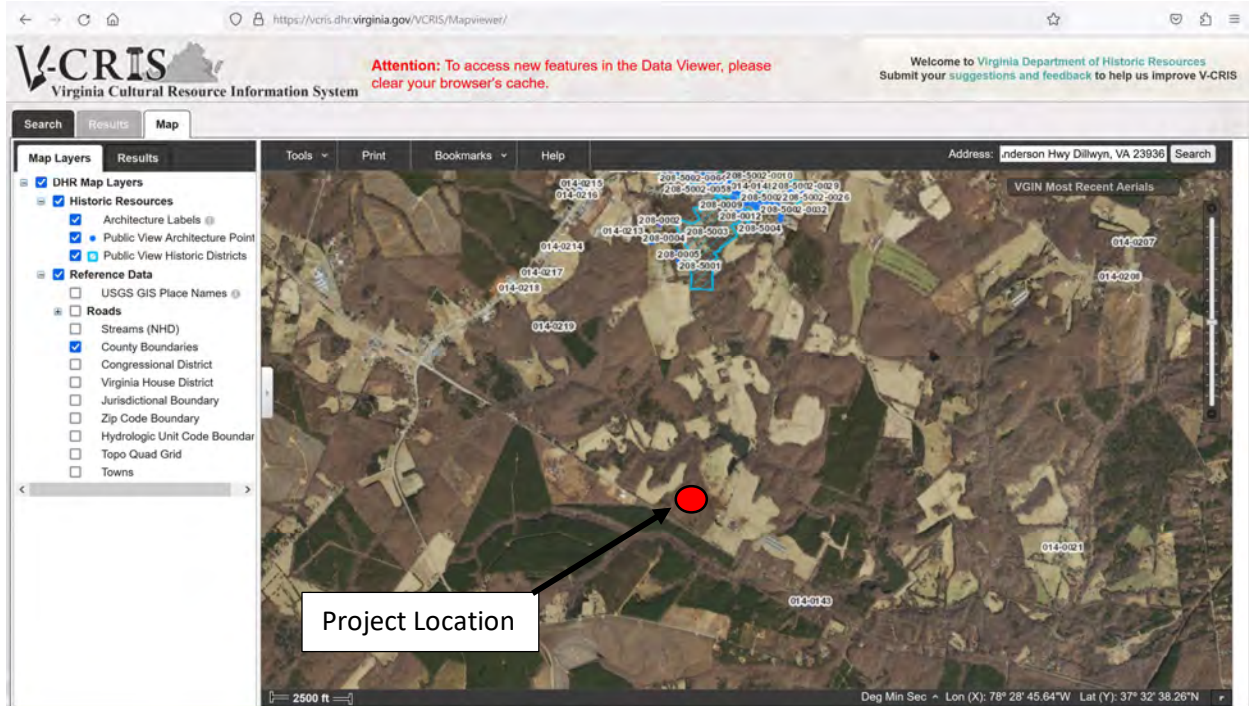
Source: Buckingham County GIS – Location Map with Aerial (2022)



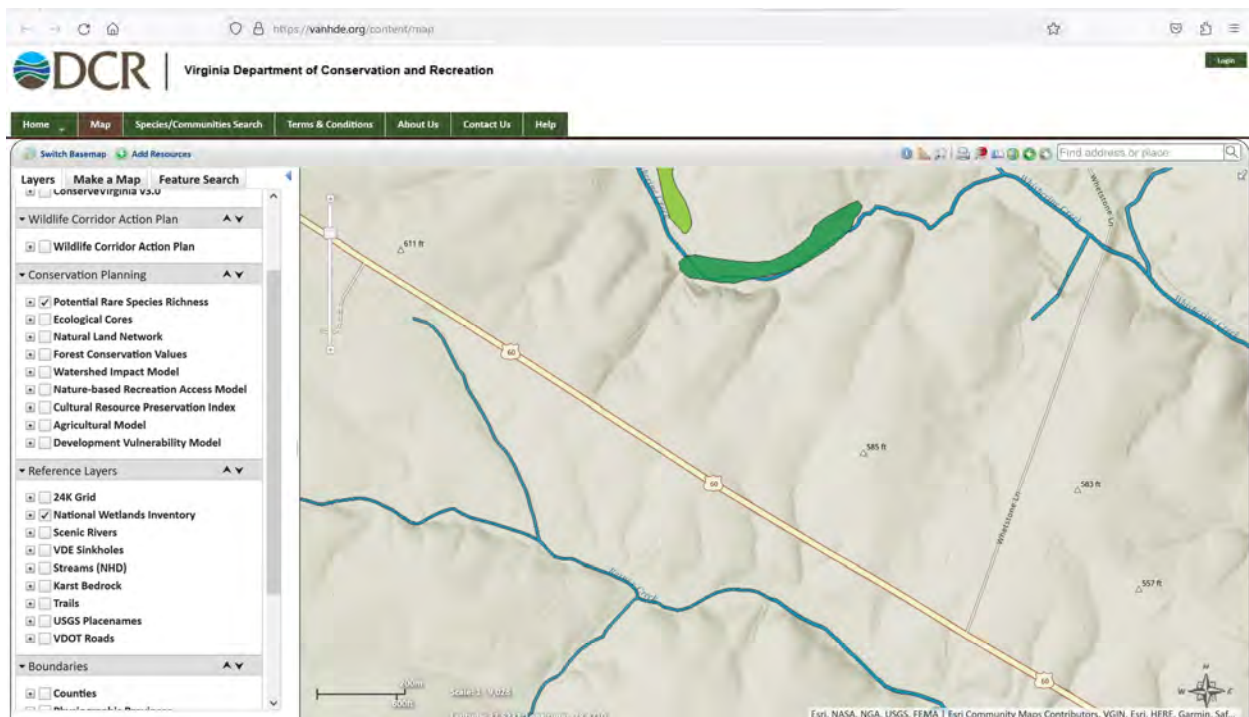
Source: Buckingham County GIS – Landcover Map (VGIN)



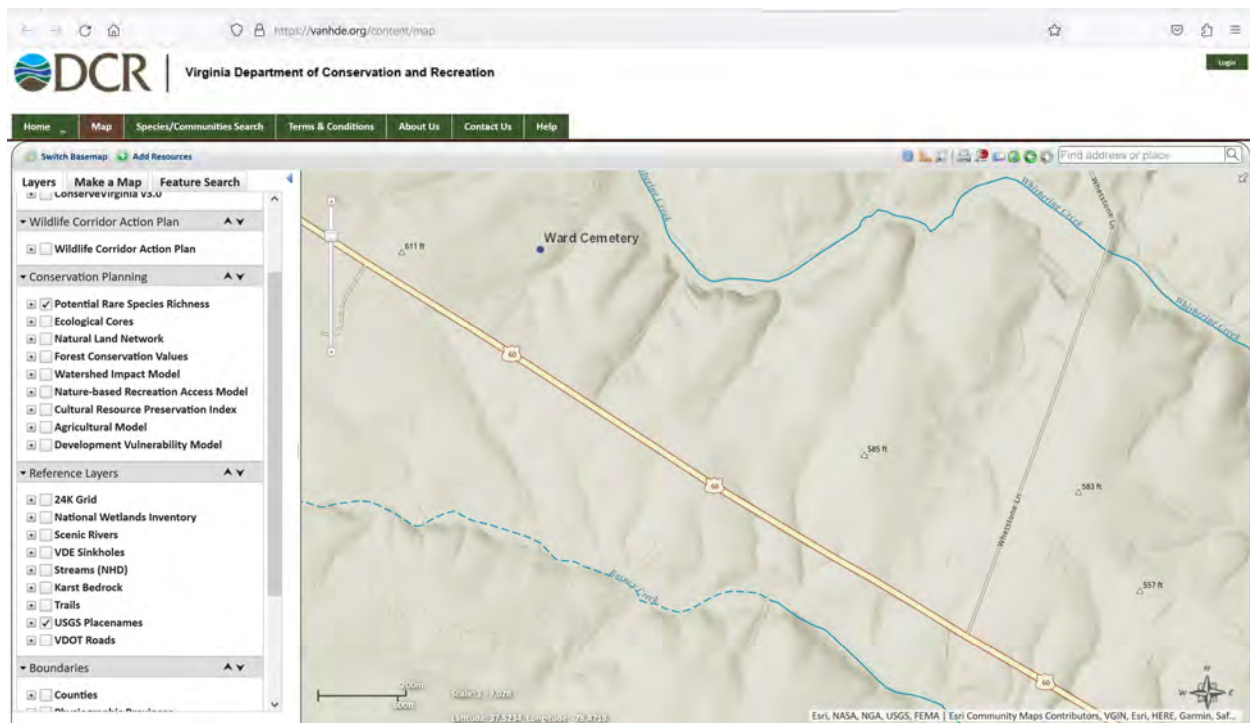
Source: V-CRIS – Historical Districts



Source: V-CRIS – Historical Districts (Zoomed Out)

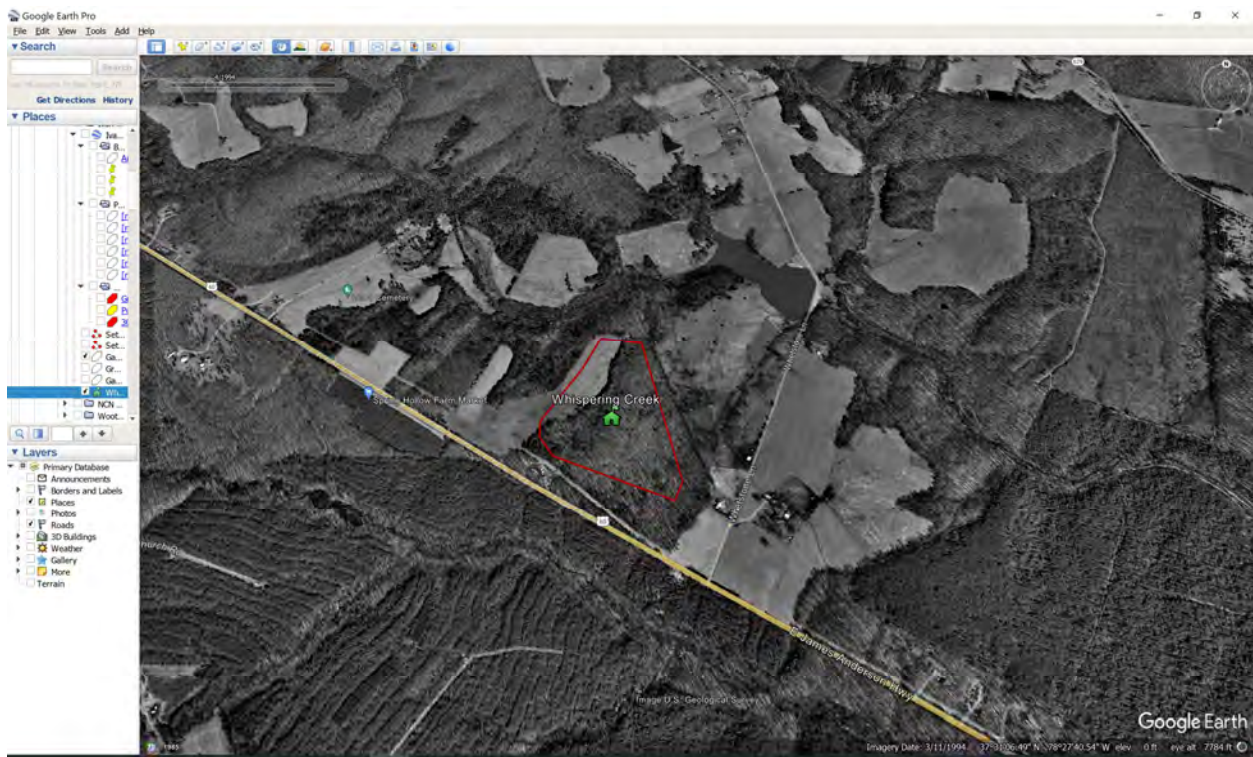


Source: DCR Website – Wetlands Inventory

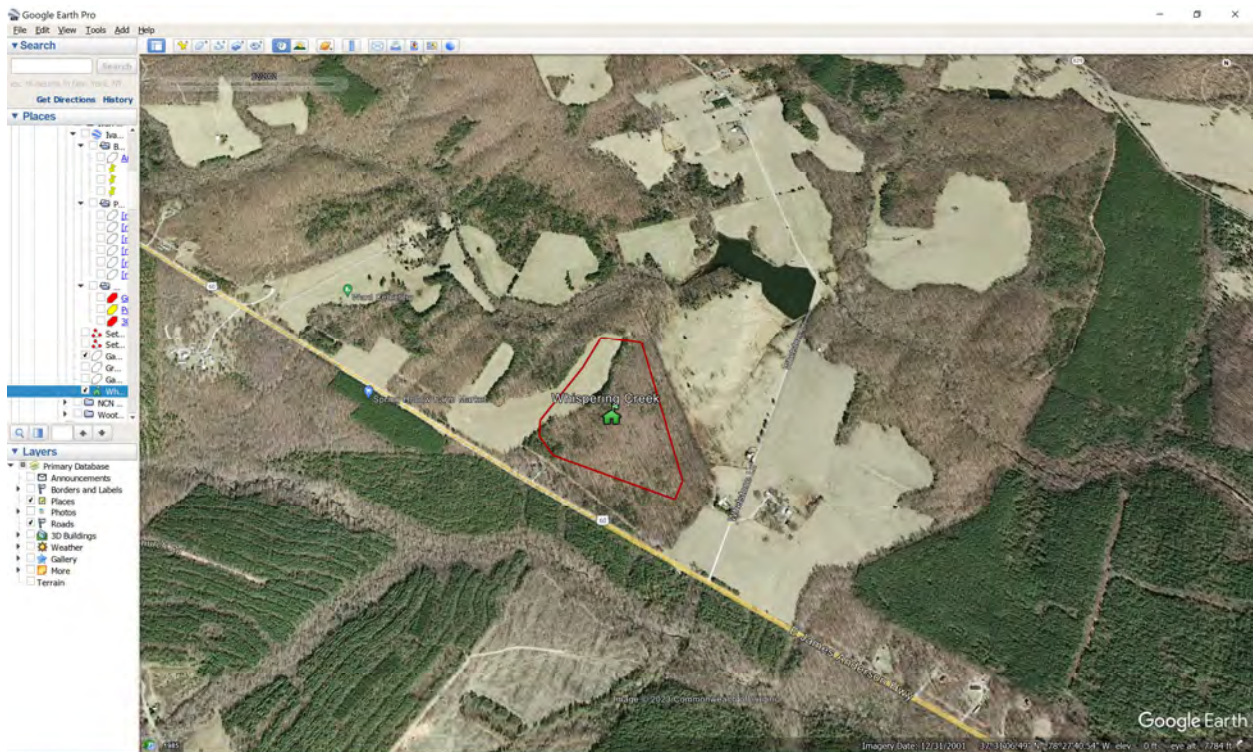


Source: DCR Website – USGS Placenames (Cemetery)

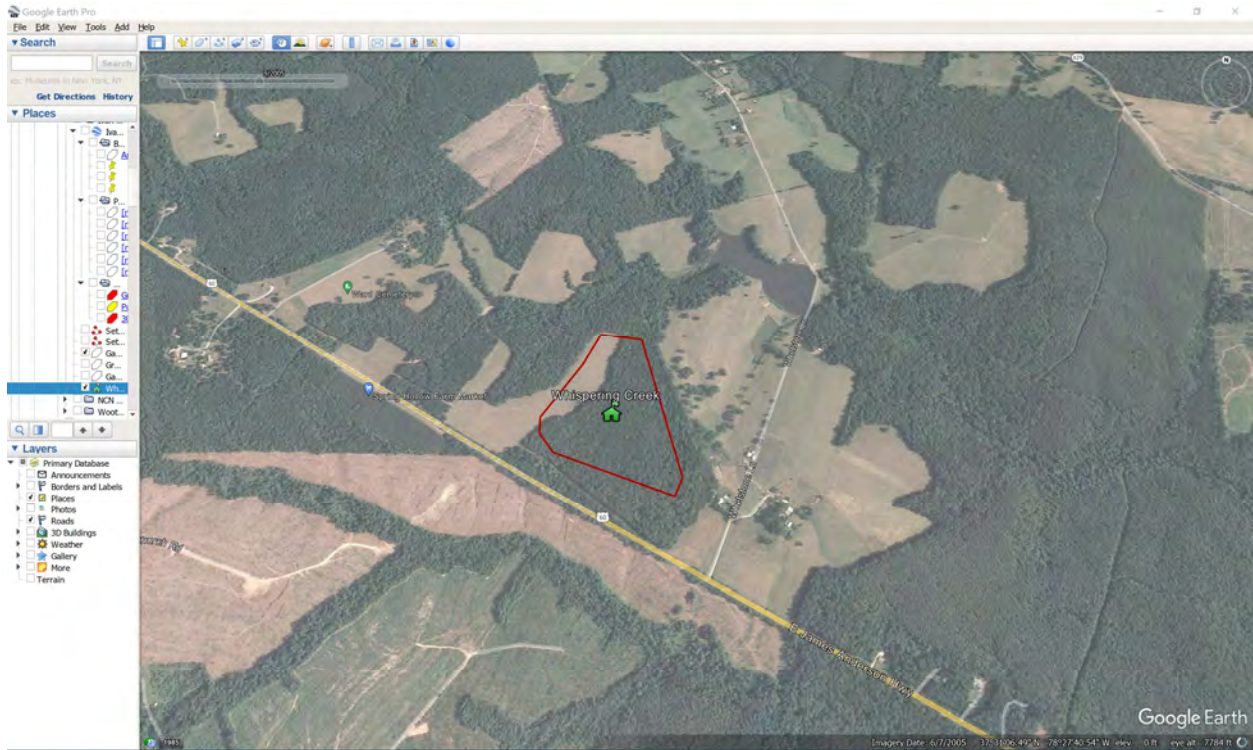
History of site location (1994 – 2022)



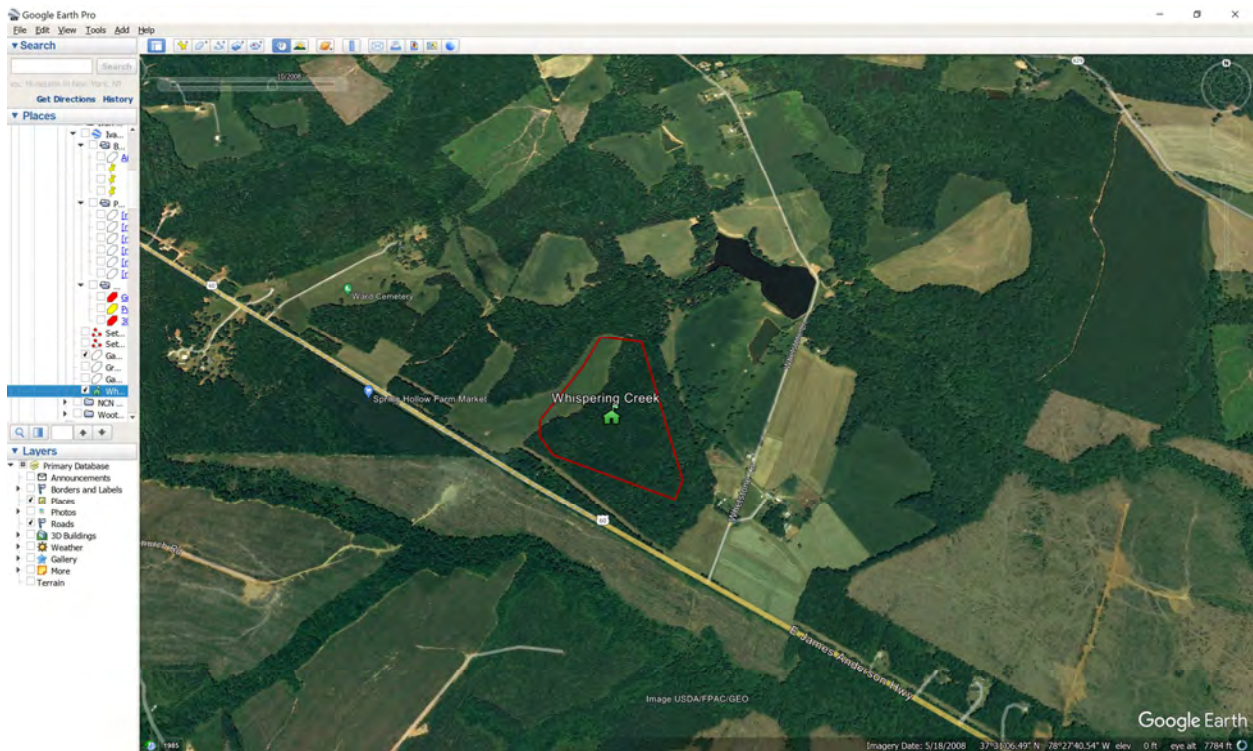
Source: Google Earth Dated 4/1/1994



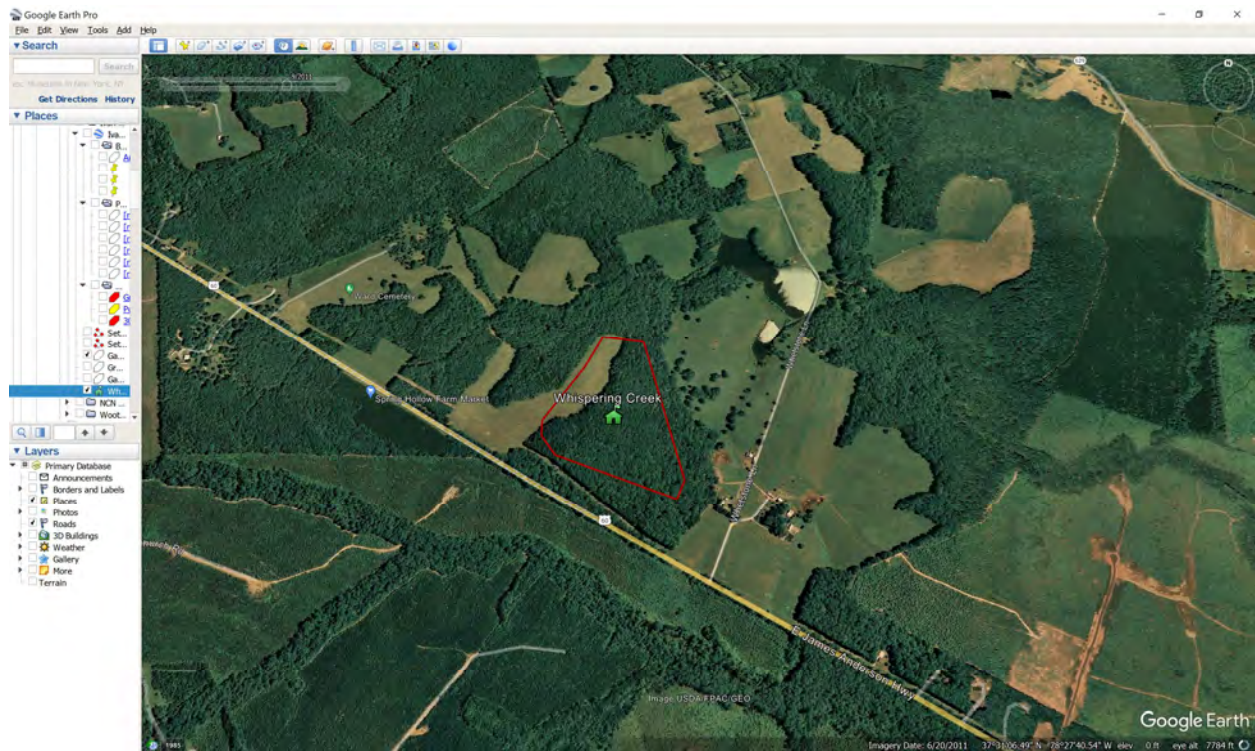
Source: Google Earth Dated 12/1/2002



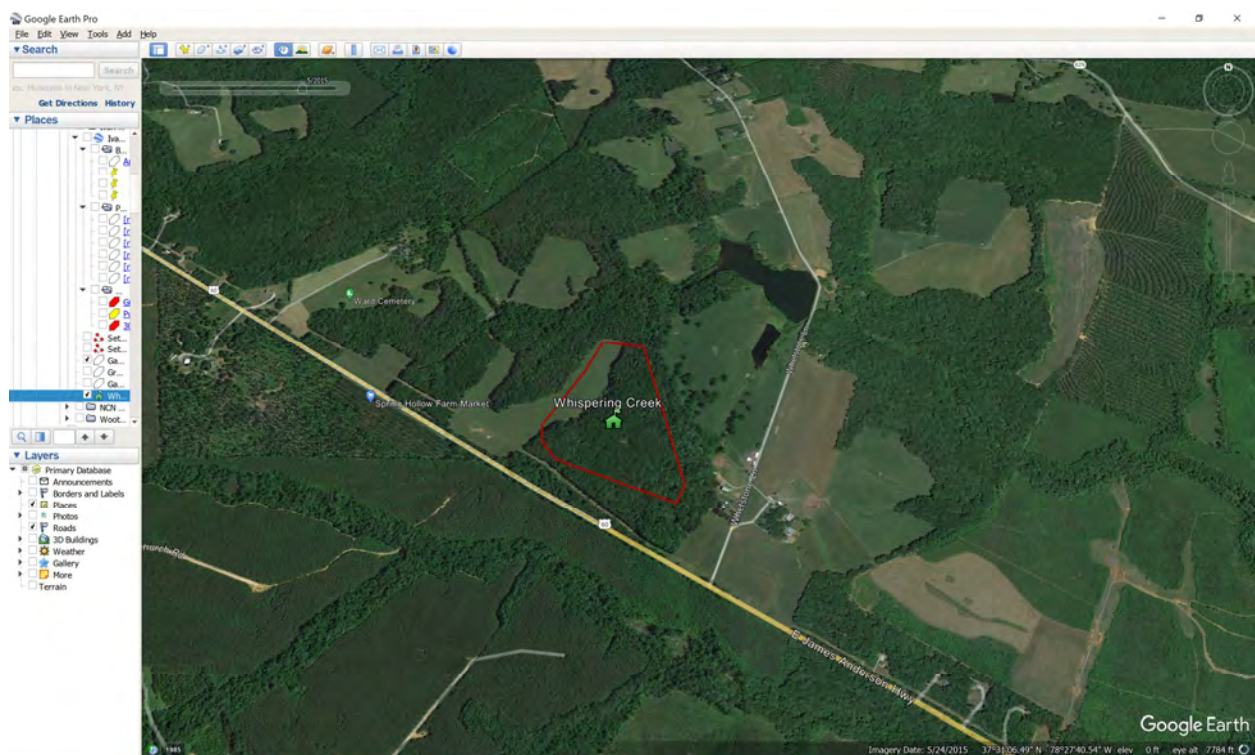
Source: Google Earth Dated 9/1/2005



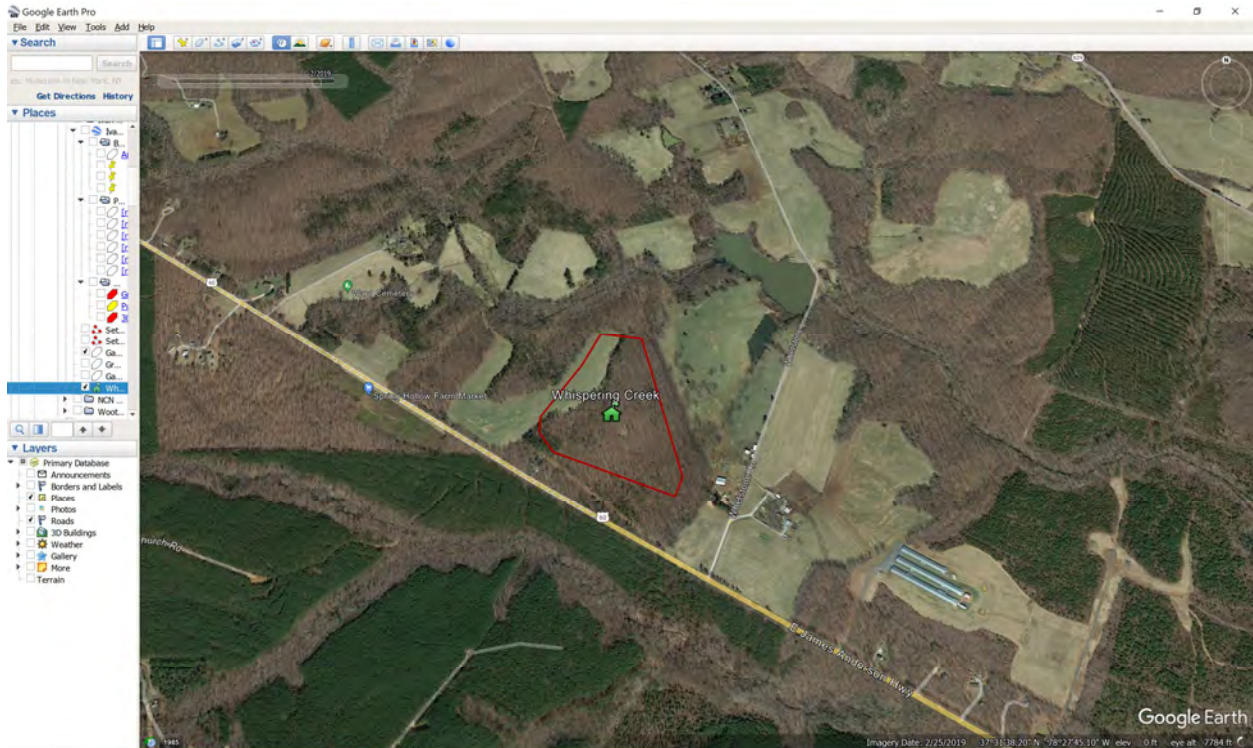
Source: Google Earth Dated 10/1/2008



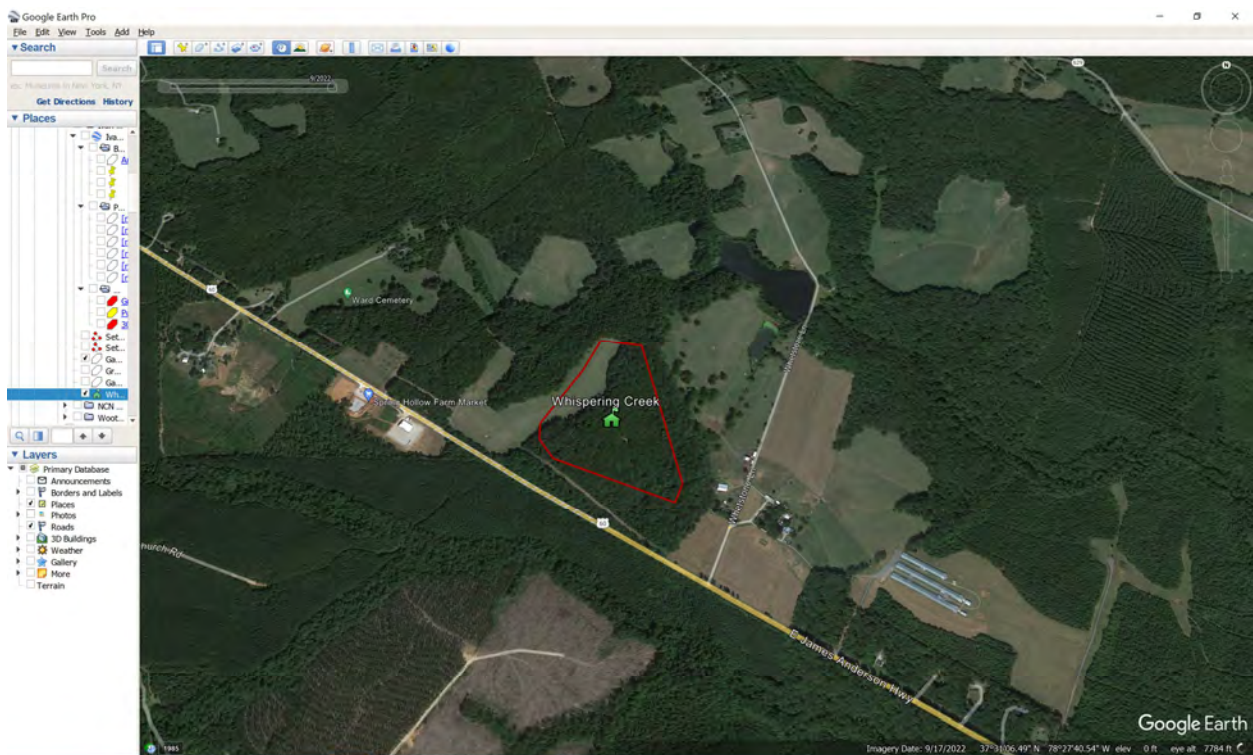
Source: Google Earth Dated 9/1/2011



Source: Google Earth Dated 5/1/2015



Source: Google Earth Dated 2/1/2019



Source: Google Earth Dated 9/1/2022

BOOK 182 PAGE 213

#2155

THIS DEED, made this 18th day of December, 1992, by and between DAVID M. WORD, III and FRANCES G. WORD, husband and wife, parties of the first part (grantors), and IVAN P. DAVIS and MOLLIE P. DAVIS, husband and wife, of P. O. Box 144, Dillwyn, VA. 23936, parties of the second part (grantees).

WITNESSETH, that for and in consideration of the sum of \$20.00 and other valuable consideration paid by the parties of the second part to the parties of the first part, the receipt of which is hereby acknowledged, said parties of the first part do hereby bargain, sell, grant and convey, with General Warranty and, except as hereinafter set forth, English Covenants of Title, unto the parties of the second part, as tenants by the entireties with the right of survivorship as at common law, all the following described real estate, to-wit:

All that certain tract or parcel of land, with improvements thereon and appurtenances thereunto belonging, situated in Curdsville Mapisterial District of Buckingham County, Virginia, containing One Hundred Sixty-Six and sixty-two/hundredths (166.62) acres, more or less, being bounded on the southwest by U. S. Route #60, on the south by lands of W. F. Davis et al and lands of Gordon, on the northeast by lands of Ivan P. Davis et ux and lands of LeSueur, and on the northwest by lands of Dunn and lands of Garland. Said lands being the residue of a 267.1 acre tract depicted on a plat of survey prepared by Carroll Gillispie, CLS/SBC, dated March 29, 1962, and recorded in the Clerk's Office of the Circuit Court of Buckingham County in Deed Book 68, at page 509, after deducting therefrom the following parcels: an off-conveyed parcel of 10 acres (see LOT 1 on plat in Deed Book 90, at page 344) recorded in Deed Book 84, at page 395 et seq.; an off-conveyed parcel of 16.05 acres (see LOT 2 on said plat in Deed Book 90, at page 344) recorded in Deed Book 90, at page 342 et seq.; an off-conveyed parcel of 30.08 acres


BOOK 182 PAGE 214


Plat Recorded
Deed Book No. 182
Page No. 214

(see plat in Deed Book 109, at page 370) recorded in Deed Book 109, at page 369 et seq.; and, a parcel of 44.35 acres hereby reserved unto the parties of the first part and described on a plat of survey prepared by Carroll Gillispie, C.L.S., dated September 15, 1986, which is attached hereto, made a part hereof, and recorded herewith. Said lands being a portion of the lands conveyed unto David M. Word, III and Frances G. Word, as tenants by the entirety, from Charles M. Garland, Jr. et al by deed of partition dated April 10, 1967 and recorded in the aforesaid Clerk's Office in Deed Book 68, at page 510 et seq.

This conveyance is made subject to: any and all conditions, restrictions, and/or rights of way which are a matter of public record; and, any and all easements and/or rights of way which are apparent on the ground from an inspection of the lands hereinabove described or apparent on an inspection of the plats hereinabove referenced.

WITNESS the following signatures and seals.


DAVID M. WORD, III (SEAL)


FRANCES G. WORD (SEAL)

BOOK 182 PAGE 215

STATE OF VIRGINIA AT LARGE
COUNTY OF BUCKINGHAM, to-wit:

I, Linda H. Meador, a notary public in and for the State of Virginia at Large, do hereby certify that DAVID M. WORD, III and FRANCES G. WORD, whose names are signed to the writing above, have acknowledged the same before me in my county aforesaid.

Given under my hand this 21st day of December, 1992.

My commission expires August 31, 1994.

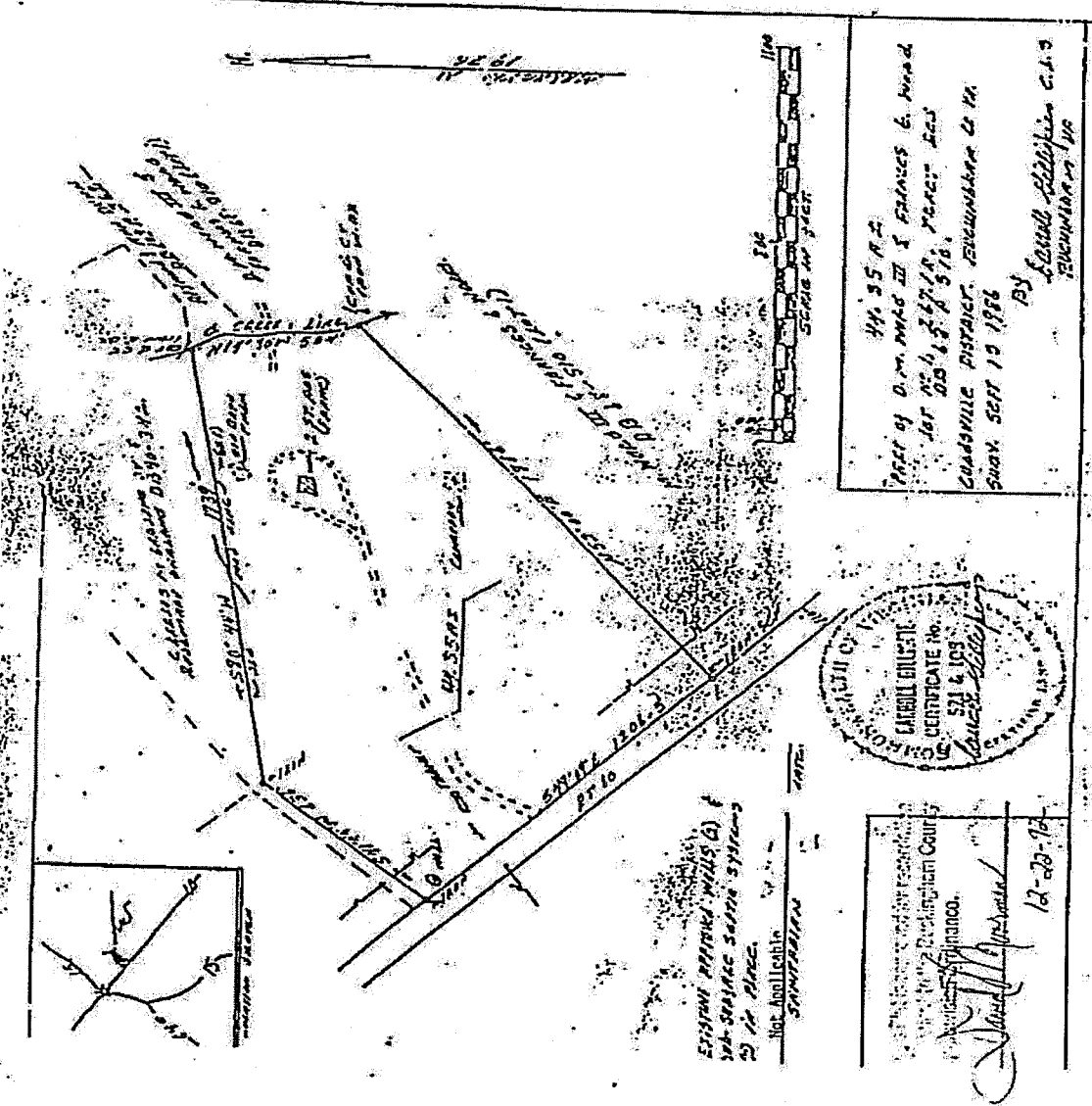
Linda H. Meador
NOTARY PUBLIC

VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY.

St. R. Tax	202.50
Co. R. Tax	67.50
Transfer	1.00
Clerk	12.00
Lib. (145)	1.00
Grantor Tax	135.00
Total \$	419.00

The foregoing instrument with acknowledgement was admitted to record on 12/30/92 at 10:35 AM, in D.B. 182 Page(s) 213-216
Teste: MALCOLM BOOKER, JR., CLERK
BY: *Ann B. Cyre*, DEPUTY CLERK

Plat Recorded
Used Book No. 182
Page No. 216



3043

Return recorded deed to:
James P. Seidl, Esquire BOOK 339 PAGE 001
James P. Seidl Law Offices, PC
5672 Flintstone Drive, Suite 100
Barboursville, Virginia 22923-2810

The Code of Virginia §58.1-811(A)(12) and (D) exempts this conveyance by deed from recorda-
tion taxes, including those imposed by §§58.1-801, 58.1-802 and 58.1-814.

COMMONWEALTH OF VIRGINIA
COUNTY OF BUCKINGHAM
GENERAL WARRANTY DEED OF GIFT

GRANTOR IVAN P. DAVIS, SR. and MOLLIE P. DAVIS , Husband and Wife as Ten- ants by the Entirety P.O. BOX 144, STATE RT. 629 DILLWYN, VIRGINIA 23936	GRANTEE IVAN P. DAVIS, SR. and MOLLIE P. DAVIS , General Partners of the IVAN AND MOLLIE DAVIS FAMILY LIM- ITED PARTNERSHIP , a Virginia Limited Partnership P.O. BOX 144, STATE RT. 629 DILLWYN, VIRGINIA 23936
--	---

Date of this Deed: **JUNE 20, 2005**
Consideration: \$0
Tax Map Number: #151-17
Property Address: **Route 60, Buckingham County, Virginia**

WITNESS:

That for estate planning purposes, and for no monetary consideration, the Grantor does hereby give, grant and convey with General Warranty of Title, to the Grantee, and Successors in Trust and Assigns, the following described property, lot, tract, or parcel of land, together with improvements thereon, situate, lying and being in the **CURDSVILLE MAGISTERIAL DISTRICT, COUNTY OF BUCKINGHAM, COMMONWEALTH OF VIRGINIA:**

Containing 166.62 acres, more or less, being the residue of a 267.1 acre tract, described by a plat of survey prepared by Carroll Gillispie, CLS/SBC, dated March 29, 1962, and recorded among the Land Records of the **COUNTY OF BUCKINGHAM, VIRGINIA**, in Deed Book 68, beginning at page 509.

Being the same property as that conveyed to **IVAN P. DAVIS, SR. and MOLLIE P. DAVIS**, husband and wife, as tenants by the entirety with right of survivorship as at common law by Deed dated December 18, 1992, from David M. Word, III, and Frances G. Word, husband and wife, and recorded December 30, 1992, among the Land Records of the **COUNTY OF BUCKINGHAM, VIRGINIA**, in Deed Book 182, beginning at page 213.

BOOK 339 PAGE 002

GENERAL WARRANTY DEED OF GIFT
IVAN P. DAVIS, SR. AND MOLLIE P. DAVIS, GRANTORS

1 Together with all its appurtenances, and subject to all other
2 conveyances, exceptions, easements, rights of way, covenants,
3 conditions, restrictions and other instruments of record, or
4 which may be apparent on the premises, as well as ordinances,
5 codes, and regulations, legally affecting the property.

6 TO HAVE AND TO HOLD SAID PROPERTY IN FEE SIMPLE UNDER THE
7 TERMS OF THE IVAN AND MOLLIE DAVIS FAMILY LIMITED PARTNER-
8 SHIP, A VIRGINIA LIMITED PARTNERSHIP, AS MAY BE AMENDED FROM
9 TIME TO TIME, HEREAFTER THE PARTNERSHIP.

10 TO FURTHER HAVE AND TO HOLD the property with full power and au-
11 thority given to the Grantee, and Successor Partners and Assigns, subject to
12 the terms of the Partnership to protect, conserve and manage; to sell, convey,
13 exchange or otherwise dispose; to lease, and to extend, terminate or modify a
14 lease; to pledge, assign, encumber, mortgage, or subdivide; and to grant op-
15 tions, licenses and easements for utility or other purposes across, over and
16 under the property.

17 All of these foregoing powers may be exercised by the Grantee from time
18 to time, for any period of time, under such terms and conditions, with or with-
19 out consideration, pertaining to the property either in whole or in part, includ-
20 ing any improvements, in the sole discretion of the Grantee.

21 The Grantee is hereby empowered to execute, acknowledge and deliver
22 such deeds, deeds of trust, leases and other instruments necessary to carry
23 out the foregoing powers.

24 No party, including any purchaser, lessee or lender, dealing with the
25 Grantee or Successor in Interest will be obligated or liable: (i) to see to the ap-
26 plication of the proceeds from any transaction involving the property; (ii) to see
27 that the terms of the Partnership have been complied with; (iii) to inquire into
28 the authority, necessity or expediency of any act of the Grantee or Successor in
29 Interest; or (iv) be privileged to inquire into, review or examine any of the terms
30 of the Partnership without the permission of the Grantee or Successor in Inter-
31 est.

32 Every deed, deed of trust, mortgage, lease or other instrument executed
33 by the Grantee will be conclusive evidence in favor of every person claiming any
34 right, title or interest there under that: (i) at the time of the delivery of such in-
35 strument, the Partnership was in full force and effect; (ii) such instrument was
36 executed in accordance with the terms and conditions of such Partnership,
37 however amended, and is binding upon all beneficiaries of the Partnership; (iii)
38 the Grantee was duly authorized and empowered to execute and deliver every
39 such instrument; and (iv) if such instrument is executed by, or such transac-
40 tion involves, a Successor Partner or Assign, that such Successor or Assign has

BOOK 339 PAGE 003

**GENERAL WARRANTY DEED OF GIFT
IVAN P. DAVIS, SR. AND MOLLIE P. DAVIS, GRANTORS**

1 been properly appointed and fully vested with all of the title, estate, rights,
2 powers, duties and obligations of the Initial Grantee.

3 The Grantee will have no individual liability or obligation whatsoever
4 arising from their ownership as Partner of the legal title of said property or with
5 respect to any act done or contract entered into or indebtedness incurred by
6 them, or either of them, in dealing with said property or in otherwise acting as
7 such Partner except only as far as the property and any Partnership funds in
8 actual possession of the Partner will be applicable to the payment and dis-
9 charge thereof.

10 The Grantor covenants that Grantor has the right to convey the property
11 to Grantee, that Grantee will have quiet possession of the property, that Gran-
12 tor has done no undisclosed act to encumber the property, and that Grantor
13 will execute such further assurances of the property as may be required.

14 The designation of Grantor and Grantee includes their heirs, successors
15 and assigns, and includes the singular, plural, masculine, feminine or neuter
16 as required by the context.

17 [Signature page follows.]

BOOK 339 PAGE 004
GENERAL WARRANTY DEED OF GIFT
IVAN P. DAVIS, SR. AND MOLLIE P. DAVIS, GRANTORS

SIGNATURE PAGE

WITNESS the following signatures and seals:

Ivan P. Davis, Sr. [Seal]
IVAN P. DAVIS, SR., Grantor

Mollie P. Davis [Seal]
MOLLIE P. DAVIS, Grantor

ACKNOWLEDGMENT

COMMONWEALTH OF VIRGINIA
COUNTY OF BUCKINGHAM

The foregoing Deed, consisting of **FOUR** pages, including this signature page, was acknowledged before me on **JUNE 20, 2005**, by the Grantors, **IVAN P. DAVIS, SR. and MOLLIE P. DAVIS**.

James P. Seidl, Esq.
James P. Seidl, Esq., Notary Public
My Commission expires: December 31, 2006



This document prepared solely from information provided by the Grantor, and without title examination by:
James P. Seidl, Esquire
James P. Seidl Law Offices, PC
5672 Flintstone Drive, Suite 100
Barboursville, Virginia 22923-2810

035 Rec Fee	1.00	VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY
St. R. Tax		
Co. R. Tax		The foregoing instrument with acknowledgement
Transfer	1.50	
Clerk	19.50	was admitted to record on
Lib. (145)	1.50	at 2:45 PM. in D.B. 339 Page(s) 1-4
T.T.F.	5.00	Tests: MALCOLM BOOKER, JR., CLERK
Grantor Tax		BY: <u>James P. Seidl</u> DEPUTY CLERK
036 Proc.Fee		
Total \$	23.00	



AN ALLETE COMPANY

WHISPERING SPRINGS PROJECT SUMMARY

5 MW AC SHARED SOLAR GARDEN

Prepared for:

Buckingham County, Virginia - Board of Supervisors
13380 W. James Anderson Hwy., Buckingham, Virginia 23921

Applicant Details:

Applicant:	Buckingham Solar 1 LLC
Applicant Address:	2530 Riva Road Suite 200 Annapolis, MD 21401
Applicant Parent Company:	New Energy Equity, LLC DBA New Energy Equity
Agreement Type:	Land Lease located on Private Land
Permitting Point of Contact:	Jesse Dimond
Phone Number / Email:	651-333-0541 Development@newenergyequity.com
Real Property Owner(s):	Ivan and Deborah Davis Living Trust
Parcel ID(s) (PID):	151-17
Legal Description:	RT 60 - 1/2 MI E OF SPROUSES CORNER 166.62 AC
Phone Number:	(434) 315-4212

1 **Executive Summary:**

2
3 Buckingham Solar 1 LLC, a subsidiary of New Energy Equity, LLC, (“Applicant”) has prepared this Project
4 Summary for the proposed development, installation, and operation of a 5 MW AC shared solar photovoltaic
5 facilities, including the proposed construction and operation of a permanent access road, interconnection
6 poles and line along E. James Anderson Hwy. within the jurisdiction of Buckingham County, known as PID:
7 151-17 (the “Solar Facility”) for the purpose of obtaining a Conditional Use Permit from the County of
8 Buckingham Board of Supervisors.
9

10 The site was selected due to its physical characteristics, proximity to existing electrical infrastructure and
11 distribution lines, zoning and permitting requirements, and landowner participation. The Solar Facility’s final
12 design will follow all regulatory, technical, and environmental guidance, requests, rules and requirements of
13 the Utility, Town, City, County, Involved Agencies, as well as following National Electrical Safety Code,
14 the U.S. Department of Labor and Occupational Safety and Health Standards for the safety and protection of
15 landowners, general public and property.
16

17 A pre-application meeting was held between the Applicant and the AHJ on October 24th, 2022, to review the
18 proposed location and layout.

19 **Applicability to Local Regulations:** The County of Buckingham Zoning Law regulates the Solar Facility
20 under the following codes: Article 2: Districts – District 1 – Agricultural District (A-1). *A copy of the*
21 *completed Buckingham County Conditional Use Permit Form is attached as Exhibit A.* It is the intent of
22 the Applicant to meet or exceed the requirements of all the conditions of the applicable local laws and zoning
23 without any Variances; should any misrepresentation or error be found within the project summary and
24 associated exhibits, the Applicant will promptly provide update throughout the permit process.
25

26 **Consistency with Comprehensive Plan:** The proposed shared solar facility is consistent with goals and
27 objectives of the current comprehensive plan, specifically:

- 28 1. Development and Construction of the Solar Facility will contribute to total economic activity of the
29 County which will help *ensure economic growth to enhance the quality of life of its residents.*
- 30 2. Operation of the Solar Facility is long-term clean energy source, up to 40 years, that will *help create*
31 *appropriate economic opportunity for current and future citizens of Buckingham County.*
- 32 3. Operation of the Solar Facility provides potential to *reduce Potential for Groundwater*
33 *Contamination*, currently a issue from a variety of agricultural and industrial uses. The Solar Facility
34 will improve soil health by sustaining soil functions including groundwater recharge, carbon
35 sequestration, water quality and minimizing soil loss.
- 36 4. Operation of the Solar Facility *encourages landscaping and physical improvement to improve the*
37 *overall visual quality of the County.* *Project plans* include consistent landscape and vegetative
38 maintenance, including upkeep of the lands in a meadow like condition. Further, the roadside tree
39 lines and agricultural type fencing will be maintained.
40

41 **Interconnection:** The Solar Facility will be grid connected to the Dominion service territory, on a
42 distribution level three phase power line that has available hosting capacity and an approved interconnection
43 queue position held by the Applicant. Proof of Project Interconnection Facilities Study Agreement is attached
44 as **Exhibit B**. The final Solar Facility system size will be determined based on final system design as
45 approved by Buckingham Solar 1 LLC and Dominion.

Dominion Shared Solar Program: The Solar Facility is a planned Dominion Energy Shared Solar Project. The energy generated from the Shared Solar Facility goes into Dominion's distribution network and can be subscribed to for daily electrical use by Dominion customers. Upon successful completion of Conditional Use Permitting, the project will be submitted to the Shared Solar Program for consideration. It is anticipated the Applicant's subscription program will be managed by third party provider, Arcadia. A commitment letter from Arcadia is attached as Exhibit C.

Pollution Control Agencies: Proposed locations and plans for Solar Facilities must be approved by both the town/city/county and state pollution control agency (DEQ). The Applicant shall seek out approval by both the local AHJ and the State Agency after the completion of the local permitting processes. The Solar Facility will follow guidance from the Virginia DEQ Stormwater Manual for solar projects.

VDOT: Proposed location ingress/egress from a VDOT public roadway utilizing an existing access entrance location, which will be upgraded to VDOT standards. A VDOT access permit will be obtained prior to the building permit process. A Preliminary review will be requested for the location during the AHJ land use permitting process.

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Exhibit List

Exhibit Letter

•	AHJ Permit Application Form	A
•	Proof of Project Interconnection Acceptance.....	B
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1. Overview

Purpose:

The overall purpose of the Solar Facility is to provide customers with a cost-effective source of reliable renewable solar electricity. Additional Project objectives include:

- Develop a generation facility that is feasible, quick to construct and easy to operate while providing the local utility and its customers with a cost-effective, cleaner alternative.
- Establish emission-free solar electricity and reduce greenhouse gas (GHG) emissions while avoiding, minimizing, and mitigating the impacts to the environment.
- Generate electricity without utility water supply needs.
- Provide other important economic and environmental benefits to the local utility and the Municipality, including improving local air quality and public health, developing local energy sources, promoting local jobs, and diversifying the energy supply; and
- Render solar energy to the community and meet the State's Energy Plan and Clean Energy Standard and mandate of the 2020 Virginia Clean Economy Act.

The Applicant's preference would be for the residents and businesses of Buckingham County to participate in the Applicant's Shared Solar Garden Program and be the direct beneficiaries of reduced electricity rates.

Overview:

- Grid tied distributed generation system.
- Minimal noise generated during solar power generation, none outside project fence, none at night.
- No traffic disturbance during Project operation.
- Minimal visual impact, uniform solar arrays.
- Minimal ground disturbance to the Solar Site, including the surrounding environment.
- Solar panels secured to ground by use of a racking system to minimize ground grading.
- Project plan utilizes pollinator habitat guidelines to incorporate best practices that ensure the Solar Facility can become a resilient, functional landscape that maintains ecological diversity.

Project Description:

Description	Total
Land owned by the Property Owner (Acreage)	166.62 Acres
Solar Facility / Lease Area (Acreage)	30.1 Acres
Fenced Area (Acreage)	24.08 Acres
Modules Covered Area (Quantity)	12,984 Modules
Equipment Pads (#)	2
Above Ground Utility Poles (#)	9
Above Ground Interconnection Line Estimate (Linear Feet)	1,000'
Underground Interconnection Line Estimate (Linear Feet)	1,000'

Applicant has provided a copy of the current Site Plan Set attached as **Exhibit D**.

The project consists of solar modules mounted to a driven pile, fixed tilt system. Both direct current (DC) and alternating current (AC) conductors will be trenched in conduit. After final circuit consolidation at the PV system pad mounted switchboard, the system's voltage will be stepped-up to distribution level at the Dominion owned transformer and interconnected, onto an existing utility distribution circuit.

The racking system manufacturer's engineer will provide certification that the design of the foundations and panels are within accepted professional standards, given local soil and climate controls. The equipment is designed to withstand wind up to one hundred and five MPH and fifty pounds per square foot of snow. Each Solar Facility will have one to two concrete equipment pads, to support interconnection and metering equipment, and above ground typical utility poles to support interconnection of the distribution powerline. Indicative Manufacturer Equipment Specification Sheets are attached as **Exhibit E**.

The panels will be arranged into rows arranged from east to west. Rows of solar panels will connect to an inverter. The inverters will be connected by directionally bored underground conduit that is housed inside a PVC housing which will be installed two feet below the surface. The conduit will lead to the concrete equipment pad. The inverters transform the direct current power generated by the photovoltaic system to alternating current power, which is then connected to the existing distribution line at the point of interconnection. All electrical conduits within the array fence will be buried.

Proposed design will not have any adverse effects the neighboring properties, including no direct sight, odors, dust, gas, smoke, fumes, vibrations, glare, or noise during operation. During construction we intend to follow general good practices and any recommendations from the County or any Involved Agencies. We do not request the town/city to provide any services or county personnel to support the Solar Facility construction or operation.

Further, there will be signage along the fence, including utility hazard, company information, and contact information on the fence. No exterior lighting is proposed for the project. Due to the facilities size, wildlife corridors are not expected to be needed. The Solar Facility is small in scale and will not impact wildlife movement.

The duration of construction is expected to last three to six months, weather dependent.

2. Pre-development Site Conditions

The Solar Facility is located on a portion of a parcel that is a mixture of Woodlands and unimproved grassland. The combination of existing vegetation, tree canopy, adjacent commercial industrial uses and proposed vegetative screening provides adequate screening for the location:

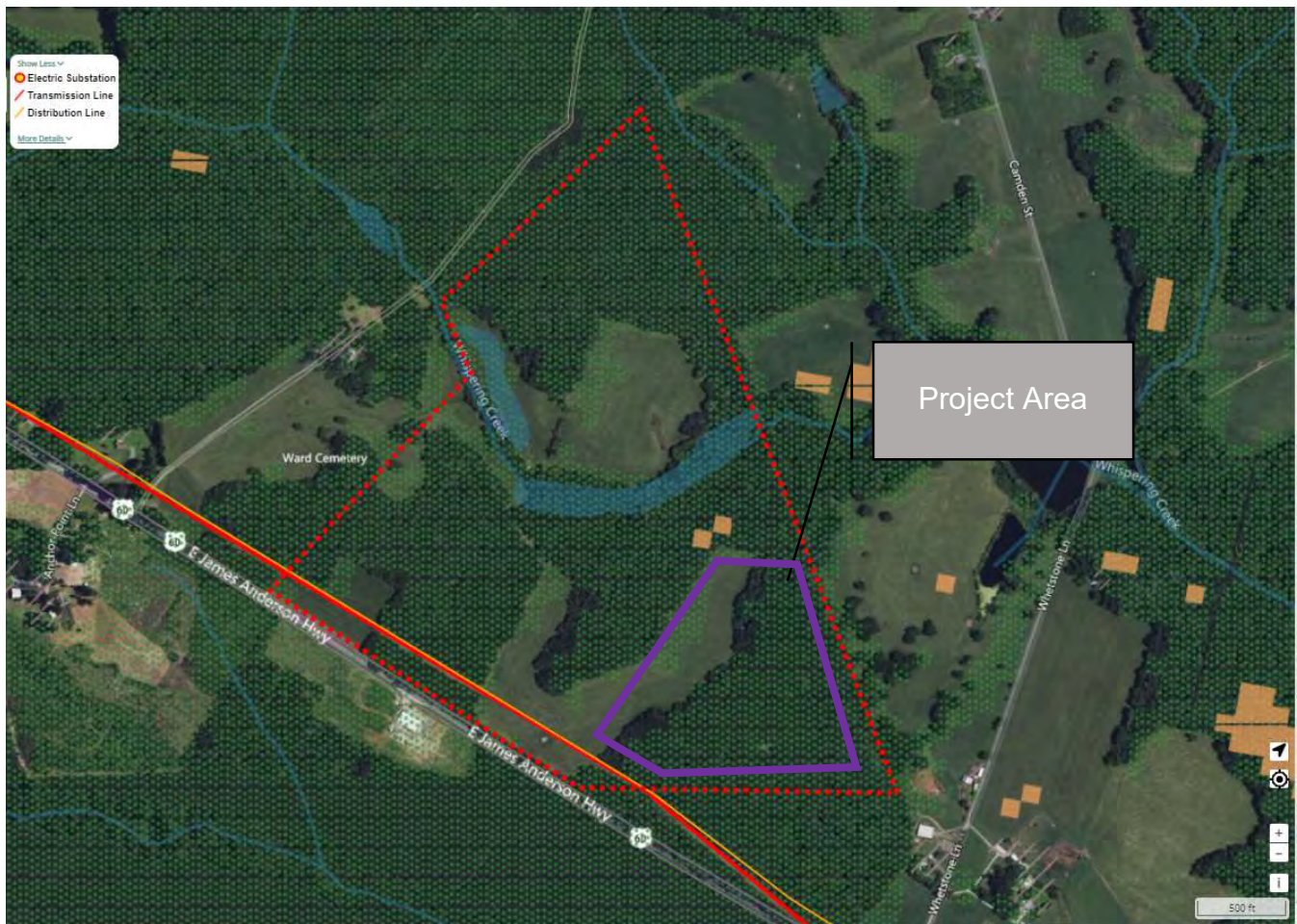


Figure of Aerial depicting Existing Conditions (Source: Landgate)

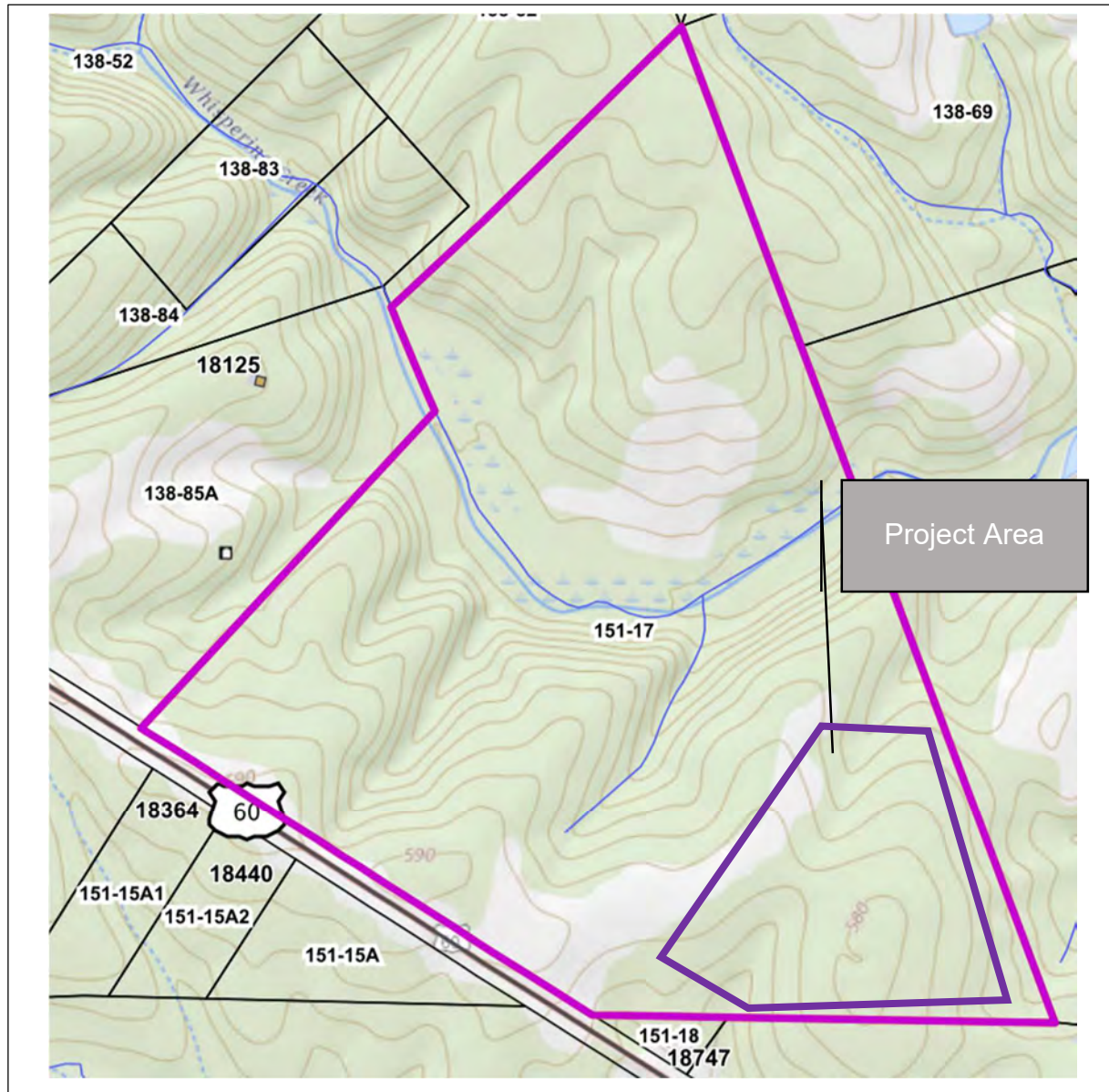


Figure of Topography (Source: County GIS)

Environmental Considerations:

During the planning and development process, the Applicant has completed desktop diligence; including, but not limited to:

- Significant locations of rare or high-quality wetlands, forests, grasslands, ponds, streams, and other types of habitats, ecosystems, and ecological areas.
- Unique or unusual geological features or landforms.
- Wetlands that are currently mapped by the National Wetlands Inventory.

- Animals and plants that are rare in Virginia, including but not limited to those listed as Endangered and Threatened by the U.S. Fish and Wildlife Service and Virginia Department of Conservation and Recreation - Division of Natural Heritage (DCR-DNH).

The current Site Plan Set utilizes this combination of data and expertise to avoid and/or minimize impacts, identify as well as identify and implement appropriate setbacks.

In the event that an unidentified environmental resource is found to exist after local land use permitting is completed, the Applicant would update the Site Plan set accordingly, conduct necessary regulatory review, and follow all applicable state and federal regulations prior to submitting for a building permit.

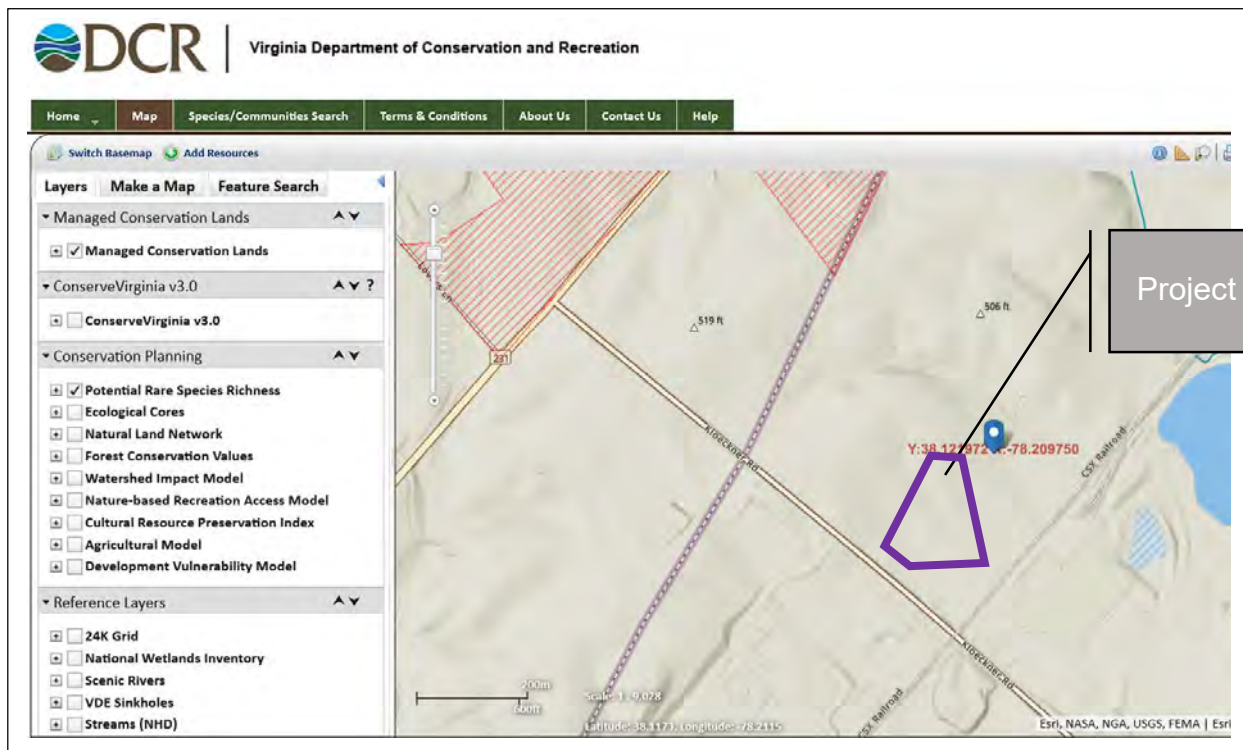


Figure of Project Location Search on the VA [Natural Heritage Data Explorer](#).

Cultural and Historical:

The Virginia Department of Historic Resources' statewide electronic cultural resources GIS and database has been utilized to confirm the absence of mapped cultural or historical significance exist on site. Any cultural resource that would be directly or indirectly impacted, if any, would be subject to further evaluation following Section 106/Project Review guidelines.

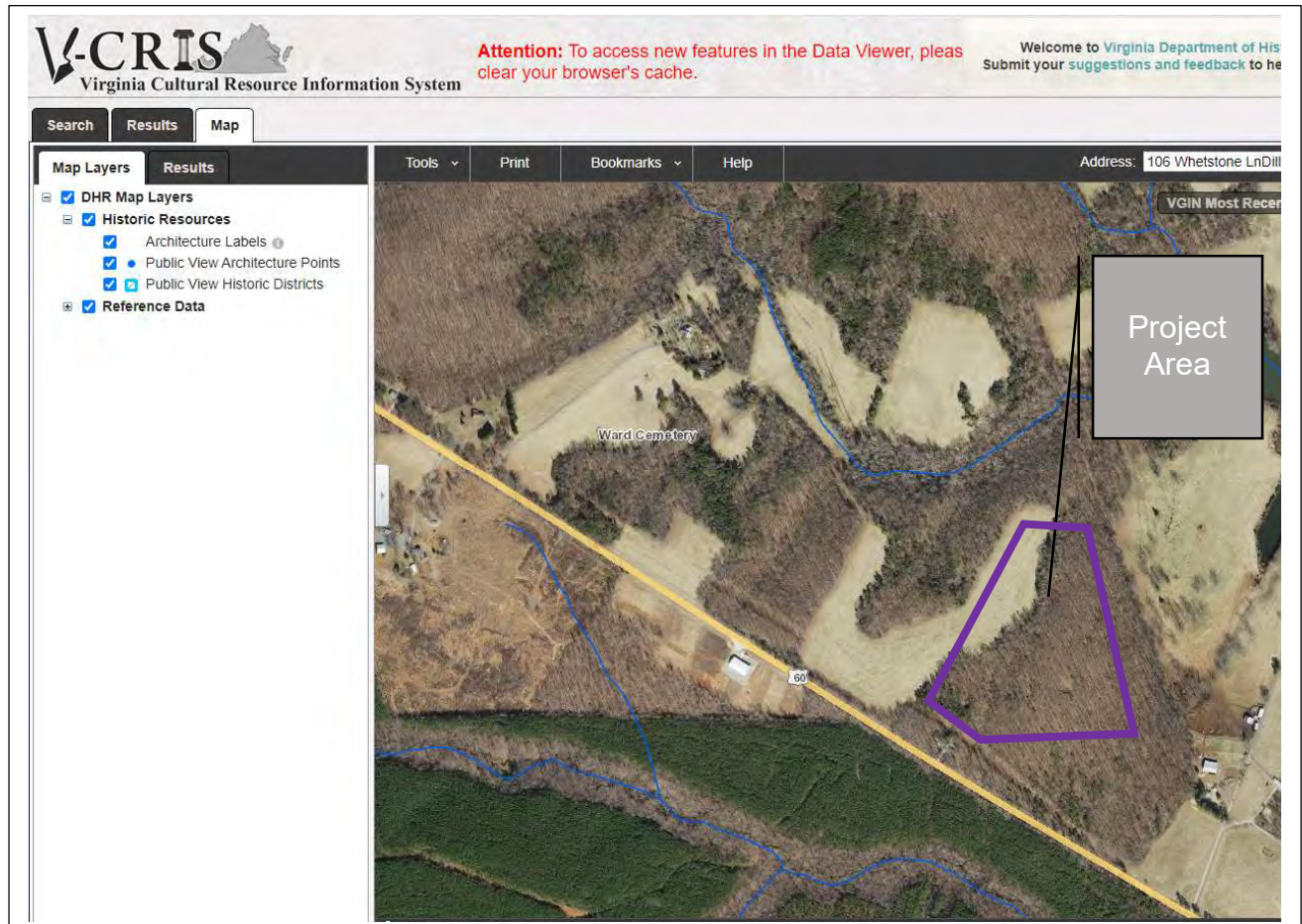


Figure of Project Location Search on the VCRIS showing absence of Historical Resources

3. Storm Water Management Measures

A licensed third-party civil engineering firm will be engaged to provide preliminary storm water management measures and a storm water pollution prevention plan ("SWPPP"). Measures will include analysis of the existing topography, use of erosion control logs and silt fences, and establishment a germinated pollinator friendly vegetative base underneath the project site before construction begins to prevent erosion. The intent is to slow down the velocity of water runoff, improving the permeability of the soil, promoting insect and wildlife habitat, and not using row crop pesticides.

Visual resources in the area of the Solar Facility have been affected by past and present actions including existing adjacent commercial uses, public utility powerlines, highway/roadway construction and limited commercial and residential development:



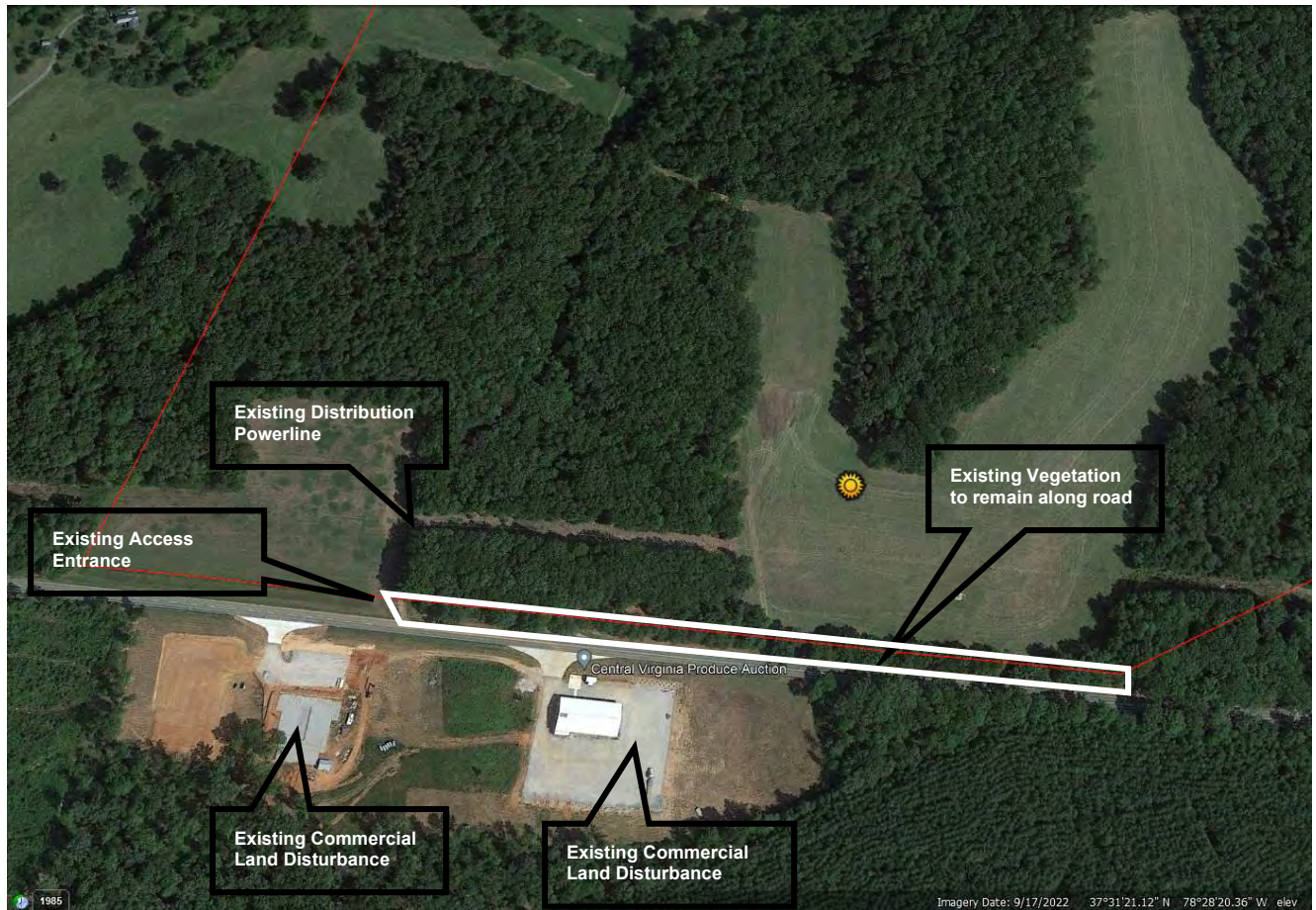


Figure of Aerial depicting Existing Visual Impacts (Source: Landgate GIS)



Figure of Road Views facing east toward Proposed Solar Facility Location from western parcel boundary and VDOT roadway



Figure of Road Views facing north toward Proposed Solar Facility Location / Existing Access from VDOT roadway



Figure of Road Views facing west toward Proposed Solar Facility Location from eastern parcel boundary and VDOT roadway showing existing screening

Harmony with Nearby Residential, Agricultural, and Business Properties:

- **Appearance:** Large solar projects have similar characteristics to a greenhouse or single-story residence. Usually no more than 10 feet high, solar farms are often enclosed by fencing and/or landscaping to minimize visual impacts.
- **Noise:** Solar projects are effectively silent. Tracking motors and inverters may produce an ambient hum that is not typically audible from outside the enclosure.
- **Odor:** Solar projects do not produce any byproduct or odor.
- **Traffic:** Solar projects do not attract high volumes of additional traffic as they do not require frequent maintenance after installation. The expected traffic volume is less than a single-family home.

Locations of residential, historical or recreation, have been considered during the project planning and development. There are no known inventoried aesthetic resources located off-site within the potential visual field of the proposed solar arrays.

Glare:

In general, the concept of efficient solar power is to absorb as much light as possible while reflecting as little light as possible, standard solar panels produce less glare and reflectance than standard window glass. The solar panels will be coated with a anti reflective coating, which ensures the solar panel reflects a lower percentage of light than smooth water.

Considering landscaping and fencing surrounding the Solar Facility as well anti reflective coatings on the solar panels, roadways, buildings, and flights paths will not be impacted by glare from the panels.

5. Vegetation and Soil Management:

Agricultural Soils:

When considering the design of this project we have put significant focus on minimizing potential project effects on future agricultural land use. This plan includes measures that have been developed to maintain and / or improve the quality of soil resource with the expectation that the site can be returned to row crop agricultural use at the end of the project operation. The Applicant's goal is to improve and maintain soil health during the operational phase of the project by sustaining soil functions including groundwater recharge, carbon sequestration, water quality and minimizing soil loss due to erosion.

Agricultural Soil Protection Practices:

- To the extent practical, the solar facility will be developed without modifying grades.
- Wherever possible, facility roads are laid out over existing farm roads.
- Pile drivers will be track mounted to lessen the soil compaction caused.
- Construction equipment travel will be limited in agricultural fields when soils are visibly saturated.
- Cover crops and deep-rooted perennial vegetation will be used to promote the development of soil structure and reduce compaction potential.
- When trenches need to be installed across farmland, the topsoil will be segregated from the subsoil and substrata. When the trench is backfilled care will be taken to replace topsoil back at the top of the trench.

Temporary Vegetative Cover:

Vegetative cover is important to promote soil health and minimize erosion losses. Maintaining healthy vegetative cover will help reduce the proliferation of noxious and invasive weeds. The goals of maintaining vegetative cover are:

- Protect soils from erosion losses and promote healthy soil by establishing and maintaining a vegetated surface and healthy root zone during construction and throughout the operational phase.
- During construction temporary erosion control will be provided by mulching and the use of temporary vegetative cover as well as other measures outlined in the storm water management measures.

Permanent Vegetative Cover:

A properly designed and maintained vegetative cover will improve the surrounding agricultural community, surface, and ground water quality, increase biodiversity, and improve onsite soil health. The goal is to have a vegetative community that stabilizes the site to minimize erosion. The permanent vegetative cover is designed to be sustainable with low maintenance and high ecological and agricultural significance. The Applicant will utilize commercially reasonable efforts to contract with a local company to maintain the Solar Facility.

- The entire site will be stabilized and maintained with vegetative cover; areas beneath the solar arrays will be planted with grass to stabilize the site. The Project will be developed in three phases to ensure proper soil stabilization:
- Seed Type: Seed Type will be chosen prior to construction and selection will be submitted apart of the building permit submittal Solar facilities must be adequately vegetated to meet stormwater and erosion/sedimentation control guidelines; Solar facilities are subject to state and local ordinances with regard to spread of noxious and invasive plant species; and; It is an industry best-practice to ensure that solar panels are not shaded by plants. Multiple seed mixes may be used such as a grass-only mix under the panel and a pollinator seed mix between panels and on the edges of the site, as determined necessary.
- Substitution of like kind seed mixes/species lists must be provided to the local government organization staff.

Pollinator Habitat:

- A successful pollinator habitat will provide benefits to the environment and the solar site owner/operator in several key areas, including: Pollinator services, Biodiversity and habitat enhancement, Carbon sequestration, Erosion and sediment control, and Reduced vegetation maintenance over time.
- Placement: A Virginia Pollinator Smart Seed Mix shall be selected and will cover a minimum of 10% of the Project Facility.
- During establishment, mowing may be required to initially control undesirable species before they can become established
- After successful establishment of the permanent vegetative community, mowing may be required for general maintenance and potential weed and shrub control. Mowing will be limited and only used when necessary.
- Ground cover within the fenced portion of the array will follow best management practices for the seed type and seasonal conditions.

Vegetated Buffer Management:

Watering:

- Roots of newly planted stock must not dry out completely for extended periods of times especially during the first growing season. Such stress may kill them. Water each plant thoroughly right after planting to settle the soil around the roots, then check soil near the base of plants to a depth of six inches. Water soil when it feels dry. The frequency and the amount of water depend on the character of the soils. Water about once a week to ten days from April to September in clay or other heavy soils; twice a week watering may be needed in sandy or little soil. Continue to keep the roots of evergreen trees moist until the ground freezes as they will continue to perspire and lose moisture over the winter months. Allow the water to run at a trickle for one-half to one hour on each plant depending on the size and soil type.

Pruning:

- Trees and shrubs require only a shortening of more vigorous branches the first year or two to keep a symmetrical appearance. After the second year, begin the following program of maintenance pruning.

Shade Trees:

- After the first year, remove one to two of the lowest limbs until the lowest are at the ultimate desired height. Most trees can be trimmed any time of year.

Evergreen Trees And Shrubs:

- Trees do not typically get pruned. Shrubs in June or July. Do not remove more than one half of the new growth.

Deciduous Shrubs:

- Spring flowering varieties should be pruned after flowering. Summer Flowering varieties should be pruned in late fall or early spring.

Perennials And Ornamental Grasses:

- Cut back to a few inches in late fall or early spring.

6. Construction:

Typical Process:

The construction process typically takes approximately three to six months, weather dependent to ensure safe site conditions for work personnel. A licensed survey team, prior to any commencement of construction, will stake the Solar Site physical boundaries and construction footprints. The survey team will stake the path through any right of ways ("ROWS") for the Interconnection Lines and/or provide a detailed map using GPS coordinates. Construction activities would include installation, operation and maintenance facility construction, road and access construction, Interconnection Line trenching, installation of a buried Interconnection Line, cleanup, and site reclamation.

Temporary construction staging areas, including material laydown, storage, equipment assembly, construction trailers, construction worker parking and portable toilet facilities are anticipated during the duration of construction activities. Construction Operating hours during construction will be 8am - 6pm. No water supply will be required.

Construction Phasing / Soil Stabilization/ Erosion and Sediment Control:

- Phase 1: Will consist of construction of an entrance and laydown area to support the commencement of construction of the Project.
- Phase 2: Will consist of establishment of required perimeter buffers and establishment of all temporary and permanent ESC and stormwater management measures.

- Phase 3: Will consist of all clearing and grubbing in the panel area. All seeded areas should be mulched or blanketed to minimize the potential for failure to establish an adequate vegetative cover. Mulching may also be used as a temporary stabilization of some disturbed areas in non-germinating seasons. The final stabilization will be reviewed and approved by the AHJ. All disturbed areas shall immediately receive temporary or permanent seeding according to the Virginia Erosion and Sediment Control Handbook.

Applicant will use appropriate temporary (construction-related) erosion and sediment control best management practices through construction. Applicant agrees to the Site Rules attached as **Exhibit F**.

Equipment:

Equipment will be used for construction, including but not limited to passenger vehicles, pickup trucks, excavator, road grader, dump trucks, compactor, trencher, skid steer track loader, piling and drilling machine and forklifts will be on site almost every day throughout the construction process.

Drain Tile:

Applicant will be responsible for maintaining any existing drain tile system underneath the array and replacing any damage to tile occurring during construction, or any time prior to or during decommissioning.

Existing drain tile lines will be identified upon the completion of the ALTA survey prior to construction.

Transportation Plan:

Multiple truckloads of equipment, gravel and aggregates will be delivered throughout the construction period. Materials would be sourced locally where available. Construction crews will access the public roadway as depicted in the Site Plan Set, utilizing a permanent access entrance for operations, and a temporary construction entrance for mobilization and construction. To ensure safe access to the site during and after construction of the Solar Facility, Applicant is committed to incorporating all reasonable road improvements and traffic related recommendations from the Town/City/County and Involved Agencies. Construction will involve multiple semi-trailer deliveries. Road access will be controlled for erosion control during construction. Construction crew parking will be located entirely within the site. No additional permanent parking is required unless required by local regulations. Maintenance crews will park within the site access road and turnaround area.

Once installation is complete, minimal low frequency access is required as further described in the Operations and Maintenance Basic Scope of Services.

Temporary Roads and Parking Surfaces:

Existing roads will be utilized as much as possible for temporary access during construction. Temporary roads that are not located along existing roads and that require heavy equipment to cross agricultural fields during construction will use the following:

- Install geotextile matting designed for soil separation over exposed topsoil (or subsoil if topsoil is stripped) surface prior to placing a 4-inch layer of crushed rock for the road surface.
- Complete removal of the temporary access fill and geotextile required for temporary access during construction or decommissioning will be removed upon completion of task.
- The topsoil and subsoil shall be de-compacted by tillage after the roads are removed and seeded as described above.

Waste Materials:

The construction of the Solar Facility will generate a variety of non-hazardous wastes during construction, such as paper, cardboard, plastic, and wooden pallets. Any waste or debris will be the responsibility of the Applicant and will be gathered in a dumpster that will be removed during construction progress as necessary. A waste management plan will be implemented during construction.

7. Operations & Emergency Response:

General:

The Solar Facility site will operate 7 days a week, generating electricity during daylight hours by a qualified operations and maintenance provider, either internal or external and/or manufacturer warranty services, to be determined (the "Operator").

Service	Description	Frequency
System Monitoring	Operator will monitor the System via the Applicant supplied DAS	Daily
Event Notification	Operator shall create an Event in the Enterprise Asset Management System (Bluepoint) and notify the Asset Manager when: the DAS generates a valid alarm, the System experiences an underperformance condition, or a deficiency is identified onsite during a site visit. Severity: <ul style="list-style-type: none"> • High Priority events represent conditions that are either causing damage to System or significantly reducing electrical output of System. - Upon Asset Manager approval, truck roll within 24 hours. • Medium Priority events affect System electrical output, but not to a significant degree. - Upon Asset Manager approval, truck roll within 72 hours. • Low Priority events do not impact System electrical output. - Upon Asset Manager approval, truck roll within 7 business days or combined with another previously scheduled visit. 	As necessary per occurrence
Diagnostic and troubleshooting	Any diagnostic or troubleshooting work performed on site to develop the Corrective Action Plan, including travel time.	As needed
Equipment Warranty	• Operator shall maintain System equipment warranty and perform	As necessary

Maintenance and Enforcement	<p>all preventative maintenance as specified by System equipment manufacturer.</p> <ul style="list-style-type: none"> • All warranty diagnostic and data collection for the purposes of submitting a system warranty claim included in basic services. • Operator shall perfect and enforce all System warranties and coordinate the corrective actions performed by the manufacturer under the warranty claim. • Operator work performed on System warranty not reimbursed by Manufacturer will be included in Basic Services. • Warranty Maintenance and enforcement that can't be completed due to the good standing and solvency of the System Equipment Manufacturer will be considered Additional Work. 	per occurrence
Warranty Repairs	All labor performed onsite to replace warrantied equipment and return the System to full electrical output.	As needed
Corrective Maintenance	All corrective action, including travel time, performed to complete the Corrective Action Plan.	As needed
Verification of Electric Revenue Meter	Operator shall verify that the electric revenue meter is operational with an accuracy tolerance band of plus or minus 5%. If the Electric Revenue Meter is outside this tolerance band, Operator shall promptly cause the meter to be repaired or replaced pursuant to "Equipment Warranty and Maintenance Enforcement" if considered a warranty claim, or as additional work if not considered a warranty claim.	Once every 5 years
Semi-Annual System Performance Report and Visual and Mechanical Inspection	<p>Will consist of the following:</p> <ul style="list-style-type: none"> • Performance report (Actual vs Forecast vs Weather adjusted output model) for the report period • List of Events for the report period pulled from Bluepoint • Operator will visit the System between no sooner than five (5) months and no later than seven (7) months after the previous Annual Preventative Maintenance Inspection was completed and complete a visual and mechanical inspection of the System, noting all non-conformances, and documenting through a checklist that will be provided as part of the Semi-Annual System Performance Report. 	Once every 6 months
Annual Preventative Maintenance and Performance Report	TBD	Annually
Annual Report – Performance Summary	Performance report (Actual vs Forecast vs Weather adjusted output model) for the report period.	Annually
Annual Report – Work Order Summary Report	List of Events for the report period from Bluepoint.	Annually
Annual Report – Preventative Maintenance Visual & Mechanical Inspection and Checklist	<p>Visual & Mechanical Inspection checklist which includes inspection and maintenance activities for the following:</p> <ul style="list-style-type: none"> • General Site Observations • Array • Racking • Tracker (If applicable) 	Annually

	<ul style="list-style-type: none"> • Conduit • Inverters • Accumulation Panel(s) • Disconnect(s) • Transformer(s) • DAS & Weather sensors • Equipment manufacturer warranty maintenance 	
Annual Report - Infrared Thermal Imaging	<p>Operator Shall perform infrared thermography of the following:</p> <ul style="list-style-type: none"> • 25% of system PV modules if handheld IRT is performed. Shall otherwise be 100% completed by aerial drone as part of “Annual Report – System Performance Data” • Hand-held IRT imaging of Inverter enclosures, combiner boxes, accumulation panels, disconnects, and transformers. 	Annually
Annual Report - System Performance Data	<p>Operator shall collect one of the following:</p> <ul style="list-style-type: none"> • Perform I/V curve tracing on a random 25% of the PV Module strings. Comments will accompany any results that suggest there is a problem • Perform Aerial Drone Infrared Thermography of the entire System array. Thermography will be performed at a minimum of 500 w/m2. Drone analysis will be provided to the customer as both a printout and an interactive online report. 	Annually
System Performance Analysis	Any System performance analytics, configuration or assessment initiated by Asset Manager will be considered additional work.	As needed
General Requests for Information	Additional System tests, written reports, site visits and other related activities as requested by Asset Manager that are outside of the services detailed in this agreement.	As needed
Solar PV Module Cleaning	Cleaning of the PV Modules as requested by Asset Manager. Operator shall monitor and recommend any special cleaning needs that may be required as a result of System conditions.	As needed
Minimum Vegetation Management and Snow Plowing	<p>Operator shall establish a timeframe for cutting the grass and maintaining other plant material growth in order to maintain the System to the Asset Manager’s requirements. Upon Asset Manager’s approval, Operator will execute the approved mowing plan.</p> <p>Maintenance of a site plays a vital role in the eventual success of any native landscape installation, especially during the establishment period of years one through five.</p> <p>Active management in all areas of the solar site should include an annual inspection followed by necessary vegetation maintenance to encourage healthy native species while discouraging non-native/invasive species. During the growing season of the first year of establishment, the site should be inspected a minimum of three times</p>	As needed, estimated 3 x per year

	<p>During the germination year, mow the project area to control annual weed development and to aid in the growth of the seedlings by reducing weed competition. Operator shall establish a timeframe for cutting the grass and maintaining other plant material growth.</p> <p>Native species have evolved to produce massive and deep root systems which allow them to endure long periods of drought. To develop these remarkable root systems, the plants produce only a limited amount of above-ground vegetation during year one. There is much more happening below the surface than above and year two will bring additional above-ground vegetation.</p> <p>During the third growing season the vegetation has expanded and are the species are producing blossoms and seeds.</p> <p>In years following the first growing season, vegetation management services are utilized to control weed species within the developing native landscape. Typical services include spot herbicide spraying, spot mowing, and herbicide wicking.</p> <p>The equipment typically used on sites this size are small tractors and ATVs mounted with the proper equipment and sickle style hay mowers.</p>	
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Emergency Response:

Solar Facility is monitored 24 hours a day, 365 days a year remotely through a computer data acquisition system (DAS) so that appropriate personal can be dispatched to investigate potential problems.

In the event of an onsite emergency, an AC Generator Disconnect (Isolation) Switch provides 24-hour/7-day unlimited access and manual control. The disconnect switch must be rated for the voltage and current requirements of the installation. Disconnecting means shall be rated to interrupt the maximum generator output; meet applicable Underwriters Laboratories (UL), American National Standards Institute (ANSI), and IEEE standards; and shall be installed to meet the NEC and all related applicable local, state, and federal codes. It will be clearly marked with permanent larger letters: "Generator Disconnect Switch". A detailed draft emergency response plan is attached as **Exhibit G**.

Site Security:

Limiting access to the Solar Facility to non-authorized personnel is necessary both to ensure the safety of the public and to protect equipment from potential theft and vandalism. Some, or all, of the perimeter of the Solar Facility and Equipment Pads, are fenced with an approximately eight-foot-high fence. Surveillance methods such as security cameras, motion detector, or heat sensors may be installed at locations along the Solar Facility boundary as determined necessary. No lighting will be installed.

8. Decommissioning Plan:

The intent of the decommissioning work will be to fully remove the solar facility, dispose of any components, and restore the site to a grassy field. The Applicant has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the lease. These obligations include removal of all equipment, timelines for removal, owner's rights to remove the solar facility upon failure by the Project Company, and establishment of a monetary security for removal in the form of a bond, escrow, or letter of credit.

The purpose of the security is to ensure there is sufficient money available to return the project site to an appropriate condition at the end of the project's useful life, or earlier. The County will be the designated beneficiary of the fund and will be provided a copy of the document establishing the security before construction commences. The decommissioning process for the Solar Facility is described below:

Summary Statement of Expected Decommissioning Cost:

The expected residual value of the solar facility is the difference between the removal/restoration cost and the salvage value. The decommissioning cost to remove the solar PV facility and reestablish the property back to a grassy field is not expected to exceed a net expenditure of decommissioning cost.

Basis of Decommissioning Plan Narrative:

The following is a list of assumptions and clarifications to further define the methodology used to establish the scope and values of the removal costs and salvage values:

Civil Infrastructure

- Topsoil used to backfill excavations will be borrowed from onsite locations. No topsoil import is included.
- Remove rip rap at stormwater basins.
- Aggregate removal will be the full depth of the aggregate section for roads, equipment pads, and other areas utilizing aggregate. No aggregate will be buried. Includes subgrade scarification prior to backfilling with topsoil.
- Turf establishment includes mulch, fertilizer, and water as necessary to achieve 70% ground cover as required to satisfy the NPDES Construction General Permit.
- Sediment control cost consists of silt fence but could also be fiber logs. Location of sediment control will be downslope from exposed soils only in areas where sedimentation offsite or into onsite water bodies can reasonably be expected.
- Trees and shrubs shall be protected and shall remain in place.

Structural Infrastructure

- Steel pile foundation removal is estimated at 25% the effort and cost as pile installation.
- Steel racking removal is estimated at 50% the effort and cost of racking installation.

Electrical Infrastructure

- PV modules to be recycled. Assumption is that the modules are 72 cell polysilicon modules, having an approximate dimension of 6' x 3'..
- Switchgear including transformers will be removed from their respective concrete pads and recycled or returned to the manufacturer.
- Copper wiring will be dug up (if required) and recycled.
- Aluminum wiring will be dug up (if required) and recycled.
- On site riser or interconnection poles shall be removed.
- String inverters/combiner boxes are no more than 130 lbs. in weight and not more than 40" x 25" x 12" in dimension. A two-person crew can dismantle a string inverter and recycle the components.
- Transformers are pad mounted and weigh approximately 8,500 pounds.
- Underground power and communication cables can be removed by excavating with a power trencher or excavator.

Recycling PV Modules:

Recycling solar modules have environmental benefits such as:

- Creating a useful and sustainable method of disposal.
- Providing raw materials for repurposing and reprocessing.
- Recovering up to 90% of the photovoltaic glass and up to 95% of the semiconductor material necessary for further production.
- Recycling of rare earth metal.

Schedule of Removal and Restoration Costs:

Summary		
Description	Cost	Units
Decommissioning Estimate (DE)	\$ 537,757.47	\$
Factor of Safety (FoS)	1.075	
DE with FoS	\$ 578,089.28	\$
Salvage Estimate (SE)	\$ 487,858.56	\$
Total Cost (DE-SE)	\$ 90,230.72	\$
Average Inflation rate	2.50%	%
Time Period	35	Years
Total Cost with FoS and Inflation after Time Period	\$ 208,913.19	\$

Figure of Engineer's Estimate of Decommissioning

Costs associated with this Engineers Estimate represent a "turnkey" operation for a general contractor to be hired for this work, including permits, mobilization, contingency, etc. Haul costs assume a maximum distance of 60 miles between the project and nearest disposal or recycling facility. The service life of the facility is assumed to be 35 years. All dollar amounts are in net-present-value. It is assumed that all values

will inflate/deflate consistent with baseline inflation, therefore, the net-present-value comparison of removal cost to salvage value will remain relevant at the end of the service life.

9. Fire Prevention:

This solar array will meet the requirements of the 2012 International Fire Code, specifically to sections 605.11 – 605.11.2 for clearance, markings, and location of underground DC conductors. The Solar Facility will meet the international Building Code (IBC), National Electric Code (NEC), and local electric and fire code. NEC code is produced by the National Fire Protection Agency (NFPA) with safety of the public, contractors, and firefighters as the entire objective. Solar specific Code has been included in the NEC for over a decade. Safety is paramount in our solar PV facilities, as we need them to function optimally for their entire system life.

10. Insurance Information:

Applicant or its successor will provide a certificate of insurance meeting the following requirements:

- Insurance provider must be rated B+ or better by “Best.”
- Limits of \$2,000,000 for each occurrence.
- Coverage against claims for damages resulting from bodily injury, wrongful death, and property damage arising out of the Interconnection Customer’s ownership and/or operating of the Generation System under the interconnection agreement.
- Contain a severability of interest clause of cross-liability insurance.

11. Economic Impact Analysis:

The tax revenue would support community needs without adding more residents or businesses, allowing for the preservation of County rural character. Plus, by providing power to the regional grid, solar projects reduce carbon emissions. The energy collected can be shared with homes and businesses that would normally not be able to benefit from solar power.

Pursuant to Chapter 22, Title 15.2, Article 7.3 of the Code of Virginia titled “Siting of Solar Energy Facilities”, Applicant and the County may enter into a siting agreement for solar facilities.

The Applicant is committed to making voluntary solar revenue payments and will complete a Siting Agreement with the County prior to the request for a building permit.

Benefits Summary:

The development of the typical Solar Facility invests approximately \$2 million dollars for every megawatt of AC capacity of the Solar Facility:

- Energy supply cost savings to subscribers, which will result in an average savings of 10% off the supply of energy on a subscribers existing energy bill. The estimated annual consumer savings is \$30,000 per megawatt AC capacity of the facility. The Applicant’s preference would be for local residents and businesses to participate in the Applicant’s Shared Solar Program and be the direct beneficiaries of reduced electricity rates.

- Neighboring and the subject properties land values are anticipated to remain the same.
- Generate lease dollars for the host landowner annually for the life of the Solar Facility.
- According to the Lawrence Berkeley National Laboratory an acre of solar panels producing zero-emissions electricity saves between 267,526 to 303,513 pounds, or 121 to 138 metric tons, of carbon dioxide per year compared to using a fossil fuel generation. By comparison, according to the EPA, the average acre of forest in the United States sequesters 0.84 metric tons of carbon dioxide per year. Thus, an acre of solar panels reduces approximately 144 to 166 times more carbon dioxide per year than an acre of forest.
- The project will incur fees for required applications and construction-related permits.

Economic Impact Overview:

This Solar Facility is a planned Dominion Shared Solar project. Dominion's Shared Solar program is an effort, established in 2020, which seeks to "reduce carbon emissions that contribute to climate change".

Shared Solar is a way of organizing the production and distribution of electricity from solar power. Shared Solar facilities provide a means for apartment dwellers, and others living in households without sufficient space to install their own solar panels to use this cleaner source of energy. A Shared Solar Facility is shared by multiple community subscribers that purchase a subscription will receive a bill credit for the proportional output of the shared solar facility attributable to that subscriber, subject to a minimum bill notwithstanding the bill credit. Subscriptions must be sized such that the estimated bill credits do not exceed the subscriber's average annual bill for the account to which the subscription is attributed.

Development of Shared Solar facilities will generate economic impacts in three distinct phases, each with their own unique set of economic impacts: (1) the development phase, when interested landowners are identified, diligence, planning and development of the Solar Facility occurs (2) the construction phase, when the Solar Facility is being created and being connected to the electrical grid and customers are being recruited; and (3) during the operation phase, when the Solar Facility is fully operational, and customers are receiving electricity.

Understanding Economic Impact:

An "economic impact" is a change in the employment, income, and output in an area based on an activity that affects the local economy, such as construction and operation of shared solar facilities. Economic impact includes three components: direct impacts, indirect impacts, and induced impacts.

The direct impacts include the changes in employment, worker income, and total economic activity directly related to the shared solar facilities.

- During the development phase these direct impacts will include outreach and identification of lease landowners, development payments received by owners of land where the facilities are desired to be studied, payments to the utility company to apply for and study the locations potential for viability, payments to architectural, engineering, and related services, public relations and related services, real estate services, county clerk's office, permitting and environmental consulting services.

- During the construction phase these direct impacts will include site preparation, installation of solar panels and other equipment onsite, upgrading of electrical lines and equipment to get the electricity produced into electrical networks, and advertising for and recruiting customers.
- During the operation phase, these direct impacts will include operation, maintenance, and repair of the facilities; advertising for and recruiting customers; lease payments received by owners of the land where the facilities are located; and savings accrued by customers of the facilities.

Indirect impacts measure the effect of these direct impacts on the businesses in the economy who sell products or services to the shared solar facilities, such as equipment, accounting and legal services, and advertising.

The induced impacts are the effects resulting from changes in spending by employees of the shared solar facilities, of employees in other businesses indirectly affected by these facilities, by landowners receiving lease payments, and by consumers who spend the money they saved by subscribing to shared solar.

- For example, if employees at an advertising company work more hours because their firm was hired to work on shared solar facility-related activities, they'll have more money to spend on things like groceries, clothing, local entertainment, and other household items.

The indirect and induced effects, which measure how money ripples through other sectors of the economy, is also referred to as the Economic Multiplier Effect. These impacts can be measured in three different ways: (1) employment, which reflects the change in full-time equivalent jobs as a result of the shared solar facility construction and operation; (2) labor income, which measures the increase in wages, salaries and other remuneration due to these job gains; and (3) output, which reflects the total change in economic activity, including the value of sales and changes in inventory.

12. State Code Clarifications

Shared Solar Program

Signed into law in 2020, the Virginia Clean Economy Act, establishes solar and onshore wind is "in the public interest" and requires Dominion Energy Virginia to be 100% carbon-free by 2045. Virginia's efforts to reduce carbon emissions that contribute to climate change include the introduction of Shared Solar Programs. Through these programs customers are afforded an opportunity to purchase solar generated electricity and receive renewable energy credits associated with their subscription to a shared solar facility.

Each of the links below will provide additional information and access to applicable rules, statutes, application forms and resources.

Applicable Rules:

- [Code of Virginia §56-594.3 Shared Solar Programs](#)
- [Rules Governing Shared Solar Program](#)

Utility Company Information

- [Dominion Energy Virginia](#)

Public Utility Commission Case

- [PUR-2020-00125](#)

As such, electric service providers must meet new state requirements in addition to other governing carbon reduction goals. Facilities in the Multi-family Shared Solar Program for Dominion and KU-ODP, under Code of Virginia § 56-585.1:12, may not exceed 3 MW in a single location or 5 MW in contiguous locations. Facilities in Dominion's Shared Solar Program, under Code of Virginia § 56-594.3, may not exceed 5 MW per parcel of land, whether a single facility or an aggregate of multiple facilities.

13. Conditional Use Permit Conditions

The Applicant has compiled this preliminary Project Summary with, to the best of its knowledge, based on the information currently available. The present document is subject to change and may be modified if new information becomes available and as design drawings are finalized prior to construction. The information contained in this document is preliminary and not intended to describe all the relevant information of the Project and is qualified in its entirety by the final application and site plans.

Prior to issuance of a building permit, the Applicant will adhere to the following typical conditions:

- Conduct additional research, studies and/or investigation, including but not limited to Wetlands, ESA, Geotechnical, Title, ALTA, and final engineering to fully develop the final Site Plan Set and SWPPP.
- Enter into a contract with for making voluntary solar revenue payments called a Siting Agreement in as authorized by Virginia Code § 15.2-2288.8(B)
- Provide decommissioning bond or surety as required by the local law governing the County of Buckingham based on the final system size.
- Complete all State required regulatory processes including SWPPP / Stormwater Permit, VDEQ concurrences.
- Complete federal regulatory concurrences with the USACOE (Wetlands No Permit Required) and USFWS (Endangered Species Concurrence) and FAA (No Impact)
- Hold a preconstruction meeting with municipal staff, outside Involved Agencies (as applicable), Project Owner and Project Contractors.

Upon request, the Applicant can provide additional information, studies, and reports before the Town/City/County issues the building permit.

We sincerely appreciate all the help we have received from your staff regarding our application, and we look forward to collaborating with you further to develop a great project that we can all be proud of.



EXHIBIT A

SPECIAL USE PERMIT APPLICATION CHECKLIST
BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINIMUM SUBMISSION
REQUIREMENTS

The following table lists the information necessary to review a special use application. All items are required, unless otherwise stated, and must be submitted in order for the application to be accepted for review. This completed checklist must be submitted with the application.

Adjacent Property Owners List and Affidavit (pages 4, 5 & 6 attached). This list can be obtained from the Clerk of Courts Office: ☒ YES ☐ NO

Completed application for special use permit (page 3 attached). If not signed by the owner, a Power of Attorney must accompany the application: ☒ YES ☐ NO

Interest Disclosure Affidavit (page 7 attached). Must be signed by the owner: ☒ YES ☐ NO

Power of Attorney (page 10 attached). Required if anyone other than the owner is signing the application form or proffer statement on behalf of the owner: YES ☒ NO

Written Narrative (page 11 guidance in preparing the Written Narrative): ☒ YES ☐ NO

Fees: ☒ YES ☐ NO

Deed: YES ☒ NO

Plat (15 copies). The plat information may be incorporated into the Special Use Permit General Site Plan, in which case, copies of a separate plat are not required. The plat must be prepared by a certified land surveyor or licensed civil engineer and contain the following:

- A. Bearings and distances of a scale of 1" = 100' or less for all property lines and existing and proposed zoning lines: ☒ YES ☐ NO
- B. Area of land proposed for consideration, in square feet or acres: ☒ YES ☐ NO
- C. Scale and north point: ☒ YES ☐ NO
- D. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES ☐ NO

Tax Map (15 copies). Identify property that special use is being considered for and identify by name all adjacent landowners.

Special Use General Site Plan (15 copies) The General Site Plan must contain the following:

1. Vicinity Map – Please show scale: ☒ YES NO N/A
2. Owner and Project Name: ☒ YES NO N/A
3. Parcel Identification numbers, name, present zoning, and zoning and use of all abutting or adjoining parcels: ☒ YES NO N/A
4. Property lines of existing and proposed zoning district lines: ☒ YES NO N/A
5. Area of land proposed for consideration, in square feet or acres: ☒ YES NO N/A
6. Scale and north point: ☒ YES NO N/A
7. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES NO N/A
8. Easements and encumbrances, if present on the property: ☒ YES NO N/A
9. Topography indicated by contour lines: ☒ YES NO N/A
10. Areas having slopes of 15% to 25% and areas having slopes of 25% or greater clearly indicated by separate shading devices (or written indication of “no areas having slopes of 15% to 25% or greater”): YES ☒ NO N/A
11. Water Courses to include the approximate location of the 100 year floodplain (if applicable) based on FEMA maps (or written indication of “not in floodplain”): ☒ YES NO N/A
12. Delineation of existing mature tree lines or written indication of “no mature tree lines”: YES ☒ NO N/A
13. Proposed roads with right-of-way width that will connect with or pass through the subject property: ☒ YES NO N/A
14. General locations of major access points to existing streets: ☒ YES NO N/A
15. List of the proposed density for each dwelling unit type, and/or intensity of each non-residential use: YES NO ☒ N/A
16. Location of any open space and buffer areas, woodland conservation areas, storm water management facilities, and community and public facilities: ☒ YES NO N/A
17. Location of existing and proposed utilities, above or underground: ☒ YES NO N/A
18. Vehicular and pedestrian circulation plan, including traffic counts and typical street sections, right-of-way improvements, access points, travel ways, parking, loading, stacking, sidewalks, and trails: ☒ YES NO N/A
19. Layouts and orientation of buildings and improvements, building use, height, setbacks from property lines and restriction lines: ☒ YES NO N/A
20. Location and design of screening and landscaping: ☒ YES NO N/A
21. Building architecture: YES NO ☒ N/A
22. Site lighting proposed: YES NO ☒ N/A
23. Area of land disturbance in square feet and acres: ☒ YES NO N/A
24. Erosion and Sediment Control Plan submitted (10,000 square feet or more): YES ☒ NO N/A
An erosion and sediment control plan will be provided for review and approval by County prior to building permit completion
25. Historical sites or gravesites on general site plan: YES NO ☒ N/A
26. Show impact of development of historical or gravesite areas: YES NO ☒ N/A
27. A copy of the current status of all real estate taxes of all property owned in Buckingham County. If real estate taxes are not current, an explanation in writing and signed by the owner shall accompany this application. Any liens or other judgments against property shall also be explained in writing and signed by the owner: YES NO ☒ N/A

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: 3.16.2023

Special Use Permit Request: New Energy Equity is requesting a Special Use Permit for a period of 35
years to construct a 5 MW AC photovoltaic community solar garden

Purpose of Special Use Permit: to construct a 5 MW AC photovoltaic community solar garden on
approximately 24.08 acres of land in Buckingham County

Zoning District: A1 Agricultural Number of Acres: 166.62

Tax Map Section: _____ Parcel: 151 Lot: 17 Subdivision: _____ Magisterial Dist.: _____

Street Address: Unassigned

Directions from the County Administration Building to the Proposed Site: Head N toward US-60 (246 ft),
turn right onto US-60 E (5.7 mi), turn left onto Whetstone Ln (0.1 mi), slight right (440 ft)

Name of Applicant: Buckingham Solar 1 LLC, a subsidiary of New Energy Equity, LLC (New Energy Equity)

Mailing Address: 2670 Patton Road, Roseville, MN 55113

Daytime Phone: (651) 333-0541 Cell Phone: _____

Email: development@newenergyequity.com Fax: _____

Name of Property Owner: Ivan P Davis, Jr. and Deborah B. Davis

Mailing Address: 106 Whetstone Ln, Dillwyn, ^{VA}~~PA~~ 23936

Daytime Phone: (434) 315-4212 Cell Phone: _____

Email: N/A Fax: _____

Signature of Owner: _____ **Date:** _____

Signature of Applicant:  Jamie Borell (May 11, 2023 09:35 CDT) **Date:** May 11, 2023

Please indicate to whom correspondence should be sent:

☐ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer

☒ Applicant Contact person: Jesse Dimond

ADJACENT PROPERTY OWNER'S LIST

(Required)

The applicant shall provide a list of all adjoining landowners, including subject property and all property immediately across the street/road from the subject property. Any body of water does not constitute a boundary line for this purpose, therefore a body of water and the property adjoining the subject property but separated by a body of water is still considered an adjoining landowner. County boundary lines and those adjoining property owners in the next County are considered adjoining property owners if the land adjoins the subject's property. Adjoining landowners can be verified through the Buckingham County Clerk of Courts or the Clerk's Office in the adjoining County, or by personal contact. The list shall include the name, address, town/city, zip code, road route number, tax map section number, parcel number, lot number, and subdivision. The list shall be typewritten or printed legibly. Failure to list all adjoining landowners could delay the process.

1. Name: Bernard A Wright Jr and Dian Dunn PID: 138-82

Mailing Address: 109 Darden Dr, Poquoson, VA 23662

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 138 Lot: 82 Subdivision: _____

2. Name: Raymond Jee Dunn, Jr PID: 138-84

Mailing Address: 30 Haughton, Newport News, VA 23606

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 138 Lot: 84 Subdivision: _____

3. Name: Edward C and Elaine M K Selfridge PID: 138-85A

Mailing Address: 18125 E James Anderson Highway

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 138 Lot: 85A Subdivision: _____

4. Name: Amos K and Naomi B Beiler PID: 151-15

Mailing Address: 115 Anchor Point Ln, Dillwyn, VA 23936

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 15 Subdivision: _____

6. Name: Ivan P Davis Jr and Deborah B Davis PID: 151-18

Mailing Address: 106 Whetstone Ln, Dillwyn VA 23936

cal Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 18 Subdivision: _____

7. Name: Ivan P Davis Jr and Deborah B Davis Living Trust PID: 151-19

Mailing Address: 106 Whetstone Ln, Dillwyn VA 23936

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 19 Subdivision: _____

8. Name: Ivan P Davis, Jr Exec PID: 151-21

Mailing Address: 106 Whetstone Ln, Dillwyn, VA 23936

Physical Address: Rt 60

Tax Map Section: _____ Parcel: 151 Lot: 21 Subdivision: _____

9. Name: Ivan P Davis, Jr Exec PID: 138-69

Mailing Address: 106 Whetston Ln, Dillwyn VA 23936

Physical Address: Off Rt 15

Tax Map Section: _____ Parcel: 138 Lot: 69 Subdivision: _____

10. Name: Ivan P Davis, Jr and Deborah B Davis Living Trust PID: 138-80

Mailing Address: 106 Whetstone Ln, Dillwyn, VA 23936

Physical Address: Rt T1001

Tax Map Section: _____ Parcel: 139 Lot: 80 Subdivision: _____

11. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

Name: Weyerhaeuser Company PID: 151-14

Mailing Address: 205 Perry Lane Road, Brunswick, GA 31525

Physical Address: RTS 15-60 - 1 MI E OF SPROUSES CORNER 579.732 AC

Tax Map Section: _____ Parcel: 151 Lot: 14 Subdivision: _____

Name: Central Virginia Produce Auction PID: 151-15A

Mailing Address: 18440 E James Anderson Hwy, Dillwyn, VA 23936

Physical Address: RT 60 - 1 MI E OF SPROUSES CORNER 7.63 AC

Tax Map Section: _____ Parcel: 151 Lot: 15A Subdivision: _____

Name: John E King & Barbara S King PID: 151-15A2

Mailing Address: 1579 New Store Road, Dillwyn, VA 23936

Physical Address: RT 60 - 1 MI E OF SPROUSES CORNER LOT 2 5.44 AC

Tax Map Section: _____ Parcel: 151 Lot: 15A2 Subdivision: _____

Name: Townsedge Hardware LLC PID: 151-15A1

Mailing Address: 1039 Banton Shop Road, Dillwyn, VA 23936

Physical Address: RT 60 - 1 MI E OF SPROUSES CORNER LOT 1 6.93 AC

Tax Map Section: _____ Parcel: 151 Lot: 15A1 Subdivision: _____

ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

This _____ day of _____, year _____,

I _____ hereby make oath that
(printed name of owner/contract purchaser/authorized agent)

the list of adjoining landowners is a true and accurate list as submitted with my application.

Signed: (to be signed in front of notary public)

(owner / contract purchaser / authorized agent – please circle one)

NOTARY:
COMMONWEALTH OF VIRGINIA

COUNTY OF _____

STATE OF _____

Subscribed and sworn to me on the _____ day of _____,

of the year _____. My Commission expires on _____.

Notary Public Signature: _____

Stamp:

INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA

COUNTY OF BUCKINGHAM, VIRGINIA

On this _____ day of _____, of the year _____,

I _____ (printed name of owner)
hereby make oath that no member of the Buckingham County Board of Supervisors nor
the Buckingham County Planning Commission has interest in such property either
individually, or by ownership of stock in a corporation owning such land, or by
partnership, or as a holder of ten percent (10%) or more of the outstanding shares of
stock in or as a director or officer of any corporation owning such land, directly or
indirectly by such members of his/her immediate household, except as follows:

Signature of Owner: (to be signed in front of notary public)

NOTARY PUBLIC

COUNTY OF _____ STATE OF _____

Subscribed and sworn to me on this _____ day of _____,

of the year _____. My commission expires _____.

Notary Public Signature: _____

Stamp:

**CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR
PENDING DEVELOPMENT APPLICATIONS**

Case Number / File Name: See Attached.

Visual Inspection Findings (describe what is on the property now):

This property has been partially wooded with mature trees and grasslands for the last 30+
years. The grassland is a pasture, which is currently used for cattle grazing.

County Records Check (describe the history of this property):

No historical properties, cemeteries, or other significant historical markers were found on
this property. County records, deeds, and the landowner records were reviewed.

Were any historical sites or gravesites found on site, or be suspected by a reasonable person to be on the site? Yes _____ No X

If yes, please explain and show on the site plan the location of such and explain any historical significance:

N/A

Will this proposal have any impact on the historical site or gravesite? Yes ____ No X

If yes, please explain any impact:

N/A

Owner/Applicant Signature: Jesse Dimond Date: 7/6/23

Printed Name: Jesse dimond Title: Senior Solar developer

APPLICATION FOR A TRAFFIC IMPACT DETERMINATION

Please fill out the following information before presenting to VDOT:

Case Number / File Name: _____

Applicant: Buckingham Solar 1 LLC

Location: Parcel 151-17

Proposed Use: 5 MW AC shared solar array

For VDOT use only:

☐ A Traffic Impact Statement is required per 24 VAC 30-155-60.

☒ A Traffic Impact Statement is not required. The traffic generated by the proposed zoning change / development does not exceed normal thresholds.

☐ The Traffic Impact Analysis has been waived by the Zoning / Planning Department for the following reasons:

Does the existing entrance meet VDOT requirements for the proposed use?
Yes ☐ No ☒ If no, please explain the necessary steps to bring into compliance with the requirements for the proposed use:

An entrance to access the property will need to be designed and constructed in accordance with VDOT Low Volume Commercial Entrance Standards. Minimum sight distance requirements are achievable at this location and owner will need to acquire a VDOT Land use permit prior to construction.

Signature of VDOT Resident Engineer: [Signature]

Printed Name: Charles D. Edwards Date: 6/28/23

SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

On this _____ day of _____, in the year of _____,

I _____ the owner of _____
(printed name of landowner) (Tax Map Number)

Hereby make, constitute, and appoint Applicant: Buckingham Solar 1 LLC and Agent Jesse Dimond
(printed name)

my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/her said full power and authority to do and perform all acts and make all representation necessary, without limitation whatsoever, to make application for said zoning. The right, powers, and authority of said attorney-in-fact herein granted shall commence and be in full force and effect on the day _____ of the month _____ in the year of _____ and shall remain in full force and effect thereafter until actual notice by certified mail with return receipt requested is received by the Zoning / Planning Office of Buckingham County stating that the terms of this power have been revoked or modified.

Signature of Landowner (to be signed in front of Notary Public):

NOTARY PUBLIC

County of _____ State of _____

Subscribed and sworn before me on the _____ day of _____

in the year _____. My commission expires _____.

Signature of Notary Public: _____

Stamp:

WRITTEN NARRATIVE

The Written Narrative shall describe the relationship of the proposed project to the relevant components of the Comprehensive Plan. Please be very detailed and describe in depth each and every component 1 through 15. The following outline is provided to aid you in preparing the written narrative:

1. Land Use
2. Community Design
3. Cultural Resources
4. Economic Development
5. Environment
6. Fire and Rescue, Law Enforcement
7. Housing
8. Libraries
9. Parks and Open Spaces
10. Potable Water
11. Sewage
12. Schools
13. Telecommunications
14. Transportation
15. Solid Waste

If this proposal is for an event, describe the handling of the entire event, including but not limited to: number of participants, schedule of events, police, security, food, beverages, water, sanitation, emergencies, crowd control, entrances and exits, traffic control, signage, advertisement, parking, fee collection, control of animals, trash disposal, site clean-up, fighting, alcohol, abuse of alcohol and/or illegal substances

SIGNAGE AT PROPERTY

The Buckingham County Zoning Ordinance requires the following:

The applicant in any case which requires a public hearing shall post signs furnished by the agent on each parcel involved at least 21 days prior to the public hearing indicating that a public hearing is eminent, the date, a rezoning issue, and a County contact number. The signs shall be placed on the VDOT right-of-way closest to the applicant's property line and shall be clearly visible from the road with bottom of the sign not less than one and one half feet above the ground. If more than one public road abuts the property, the signs shall be placed in the same manner as above for each abutting road. If no road abuts a property, then the agent shall define an area for the signs. The agent may ask the applicant that the sign be moved to another area either on the property to achieve greater public visibility. The applicant shall be responsible for keeping the signs free from grass, weeds, and any other plants or vines that may obstruct the public's view. The applicant shall contact the Virginia Department of Transportation for any information concerning where the right-of-way is located. The applicant shall be responsible for the signs should VDOT or their contractor conduct mowing or clearing of the right-of-way in the area where the sign is located.

Any signs required shall be maintained at all times by the applicant up to the time of the final public hearing. No person, except the applicant or the agent or an authorized agent of either, shall remove or tamper with any sign furnished during the period it is required to be maintained under this section. All signs erected under this ordinance shall be removed by the applicant within 15 days following a decision at the final public hearing and shall be returned to the agent. The applicant shall purchase the signs at a fee as determined by the Board of Supervisors and shall be non-refundable. The applicant shall be responsible for the replacement of the sign(s) and shall contact the agent as soon as possible for another sign to be replaced as the manner described above. Should the sign(s) have to be replaced more than twice, this section shall no longer be forced upon the applicant.

I have read, understand and agree to the above requirements.

Applicant/Owner: _____

Date: 3.16.2023

TENTATIVE SCHEDULE FOR A SPECIAL USE PERMIT

The application, site plan, written narrative, and all information requested in this application must be filled out in its entirety and supplied to the Buckingham Zoning / Planning Office and the fee must be paid before this case will be allowed to move forward.

Case will be introduced at a regularly scheduled Planning Commission meeting held on the fourth Monday of every month. Planning Commission may set a Public Hearing at this time to be held during a regularly scheduled meeting. Public Hearings offer an opportunity for citizens to speak concerning the case.

Following the Planning Commission Public Hearing, the Planning Commission may make a recommendation to approve / deny / or table the case for more information. Once the Planning Commission makes a recommendation to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. The Board of Supervisors meetings are held on the second Monday of every month. The Board of Supervisors may set a Public Hearing at this time to be held during a regularly scheduled meeting. The Board of Supervisors will make the final decision to approve or deny the application after the public hearing.

Example Timeline:

January 25	Case is introduced to Planning Commission. Planning Commission sets Public Hearing for next regularly scheduled meeting on February 22.
February 22	Planning Commission Public Hearing. Planning Commission recommends to approve / deny / or table for more information. Once the Planning Commission reaches a decision to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting.
March 8	Case is introduced to Board of Supervisors.
April 12	Board of Supervisors may approve / deny / table for more information.

The Planning Commission and the Board of Supervisors has a right to call extra public hearings at their discretion if the Board(s) decide they are needed.

You or your agent are encouraged to attend these meetings to answer any questions that may arise concerning your application / proposal. The County strongly encourages the applicant to visit the area around his proposed site and understand what the adjoining landowner concerns are.

Whispering Creek – Historical Data



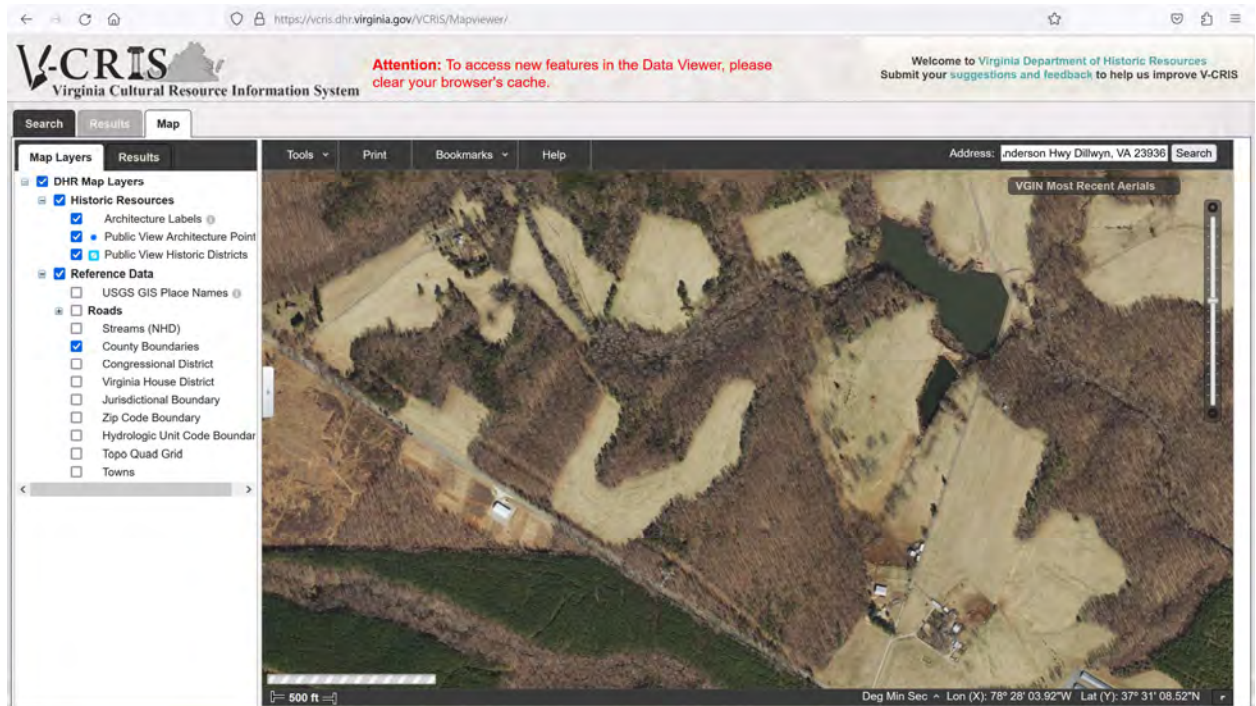
Source: Buckingham County GIS – Location Map



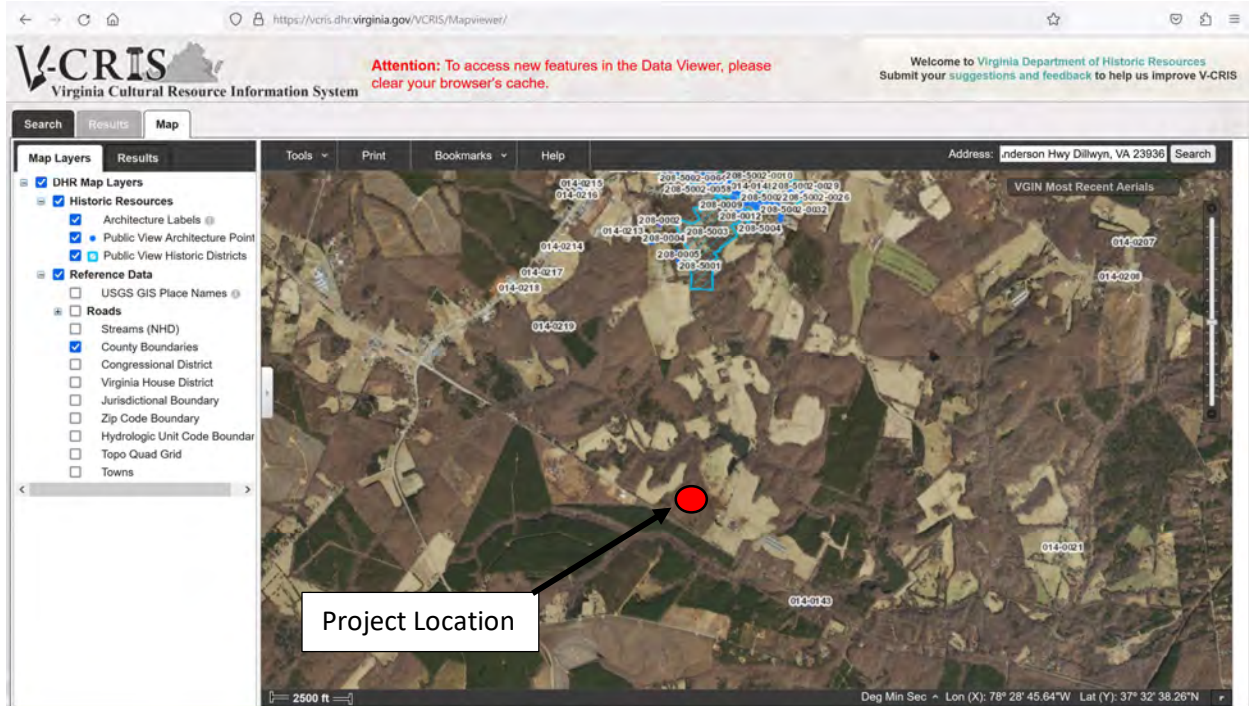
Source: Buckingham County GIS – Location Map with Aerial (2022)



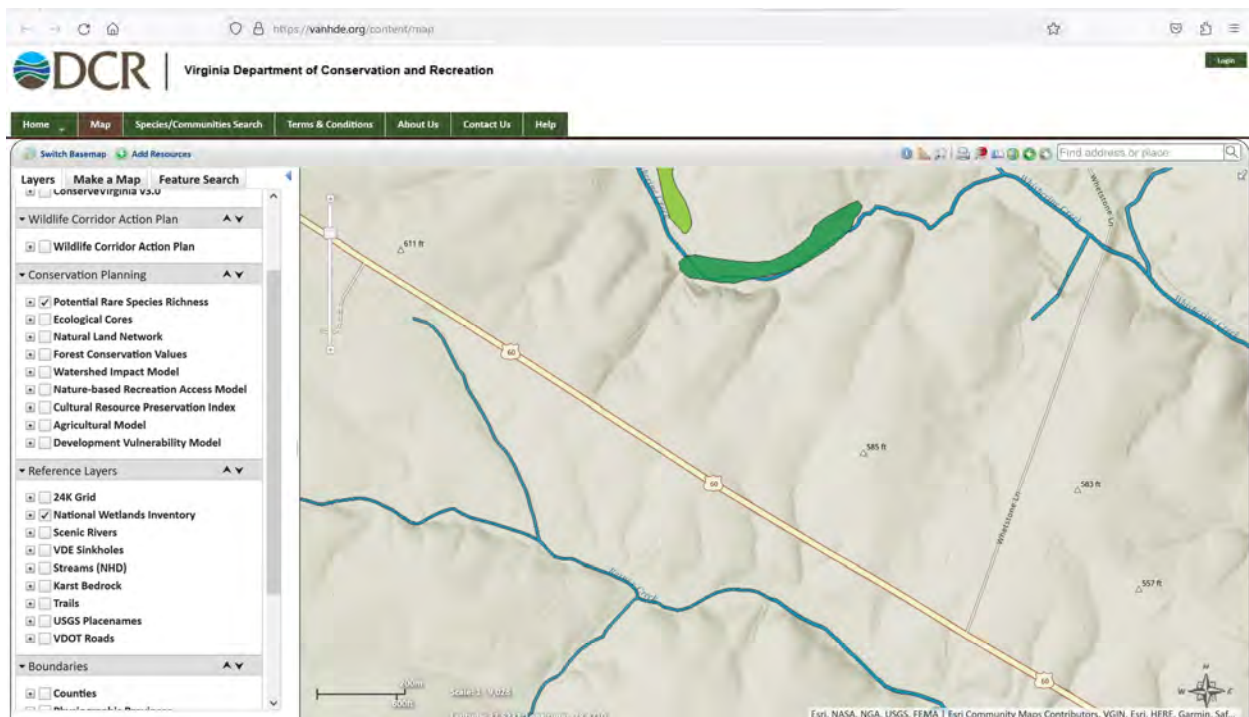
Source: Buckingham County GIS – Landcover Map (VGIN)



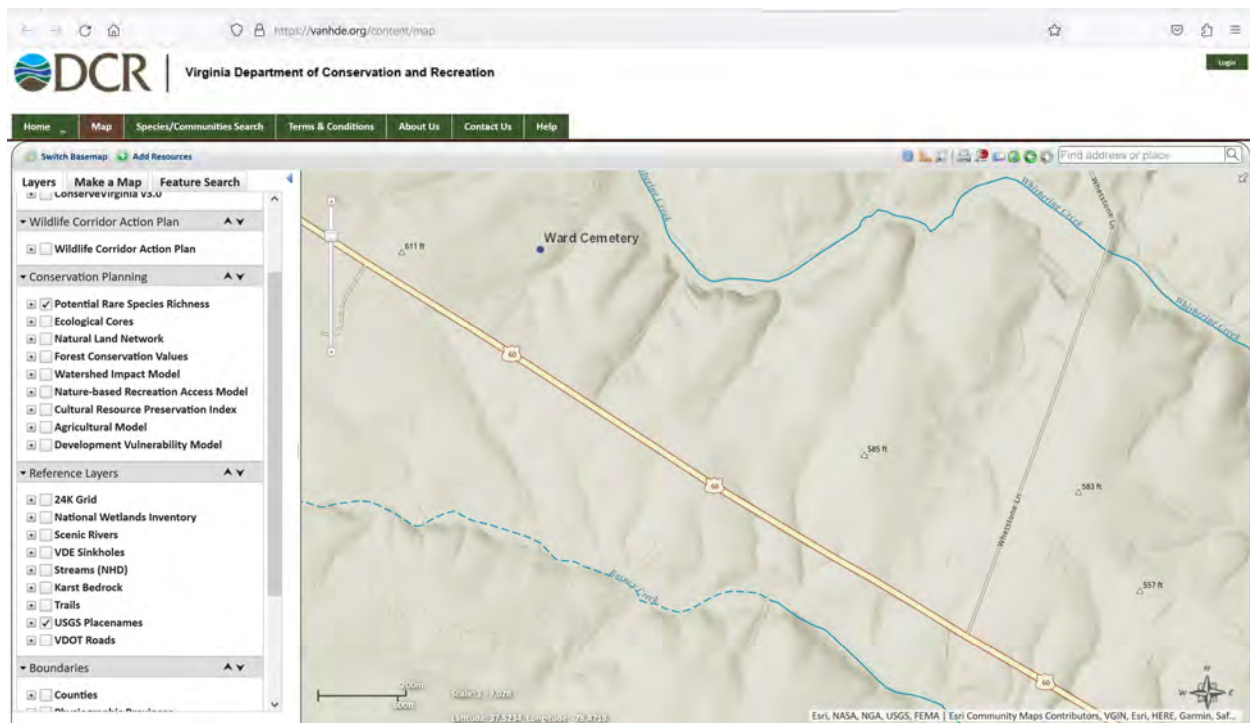
Source: V-CRIS – Historical Districts



Source: V-CRIS – Historical Districts (Zoomed Out)

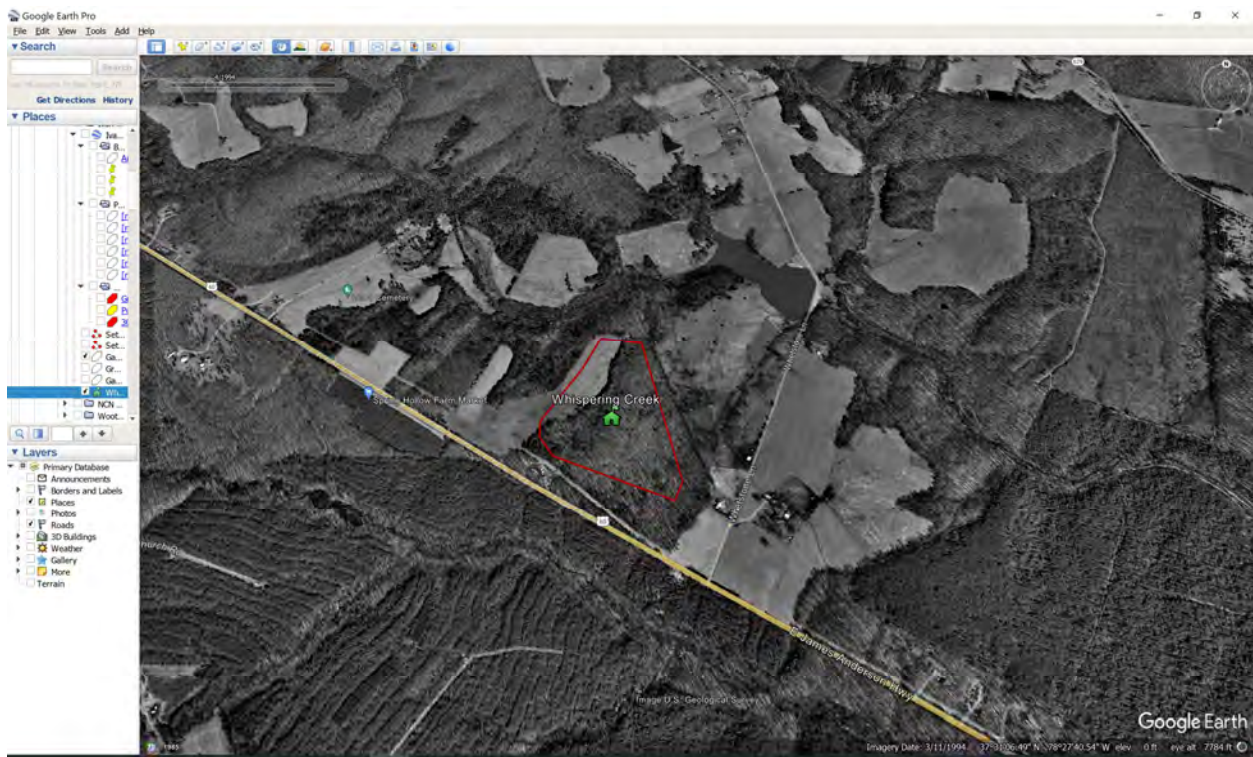


Source: DCR Website – Wetlands Inventory

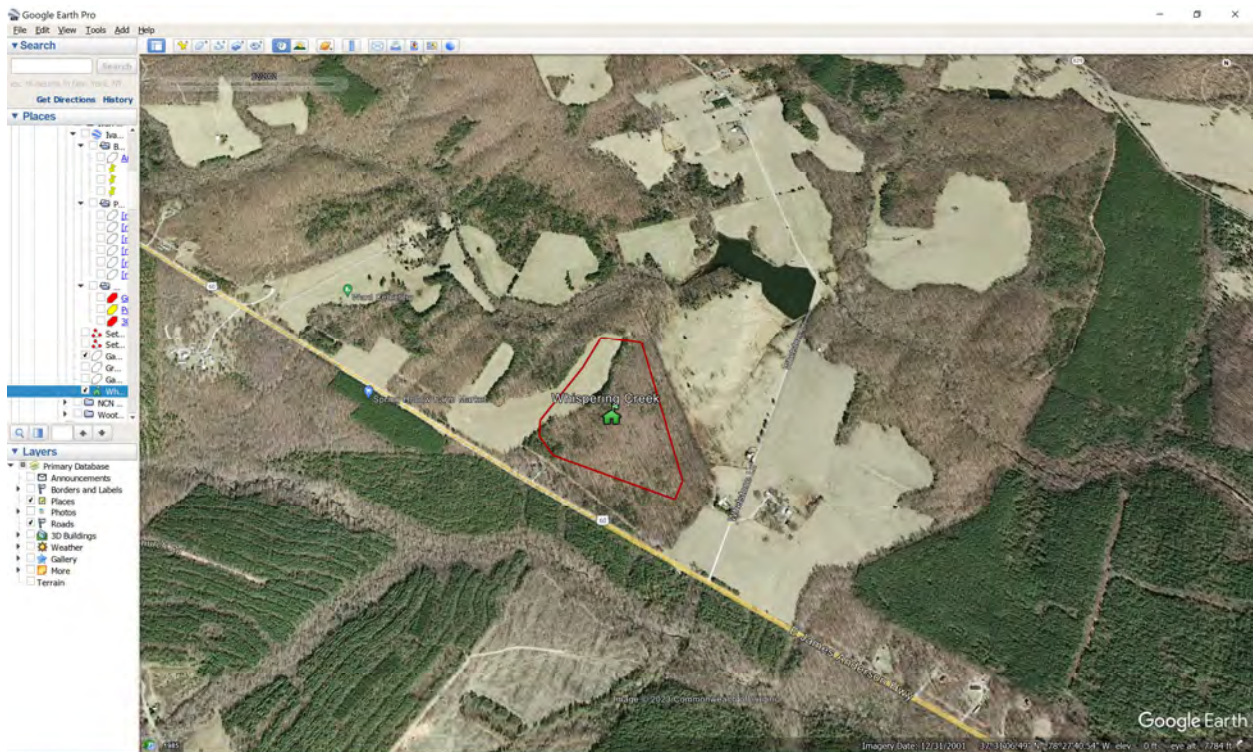


Source: DCR Website – USGS Placenames (Cemetery)

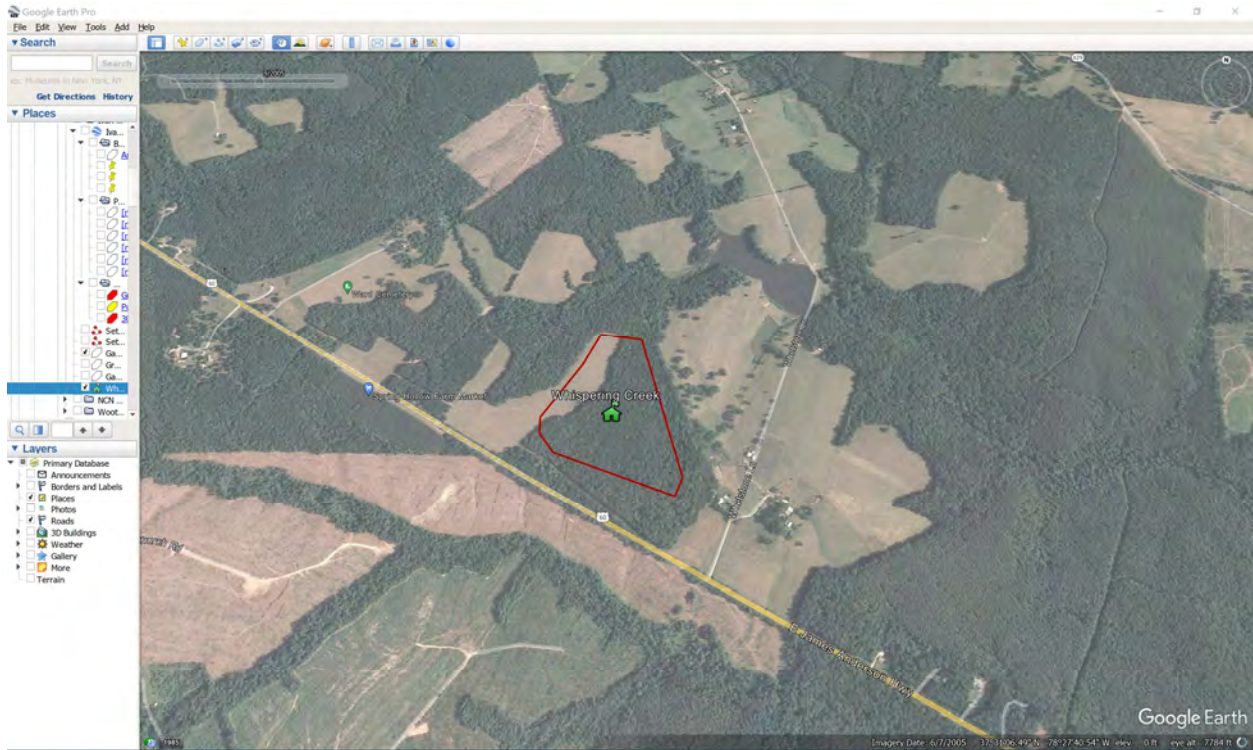
History of site location (1994 – 2022)



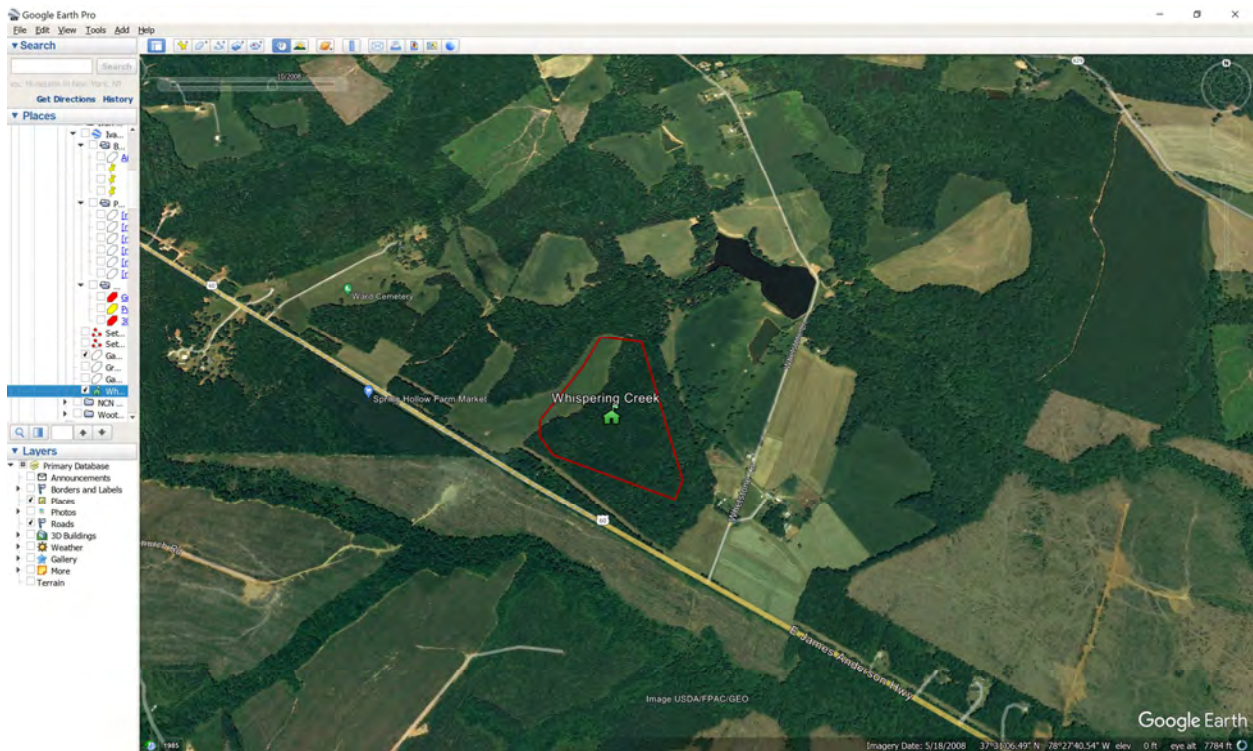
Source: Google Earth Dated 4/1/1994



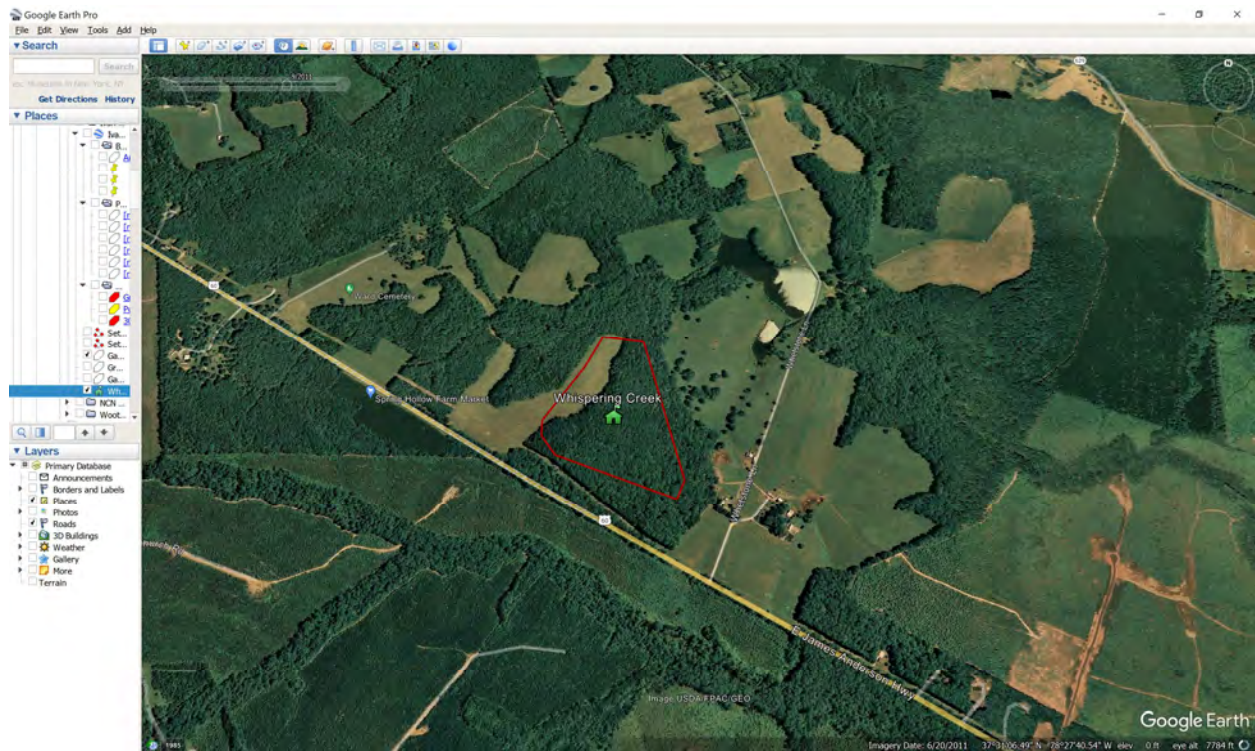
Source: Google Earth Dated 12/1/2002



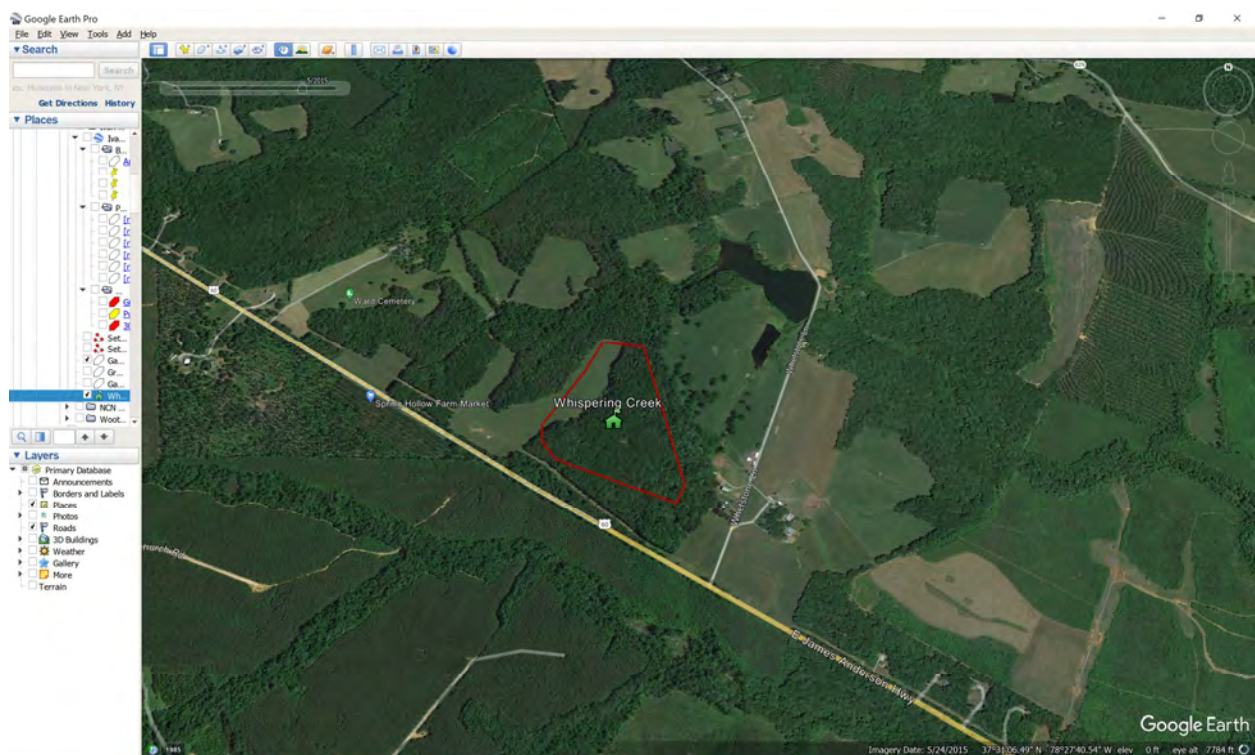
Source: Google Earth Dated 9/1/2005



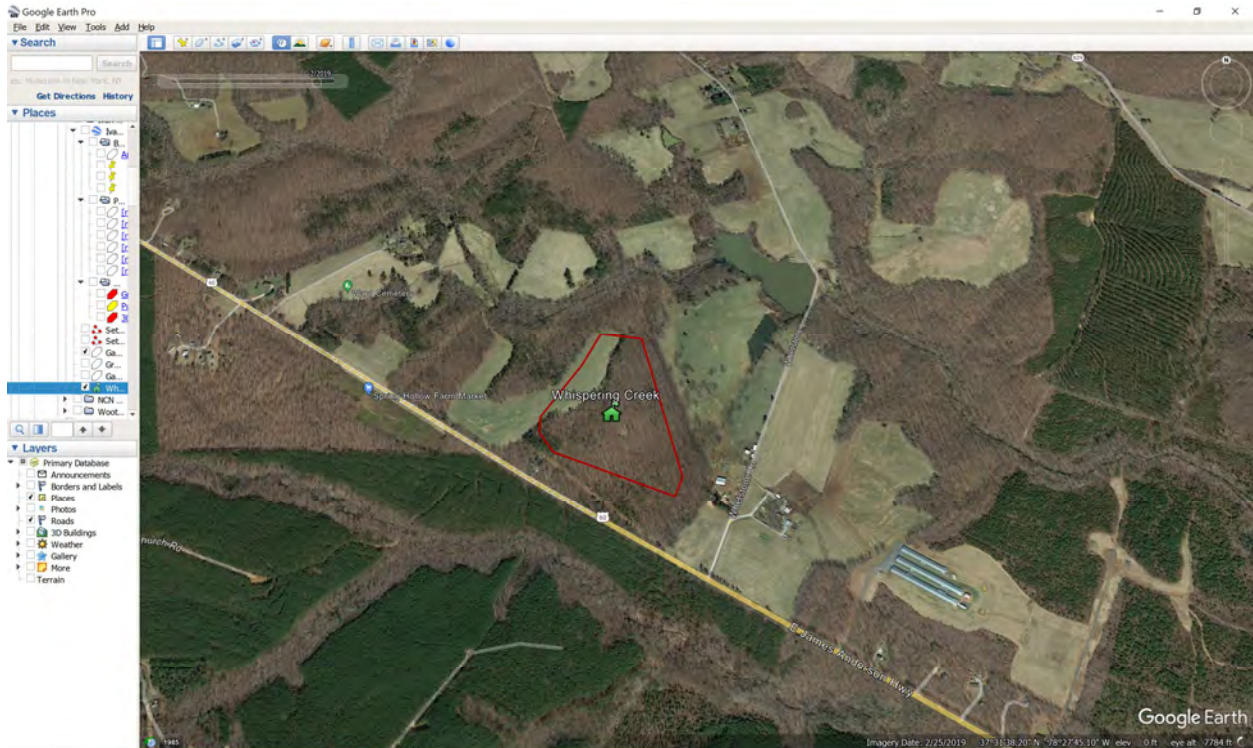
Source: Google Earth Dated 10/1/2008



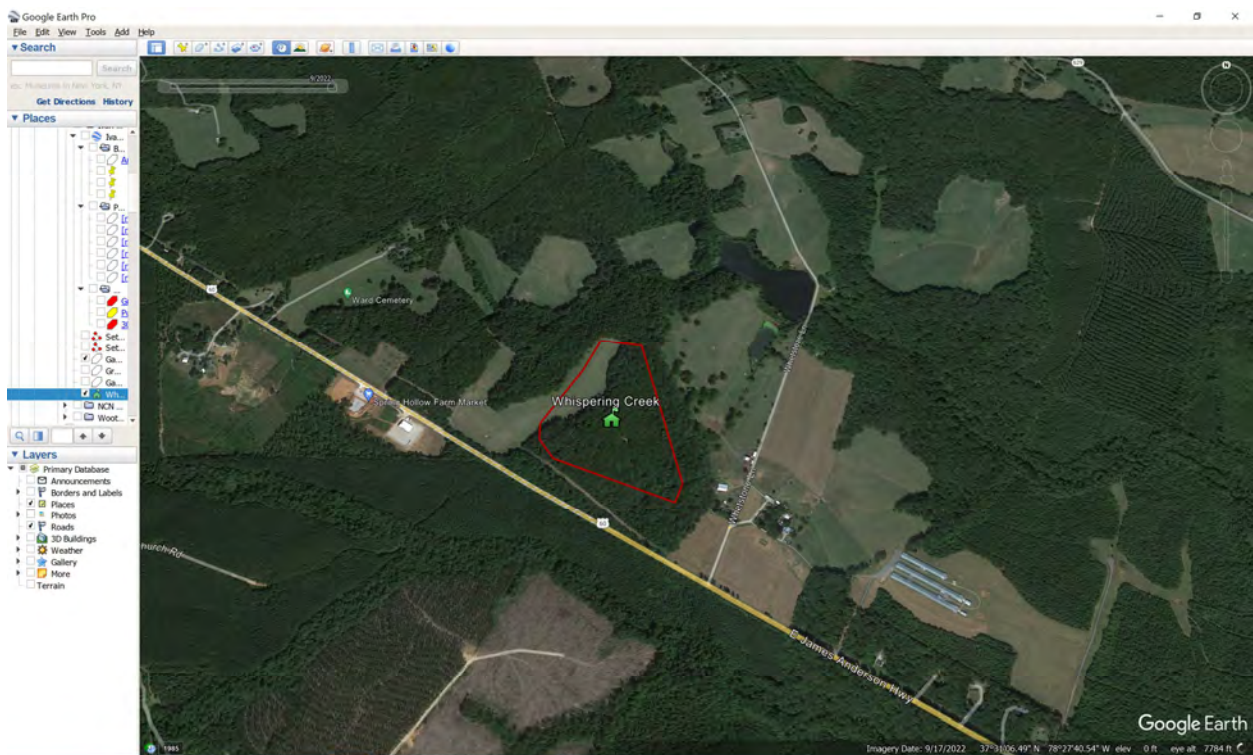
Source: Google Earth Dated 9/1/2011



Source: Google Earth Dated 5/1/2015



Source: Google Earth Dated 2/1/2019



Source: Google Earth Dated 9/1/2022

BOOK 182 PAGE 213

#2155

THIS DEED, made this 18th day of December, 1992, by and between DAVID M. WORD, III and FRANCES G. WORD, husband and wife, parties of the first part (grantors), and IVAN P. DAVIS and MOLLIE P. DAVIS, husband and wife, of P. O. Box 144, Dillwyn, VA. 23936, parties of the second part (grantees).

WITNESSETH, that for and in consideration of the sum of \$20.00 and other valuable consideration paid by the parties of the second part to the parties of the first part, the receipt of which is hereby acknowledged, said parties of the first part do hereby bargain, sell, grant and convey, with General Warranty and, except as hereinafter set forth, English Covenants of Title, unto the parties of the second part, as tenants by the entireties with the right of survivorship as at common law, all the following described real estate, to-wit:

All that certain tract or parcel of land, with improvements thereon and appurtenances thereunto belonging, situated in Curdsville Mapisterial District of Buckingham County, Virginia, containing One Hundred Sixty-Six and sixty-two/hundredths (166.62) acres, more or less, being bounded on the southwest by U. S. Route #60, on the south by lands of W. F. Davis et al and lands of Gordon, on the northeast by lands of Ivan P. Davis et ux and lands of LeSueur, and on the northwest by lands of Dunn and lands of Garland. Said lands being the residue of a 267.1 acre tract depicted on a plat of survey prepared by Carroll Gillispie, CLS/SBC, dated March 29, 1962, and recorded in the Clerk's Office of the Circuit Court of Buckingham County in Deed Book 68, at page 509, after deducting therefrom the following parcels: an off-conveyed parcel of 10 acres (see LOT 1 on plat in Deed Book 90, at page 344) recorded in Deed Book 84, at page 395 et seq.; an off-conveyed parcel of 16.05 acres (see LOT 2 on said plat in Deed Book 90, at page 344) recorded in Deed Book 90, at page 342 et seq.; an off-conveyed parcel of 30.08 acres


BOOK 182 PAGE 214


Plat Recorded
Deed Book No. 182
Page No. 214

(see plat in Deed Book 109, at page 370) recorded in Deed Book 109, at page 369 et seq.; and, a parcel of 44.35 acres hereby reserved unto the parties of the first part and described on a plat of survey prepared by Carroll Gillispie, C.L.S., dated September 15, 1986, which is attached hereto, made a part hereof, and recorded herewith. Said lands being a portion of the lands conveyed unto David M. Word, III and Frances G. Word, as tenants by the entirety, from Charles M. Garland, Jr. et al by deed of partition dated April 10, 1967 and recorded in the aforesaid Clerk's Office in Deed Book 68, at page 510 et seq.

This conveyance is made subject to: any and all conditions, restrictions, and/or rights of way which are a matter of public record; and, any and all easements and/or rights of way which are apparent on the ground from an inspection of the lands hereinabove described or apparent on an inspection of the plats hereinabove referenced.

WITNESS the following signatures and seals.


DAVID M. WORD, III (SEAL)


FRANCES G. WORD (SEAL)

BOOK 182 PAGE 215

STATE OF VIRGINIA AT LARGE
COUNTY OF BUCKINGHAM, to-wit:

I, Linda H. Meador, a notary public in and for the
State of Virginia at Large, do hereby certify that DAVID M.
WORD, III and FRANCES G. WORD, whose names are signed to the
writing above, have acknowledged the same before me in my
county aforesaid.

Given under my hand this 21st day of December,
1992.

My commission expires August 31, 1994.

Linda H. Meador
NOTARY PUBLIC

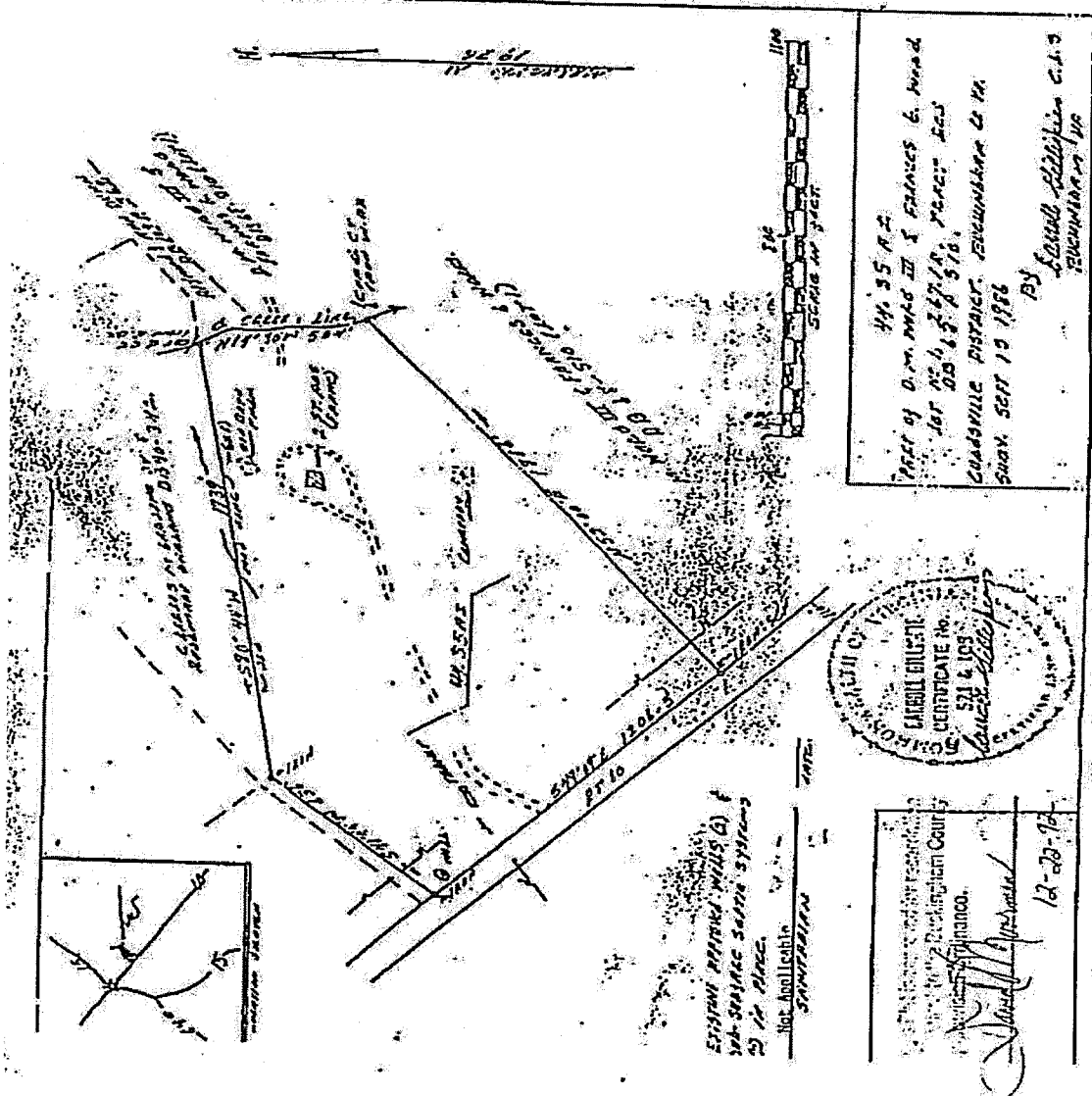
VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY.

St. R. Tax	202.50
Co. R. Tax	67.50
Transfer	1.00
Clerk	12.00
Lib. (145)	1.00
Grantor Tax	135.00
Total \$	419.00

The foregoing instrument with acknowledgement
was admitted to record on 12/30 19 92
at 10:35 AM in D.B. 182 Page(s) 213-216
Teste: MALCOLM BOOKER, JR., CLERK
BY: Ann B. Cyre, DEPUTY CLERK

Plat Recorded
Used Book No. 182
Page No. 216

BOOK - 182 PAGE 216



3043

Return recorded deed to:
James P. Seidl, Esquire BOOK 339 PAGE 001
James P. Seidl Law Offices, PC
5672 Flintstone Drive, Suite 100
Barboursville, Virginia 22923-2810

The Code of Virginia §58.1-811(A)(12) and (D) exempts this conveyance by deed from recorda-
tion taxes, including those imposed by §§58.1-801, 58.1-802 and 58.1-814.

COMMONWEALTH OF VIRGINIA
COUNTY OF BUCKINGHAM
GENERAL WARRANTY DEED OF GIFT

GRANTOR IVAN P. DAVIS, SR. and MOLLIE P. DAVIS , Husband and Wife as Ten- ants by the Entirety P.O. BOX 144, STATE RT. 629 DILLWYN, VIRGINIA 23936	GRANTEE IVAN P. DAVIS, SR. and MOLLIE P. DAVIS , General Partners of the IVAN AND MOLLIE DAVIS FAMILY LIM- ITED PARTNERSHIP , a Virginia Limited Partnership P.O. BOX 144, STATE RT. 629 DILLWYN, VIRGINIA 23936
--	---

Date of this Deed: **JUNE 20, 2005**
Consideration: \$0
Tax Map Number: #151-17
Property Address: **Route 60, Buckingham County, Virginia**

WITNESS:

That for estate planning purposes, and for no monetary consideration, the Grantor does hereby give, grant and convey with General Warranty of Title, to the Grantee, and Successors in Trust and Assigns, the following described property, lot, tract, or parcel of land, together with improvements thereon, situate, lying and being in the **CURDSVILLE MAGISTERIAL DISTRICT, COUNTY OF BUCKINGHAM, COMMONWEALTH OF VIRGINIA:**

Containing 166.62 acres, more or less, being the residue of a 267.1 acre tract, described by a plat of survey prepared by Carroll Gillispie, CLS/SBC, dated March 29, 1962, and recorded among the Land Records of the **COUNTY OF BUCKINGHAM, VIRGINIA**, in Deed Book 68, beginning at page 509.

Being the same property as that conveyed to **IVAN P. DAVIS, SR. and MOLLIE P. DAVIS**, husband and wife, as tenants by the entirety with right of survivorship as at common law by Deed dated December 18, 1992, from David M. Word, III, and Frances G. Word, husband and wife, and recorded December 30, 1992, among the Land Records of the **COUNTY OF BUCKINGHAM, VIRGINIA**, in Deed Book 182, beginning at page 213.

BOOK 339 PAGE 002

GENERAL WARRANTY DEED OF GIFT
IVAN P. DAVIS, SR. AND MOLLIE P. DAVIS, GRANTORS

1 Together with all its appurtenances, and subject to all other
2 conveyances, exceptions, easements, rights of way, covenants,
3 conditions, restrictions and other instruments of record, or
4 which may be apparent on the premises, as well as ordinances,
5 codes, and regulations, legally affecting the property.

6 TO HAVE AND TO HOLD SAID PROPERTY IN FEE SIMPLE UNDER THE
7 TERMS OF THE IVAN AND MOLLIE DAVIS FAMILY LIMITED PARTNER-
8 SHIP, A VIRGINIA LIMITED PARTNERSHIP, AS MAY BE AMENDED FROM
9 TIME TO TIME, HEREAFTER THE PARTNERSHIP.

10 TO FURTHER HAVE AND TO HOLD the property with full power and au-
11 thority given to the Grantee, and Successor Partners and Assigns, subject to
12 the terms of the Partnership to protect, conserve and manage; to sell, convey,
13 exchange or otherwise dispose; to lease, and to extend, terminate or modify a
14 lease; to pledge, assign, encumber, mortgage, or subdivide; and to grant op-
15 tions, licenses and easements for utility or other purposes across, over and
16 under the property.

17 All of these foregoing powers may be exercised by the Grantee from time
18 to time, for any period of time, under such terms and conditions, with or with-
19 out consideration, pertaining to the property either in whole or in part, includ-
20 ing any improvements, in the sole discretion of the Grantee.

21 The Grantee is hereby empowered to execute, acknowledge and deliver
22 such deeds, deeds of trust, leases and other instruments necessary to carry
23 out the foregoing powers.

24 No party, including any purchaser, lessee or lender, dealing with the
25 Grantee or Successor in Interest will be obligated or liable: (i) to see to the ap-
26 plication of the proceeds from any transaction involving the property; (ii) to see
27 that the terms of the Partnership have been complied with; (iii) to inquire into
28 the authority, necessity or expediency of any act of the Grantee or Successor in
29 Interest; or (iv) be privileged to inquire into, review or examine any of the terms
30 of the Partnership without the permission of the Grantee or Successor in Inter-
31 est.

32 Every deed, deed of trust, mortgage, lease or other instrument executed
33 by the Grantee will be conclusive evidence in favor of every person claiming any
34 right, title or interest there under that: (i) at the time of the delivery of such in-
35 strument, the Partnership was in full force and effect; (ii) such instrument was
36 executed in accordance with the terms and conditions of such Partnership,
37 however amended, and is binding upon all beneficiaries of the Partnership; (iii)
38 the Grantee was duly authorized and empowered to execute and deliver every
39 such instrument; and (iv) if such instrument is executed by, or such transac-
40 tion involves, a Successor Partner or Assign, that such Successor or Assign has

BOOK 339 PAGE 003

**GENERAL WARRANTY DEED OF GIFT
IVAN P. DAVIS, SR. AND MOLLIE P. DAVIS, GRANTORS**

1 been properly appointed and fully vested with all of the title, estate, rights,
2 powers, duties and obligations of the Initial Grantee.

3 The Grantee will have no individual liability or obligation whatsoever
4 arising from their ownership as Partner of the legal title of said property or with
5 respect to any act done or contract entered into or indebtedness incurred by
6 them, or either of them, in dealing with said property or in otherwise acting as
7 such Partner except only as far as the property and any Partnership funds in
8 actual possession of the Partner will be applicable to the payment and dis-
9 charge thereof.

10 The Grantor covenants that Grantor has the right to convey the property
11 to Grantee, that Grantee will have quiet possession of the property, that Gran-
12 tor has done no undisclosed act to encumber the property, and that Grantor
13 will execute such further assurances of the property as may be required.

14 The designation of Grantor and Grantee includes their heirs, successors
15 and assigns, and includes the singular, plural, masculine, feminine or neuter
16 as required by the context.

17 [Signature page follows.]

BOOK 339 PAGE 004
GENERAL WARRANTY DEED OF GIFT
IVAN P. DAVIS, SR. AND MOLLIE P. DAVIS, GRANTORS

SIGNATURE PAGE

WITNESS the following signatures and seals:



IVAN P. DAVIS, SR., Grantor [Seal]


MOLLIE P. DAVIS, Grantor [Seal]

ACKNOWLEDGMENT

COMMONWEALTH OF VIRGINIA
COUNTY OF BUCKINGHAM

The foregoing Deed, consisting of **FOUR** pages, including this signature page, was acknowledged before me on **JUNE 20, 2005**, by the Grantors, **IVAN P. DAVIS, SR. and MOLLIE P. DAVIS**.


James P. Seidl, Esq., Notary Public
My Commission expires: December 31, 2006



This document prepared solely from information provided by the Grantor, and without title examination by:
James P. Seidl, Esquire
James P. Seidl Law Offices, PC
5672 Flintstone Drive, Suite 100
Barboursville, Virginia 22923-2810


035 Rec Fee	1.00	VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY
St. R. Tax		
Co. R. Tax		The foregoing instrument with acknowledgement
Transfer	1.50	
Clerk	19.50	was admitted to record on
Lib. (145)	1.50	at 2:45 PM. in D.B. 339 Page(s) 1-4
T.T.F.	5.00	Tests: MALCOLM BOOKER, JR., CLERK
Grantor Tax		BY:  DEPUTY CLERK
036 Proc.Fee		
Total \$	23.00	



EXHIBIT B

November 21, 2022

IPS Development Virginia, LLC.
2670 Patton Road
Roseville, MN 55113
Attn: Ian Santos-Meeker

**Re: Virginia Electric and Power Company
Feasibility Study Report and System Impact Study Agreement
VA20371 IPS Development Virginia, LLC (Ivan Davis) – 5 MW**

IPS Development Virginia, LLC (Ivan Davis) (hereinafter called “Interconnection Customer”) has submitted an Interconnection Request, for the referenced generation facility, to operate in parallel with the distribution system of Virginia Electric and Power Company, doing business as Dominion Energy Virginia in Virginia (hereinafter called “Company”). The results of the Feasibility Study are as follows:

Preface

The intent of the Feasibility Study is to determine a plan, with approximate cost and construction time estimates, to connect the subject generation to the Dominion Energy Virginia Electric System at a location specified by the Interconnection Customer. As a requirement for interconnection, the IC may be responsible for the cost of constructing: Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the Dominion Energy Virginia system. All facilities required for interconnection of a generator must be designed to meet the technical specifications for the appropriate ITO.

The Feasibility Study Cost is an estimated cost only. No engineering has been performed to arrive at the cost and Dominion Energy Virginia does not guarantee the accuracy or completeness of this cost. The estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. All estimates have been calculated in good faith, however, are non-binding.

General

Address of facility: **E James Anderson Hwy. Dillwyn, VA 23936**
The installed facilities will have a total capability of: **5 MW**
Substation: **Buckingham**
Circuit number: **63 309**
Circuit voltage: **34.5 kV**

Utility Provided Attachment Facilities – \$181,200.00

- Installation of approximately 300 feet of three (3) phase overhead 477 Al. Primary / 246.9 Al. Neutral conductor
- Installation of G & W Viper Recloser with a SEL651R-2 Recloser Control
- Power Quality Monitor (SEL-735 or equivalent device) at the Point of Common Coupling with all required metering/relay functionality
- Transformer and secondary voltage conductors to provide source voltage for the Utility owned Recloser, PQ Monitor, Metering Equipment, and Transfer Trip Equipment.
- All metering needed for interconnection of generation and auxiliary load
- One Disconnect Switch at the Point-of-Interconnection
- Install a single phase OH transformer to supply power for Recloser, SEL-735R, & Transfer Trip controls and extend #2 Triplex to Recloser & Metering Poles.
- Extend 3 phase, 477 Al. primary/neutral overhead to a new pole and install G&W Viper ST w/SEL 651R-2 Control Recloser.
- Extend 3 phase, 477 Al. primary/neutral overhead to a new pole and install Bi-Directional Primary Metering equipment.
- Extend 3 phase, 477 Al. primary/neutral overhead to a new pole and install 600 amp Disconnects.
- Utility will install new metering equipment, CT's and PT's, the meter cabinet, meter, and connect the customer conductor to utilities 34.5kV facilities

In addition to the onetime cost equal to the estimated cost of the new attachment facilities there will also be an ongoing monthly charge for the operation and maintenance cost of the attachment facilities equal to 0.507% of the estimated cost of the new attachment facilities (i.e. \$181,200.00 x 0.00507 = **\$918.68 per month**).

Interconnection Customer Requirements (to include but not limited to)

- Installation of road providing accessibility along the Utility interconnection poles suitable for construction and operation vehicle traffic.
- Installation of a gang operated air-break switch or equivalent located 1 span from the point of interconnection providing a visible opening that can be locked and tagged that will be utilized to isolate the IC from the Utility.
- Installation of all conductors, pad mount transformers, and generator breakers between the generating facility and POI.
- Communication lines for all metering.
- Communication circuit(s) for Transfer Trip Scheme, if required, between the DG site and Substation, and between the DG site and inline recloser(s).
- Obtain any required right-of-way for the construction of Utility's facilities necessary for the interconnection of this generator.
- Provide and maintain a telephone line (POTS) to the Utility metering equipment.
- Metering to report real-time to PJM is required when the generation capacity is 10 MW or more total on the circuit.
- All ICs must provide generator status and instantaneous MW output to PJM per Manual 14D of the PJM OATT via communication links when the aggregate generation capacity reaches 10MW or more on a circuit. This communication medium is installed, owned, and maintained by the IC. Contact PJM for additional details concerning the requirement [PJM System Planning Division @ (610) 666-8980].

Utility Provided Distribution Upgrades – \$0.00

IPS Development VA proposes to build a 5 MW DER facility located on E James Anderson Hwy, Dillwyn, VA 23936. Based on the location the DER site would interconnect to Dominion Energy Virginia's Buckingham Substation on 63_Cir 309 (34.5 kV). The site is located approximately 7.4 miles in circuit length away from Buckingham Substation. The existing conductors between the substation and the interconnection site consists of UG 1000 Al and 477 Al. This project is a status A and has 19.8MW energized, 2 MW executed ahead of it. A new transformer (33.6/45/56 MVA unit) will be needed for the additional required capacity. Additional Transformer, Substation, and Transmission Upgrades will be provided in the Facility Study. Due to the aggregate size of the generation on the circuit, transfer trip will need to be installed on the interconnect recloser as well as the in-line recloser between the generation and the breaker.

- No distribution upgrades required
- Constructability of upgrades is contingent upon the acquisition of required easements and/or encroachments.

Utility Provided Substation Upgrades are not available at this time for reporting

Preliminary Distribution Upgrades only plus attachments equal estimated \$181,200.00.

Estimated time for engineering, material acquisition, and construction: TBD months from the execution of the SGIA and payment of estimated charges.

Additional studies (System Impact and Facilities) may identify additional Distribution and Transmission system protection requirements that would be provided as Upgrades at the IC's expense. **These studies will also further refine the costs and construction time estimates.**

Please contact me with any questions you may have concerning the preliminary scope and estimate for this project.

Sincerely,

Lela Foster
Dominion Energy Virginia Distributed Generation
DG Contracts Administrator III
757-613-4340

Attachment – System Impact Study Agreement will be sent in Adobe Sign.



EXHIBIT C

August 16, 2021

Jamie Borell

IPS Development Virginia LLC

2530 Riva Road, Suite 200

Annapolis, MD 21401

Re: Shared Solar Program in the service territory of Dominion Energy Arcadia

Dear Mr. Borell,

This Memorandum of Understanding ("MOU") sets forth the preliminary intentions of Arcadia's support for IPS Development Virginia LLC's participation in the Shared Solar Program being hosted by Dominion Energy Virginia. Arcadia plans to provide subscriber management services for Virginia Shared Solar projects developed by IPS Development Virginia LLC. It is understood that a minimum of 30% of the subscribed solar energy must be allocated to low-income customers.

First and foremost, our customer-friendly product offering was designed to make shared solar a good fit for everyone, particularly Low to Moderate Income (LMI) households, who are more likely to face a high energy cost burden, move more frequently, and have lower credit scores. There is no doubt that a LMI household struggling to make ends meet would be better off if they subscribed to a shared solar project managed by Arcadia.

IPS Development Virginia LLC is particularly excited about some of the successes Arcadia has had in reaching out directly to LMI customers. For example, Arcadia is working with a housing authority in New York, affordable housing properties in Maryland and Rhode Island, and signing up low- to moderate-income customers directly across all our active shared solar markets.

Arcadia is extremely excited to subscribe low-income customers in this partnership with IPS Development Virginia LLC. We understand the importance of democratizing solar access and have the technical and financial experience necessary to ensure that this takes place.

Contact:

Madeline Gould

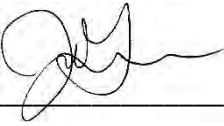
Policy Manager, Arcadia

madeline.gould@arcadia.com

866-526-0083

Signature page follows

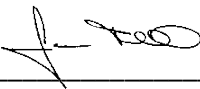
Arcadia Power, Inc

By:  _____

Name: Joel Gamoran

Title: General Manager

IPS Development Virginia LLC

By:  _____

Name: Jamie Borell

Title: Manager



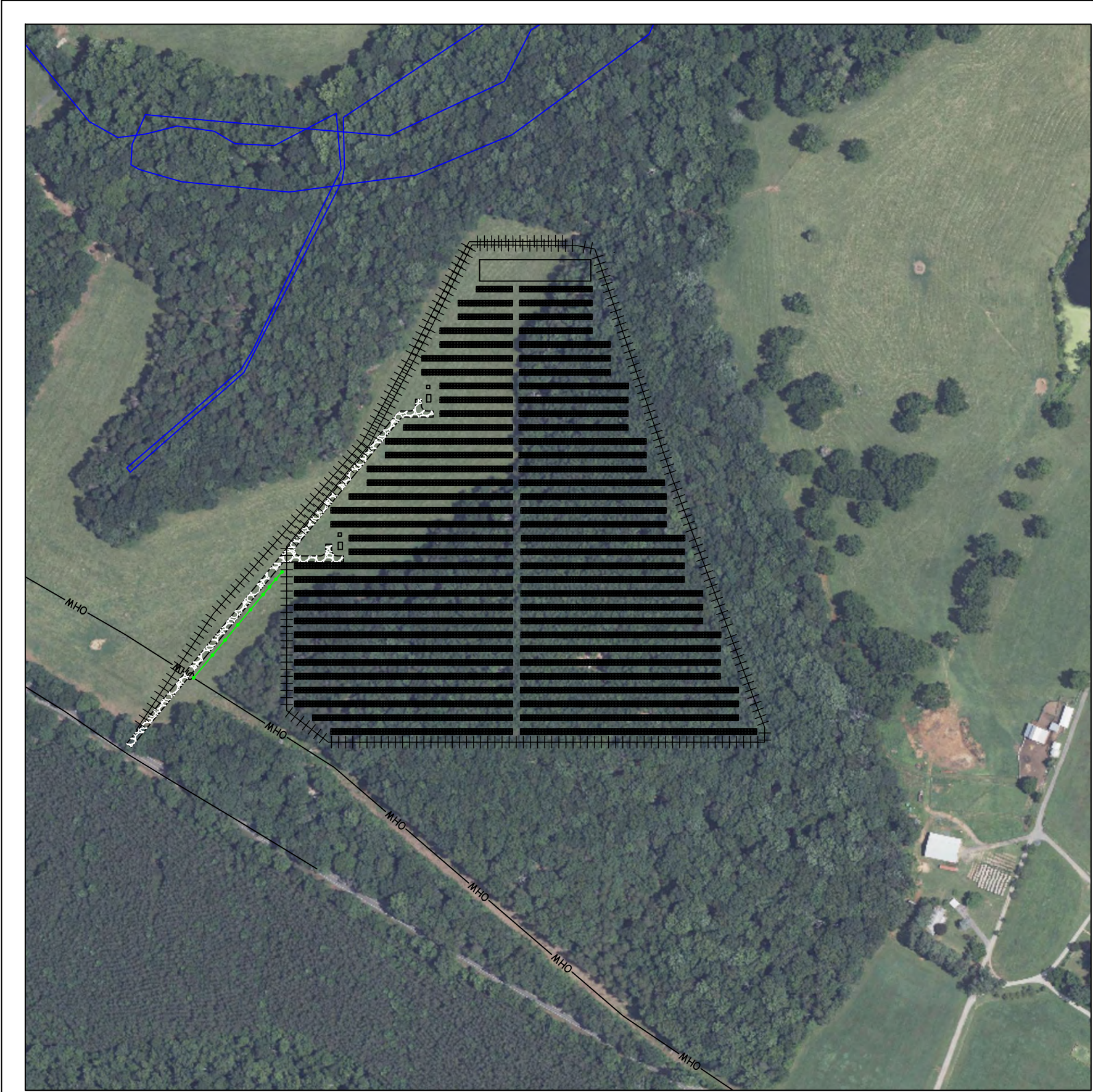
EXHIBIT D

WHISPERING CREEK COMMUNITY SOLAR GARDEN



1 ARRAY LOCATION

Scale: 1" = 2000'



2 OVERHEAD MAP

Scale: 1" = 300'

PROJECT TEAM

PROJECT OWNER
BUCKINGHAM SOLAR 1 LLC

ENGINEER OF RECORD
TBD

PROJECT DEVELOPER
NEW ENERGY EQUITY
2530 RIVA RD SUITE 200
ANNAPOLIS, MD 21401
443-267-5012

EPC CONTRACTOR
TBD

GENERAL INFO

PROJECT ACREAGE
ENTIRE PARCEL AREA: 166.62 ACRES
AREA ENCLOSED BY FENCE: ~24.08 ACRES
LIMITS OF DISTURBANCE: ~30.1 ACRES

PARCEL DESCRIPTION
PROPERTY OWNERS: IVAN AND DEBORAH DAVIS LIVING TRUST
PARCEL ID NUMBER: 151-17
LEGAL DESCRIPTION: RT 60 - 0.5 MILES EAST OF SPROUSES
CORNER 166.62 ACRES

SHEET INDEX

SHEET #	DESCRIPTION	REVISION #	REVISION DATE
T1	TITLE PAGE	-	-
PV1	SITE PLAN	-	-
PV2	PID & ZONING MAP	-	-
PV3	SOIL MAP	-	-
PV4	TOPOGRAPHY & DRAINAGE	-	-
PV5	RACKING DETAIL	-	-
PV6	FENCE DETAIL	-	-
PV7	INFILTRATION BASIN DETAIL	-	-
E1A	SLD 1	-	-
E1B	SLD 2	-	-
E2A	SYSTEM LABELS 1	-	-
E2B	SYSTEM LABELS 2	-	-
E3	INTERCONNECTION DETAIL	-	-
E4	EQUIPMENT DOCS 1	-	-
E5	EQUIPMENT DOCS 2	-	-
E6	EQUIPMENT DOCS 3	-	-



PROJECT ENTITY: BUCKINGHAM SOLAR 1 LLC

NEW ENERGY EQUITY, LLC
2530 RIVA ROAD, SUITE 200
ANNAPOLIS, MD 21041
NEWENERGYEQUITY.COM
443-267-5012

PROJECT ADDRESS
E JAMES ANDERSON HWY
DILLWYN, VA 23936

LAT: 37.517
LONG: -78.467

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q PEAK DUO XL-G11.3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.0588kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA20371 I

NO POSITION, DISTANCE, OR CLEARANCE
ISSUES WITH OVERHEAD ELECTRIC
SERVICE LINES OR OTHER UTILITIES IN
RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS
PROVIDED FOR ALL UTILITY ENERGY
EQUIPMENT INCLUDING THE METERS AND
AC DISCONNECT.

INTERCONNECTION TYPE: PRIMARY

REVISIONS

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8	SITE REDESIGN	SP	4/18/2023
9	SITE PASTURE REDESIGN	SP	5/2/2023
10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

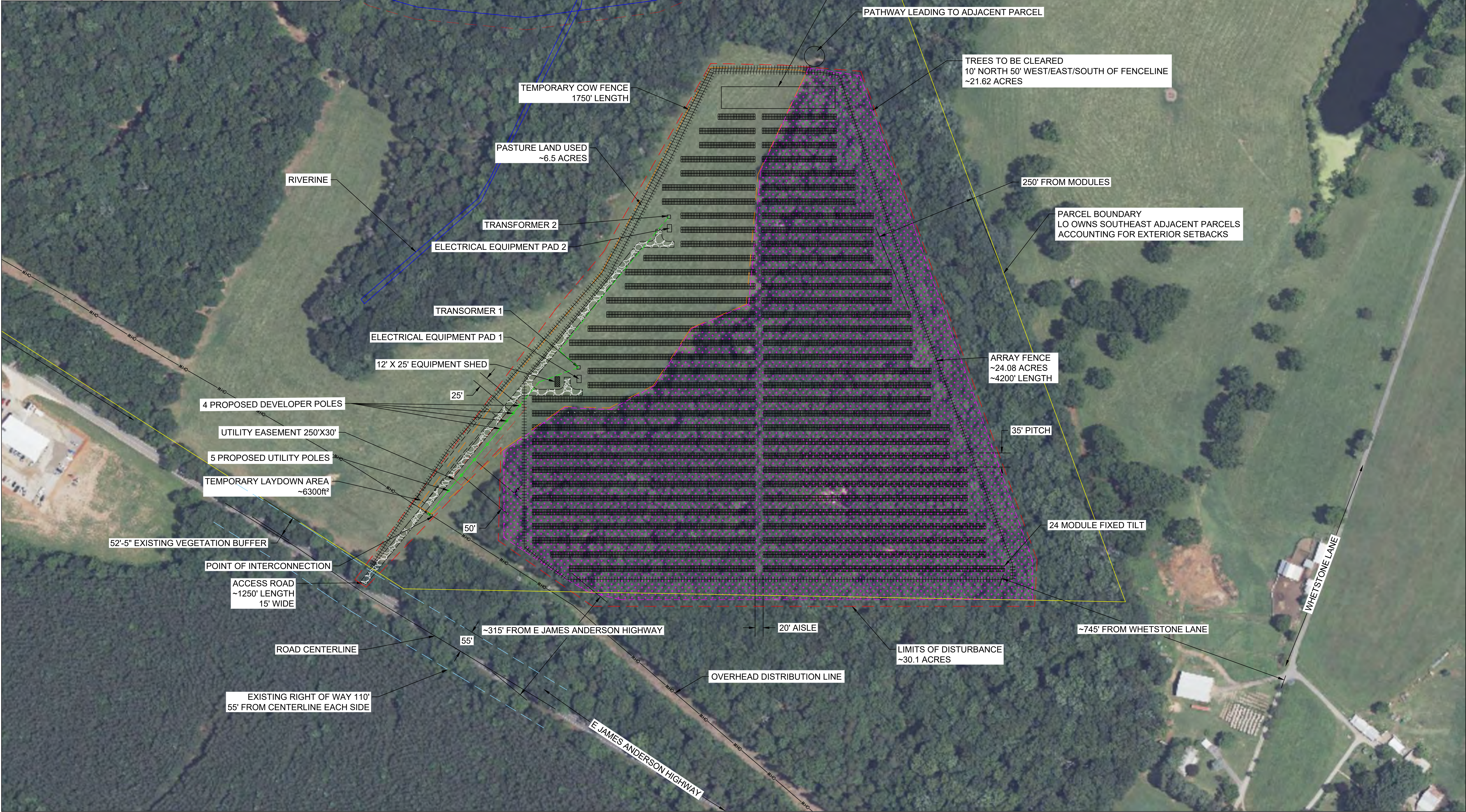
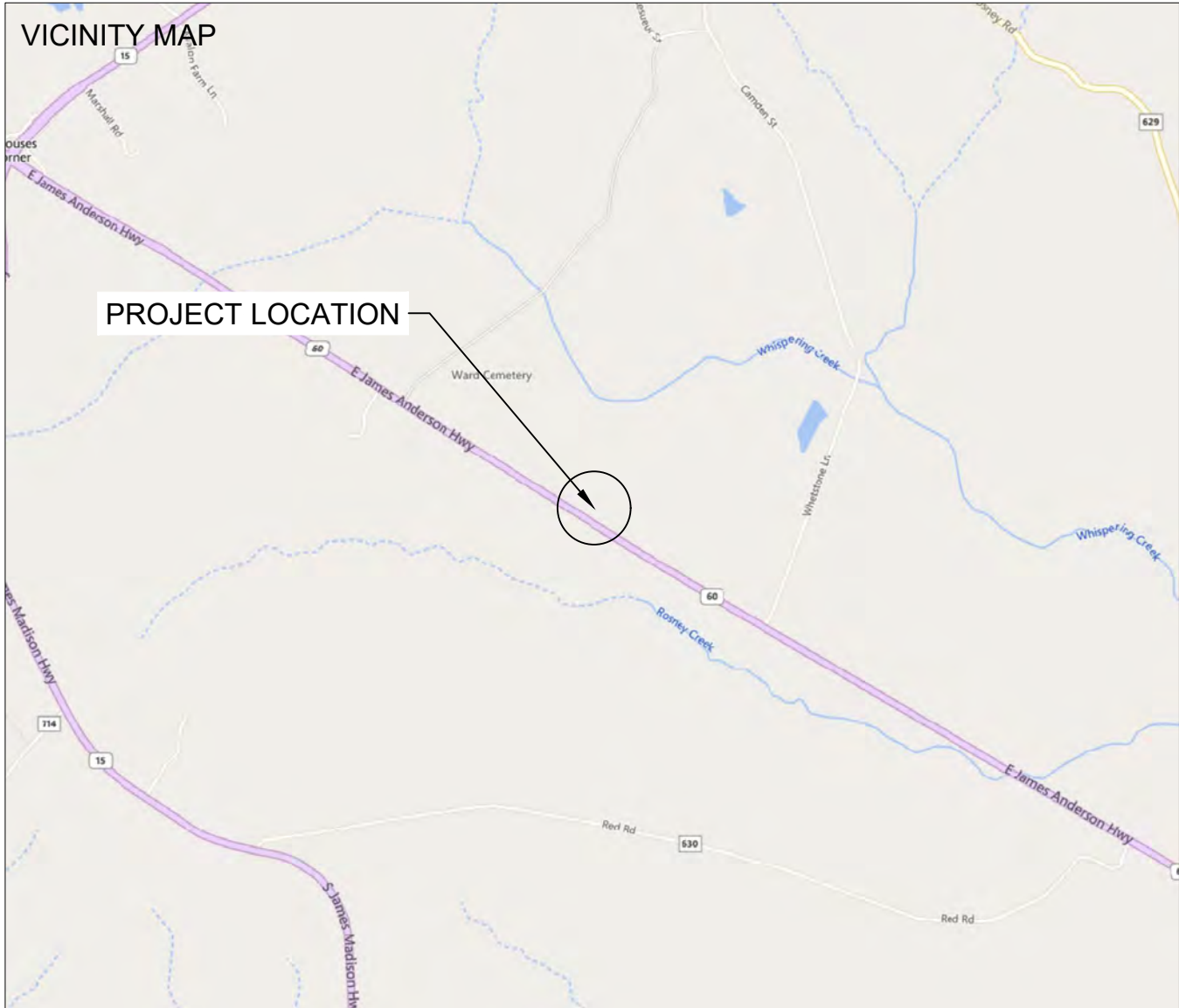
TITLE SHEET

SCALE ¹

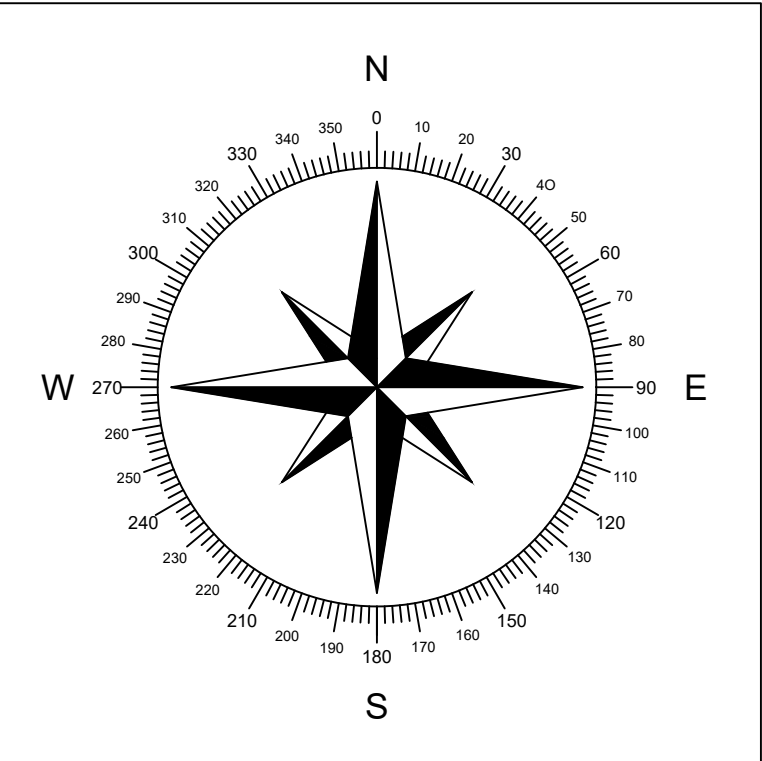
AS NOTED 0 1" 2"

SHEET

T1



SPACE FOR PE STAMP:



SHEET NOTES:
UTILITY POLES ARE SHOWN FOR INDICATING LOCATIONS ONLY. SPACING BETWEEN POLES, PHYSICAL PROTECTION BARRIER FOR SWITCHBOARDS, ETC. WILL BE ADDED IN THE DRAWINGS PREPARED FOR THE CONSTRUCTION DOCUMENTS

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NEWENERGYEQUITY.COM
443-267-5012

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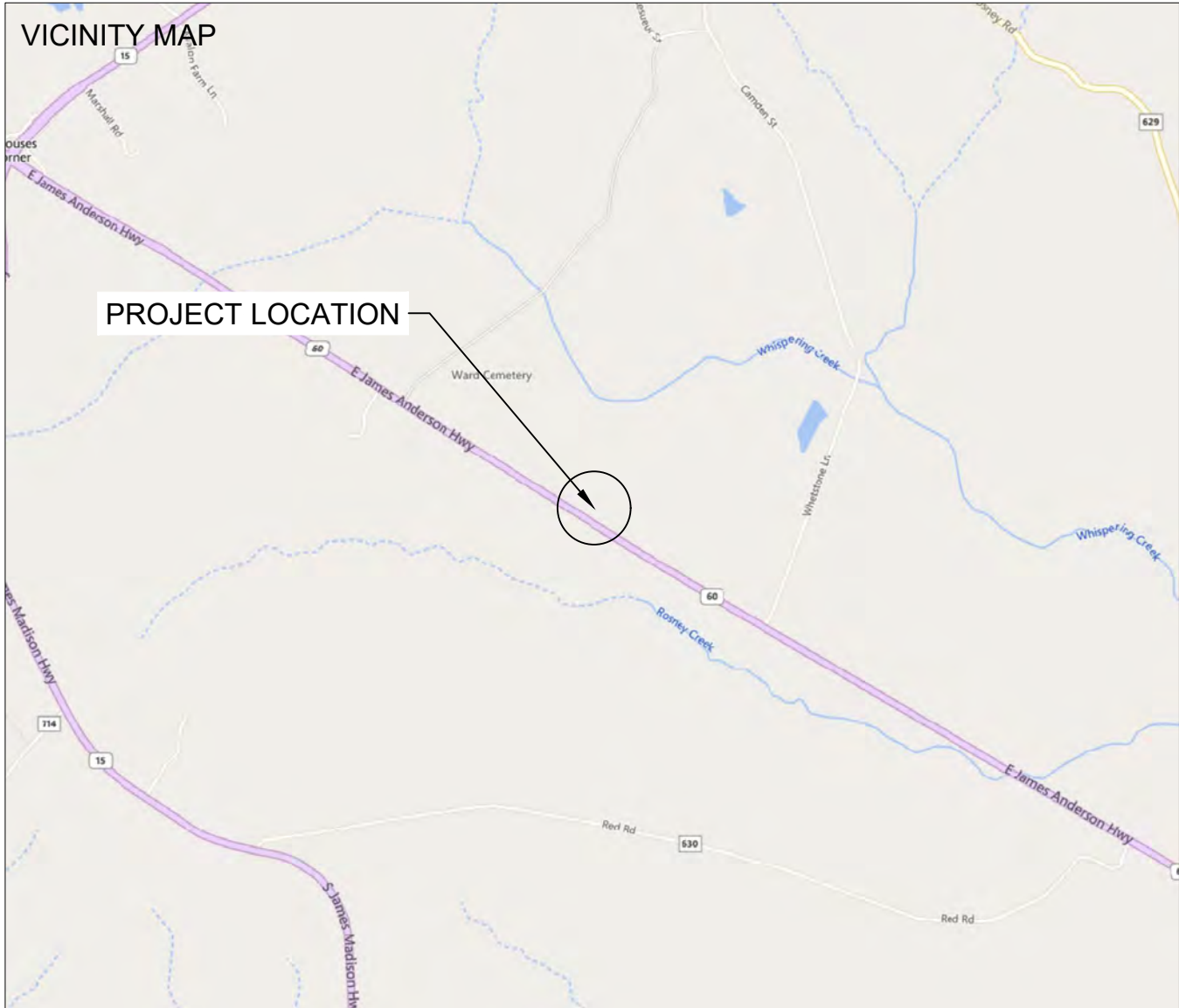
DRAWN BY
STANLEY PENG

PROJECT NAME
WHISPERING CREEK CSG

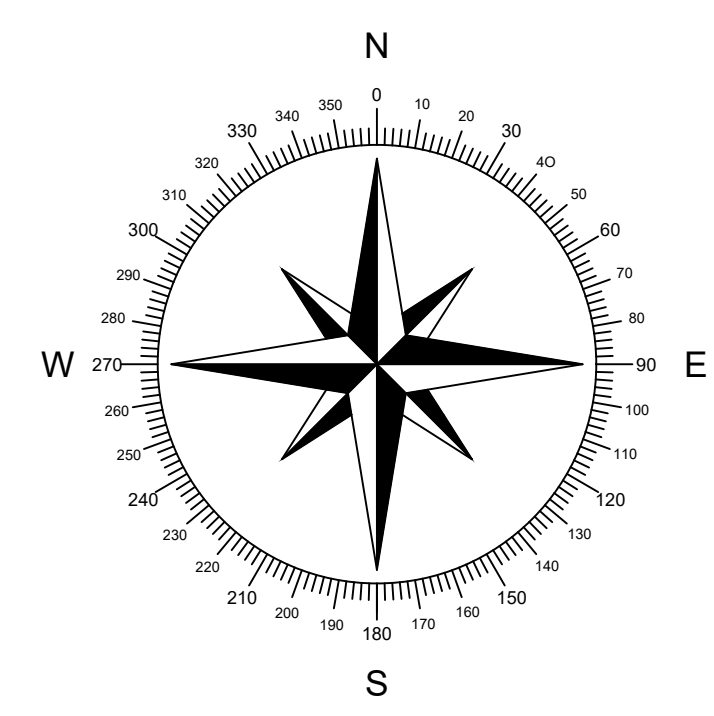
DRAWING TITLE
SITE PLAN

SCALE ¹
1" = 120'

SHEET
PV1



SPACE FOR PE STAMP:



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DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

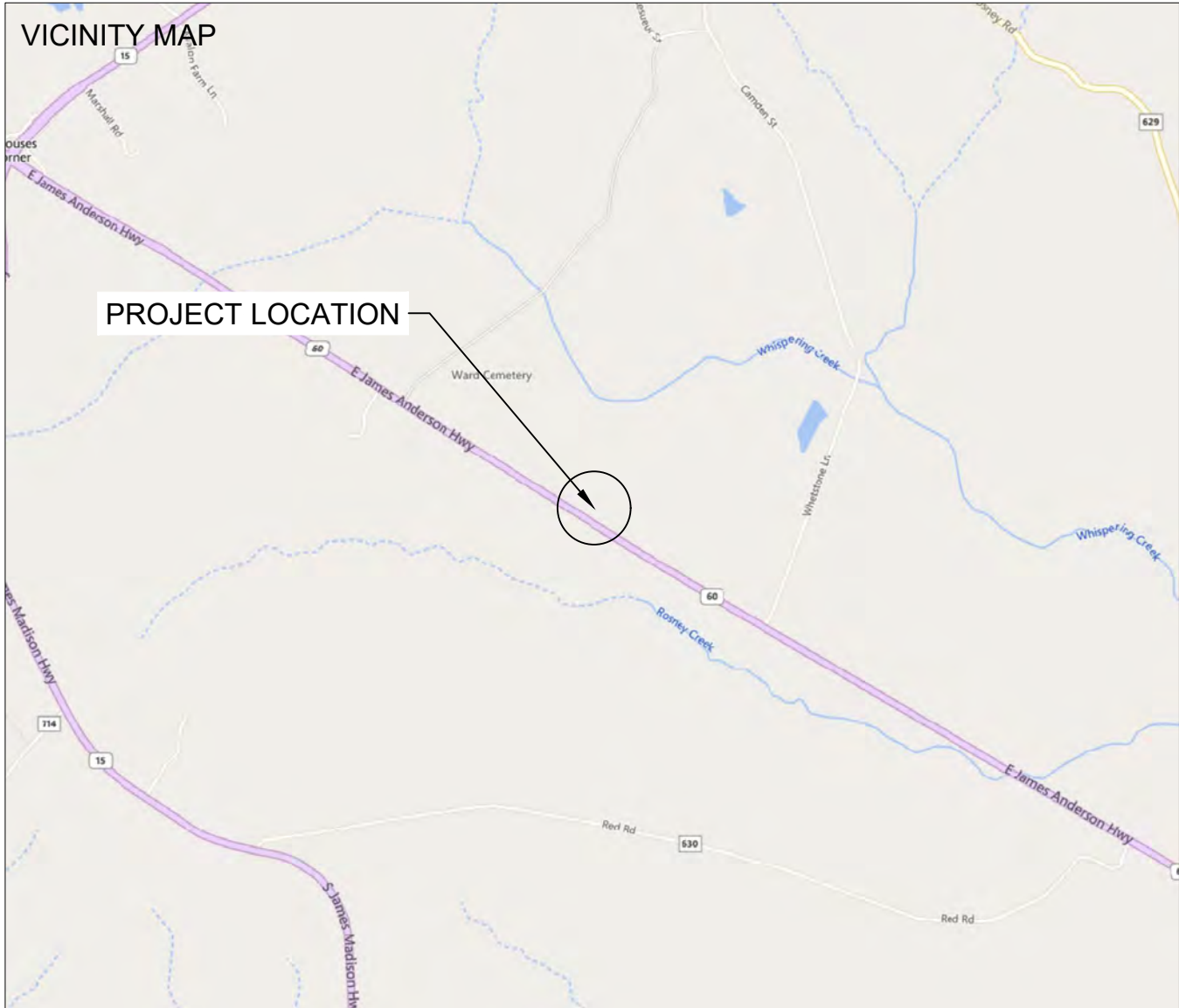
PID MAP

SCALE ¹

1" = 200' 0 1" 2"

SHEET

PV2



Buckingham County, Virginia (VA029)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10C	Bugley-Rock outcrop complex, 7 to 15 percent slopes	2.9	0.6%
12A	Codorus-Hatboro complex, 0 to 3 percent slopes, frequently flooded	31.6	6.5%
14B	Delanco loam, 2 to 7 percent slopes, rarely flooded	7.0	1.4%
19B	Grassland-Delanco complex, 2 to 7 percent slopes, rarely flooded	11.4	2.3%
21A	Hatboro loam, 0 to 2 percent slopes, frequently flooded	4.0	0.8%
23B	Littlejoe silt loam, 2 to 7 percent slopes	111.4	22.7%
23C	Littlejoe silt loam, 7 to 15 percent slopes	12.4	2.5%
28C	Oak Level loam, 7 to 15 percent slopes, extremely bouldery	12.1	2.5%
36C	Spears Mountain silt loam, 7 to 15 percent slopes	205.1	41.8%
36D	Spears Mountain silt loam, 15 to 25 percent slopes	83.6	17.0%
W	Water	8.8	1.8%
Totals for Area of Interest		490.4	100.0%



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10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

SOIL MAP

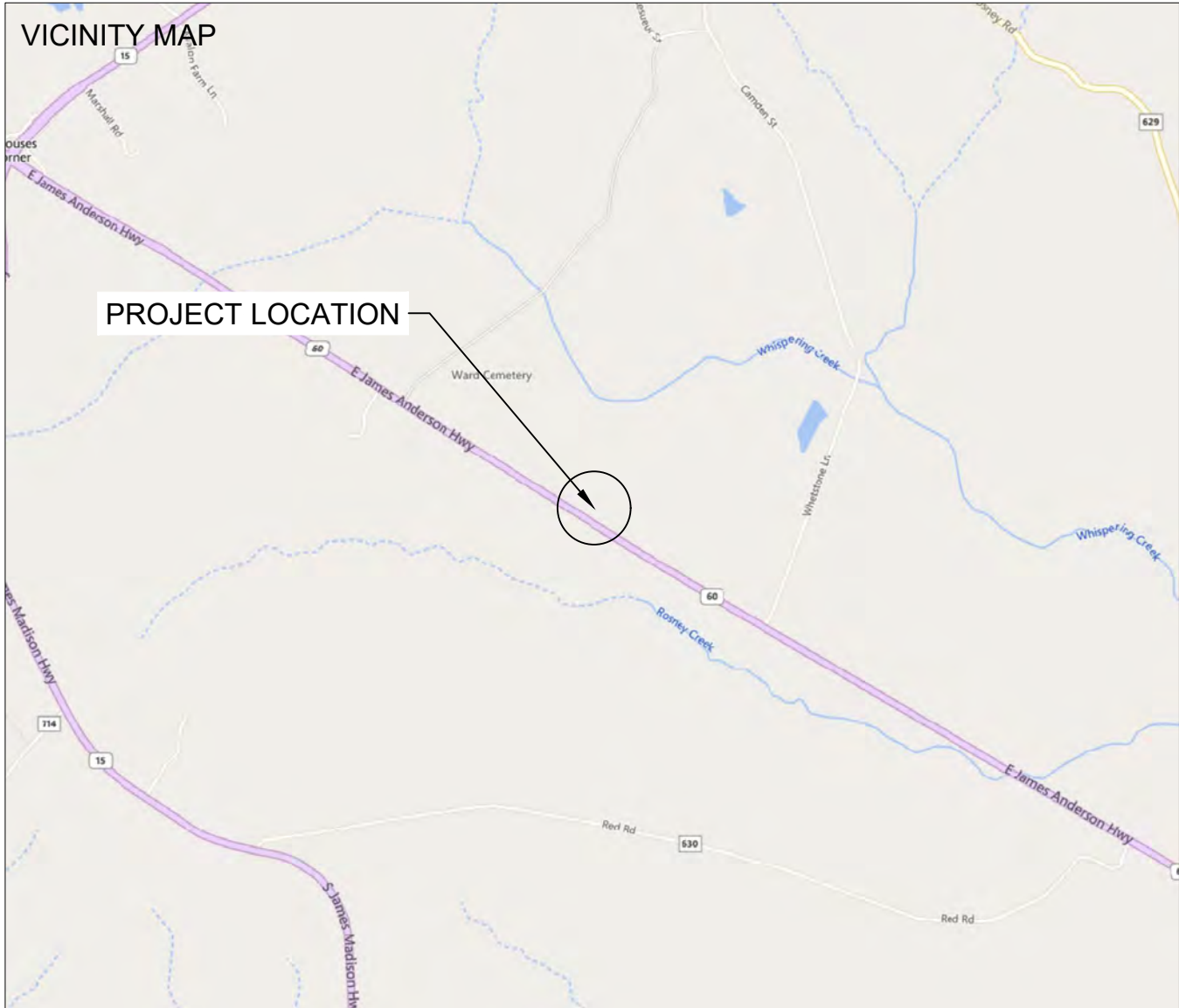
SCALE

1" = 180'

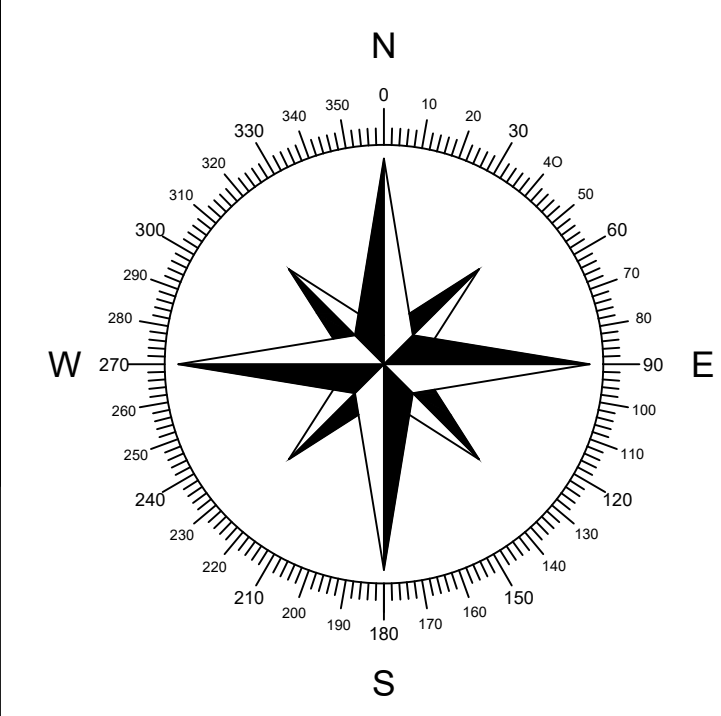


SHEET

PV3



SPACE FOR PE STAMP:



SHEET NOTES:

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443-267-5012

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LAT: 37.517
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SYSTEM SPECIFICATIONS

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SYSTEM SIZE AC	5.000 MW
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OTHER NOTES

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DRAWN BY

STANLEY PENG

PROJECT NAME

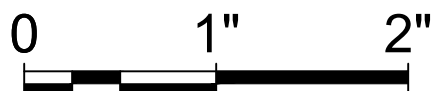
WHISPERING CREEK CSG

DRAWING TITLE

TOPOGRAPHY & DRAINAGE

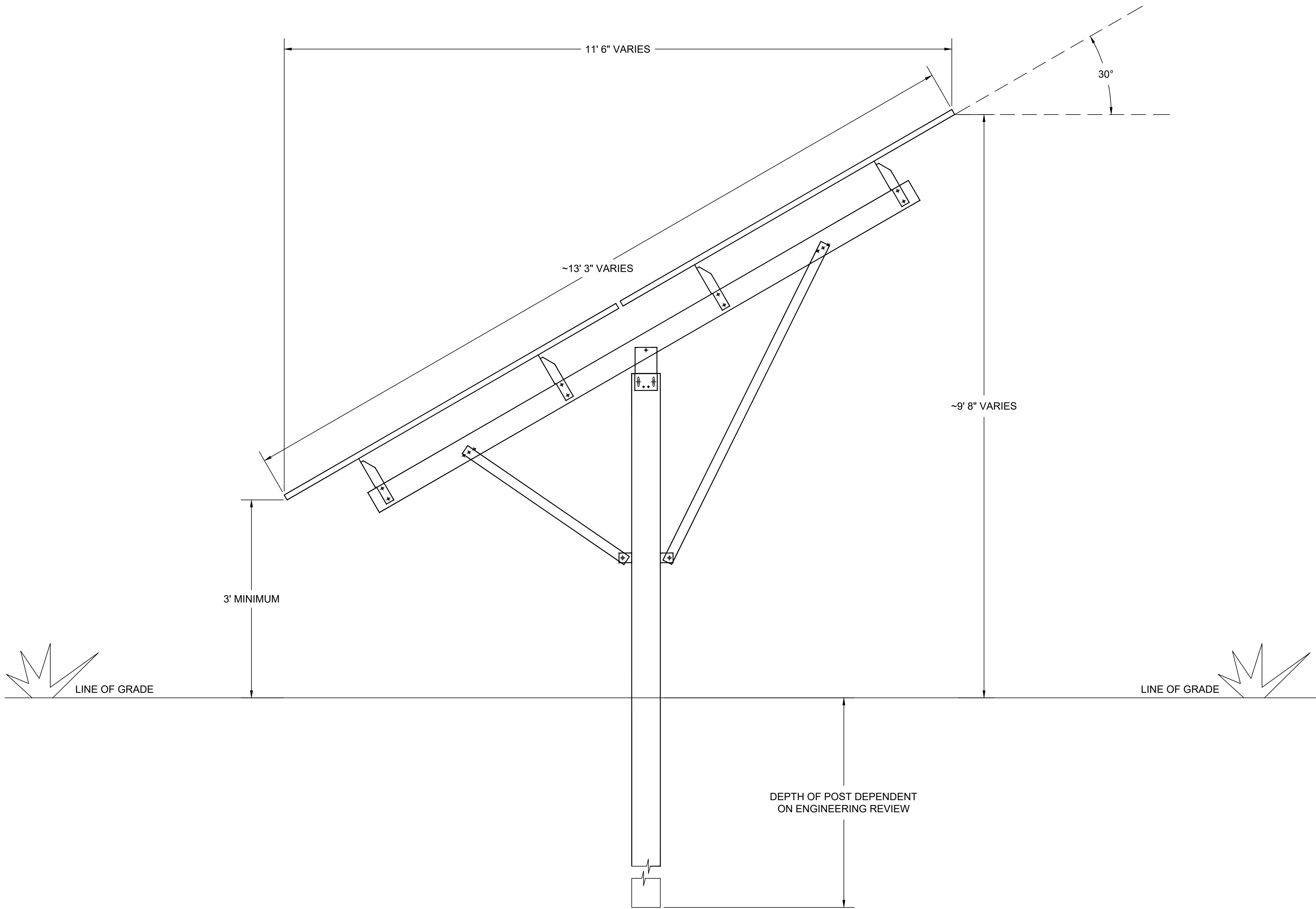
SCALE

1" = 200'



SHEET

PV4



1 FIXED TILT RACKING EAST-WEST ELEVATION
NTS



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10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

FT RACKING DETAIL

SCALE ¹

NTS

SHEET

PV5

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
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DC/AC RATIO	1.506
AZIMUTH	180°
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STANLEY PENG

PROJECT NAME

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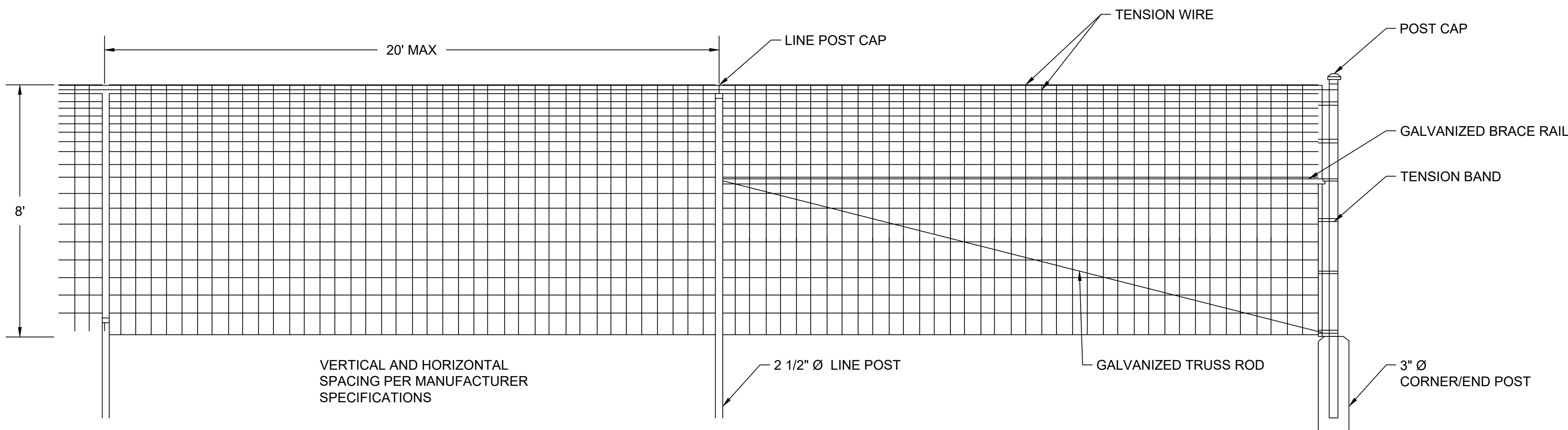
FENCE DETAIL

SCALE ¹

NTS

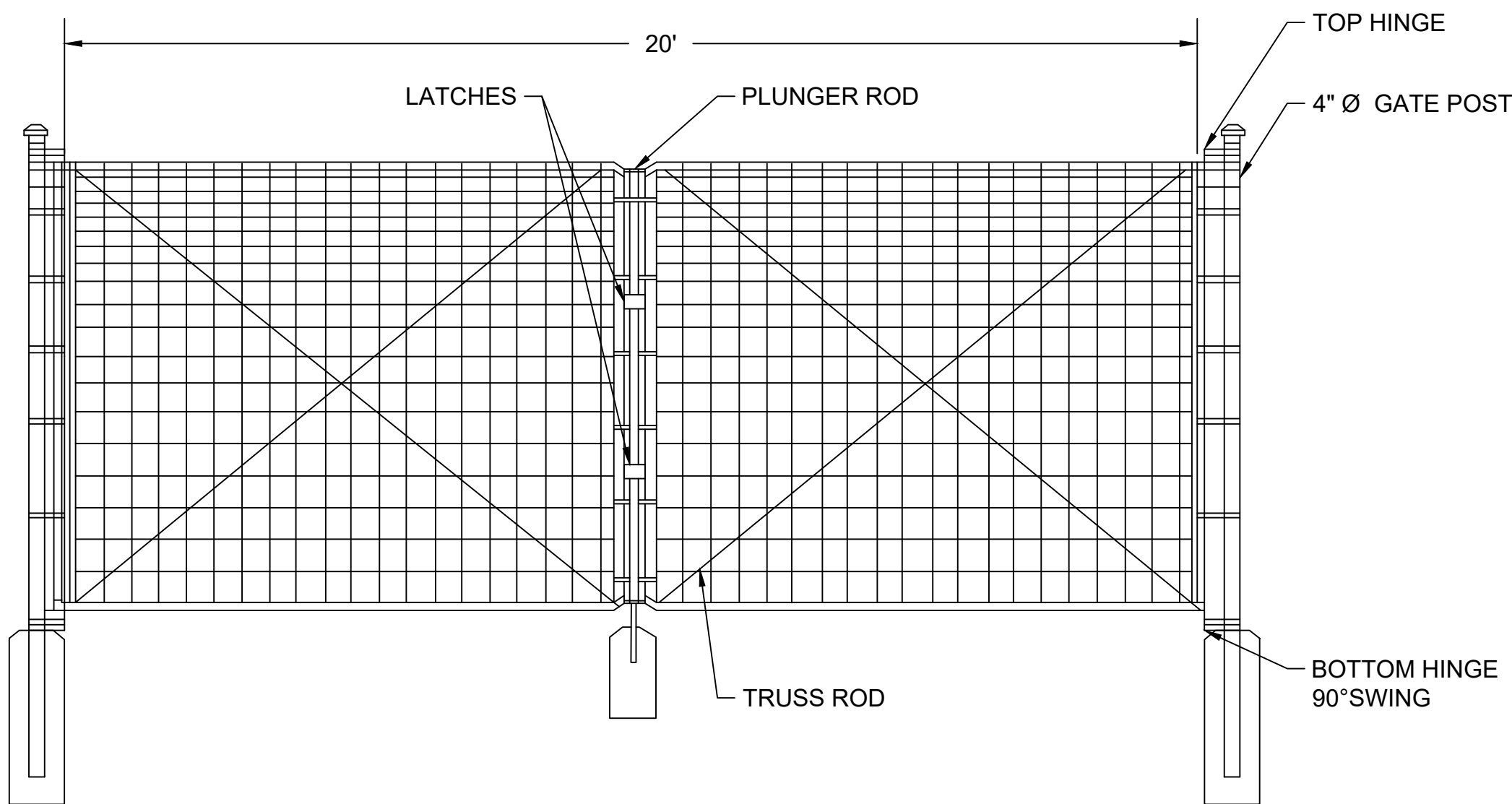
SHEET

PV6



1 8' FIXED KNOT FENCE

NTS



2 8' FIXED KNOT FENCE GATE

NTS

NOTE:
1. THIS DRAWING IS FOR INFORMATIONAL PURPOSES ONLY
AND NOT TO BE USED FOR CONSTRUCTION.
2. DO NOT SCALE DRAWING

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AC DISCONNECT.

INTERCONNECTION TYPE: PRIMARY

REVISIONS

#	DESCRIPTION	BY	DATE
1	2023 REDESIGN	SP	3/15/2023
3	ACCESS ROAD REDESIGN	SP	3/20/2023
4	CUP PACKAGE	SP	3/22/2023
5	SITE PLAN REDESIGN	SP	3/30/2023
6	ADDED XFMR IMPEDANCE	TMP	4/3/2023
7	PROJECT NAME CHANGE	SP	4/4/2023
8	SITE REDESIGN	SP	4/18/2023
9	SITE PASTURE REDESIGN	SP	5/2/2023
10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

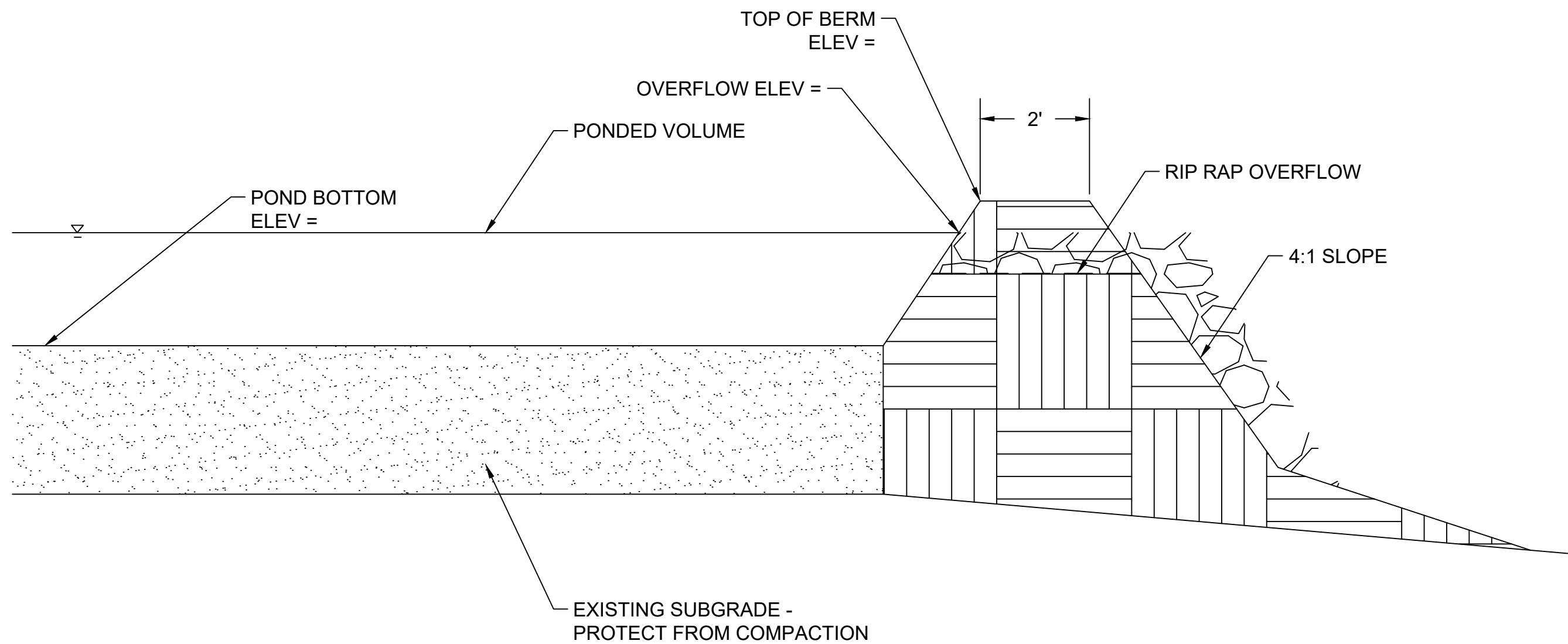
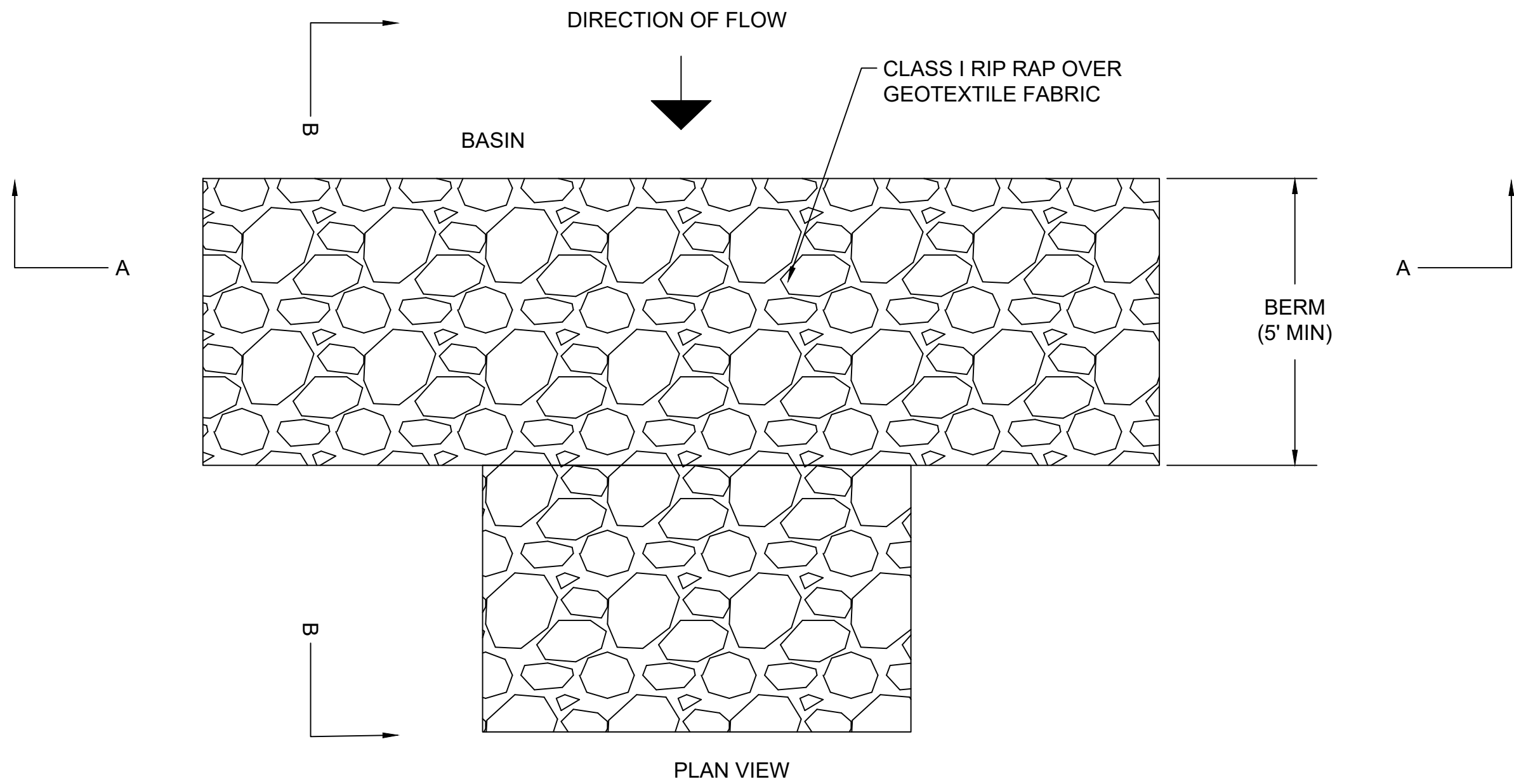
INFILTRATION BASIN DETAIL

SCALE ¹

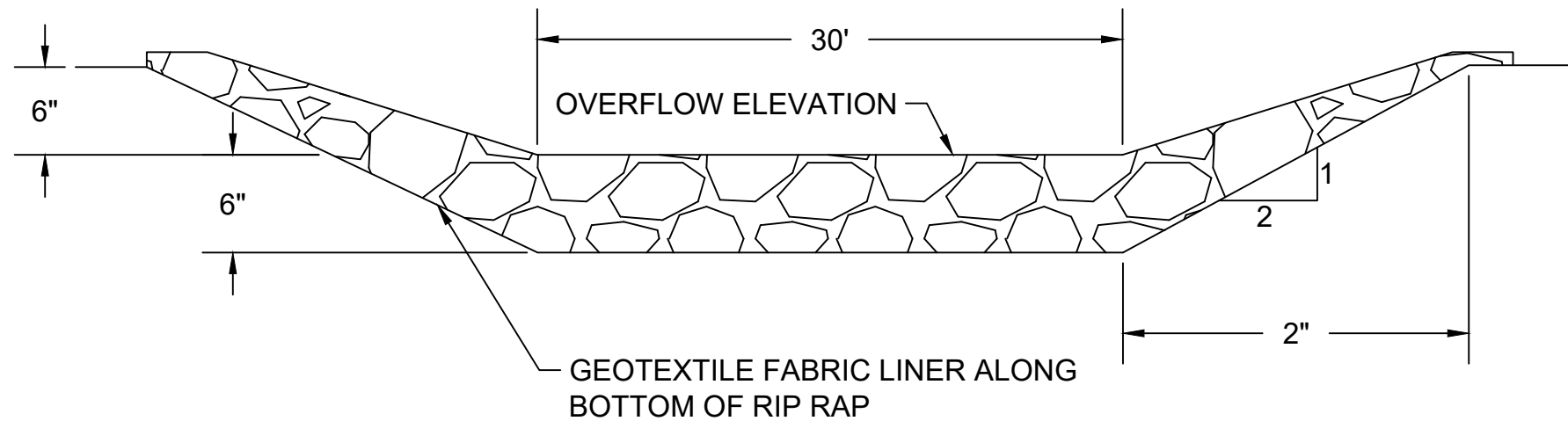
NTS

SHEET

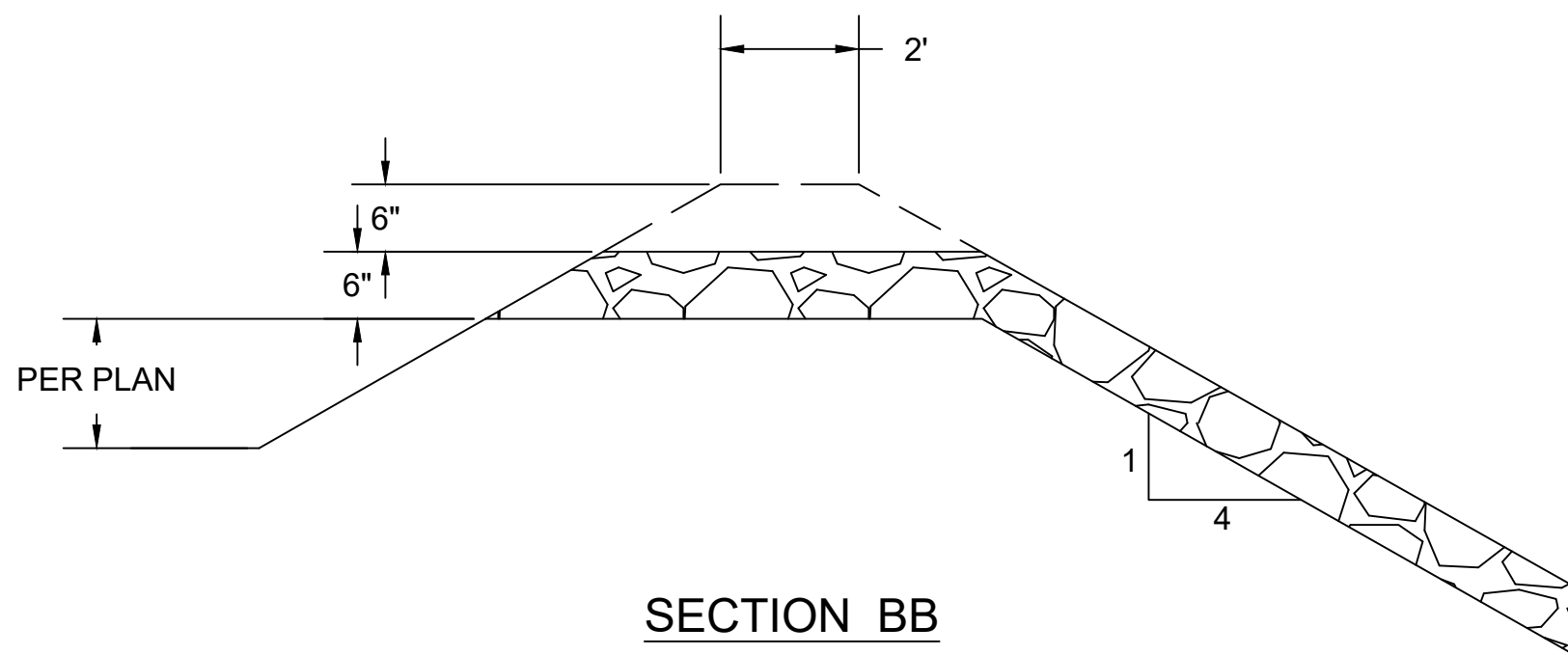
PV7



1 INFILTRATION BASIN
NTS



SECTION AA



SECTION BB

2 RIP RAP OVERFLOW
NTS

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q.PEAK DUO XL-G11.3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.0588kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA20371 I

NO POSITION, DISTANCE, OR CLEARANCE
ISSUES WITH OVERHEAD ELECTRIC
SERVICE LINES OR OTHER UTILITIES IN
RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS
PROVIDED FOR ALL UTILITY ENERGY
EQUIPMENT INCLUDING THE METERS AND
AC DISCONNECT.

INTERCONNECTION TYPE: PRIMARY

REVISIONS

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10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

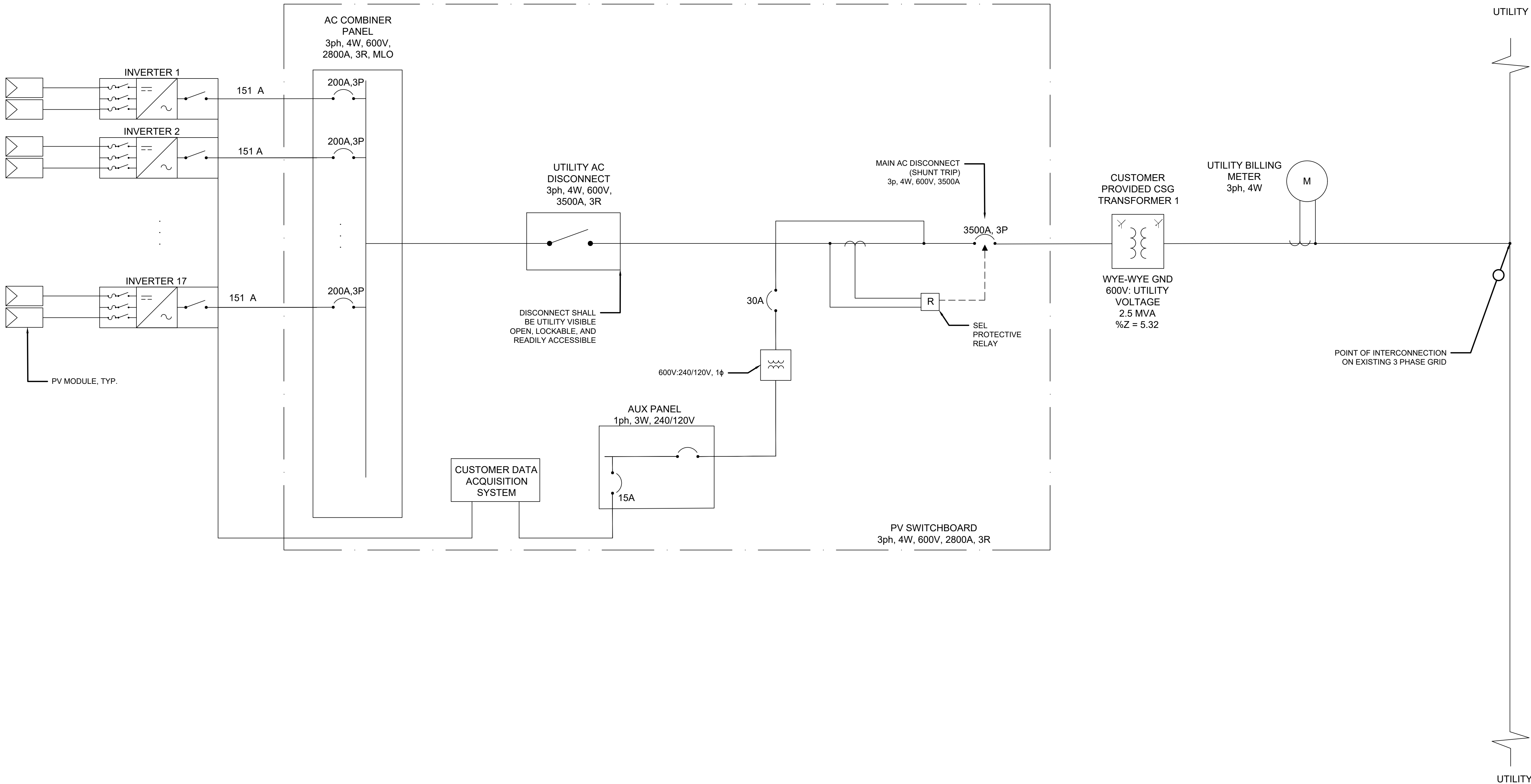
SINGLE LINE

SCALE¹

NTS

SHEET

E1A



INVERTER	
Manufacturer	SMA
Model	SUNNY HIGHPOWER PEAK3 150-US
Output Voltage (V)	600
Output Power (kW)	150 kW
Phase	3
CEC Efficiency (%)	99.0
Output Current (A)	151 A
Input Current (A)	180
Power Factor	TBD
INVERTER COMPLIES WITH NEC 690.35, IEEE 1547, UL1741, AND HAS INTEGRATED ARC FAULT PROTECTION	

PV MODULE	
Manufacturer	HANWHA
Model	HANWHA Q.PEAK DUO XL-G11.3_BFG - 580
Power (W)	580
Voc (V)	53.56000
Isc (A)	13.55000
Vmp (V)	44.88000
Imp (A)	12.92000
Efficiency (%)	21%

NOTES:

- PV MODULE SPEC SHALL BE PROVIDED FOR CONSTRUCTION DOCUMENTS
- SYSTEM SHALL BE COMPLIANT WITH NEC 2020

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q PEAK DUO XL-G11.3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.0588kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA20371 I

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10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

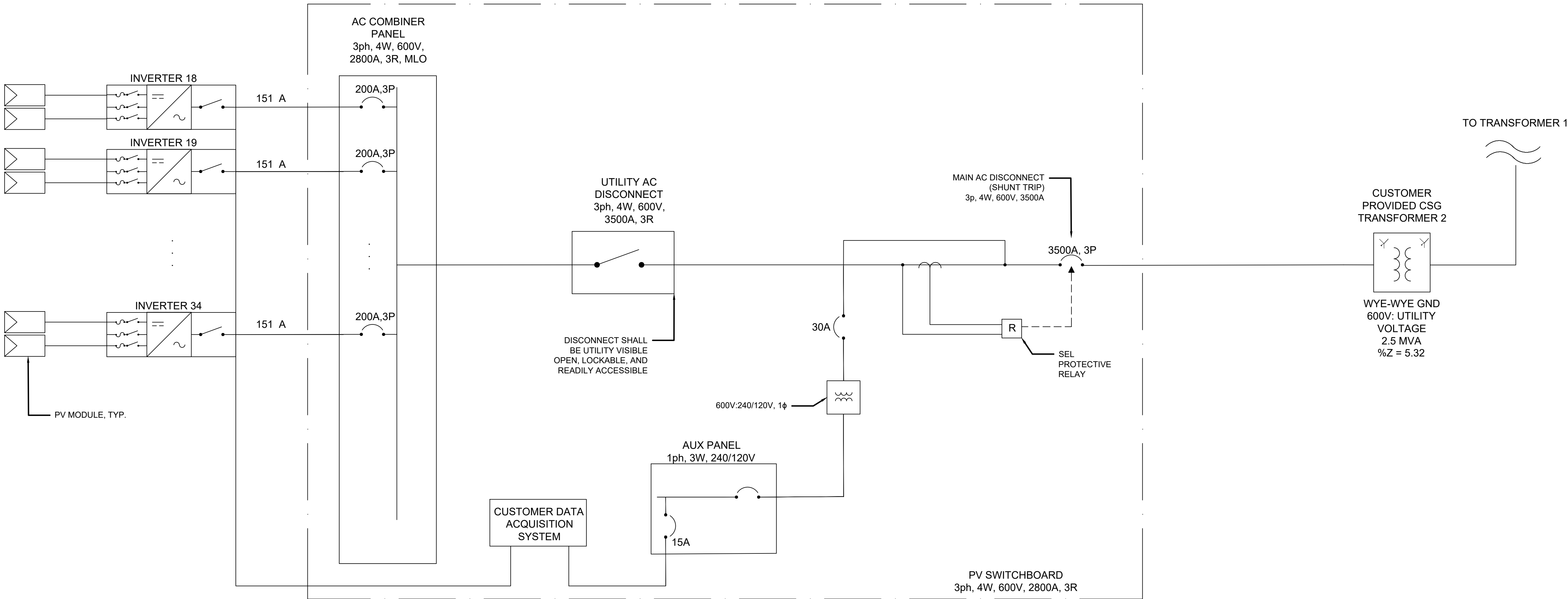
SINGLE LINE

SCALE ¹

NTS

SHEET

E1B



INVERTER	
Manufacturer	SMA
Model	SUNNY HIGHPOWER PEAK3 150-US
Output Voltage (V)	600
Output Power (kW)	150kW
Phase	3
CEC Efficiency (%)	99.0
Output Current (A)	151 A
Input Current (A)	180
Power Factor	TBD
INVERTER COMPLIES WITH NEC 690.35, IEEE 1547, UL1741, AND HAS INTEGRATED ARC FAULT PROTECTION	

PV MODULE	
Manufacturer	HANWHA
Model	HANWHA Q PEAK DUO XL-G11.3_BFG - 580
Power (W)	580
Voc (V)	53.56000
Isc (A)	13.55000
Vmp (V)	44.88000
Imp (A)	12.92000
Efficiency (%)	21%

NOTES:

- PV MODULE SPEC SHALL BE PROVIDED FOR CONSTRUCTION DOCUMENTS
- SYSTEM SHALL BE COMPLIANT WITH NEC 2020

A

6"

2 1/2"

⚠ WARNING

ELECTRIC SHOCK HAZARD
TERMINALS ON THE LINE AN LOAD SIDES
MAY BE ENERGIZED IN THE OPEN POSITION

B

6 1/4"

4 1/2"

⚠ WARNING

ARC FLASH AND SHOCK HAZARD
APPROPRIATE PPE REQUIRED

NOMINAL SYSTEM VOLTAGE
FLASH HAZARD BOUNDARY
CAL/CM² FLASH HAZARD AT 18"
ARC FLASH PPE CATEGORY
LIMITED APPROACH
RESTRICTED APPROACH
PROHIBITED APPROACH

C

6"

2 1/2"

⚠ WARNING

POWER SOURCE OUTPUT CONNECTION
DO NOT RELOCATE THIS OVERCURRENT
DEVICE.

D

6"

2 1/2"

⚠ WARNING

THIS EQUIPMENT FED BY MULTIPLE
SOURCES. TOTAL RATING OF ALL
OVERCURRENT DEVICES EXCLUDING MAIN
SUPPLY OVERCURRENT DEVICE SHALL NOT
EXCEED AMPACITY OF BUSBAR.

E

6"

2 1/2"

⚠ WARNING

TURN OFF PHOTOVOLTAIC AC DISCONNECT
PRIOR TO WORKING INSIDE PANEL

F

6 3/4"

2"

MAXIMUM VOLTAGE
MAXIMUM CIRCUIT CURRENT

MAXIMUM RATED OUTPUT CURRENT OF
THE CHARGE CONTROLLER OR
DC-TO-DC CONVERTER (IF INSTALLED)

G

7 1/2"

1"

SOLAR DATA & MONITORING

H

7 1/2"

1"

CUST. GENERATION METER

J

7 1/2"

1"

UTILITY BILLING METER

K

6"

1 1/2"

XXkW INVERTER #X
OUTPUT CURRENT
OPERATING VOLTAGE

L

7"

2"

MAXIMUM OPERATING VOLTAGE
EQUALIZATION VOLTAGE
POLARITY OF GROUNDED CONDUCTOR

M

6"

4 1/2"

SOLAR AC COMBINER
PANEL #1
OUTPUT CURRENT
OPERATING VOLTAGE
NEUTRAL WIRE IS SIZED PER EGC FOR
CURRENT SENSING ONLY. DO NOT
CONNECT ADDITIONAL LOADS TO
ACCUMULATION PANEL WITHOUT PROPER
ENGINEERING SUPERVISION AND PV
SYSTEM OWNER'S FORMAL APPROVAL

N

7 1/4"

1 1/2"

WARNING: PHOTOVOLTAIC
POWER SOURCE

O

7 1/4"

1 1/2"

RAPID SHUTDOWN SWITCH
FOR SOLAR PV SYSTEM

- GENERAL NOTES:
- Detail such as voltage, ampere, etc. for each labels shall be included in the "Approved for construction" drawing.
 - Calculated values for Arc Flash label will be provided in the "Approved for construction" drawing.

P

7 1/2"

1"

PV SOLAR AC DISCONNECT

Q

7 1/2"

1"

PV SOLAR DC DISCONNECT

R

6 3/4"

2"

UTILITY PV SYSTEM AC
DISCONNECT
OUTPUT CURRENT
OPERATING VOLTAGE

S

6 3/4"

2"

PV SYSTEM AC
DISCONNECT
OUTPUT CURRENT
OPERATING VOLTAGE

T

6 3/4"

2"

MAIN PV SYSTEM AC
DISCONNECT
OUTPUT CURRENT
OPERATING VOLTAGE

U

6 3/4"

2"

SOLAR SYSTEM POINT OF
INTERCONNECTION
OUTPUT CURRENT
OPERATING VOLTAGE

V

7"

7"

CAUTION

POWER TO THIS SERVICE IS ALSO SUPPLIED
FROM THE FOLLOWING SOURCES WITH
DISCONNECTS LOCATED AS SHOWN

PV ARRAY

UTILITY AC
DISCONNECT

INVERTER AC
DISCONNECT

NORTH

NEWENERGY
EQUITY

PROJECT ENTITY: BUCKINGHAM SOLAR 1 LLC

NEW ENERGY EQUITY, LLC
2530 RIVA ROAD, SUITE 200
ANNAPOLIS, MD 21041
NEWENERGYEQUITY.COM
443-267-5012

PROJECT ADDRESS
E JAMES ANDERSON HWY
DILLWYN, VA 23936

LAT: 37.517
LONG: -78.467

SYSTEM SPECIFICATIONS	
SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q PEAK DUO XL-G11.3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.058kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA	
MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA20371 I

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DRAWN BY
STANLEY PENG

PROJECT NAME
WHISPERING CREEK CSG

DRAWING TITLE
SYSTEM LABELS A

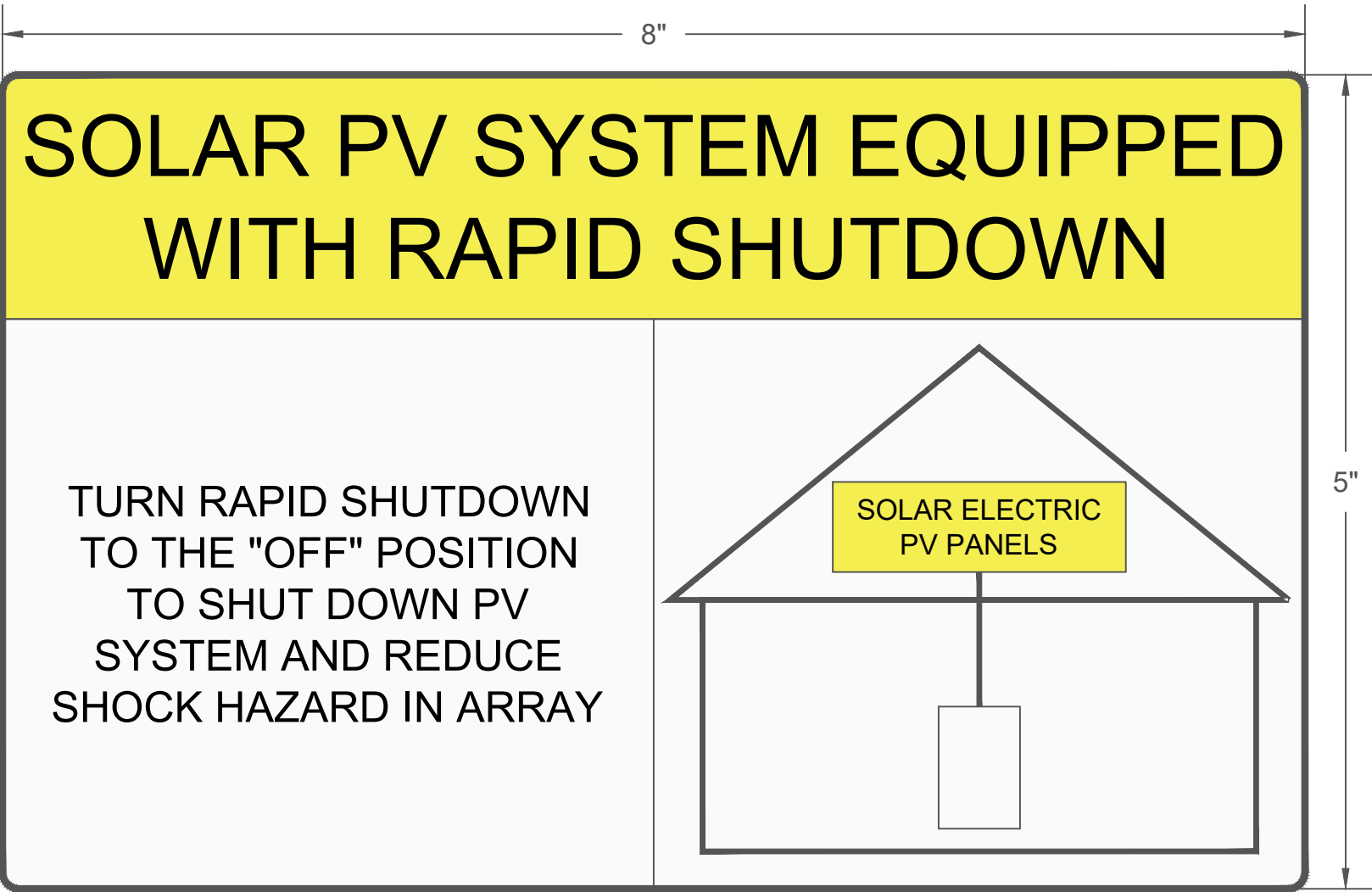
SCALE ¹
NTS

SHEET
E2A

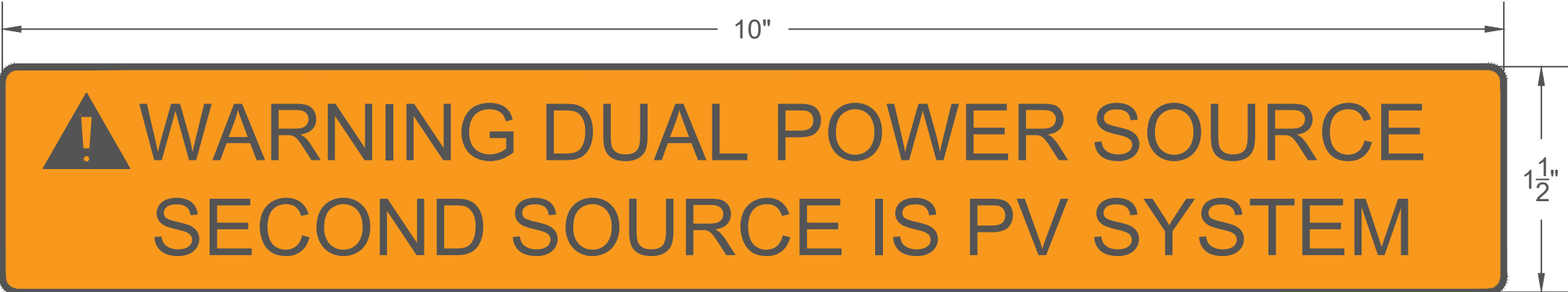
DRAWING SHEETS AND CONTENTS NOT TO BE DISTRIBUTED WITHOUT EXPLICIT WRITTEN CONSENT FROM NEW ENERGY EQUITY LLC.

¹ DRAWING SCALE ACCURATE WHEN THIS PAGE IS PRINTED ON 24"x36" PAPER.

W



X



GENERAL NOTES:

- (1) ALL LABELS MUST COMPLY WITH 2020 NEC 110.21(B):
- (2) LABELS AS PROVIDED AND NOTED ON THIS SHEET MEET WARNING, EFFECTIVE WORDING AND COLOR/SYMBOL REQUIREMENTS
- (3) LABELS SHALL BE PERMANENTLY AFFIXED TO EQUIPMENT OR WIRING METHOD
- (4) LABELS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. STICKERS OF PROPER DURABILITY AND ADHESION ARE PREFERRED. REFERENCE ANSI Z535.4-2011 FOR GUIDELINES.

SPECIFIC LABEL NOTES:

- A. 2020 NEC 690.13(D)
- B. 2020 NEC 110.16
- C. 2020 NEC 705.12(B)(1)(b)
- D. 2020 NEC 110.27(C)
- E. 2020 NEC 110.27(C)
- F. 2020 NEC 690.53
- G. UTILITY REQUIREMENT
- H. UTILITY REQUIREMENT
- I. LABEL REMOVED
- J. UTILITY REQUIREMENT
- K. 2020 NEC 690.54
- L. 2020 NEC 690.55
- M. LABEL FOR ACCUMULATION PANEL
- N. 2020 NEC 690.31(F)
- O. 2020 NEC 690.56(C)
- P. 2020 NEC 690.13(B)
- Q. 2020 NEC 690.13(B)
- R. 2020 NEC 690.54
- S. 2020 NEC 690.54
- T. 2020 NEC 690.13(B)
- U. LABEL FOR POINT OF INTERCONNECTION
- V. 2020 NEC 705.10 SYSTEM PLACCARD
- W. 2020 NEC 690.56(C)(1)
- X. 2020 NEC 690.59

EQUIPMENT	LABELS
ACCUMULATION PANELS, COMBINER BOXES, PULL BOXES, ENCLOSURES	A, B, E, M
DC CONDUIT	N
RAPID SHUTDOWN	O, W
ENERGY STORAGE	L
INVERTERS	K
MONITORING EQUIPMENT	G
METERS	H, J, X
DC DISCONNECT	A, F, Q
AC DISCONNECT	A, B, E, O, P, R, S, T, X
POINT OF INTERCONNECTION	A, C, D, U, V, E



PROJECT ENTITY: BUCKINGHAM SOLAR 1 LLC

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LAT: 37.517
LONG: -78.467

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q PEAK DUO XL-G11.3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.0588kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA20371 I

NO POSITION, DISTANCE, OR CLEARANCE ISSUES WITH OVERHEAD ELECTRIC SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS PROVIDED FOR ALL UTILITY ENERGY EQUIPMENT INCLUDING THE METERS AND AC DISCONNECT.

INTERCONNECTION TYPE: PRIMARY

REVISIONS

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10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

SYSTEM LABELS B

SCALE ¹

NTS

SHEET

E2B

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
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DESIGN CRITERIA

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WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA203711

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DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

ELECTRICAL DETAILS

SCALE¹

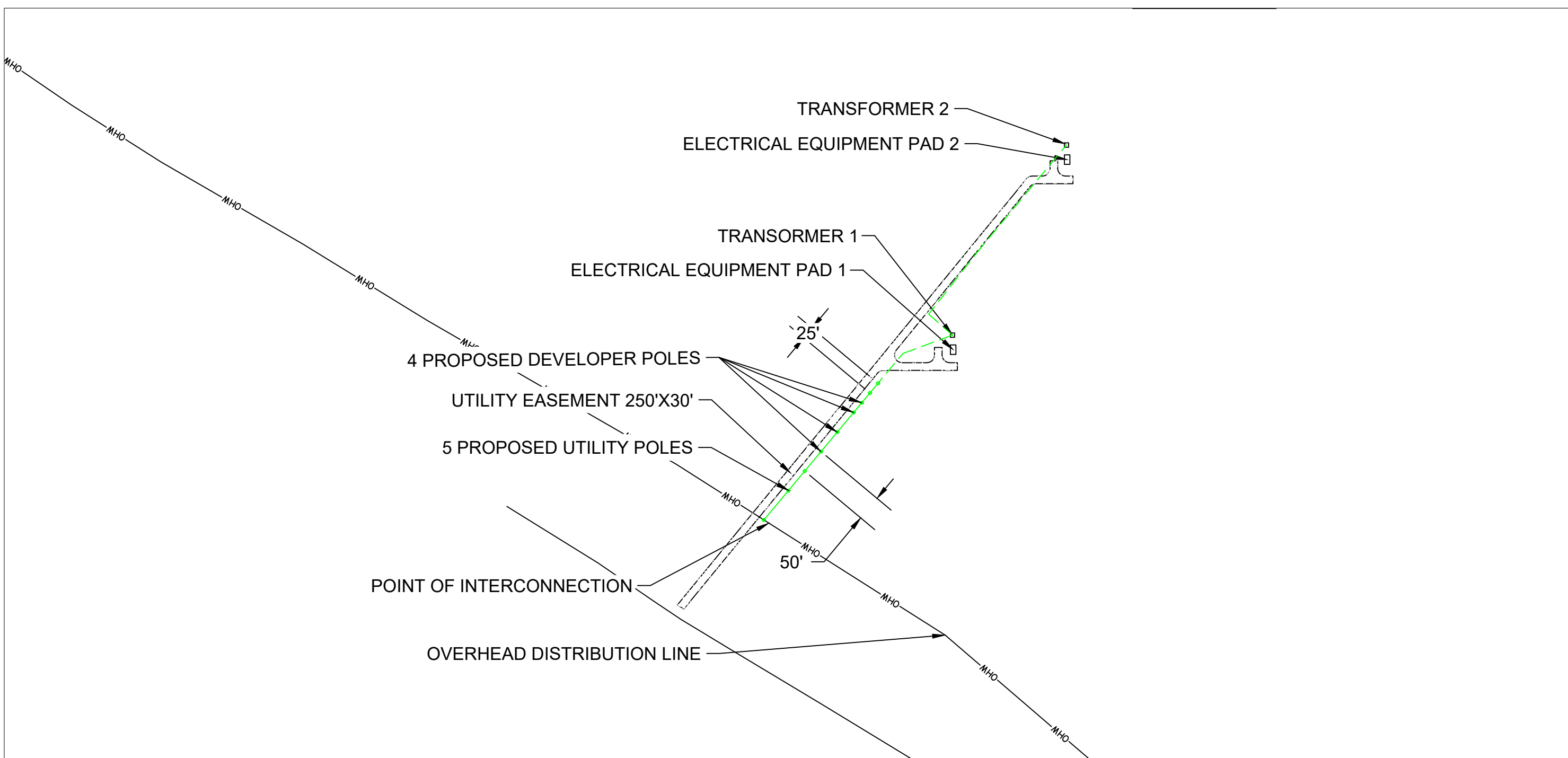
AS NOTED

SHEET

E3

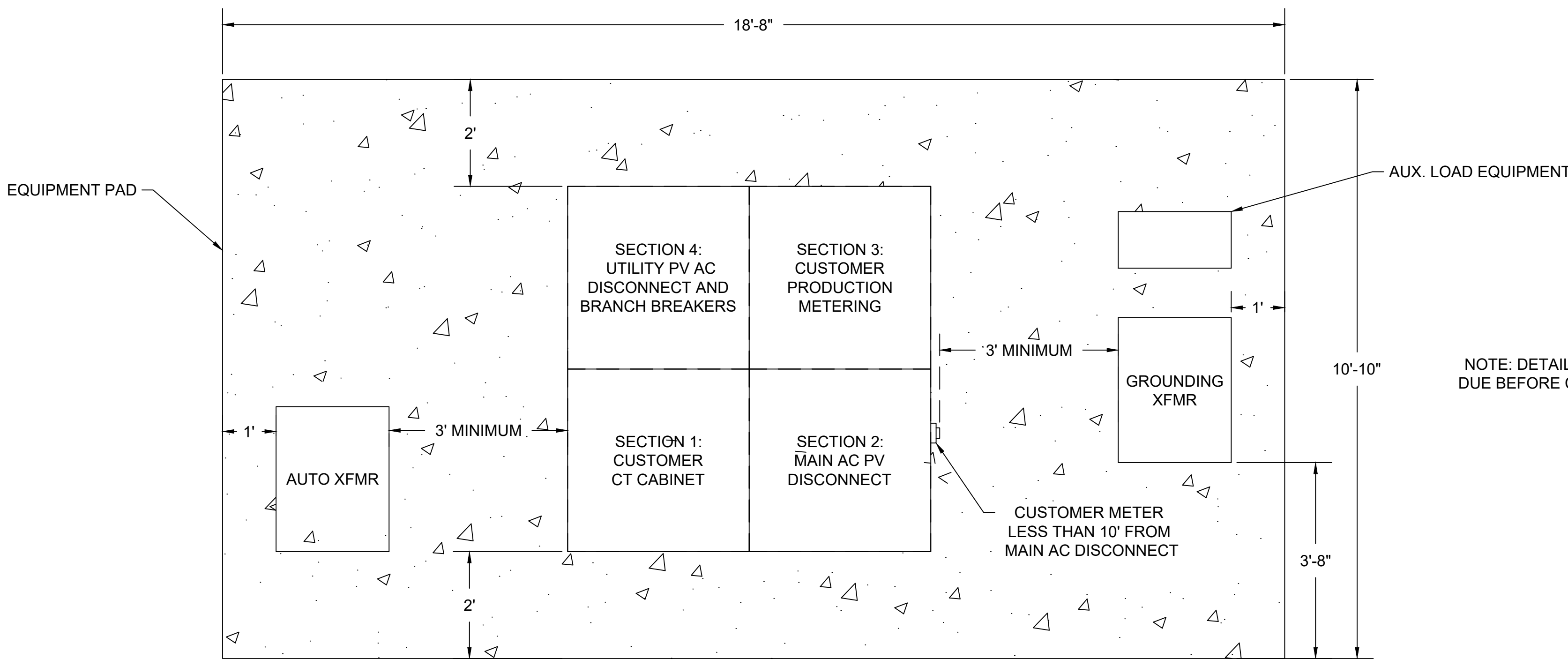
SHEET NOTES:

- Overhead line to underground service conductors detail - provided by utility
- Fence Detail and Fence Grounding - provided in the civil engineering drawings



1 INTERCONNECTION PLAN

Scale: 1" = 200'



2 EQUIPMENT PAD PLAN

Scale: 3/4" = 1'

SEPARATE EQUIPMENT
PAD FOR CUSTOMER
OWNED
TRANSFORMER

AUX. LOAD EQUIPMENT

NOTE: DETAILED DRAWINGS
DUE BEFORE CONSTRUCTION

CUSTOMER METER
LESS THAN 10' FROM
MAIN AC DISCONNECT

SPACE FOR PE STAMP:

SUNNY HIGHPOWER PEAK3 125-US / 150-US



- Cost effective**

 - Modular architecture reduces BOS and maximizes system uptime
 - Compact design and high power density maximize transportation and logistical efficiency
- Maximum flexibility**

 - Scalable 1,500 VDC building block with best-in-class performance
 - Flexible architecture creates scalability while maximizing land usage
- Simple install, commissioning**

 - Ergonomic handling and simple connections enable quick installation
 - Centralized commissioning and control with SMA Data Manager
- Highly innovative**

 - SMA Smart Connected reduces O&M costs and simplifies field service
 - Powered by award winning ennexOS cross sector energy management platform

SUNNY HIGHPOWER PEAK3 125-US / 150-US

A superior modular solution for large-scale power plants

The PEAK3 1,500 VDC inverter offers high power density in a modular architecture that achieves a cost-optimized solution for large-scale PV integrators. With fast, simple installation and commissioning, the Sunny Highpower PEAK3 is accelerating the path to energization. SMA has also brought its field-proven Smart Connected technology to the PEAK3, which simplifies O&M and contributes to lower lifetime service costs. The PEAK3 power plant solution is powered by the ennexOS cross sector energy management platform, 2018 winner of the Intersolar smarter E AWARD.

Technical Data	Sunny Highpower PEAK3 125-US		Sunny Highpower PEAK3 150-US	
Input [DC]				
Maximum array power	187500 Wp STC	1500 VDC	225000 Wp STC	
Maximum system voltage	1500 VDC		1500 VDC	
Rated MPV voltage range	700 V ... 1450 V		880 V ... 1450 V	
MPPT operating voltage range	684 V ... 1500 V		855 V ... 1500 V	
MPPT trackers	1		1	
Maximum operating input current	180 A		180 A	
Maximum input short-circuit current	325 A		325 A	
Output [AC]				
Nominal AC power	125000 W		150000 W	
Maximum apparent power	125000 VA		150000 VA	
Output phases / line connections	3 / 3 PE		3 / 3 PE	
Nominal AC voltage	480 V		600 V	
Compatible transformer winding configuration	Wye-grounded		Wye-grounded	
Maximum output current	151 A		151 A	
Rated grid frequency	60 Hz		60 Hz	
Grid frequency / range	50 Hz, 60 Hz / ±4 Hz ... ±4 Hz		50 Hz, 60 Hz / ±4 Hz ... ±4 Hz	
Power factor at rated power / adjustable displacement	1 / 0.0 leading ... 0.0 lagging		1 / 0.0 leading ... 0.0 lagging	
Harmonics (THD)	<3%		<3%	
Efficiency	98.5 %		99.0 %	
CEC efficiency	98.5 %		99.0 %	
Protection and safety features				
Ground fault monitoring: Riso / Differential current	● / ●		● / ●	
DC reverse polarity protection	●		●	
AC short circuit protection	●		●	
Monitored surge protection (Type 2): DC / AC	● / ●		● / ●	
Protection class / overvoltage category (as per UL 840)	1 / II		1 / II	
General data				
Device dimensions (W / H / D)	770 / 830 / 444 mm (30.3 / 32.7 / 17.5 in.)		770 / 830 / 444 mm (30.3 / 32.7 / 17.5 in.)	
Device weight	98 kg (216 lb)		98 kg (216 lb)	
Operating temperature range	-25°C ... +60°C (13°F ... +140°F)		-25°C ... +60°C (13°F ... +140°F)	
Storage temperature range	-40°C ... +70°C (40°F ... +158°F)		-40°C ... +70°C (40°F ... +158°F)	
Audible noise emission (full power @ 1m and 25°C)	< 69 dB(A)		< 69 dB(A)	
Internal consumption at night	< 5 W		< 5 W	
Topology	Transformerless		Transformerless	
Cooling concept	OptiCool (forced convection, variable speed fan)		OptiCool (forced convection, variable speed fan)	
Enclosure protection rating	Type 4X (as per UL 508)		Type 4X (as per UL 508)	
Maximum permissible relative humidity (non-condensing)	100%		100%	
Additional information				
Mounting	Rack mount		Rack mount	
DC connection	Terminal lugs: up to 600 kcmil CU/Al		Terminal lugs: up to 600 kcmil CU/Al	
AC connection	Screw terminals: up to 300 kcmil CU/Al		Screw terminals: up to 300 kcmil CU/Al	
LED indicator (Status/Fault/Communication)	●		●	
SMA Speedwire (Ethernet network interface)	● (2 x RJ45 ports)		● (2 x RJ45 ports)	
Data protocols: SMA Modbus / SunSpec Modbus	● / ●		● / ●	
Integrated Root Control / Q on Demand 24/7	● / ●		● / ●	
Off-grid capable / SMA Hybrid Controller compatible	- / ●		- / ●	
SMA Smart Connected (proactive monitoring and service)	●		●	
Certifications				
Certifications and approvals	UL 62109, UL 1998, CAN/CSA C22.2 No. 62109		UL 62109, UL 1998, CAN/CSA C22.2 No. 62109	
FCC compliance	FCC Part 15, Class A		FCC Part 15, Class A	
Grid interconnection standards	IEEE 1547, UL 1741 SA, CSA-R421, IEC60101-1, IEC60101-2		IEEE 1547, UL 1741 SA, CSA-R421, IEC60101-1, IEC60101-2	
Advanced grid support capabilities	L/HVRT, L/HVRT, Vok/Val, Volt/Watt, Frequency/Watt, Ramp Rate Control, Fixed Power Factor		L/HVRT, L/HVRT, Vok/Val, Volt/Watt, Frequency/Watt, Ramp Rate Control, Fixed Power Factor	
Warranty	Standard: 5 years		Standard: 5 years	
Optional extensions	10 / 15 / 20 years		10 / 15 / 20 years	
Type designation	SHP 125US-20		SHP 150US-20	
Technical data as of May 2020	● Standard features ○ Optional features - Not available		● Standard features ○ Optional features - Not available	

Toll Free +1 888 4 SMA USA
www.SMA-America.com

SMA America, LLC

powered by
Q.ANTUM DUO Z

Q. PEAK DUO XL-G11.3/BFG
570-580

BIFACIAL DOUBLE GLASS MODULE
WITH EXCELLENT RELIABILITY
AND ADDITIONAL YIELD

LOW ELECTRICITY GENERATION COSTS
Q.ANTUM DUO Z combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 21.4%.

INNOVATIVE ALL-WEATHER TECHNOLOGY
Optimal yields, whatever the weather with excellent low-light and temperature behavior.

ENDURING HIGH PERFORMANCE
Long term yield security with Anti-LED, High-Spot Protect and Traceable Quality, Tri-Q™.

FRAME FOR VERSATILE MOUNTING OPTIONS
High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400Pa) and wind loads (2400Pa).

A RELIABLE INVESTMENT
Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty*.

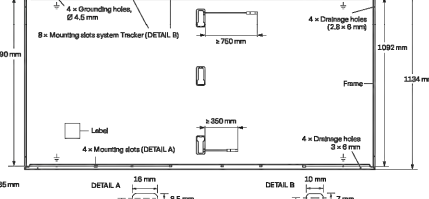
THE IDEAL SOLUTION FOR:
Ground-mounted solar power plants

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATION

Format	2436mm x 1134mm x 36mm (including frame)
Weight	34.4kg
Front Cover	2mm thermally pre-stressed glass with anti-reflection technology
Back Cover	2mm semi-tempered glass
Frame	Anodized aluminium
Cell	6 x 26 monocrystalline Q.ANTUM solar half cells
Junction box	53-103 mm x 124-103 mm x 15-38 mm Protection class IP67, with bypass diodes
Cable	4mm ² Solar cable (1) x 750mm, (1) x 350mm
Connector	SMA MCA-Evo2, Hetero Q CELLS HIGGLC-PEB



ELECTRICAL CHARACTERISTICS

POWER CLASS	570	575	580				
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, 87°C and 870°C* (POWER TOLERANCE ±0.5% / ±0.5 W)							
Power at MPP ¹	P _{MPP} [W]	570	575	580	580		
Short Circuit Current ²	I _{sc} [A]	13.90	14.77	13.52	14.80	13.58	14.83
Open Circuit Voltage ³	V _{oc} [V]	53.50	53.69	53.53	53.72	53.56	53.75
Current at MPP	I _{mp} [A]	12.83	14.53	12.87	14.09	12.92	14.14
Voltage at MPP	V _{mp} [V]	44.44	44.43	44.66	44.65	44.88	44.87
Efficiency ⁴	η [%]	20.0	22.8	21.0	23.0	21.2	23.2
Efficiency of P _{MPP} and I _{sc} 70% ± 5% - Efficiency given for rear side irradiation on top of STC (front side) - According to IEC 60904-1-2					Efficiency of P _{MPP} and I _{sc} 70% ± 5% - Efficiency given for rear side irradiation on top of STC (front side) - According to IEC 60904-1-2		
Measurement tolerances P _{MPP} ± 0.3%, I _{sc} ± 0.5% at STC, 1000 W/m², 1 m BTTC, 1000 W/m² ± 0.18 W/m², 0.1% ± 0.18 W/m², 0.1% ± 0.18 W/m² according to IEC 60904-3					Measurement tolerances P _{MPP} ± 0.3%, I _{sc} ± 0.5% at STC, 1000 W/m², 1 m BTTC, 1000 W/m² ± 0.18 W/m², 0.1% ± 0.18 W/m², 0.1% ± 0.18 W/m² according to IEC 60904-3		
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ⁵					MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ⁵		
Power at MPP	P _{MPP} [W]	429.1	432.9	436.8			
Short Circuit Current	I _{sc} [A]	10.87	10.89	10.91			
Open Circuit Voltage	V _{oc} [V]	50.60	50.63	50.66			
Current at MPP	I _{mp} [A]	10.09	10.14	10.15			
Voltage at MPP	V _{mp} [V]	42.55	42.71	42.89			
1000 W/m², NMOT, spectrum AM 1.5					1000 W/m², NMOT, spectrum AM 1.5		

1000 W/m², NMOT, spectrum AM 1.5

Q CELLS PERFORMANCE WARRANTY

At least 98% of nominal power during 1000 hours. Theoretical max. 0.65% degradation per year. At least 94% of nominal power up to 10 years, at least 85% of nominal power up to 30 years.

All data within measurement tolerance. All warranties in accordance with the warranty terms of the Q CELLS solar equipment of your respective country.

PERFORMANCE AT LOW IRRADIANCE

Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m²).

TEMPERATURE COEFFICIENTS					
Temperature Coefficient of I _{sc}	α [%/K]	-0.04	Temperature Coefficient of V _{oc}	β [%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ [%/K]	-0.34	Nominal Module Operating Temperature	NMOT [°C]	42 ± 3

PROPERTIES FOR SYSTEM DESIGN				
Maximum System Voltage	V _{max} [V]	1500	PV module classification	Class I
Maximum Reverse Current	I _r [A]	25	Fire Rating based on ANSI / UL 61720	C / TYPE 29 ⁶
Max. Design Load, Pull / Push	[Pa]	5800 / 2800	Permitted Module Temperature on Continuous Duty	-40°C - +85°C
Max. Tensile Load, Pull / Push	[Pa]	5400 / 2600	*New Type is similar to Type 3 but with metallic frame	

QUALIFICATIONS AND CERTIFICATES			
IEC 61215:2016 IEC 61730:2016 The data sheet complies with DIN EN 50381	CE	Vertical packaging	2436mm x 1134mm x 36mm 20 pallets 16 pallets 31 modules

PACKAGING INFORMATION			
Vertical packaging	2436mm x 1134mm x 36mm	20 pallets	16 pallets 31 modules

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Made in China

Hetero Q CELLS Australia Pty Ltd
Suite 1, Level 1, 15 Blue Street, North Sydney, NSW 2060, Australia | TEL: +61 (02) 9018 3031 | FAX: +61 (02) 9018 3032 | EMAIL: q-cells-australia@q-cells.com | WEB: www.q-cells.com/au

Engineered in Germany

Q CELLS



PROJECT ENTITY: BUCKINGHAM SOLAR 1 LLC

NEW ENERGY EQUITY, LLC
2530 RIVA ROAD, SUITE 200
ANNAPOLIS, MD 21041
NEWENERGYEQUITY.COM
443-267-5012

PROJECT ADDRESS
E JAMES ANDERSON HWY
DILLWYN, VA 23936

LAT: 37.517
LONG: -78.467

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q. PEAK DUO XL-G11.3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.0588kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA20371 I

NO POSITION, DISTANCE, OR CLEARANCE ISSUES WITH OVERHEAD ELECTRIC SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS PROVIDED FOR ALL UTILITY ENERGY EQUIPMENT INCLUDING THE METERS AND AC DISCONNECT.

INTERCONNECTION TYPE: PRIMARY

REVISIONS

#	DESCRIPTION	BY	DATE
1	2023 REDESIGN	SP	3/15/2023
3	ACCESS ROAD REDESIGN	SP	3/20/2023
4	CUP PACKAGE	SP	3/22/2023
5	SITE PLAN REDESIGN	SP	3/30/2023
6	ADDED XFMR IMPEDANCE	TMP	4/3/2023
7	PROJECT NAME CHANGE	SP	4/4/2023
8	SITE REDESIGN	SP	4/18/2023
9	SITE PASTURE REDESIGN	SP	5/2/2023
10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

EQUIPMENT DOCUMENTS

SCALE ¹

NTS

SHEET

E4



Certificate of Compliance

Certificate: 80048527 Master Contract: 254141

Project: 80133054 Date Issued: 2022-07-05

Issued To: Hanwha Q.CELLS GmbH

17-21 Sonnenallee
Thalheim
Bitterfeld-Wolfen, Sachsen-Anhalt, 06766
Germany

Attention: Wiebke Engler

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: Tom Yang

PRODUCTS

CLASS - C531110 - POWER SUPPLIES Photovoltaic Modules and Panels
CLASS - C531190 - POWER SUPPLIES Photovoltaic Modules and Panels - Certified to US Standards

Photovoltaic Modules with Maximum System Voltage of 1000 V dc or 1500 V dc, Class II / Application Class A, Fire Resistance Class C, Module Fire Performance Type 1, Type 2 or Type 5 (for US), Module Types:
Q.PLUS L-G4.2 XXX (XXX = 305 to 375, in steps of 5W),
B.LINE PLUS L-G4.2 XXX (XXX = 305 to 375, in steps of 5W),
Q.PLUS BFR-G4.1 XXX (XXX = 270 to 295, in steps of 5W and 282W),
B.LINE PLUS BFR-G4.1 XXX (XXX = 270 to 295, in steps of 5W and 282W),
Q.PLUS DUO L-G5.2 XXX (XXX = 340 to 385, in steps of 5W),
B.LINE PLUS DUO L-G5.2 XXX (XXX = 340 to 385, in steps of 5W),
Q.PEAK DUO L-G5 XXX (XXX = 360 to 425, in steps of 5W),

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Certificate: 80048527
Project: 80133054

Master Contract: 254141
Date Issued: 2022-07-05

B.LINE TRON ML-G1 XXX (XXX = 385 to 455, in steps of 5W),
Q.TRON BLK ML-G1 XXX (XXX = 385 to 445, in steps of 5W),
Q.TRON BLK ML-G1+ XXX (XXX = 385 to 445, in steps of 5W),
B.LINE TRON BLK ML-G1 XXX (XXX = 385 to 445, in steps of 5W),
Q.PEAK DUO XL-G11.2 XXX (XXX = 570 to 590, in steps of 5W),
Q.PEAK DUO XL-G11.3 XXX (XXX = 570 to 590, in steps of 5W),
Q.TRON-G1+ XXX (XXX = 340 to 380, in steps of 5W),
Q.TRON BLK-G1+ XXX (XXX = 340 to 380, in steps of 5W).

Notes:

- All electrical data shall be shown as relative to standard test conditions (STC) (1000 W/m2 irradiance, (25 ± 2) °C, AM 1.5 according to IEC 60904-3).
- Manufacturing tolerances are ±5% for voltage at open-circuit (Voc), ±5% for current at short-circuit (Isc) and ±3% for PV module maximum power (Pmax).

Module Type	Power Range (Watts)	Rated Maximum Power (Watts)	Open Circuit Voltage (V dc)	Short Circuit Current (A dc)	Rated Voltage (V dc)	Rated Current (A dc)
Q.PLUS L-G4.2 XXX B.LINE PLUS L-G4.2 XXX	305-405	305	44.66	9.21	35.63	8.58
		310	44.9	9.26	35.88	8.64
		315	45.14	9.31	36.18	8.71
		320	45.38	9.35	36.49	8.77
		325	45.62	9.4	36.78	8.84
		330	45.86	9.45	37.08	8.90
		335	46.10	9.50	37.36	8.97
		340	46.34	9.54	37.65	9.03
		345	46.58	9.59	37.93	9.10
		350	46.82	9.64	38.2	9.16
		355	47.06	9.68	38.48	9.23
		360	47.31	9.73	38.74	9.29
		365	47.55	9.78	39.01	9.36
		370	47.79	9.83	39.33	9.42
		375	48.03	9.87	39.62	9.49
		380	48.27	9.92	40.0	9.56
		385	48.51	9.97	40.38	9.63
		390	48.75	10.02	40.76	9.70
		395	48.99	10.07	41.14	9.77
		400	49.23	10.12	41.52	9.84
Q.PLUS BFR-G4.1 XXX B.LINE PLUS BFR-G4.1 XXX	270-295	270	38.46	9.29	31.04	8.70
		275	38.72	9.35	31.36	8.77
		280	38.97	9.41	31.67	8.84
		282	39.10	9.50	31.40	9.00
		285	39.22	9.46	31.99	8.91
		290	39.48	9.52	32.29	8.98
		295	39.73	9.58	32.59	9.05
		300	40.00	9.64	32.90	9.12
Q.PLUS DUO L-G5.2 XXX B.LINE PLUS DUO L-G5.2 XXX	340-385	340	45.89	9.69	37.40	9.09
		345	46.11	9.73	37.68	9.16

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Certificate: 80048527
Project: 80133054

Master Contract: 254141
Date Issued: 2022-07-05

Module Type	Power Range (Watts)	Rated Maximum Power (Watts)	Open Circuit Voltage (V dc)	Short Circuit Current (A dc)	Rated Voltage (V dc)	Rated Current (A dc)
Q.TRON BLK ML-G1 XXX Q.TRON BLK ML-G1+ XXX B.LINE TRON BLK ML-G1 XXX	385-445	400	46.02	11.17	37.86	10.56
		405	46.06	11.20	38.13	10.62
		410	46.09	11.23	38.40	10.68
		415	46.12	11.26	38.67	10.73
		420	46.16	11.29	38.93	10.79
		425	46.19	11.32	39.19	10.84
		430	46.22	11.35	39.45	10.90
		435	46.26	11.38	39.70	10.96
		440	46.29	11.41	39.95	11.01
		445	46.33	11.44	40.20	11.07
		450	46.36	11.47	40.45	11.13
		455	46.39	11.50	40.69	11.18
		385	46.15	10.95	37.47	10.27
		390	46.18	10.98	37.75	10.33
		395	46.22	11.01	38.03	10.39
		400	46.25	11.04	38.31	10.44
		405	46.29	11.07	38.58	10.50
		410	46.32	11.10	38.85	10.55
		415	46.35	11.13	39.12	10.61
		420	46.39	11.16	39.39	10.66
Q.PEAK DUO XL-G11.2 XXX Q.PEAK DUO XL-G11.3 XXX	570-590	425	46.42	11.19	39.65	10.72
		430	46.45	11.21	39.91	10.77
		435	46.49	11.24	40.17	10.83
		440	46.52	11.27	40.42	10.89
		445	46.56	11.30	40.67	10.94
		570	53.59	13.49	44.46	12.82
		575	53.62	13.51	44.68	12.87
		580	53.64	13.54	44.90	12.92
Q.TRON-G1+ XXX	340-380	585	53.67	13.57	45.12	12.97
		590	53.70	13.59	45.33	13.01
		340	41.14	11.11	32.89	10.35
		345	41.17	11.14	33.15	10.41
		350	41.20	11.17	33.41	10.48
		355	41.24	11.21	33.68	10.54
		360	41.27	11.24	33.94	10.61
		365	41.30	11.27	34.20	10.67
		370	41.34	11.31	34.47	10.73
		375	41.37	11.34	34.73	10.80
		380	41.40	11.37	34.99	10.86

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Certificate: 80048527
Project: 80133054

Master Contract: 254141
Date Issued: 2022-07-05

Module Type	Power Range (Watts)	Rated Maximum Power (Watts)	Open Circuit Voltage (V dc)	Short Circuit Current (A dc)	Rated Voltage (V dc)	Rated Current (A dc)
Q.TRON BLK-G1+ XXX	340-380	340	41.15	11.00	33.10	10.28
		345	41.18	11.03	33.37	10.34
		350	41.21	11.07	33.63	10.41
		355	41.25	11.10	33.90	10.47
		360	41.28	11.14	34.17	10.54
		365	41.31	11.17	34.43	10.60
		370	41.35	11.20	34.70	10.66
		375	41.38	11.24	34.96	10.73
		380	41.41	11.27	35.23	10.79
		385	45.19	11.04	36.36	10.59
Q.PEAK DUO BLK ML-G10+/TS XXX	385-405	390	45.23	11.07	36.62	10.65
		395	45.27	11.10	36.88	10.71
		400	45.30	11.14	37.13	10.77
		405	45.34	11.17	37.39	10.83

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 61730-1:19

CAN/CSA-C22.2 No. 61730-2:19

UL 61730-1 1st Edition

UL 61730-2 1st Edition

Photovoltaic (PV) module safety qualification – Part 1: Requirements for construction, 2019-12
Photovoltaic (PV) module safety qualification – Part 2: Requirements for testing, 2019-12
Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, 2017-12-04, revision date 2020-04-30
Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing, 2017-12-04, revision date 2020-04-30

Notes:

Products certified under Class C531110 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca



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PROJECT ENTITY: BUCKINGHAM SOLAR 1 LLC

NEW ENERGY EQUITY, LLC
2530 RIVA ROAD, SUITE 200
ANNAPOLIS, MD 21041
NEWENERGYEQUITY.COM
443-267-5012

PROJECT ADDRESS
E JAMES ANDERSON HWY
DILLWYN, VA 23936

LAT: 37.517
LONG: -78.467

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q.PEAK DUO XL-G11.3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.0588kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER: VA20371 I

NO POSITION, DISTANCE, OR CLEARANCE ISSUES WITH OVERHEAD ELECTRIC SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS PROVIDED FOR ALL UTILITY ENERGY EQUIPMENT INCLUDING THE METERS AND AC DISCONNECT.

INTERCONNECTION TYPE: PRIMARY

REVISIONS

#	DESCRIPTION	BY	DATE
1	2023 REDESIGN	SP	3/15/2023
3	ACCESS ROAD REDESIGN	SP	3/20/2023
4	CUP PACKAGE	SP	3/22/2023
5	SITE PLAN REDESIGN	SP	3/30/2023
6	ADDED XFMR IMPEDANCE	TMP	4/3/2023
7	PROJECT NAME CHANGE	SP	4/4/2023
8	SITE REDESIGN	SP	4/18/2023
9	SITE PASTURE REDESIGN	SP	5/2/2023
10	ROADS & PID ADDITIONS	SP	6/28/2023

DRAWN BY

STANLEY PENG

PROJECT NAME

WHISPERING CREEK CSG

DRAWING TITLE

EQUIPMENT DOCUMENTS 2

SCALE¹

NTS

SHEET

E5

CERTIFICATE OF COMPLIANCE

Certificate Number	20190417-E210376
Report Reference	E210376-20190328
Issue Date	2019-APRIL-17

Issued to: SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal GERMANY

This certificate confirms that representative samples of **STATIC INVERTERS, CONVERTERS AND ACCESSORIES FOR USE IN INDEPENDENT POWER SYSTEMS**

Permanently-connected, utility Interactive, 3-phase inverter,
Models: SHP 150-US-20, SHP 125-US-20, (which are intended for DC input from photovoltaic modules)

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: Please see addendum page
Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.


Bruce Mahrenholz, Director North American Certification Program
UL LLC
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CERTIFICATE OF COMPLIANCE

Certificate Number	20190417-E210376
Report Reference	E210376-20190328
Issue Date	2019-APRIL-17

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Standard(s) for Safety:


UL 62109-1. Safety of power converters for use in photovoltaic power systems – Part 1: General requirements.

CSA C22.2 No. 62109-1 Safety of power converters for use in photovoltaic power systems - Part 1: General requirements.

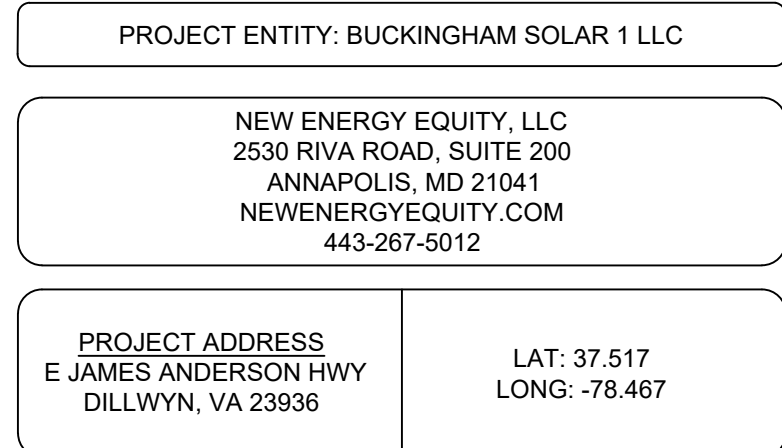
CSA C22.2 No. 62109-2 Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters.

B. Maheshwari
Bruce Maheshwari, Director North American Certification Program
UL LLC

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SYSTEM SIZE DC	7.531 MW
SYSTEM SIZE AC	5.000 MW
DC/AC RATIO	1.506
AZIMUTH	180°
TILT	30°
MODULE COUNT	12984
MODULE TYPE	HANWHA Q PEAK DUO XL-G11-3/BFG
MODULE STC RATING	580 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147.0588KW
RACKING	TBD
MONITORING	ALSO ENERGY

MIN/MAX TEMP.	-16°C / 34°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	25 PSF
BUILDING HEIGHT	0'-0"

NO POSITION, DISTANCE, OR CLEARANCE
ISSUES WITH OVERHEAD ELECTRIC
SERVICE LINES OR OTHER UTILITIES IN
RELATION TO THE PV PANELS.

INTERCONNECTION TYPE: PRIMARY

#	DESCRIPTION	BY	DATE
1	2023 REDESIGN	SP	3/15/2023
3	ACCESS ROAD REDESIGN	SP	3/20/2023
4	CUP PACKAGE	SP	3/22/2023
5	SITE PLAN REDESIGN	SP	3/30/2023
6	ADDED XFMR IMPEDANCE	TMP	4/3/2023
7	PROJECT NAME CHANGE	SP	4/4/2023
8	SITE REDESIGN	SP	4/18/2023
9	SITE PASTURE REDESIGN	SP	5/2/2023
10	ROADS & PID ADDITIONS	SP	6/28/2023

E6

SPACE FOR PE STAMP:



EXHIBIT E

INDICATIVE EQUIPMENT SPECIFICATION SHEET:



SOLAR MODULE

Q.PEAK DUO XL-G11 SERIES



570 - 585 Wp | 156 Cells
21.4 % Maximum Module Efficiency

MODEL Q.PEAK DUO XL-G11.3/BFG



Bifacial energy yield gain of up to 20 %

Bifacial Q.ANTUM solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.



Low electricity generation costs

Q.ANTUM DUO Z combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 21.4 %.



A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty¹.



Enduring high performance

Long-term yield security with Anti LeTID and Anti PID Technology², Hot-Spot Protect.



Frame for versatile mounting options

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (2400 Pa).



Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behavior.

¹ See data sheet on rear for further information.

² APT test conditions according to IEC/TS 62804-1:2015 method B (~1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)

The ideal solution for:



Ground mounted
solar panels

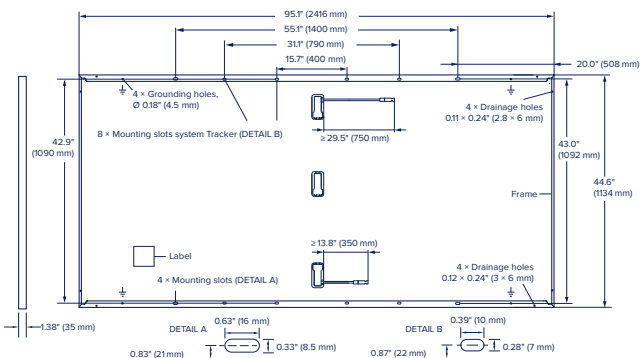


INDICATIVE - NOT FOR CONSTRUCTION

Q.PEAK DUO XL-G11 SERIES

Mechanical Specification

Format	95.1in × 44.7in × 1.38in (including frame) (2416 mm × 1134 mm × 35 mm)
Weight	75.8 lbs (34.4 kg)
Front Cover	0.08 in (2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2 mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction box	2.09-3.98 × 1.26-2.36 × 0.59-0.71in (53-101mm × 32-60 mm × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 29.5in (750 mm), (-) ≥ 13.8in (350 mm)
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4; IP68



Electrical Characteristics

POWER CLASS			570		575		580		585		
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W/−0 W)											
Minimum				BSTC*		BSTC*		BSTC*		BSTC*	
	Power at MPP ¹	P _{MPP}	[W]	570	623.5	575	629.0	580	634.4	585	639.9
	Short Circuit Current ¹	I _{SC}	[A]	13.50	14.77	13.52	14.80	13.55	14.83	13.57	14.86
	Open Circuit Voltage ¹	V _{OC}	[V]	53.50	53.69	53.53	53.72	53.56	53.75	53.59	53.78
	Current at MPP	I _{MPP}	[A]	12.83	14.03	12.87	14.09	12.92	14.14	12.97	14.19
	Voltage at MPP	V _{MPP}	[V]	44.44	44.43	44.66	44.65	44.88	44.87	45.10	45.09
	Efficiency ¹	η	[%]	≥ 20.8		≥ 21.0		≥ 21.2		≥ 21.4	

Bifaciality of P_{MPP} and I_{SC} 70 % ± 5 % • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2

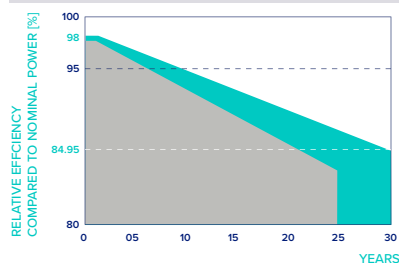
¹ Measurement tolerances P_{MPP} ± 3 %; I_{SC}, V_{OC} ± 5 % at STC; 1000 W/m²; * at BSTC: 1000 W/m² + φ × 135 W/m², φ = 70 % ± 5 %, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Minimum	Power at MPP	P _{MPP}	[W]	429.1		432.9		436.6		440.4
	Short Circuit Current	I _{SC}	[A]	10.87		10.89		10.91		10.93
	Open Circuit Voltage	V _{OC}	[V]	50.60		50.63		50.66		50.68
	Current at MPP	I _{MPP}	[A]	10.09		10.14		10.18		10.22
	Voltage at MPP	V _{MPP}	[V]	42.51		42.71		42.89		43.08

² 800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

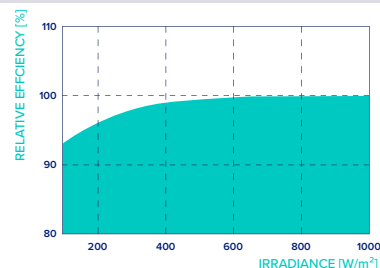


At least 98 % of nominal power during first year. Thereafter max. 0.45 % degradation per year. At least 93.95 % of nominal power up to 10 years. At least 84.95 % of nominal power up to 30 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective country.

*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{SC}	α	[%/K]	+0.04	Temperature Coefficient of V _{OC}	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3 °C)

Properties for System Design

Maximum System Voltage	V _{sys}	[V]	1500	PV module classification	Class II
Maximum Series Fuse Rating		[A DC]	25	Fire Rating based on ANSI / UL 61730	TYPE 29 ⁴
Max. Design Load, Push/Pull ³		[lbs / ft ²]	75 (3600 Pa) / 33 (1600 Pa)	Permitted Module Temperature on Continuous Duty	-40 °F up to +185 °F (-40 °C up to +85 °C)
Max. Test Load, Push/Pull ³		[lbs / ft ²]	113 (5400 Pa) / 50 (2400 Pa)		

³ See Installation Manual

⁴ New Type is similar to Type 3 but with metallic frame

Qualifications and Certificates

UL 61730, CE-compliant,
IEC 61215:2016,
IEC 61730:2016,
U.S. Patent No. 9,893,215
(solar cells)



Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.

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qcells

PRODUCT SAFETY DATA SHEET

Q CELLS SOLAR PV MODULES ARE ARTICLES AS DEFINED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION HAZARD COMMUNICATION STANDARD (HCS), 29 C.F.R. § 1910.1200 AND ARE EXEMPT FROM THE LABELING AND SAFETY DATA SHEETS (SDS) REQUIREMENTS OF THE STANDARD.

Q CELLS provides this product safety data sheet only for convenience of interested parties in the United States of America who are used to the format of safety data sheets in order to assess the product safety. This product safety data sheet does not replace any other documents provided by Q CELLS such as Safety Information, Installation and Operation Manual, Packaging and Transport Information, Product Data Sheet as well as Warranty Terms of the respective product.

1. SECTION: IDENTIFICATION

Solar PV modules convert light into electricity. Light-sensitive cells are electrically interconnected in series and sealed between glass and plastic foils for this purpose. This product safety data sheet is applicable to the following solar PV modules of the Q CELLS brand made by Hanwha Q CELLS America Inc.:

- Q.PEAK DUO-G5, Q.PEAK DUO BLK-G5, Q.PEAK DUO L-G5, Q.PEAK DUO-G5.X, Q.PEAK DUO BLK-G5.X, Q.PEAK DUO L-G5.X,
- Q.PEAK DUO-G6, Q.PEAK DUO BLK-G6, Q.PEAK DUO L-G6, Q.PEAK DUO-G6.X, Q.PEAK DUO BLK-G6.X, Q.PEAK DUO L-G6.X,
- Q.PEAK DUO-G7, Q.PEAK DUO BLK-G7, Q.PEAK DUO L-G7, Q.PEAK DUO-G7.X, Q.PEAK DUO BLK-G7.X, Q.PEAK DUO L-G7.X,
- Q.PEAK DUO-G8, Q.PEAK DUO BLK-G8, Q.PEAK DUO L-G8, Q.PEAK DUO-G8.X, Q.PEAK DUO BLK-G8.X, Q.PEAK DUO L-G8.X,
- Q.PEAK DUO-G9, Q.PEAK DUO MS-G9, Q.PEAK DUO ML-G9, Q.PEAK DUO BLK ML-G9, Q.PEAK DUO XL-G9, Q.PEAK DUO ML-G9.X, Q.PEAK DUO BLK ML-G9.X, Q.PEAK DUO XL-G9.X,
- Q.PEAK DUO ML-G10, Q.PEAK DUO BLK ML-G10, Q.PEAK DUO XL-G10, Q.PEAK DUO ML-G10.X, Q.PEAK DUO BLK ML-G10.X, Q.PEAK DUO XL-G10.X
- Q.PEAK DUO XL-G11.X

Minor variations within the product families listed above can be identified by a versioning system which replaces character “X” with numerals and lower case letters of either “1”, “2”, “3” or “a”, “b”, “c”, “d” to form G8.1, G6.2, G7.3 or G10.a, G10.c, G10.d for example. All of these variants as well as the ones with additional suffixes “/TAA” and/or “+” are covered by this product safety data sheet. This is also true for B-grade modules which have minor optical imperfections. Product names of these replace “Q.” with “B.LINE”. B-grade modules of Q.PEAK DUO L-G6.2 are named B.LINE PEAK DUO L-G6.2 for example.

Responsible Party as Importer:

Name: Hanwha Q CELLS America Inc.

Address: 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA

Phone: 1 949 748 59 96

2. SECTION: IDENTIFICATION OF SAFETY RISKS (HAZARDS IDENTIFICATION)

Q CELLS solar PV modules do not pose any risk of hazardous chemicals. Hazard symbols and precautionary hazard statements for hazardous chemicals are not applicable. No symptoms or effects – neither acute nor delayed – have to be expected when Q CELLS solar PV modules are handled as stipulated in the Installation and Operation Manual. Q CELLS provides a Safety Information sheet with all modules shipments. This document contains detailed risk statements and recommendations for installation and operation. Before installing the module, read the Installation and Operation Manual for Q CELLS modules carefully. You can obtain the complete Installation and Operation Manual from your retailer.

Attention: Only qualified and authorized specialists may install modules and put them into operation. Keep children and unauthorized persons away from the modules.

Risks:

- Risk of death from electrocution! Solar modules generate electricity and are energized as soon as they are exposed to light.
- In rare cases, solar PV modules – as any other electrical device – can cause fire due to worn electrical contacts which result in electrical arcing.
- Solar PV modules can reach high temperatures which can cause skin burns.



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PRODUCT SAFETY DATA SHEET

- Sharp edges, corners and broken glass can cause injuries.
- Solar PV modules can cause Injuries due to their weight.
 - Falling solar PV modules can cause injuries.
 - Lifting solar PV modules can cause injuries.

For precautionary statements, please refer to the Installation and Operations Manual of the respective product.

MISUSE OR INCORRECT USE OF SOLAR MODULES VOIDS THE LIMITED WARRANTY AND MAY CREATE A SAFETY HAZARD AND RISK PROPERTY DAMAGE. THIS INCLUDES IMPROPER INSTALLATION OR CONFIGURATION, IMPROPER MAINTENANCE, UNINTENDED USE, AND UNAUTHORIZED MODIFICATION.

3. SECTION: COMPOSITION / INFORMATION ON INGREDIENTS

Safety data sheets are only required for hazardous chemicals covered by the Hazard Communication Standard (HCS). Solar PV modules made by Q CELLS are not covered by HCS. The following table provides an overview of materials solar PV modules by Q CELLS are made of. The values given for the share of weight are targets and can vary for the products covered by this Product Safety Data Sheet.

Component	Material	Total Share	Remark
Frame	Aluminum	8 % – 16 %	not hazardous
	Silicone	< 2 %	not hazardous, see section 8
Laminate	Glass	60 % – 80 %	not hazardous
	Plastics (EVA, PET, PE, PPE, PC)	8 % – 16 %	no hazards known
	Silicon	2 % – 4 %	not hazardous
	Metals (Aluminum, Copper, Tin)	< 2 %	not hazardous
	Lead	< 0,1 %	hazardous
	Silver	< 0,05 %	not hazardous

4. SECTION: FIRST-AID MEASURES

In case of electrocution:

- Always protect yourself by taking all necessary safety precautions before rescuing persons injured.
- **Attention:** Stay away from sources of high voltage and leave the rescue to qualified personnel with appropriate personal protection equipment!
- Call emergency rescue services.
- Do not touch live parts. Qualified personnel should shut down the PV system as far as possible – e.g. disconnect the modules at the inverter before uncovering any live electrical parts. Be sure to observe the specified time intervals after switching off the inverter. High voltage components need time to discharge. Follow OSHA requirements for control of hazardous energy at 29 C.F.R. § 1910.147.
- In the event a person is electrocuted or affected by electrical energy of the solar PV module, CALL 911. Before attempting rescue, SHUT-DOWN THE POWER SOURCE.
- Remove the victim from the power source using only insulated tools ONLY IF CONTACT WITH LIVE ELECTRICAL COMPONENTS CAN BE PREVENTED.
- Carefully move the injured from the zone of danger.
- After moving to a safe location, check heartbeat, respiration and consciousness of the injured person.
- Apply appropriate life-saving measures (CPR) accordingly before taking care of minor injuries.
- Consult a medical professional even if there are no visible injuries.
 - Flush thermal skin burns caused by touching hot surfaces of solar PV modules with cool water. Consult a medical professional.
 - Injuries due to sharp edges, corners and broken glass need to be appropriately treated. Consult a medical professional.

PRODUCT SAFETY DATA SHEET

- Other types of injuries need to be treated appropriately as well. Consult a medical professional.

5. SECTION: FIRE-FIGHTING MEASURES

- Q CELLS solar PV modules are fire rated as Class C according to IEC and UL 1703/UL 61730 as well as Type 1 and 2 according to UL 1703/UL 61730.
- Q CELLS solar PV modules are extensively tested at the factory to ensure electrical safety of the product before shipment.
- In rare cases, solar PV modules – as any other electrical device – can cause fire due to worn electrical contacts which result in electrical arcing.
- In case solar PV modules which are not part of an array are on fire, USE FIRE EXTINGUISHERS RATED FOR ELECTRICAL EQUIPMENT, Class C.
- IN CASE A SOLAR PV MODULE ARRAY IS PRESENT, ANY FIRE SHOULD ONLY BE FOUGHT BY PROFESSIONAL FIREFIGHTERS. FIREFIGHTERS NEED TO TAKE PRECAUTIONS FOR ELECTRICAL VOLTAGES UP TO 1,500 VOLTS (DC).
- Some components of the modules can burn. Potential combustion products include oxides of carbon, nitrogen and silicon.
- In case of prolonged fire, solar PV modules may lose their structural integrity.

General recommendations from the below-mentioned reports:

- Fire service personnel should follow their normal tactics and strategies at structure fires involving solar power systems, but do so with awareness and understanding of exposure to energized electrical equipment. Emergency response personnel should operate normally, and approach this subject area with awareness, caution, and understanding to assure that conditions are maintained as safely as possible.
- Care must be exercised during all operations, both interior and exterior.
- Responding personnel must stay back from the roofline in the event modules or sections of an array may slide off the roof.
- Contacting a local professional PV installation company should be considered to mitigate potential hazards.
- Turning off an array is not as simple as opening a disconnect switch. As long as the array is illuminated, parts of the system will remain energized.
- When illuminated by artificial light sources such as fire department light trucks or an exposure fire, PV systems are capable of producing electrical power sufficient to cause inability to let go from electricity as a result of stimulation of muscle tissue, also known as lock-on hazard.
- Firefighting foam should not be relied upon to block light.
- The electric shock hazard due to application of water is dependent on voltage, water conductivity, distance and spray pattern.
- It is recommendable to fight fire with water instead of foam if a PV system is present. Salt water should not be used.
- Firefighter's gloves and boots afford limited protection against electrical shock provided the insulating surface is intact and dry. They should not be considered equivalent to electrical personal protection equipment.

Readers interested in more details may refer to the following reports:

- National Fire Protection Association, Fire Protection Research Foundation report "Fire Fighter Safety and Emergency Response for Solar Power Systems" issued May 2010, revised October 2013
- Important recommendations from a report called "Firefighter Safety and Photovoltaic Installations Research Project" issued by Underwriters Laboratories on November 29, 2011

6. SECTION: ACCIDENTAL RELEASE MEASURES

This section is not applicable.

7. SECTION: HANDLING AND STORAGE

Before installing the module, read the Installation and Operation Manual for Q CELLS modules carefully. Noncompliance with the instructions may result in damage and physical injury or death. Only qualified and authorized specialists may install modules and put them into operation.



PRODUCT SAFETY DATA SHEET

You can obtain the complete installation manual from your retailer. Details about transport and storage of palletized Q CELLS solar PV modules can be found in the Packaging and Transport Information of the respective module type.

Storage, transport and unpacking:

- Store the module dry, well-ventilated and properly secured. The original packaging is not weatherproof.
- Always transport the module in its original packaging.
- Do not stack the modules. This prevents damage of the junction box.
- The module is made of glass. Take great care when unpacking, storing and transporting it.
- Do not subject the module glass to any mechanical stress (e.g. through torsion or deflection). Do not step on the module or place any objects onto the module.
- Protect both sides of the module against scratching and other damage.
- Carry the module by holding the edges with both hands, or use a glass suction lifter.
- Never lift or carry the module using the module junction box or wiring. Avoid pulling on the wiring at all costs.

8. SECTION: EXPOSURE CONTROLS / PERSONAL PROTECTION

Before installing the module, read the Installation and Operation Manual carefully. Noncompliance with the instructions may result in damage and physical injury. Only qualified and authorized specialists may install modules and put them into operation. You can obtain the complete installation manual from your retailer.

- Please follow the valid national regulations and safety guidelines for the installation of electrical devices and systems.
- Please make sure to take all necessary safety precautions.
- Ensure that all personnel are aware of and adhere to accident-prevention and safety regulations.
- For handling of modules wear suitable protective gloves.
- Do not install damaged modules. Ensure that all electrical components are in a proper, dry, and safe condition.
- Do not modify the module (e.g. do not drill any additional holes). Never open the junction box.
- Ensure that modules and tools are not subject to moisture or rain at any time during installation. Only use dry, insulated tools for electrical work.
- Only connect cables with plugs. Ensure for a tight connection between the plugs. Plugs click together audibly.
- Cover the modules with an opaque material during installation. Cover the modules to be disconnected.

Silicones used in manufacturing release methanol during curing. Once cured, no additional methanol is released during use. Small amounts of these chemicals may be present in shipping cartons. Upon receipt, open container in a well-ventilated location and allow to stand for 5 minutes before removing units from cartons. Exposures above recommended limits for methanol of 200 ppm eight-hour time-weighted-average (TWA) will not occur.

9. SECTION: PHYSICAL AND CHEMICAL PROPERTIES

- Physical state: solid
- Voltage: refer to data sheet (below 50 volts for a single module)

Attention: Voltage of single modules add up when modules are electrically connected in series. Q CELLS solar PV modules are designed and certified for voltages up to 1,000 volts or even up to 1,500 volts. Connection of modules in series is only permitted up to the maximum system voltage as listed in the applicable data sheet.

- Weight: refer to data sheet



PRODUCT SAFETY DATA SHEET

- Solubility in water: insoluble in water

10. SECTION: STABILITY AND REACTIVITY

Under normal operating conditions as specified in the Product Data Sheet, Q CELLS solar PV modules are chemically stable.

- Q CELLS solar PV modules are tested for salt spray and ammonia resistance according to IEC 61701 and IEC 62716, respectively.
- Q CELLS solar PV modules support ambient operating temperatures from -40°C to $+85^{\circ}\text{C}$ (-40°F to $+185^{\circ}\text{F}$).
- Do not install modules above 13.120 ft (4000 m) altitude above sea level.
- Some components of the modules can burn. Potential combustion products include oxides of carbon, nitrogen and silicon.
- Do not scratch off dirt. Use a soft cellulose cloth or sponge to carefully wipe off stubborn dirt. Do not use micro fleece wool or cotton cloths.
- Rinse dirt off with lukewarm water (dust, leaves, etc.)
- Use an alcohol based glass cleaner. Do not use abrasive detergents or tensides.
- Isopropyl alcohol (IPA) can be used selectively to remove stubborn dirt and stains within one hour after it appeared.
- Follow the safety guidelines provided by the IPA manufacturer.
- Do not let IPA run down between the module and the frame or into the module edges.

11. SECTION: TOXICOLOGICAL INFORMATION

Small amounts of methanol may be present inside shipping cartons. Open cartons and allow to vent before removing units. No exposure to hazardous chemicals will occur when the units are in use.

12. SECTION: ECOLOGICAL INFORMATION

Q CELLS solar PV modules are designed to withstand outdoor operating conditions for 25 years. Biodegradation is not expected due to high chemical stability of the components.

13. SECTION: DISPOSAL CONSIDERATIONS

Q CELLS solar PV modules should be recycled rather than dumped in a landfill. Raw materials of the product can be recovered by recycling companies. Disposal must be in accordance with national and local laws and regulations for electric / electronic waste.

14. SECTION: TRANSPORT INFORMATION

Q CELLS solar PV modules can be shipped via standardized container freight. Regulations for hazardous goods do not apply. For further details, please refer to the Packaging and Transport Information which can be provided as a separate document by Q CELLS.

15. SECTION: REGULATORY INFORMATION

- Q CELLS solar PV modules are tested according to international standards IEC 61215, IEC 61730 as well as US standards UL 1703 / UL 61730.
- Please refer to the Installation and Operation Manual and Product Data Sheet of the respective Q CELLS solar PV module.

16. SECTION: OTHER INFORMATION

- Date of initial creation of this product safety data sheet: July 1, 2016
- Date of last revision: October 01, 2021

Hanwha Q CELLS America Inc.

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INDICATIVE - NOT FOR CONSTRUCTION

INDICATIVE EQUIPMENT SPECIFICATION SHEET:



INVERTER

SUNNY HIGHPOWER PEAK3

SHP 100-20 / SHP 150-20



Efficient

- High power density with 150 kW thanks to its compact structure
- Max. yield due to possible DC/AC ratio of up to 150%

Reliable

- Superior PV system availability with 150 kW units
- Innovative digital features aligned with the energy management platform ennexOS

Flexible

- For DC input voltages up to 1500 V
- Flexible DC solutions with customer-specific PV array junction boxes

Easy to install

- Ergonomic handling and simple connection for quick installation
- Centralized commissioning and control of the PV power plant via SMA Data Manager

SUNNY HIGHPOWER PEAK3

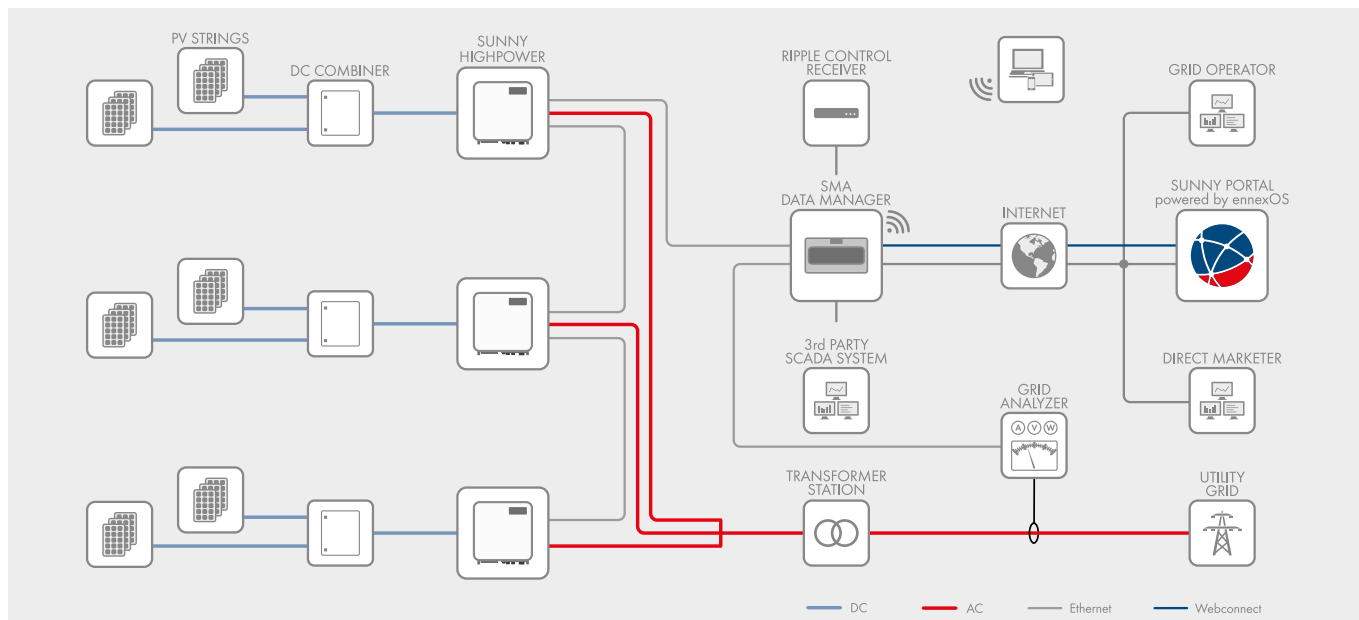
Customized for tomorrow today

The Sunny Highpower PEAK3 is the central component of the SMA solution for PV power plants with a decentralized architecture and system voltages of 1500 V DC. This compact string inverter enables cost-optimized solutions for industrial PV applications thanks to its high power density. It also provides a simple way of transport and allows for quick installation and commissioning. This string inverter with 150 kW of power is equipped with the automatic SMA Smart Connected service for proactive servicing that facilitates operation and maintenance and reduces service costs throughout the entire project lifetime.

INDICATIVE EQUIPMENT SPECIFICATION SHEET:



RACKING



Technical Data	Sunny Highpower 100-20	Sunny Highpower 150-20
Input (DC)		
Max. PV array power	150000 Wp	225000 Wp
Max. input voltage	1000 V	1500 V
MPP voltage range / rated input voltage	590 V to 1000 V / 590 V	880 V to 1450 V / 880 V
Max. input current / max. short-circuit current	180 A / 325 A	180 A / 325 A
Number of independent MPP trackers	1	1
Number of inputs	1 or 2 (optional) for external PV array junction boxes	
Output (AC)		
Rated power at nominal voltage	100000 W	150000 W
Max. apparent power	100000 VA	150000 VA
Nominal AC voltage / AC voltage range	400 V / 304 V to 477 V	600 V / 480 V to 690 V
AC grid frequency / range	50 Hz / 44 Hz to 55 Hz 60 Hz / 54 Hz to 66 Hz	50 Hz / 44 Hz to 55 Hz 60 Hz / 54 Hz to 66 Hz
Rated grid frequency	50 Hz	50 Hz
Max. output current	151 A	151 A
Power factor at rated power / displacement power factor adjustable	1 / 0 overexcited to 0 underexcited	
Harmonic (THD)	< 3%	< 3%
Feed-in phases / AC connection	3 / 3-PE	3 / 3-PE
Efficiency		
Max. efficiency / European efficiency	98.8% / 98.6%	99.1% / 98.8%
Protective devices		
Ground fault monitoring / grid monitoring / DC reverse polarity protection	• / • / •	• / • / •
AC short-circuit current capability / galvanically isolated	• / -	• / -
All-pole-sensitive residual-current monitoring unit	•	•
Monitored surge arrester (type II) AC / DC	• / •	• / •
Protection class (according to IEC 62109-1) / overvoltage category (as per IEC 62109-1)	I / AC: III; DC: II	I / AC: III; DC: II
General Data		
Dimensions (W / H / D)	770 mm / 830 mm / 444 mm (30.3 in / 32.7 in / 17.5 in)	
Weight	98 kg (216 lbs)	
Operating temperature range	-25°C to +60°C (-13°F to +140°F)	
Noise emission (typical)	< 65 dB(A)	
Self-consumption (at night)	< 5 W	
Topology	transformerless	
Cooling method	OptiCool, active cooling, speed-controlled fan	
Degree of protection (according to IEC 60529)	IP65	
Max. permissible value for relative humidity (non-condensing)	100%	
Features / function / accessories		
DC connection / AC connection	Terminal lug (up to 300 mm ²) / Screw terminal (up to 150 mm ²)	
LED display (Status / Fault / Communication)	•	
Ethernet interface	• (2 ports)	
Data interface: SMA Modbus / SunSpec Modbus / Speedwire, Webconnect	• / • / •	
Mounting type	Rack mounting	
OptiTrac Global Peak / Integrated Plant Control / Q on Demand 24/7	• / • / •	
Off-grid capable / SMA Fuel Save Controller compatible	• / •	
Warranty: 5 / 10 / 15 / 20 years	• / • / • / •	
Certificates and approvals (planned)	IEC 62109-1/-2, AR N-4110, AR N-4120, CEI 0-16, C10/11:2012, EN 50549, PEA 2017, DEWA	
• Standard features ○ Optional features — Not available Data at nominal conditions Status: 12/ 2018		
Type designation	SHP 100-20	SHP 150-20



DuraTrack® HZ v3

RELIABILITY IS POWER.

167×

fewer components than
competitive trackers

25,000+

Megawatt Years of Operation

ARRAY TECHNOLOGIES, INC.

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Albuquerque, NM 87109 USA

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+1 505.881.7572

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arraytechinc.com

THE MOST RELIABLE TRACKER UNDER THE SUN

HIGHEST POWER DENSITY.

Higher density means more power and more profit. DuraTrack HZ v3 offers the unique ability to maximize the power density of each site, boasting 6% more density than our closest competitor.

LEADING TERRAIN ADAPTABILITY.

Uneven terrain? Hill yes! Our flexibly linked architecture, with articulating driveline joints and forgiving tolerances, create the most adaptable system in market for following natural land contours and creates the greatest power generation potential from every site.

FEWER COMPONENTS. GREATER RELIABILITY.

Less is more. Array was founded on a philosophy of engineered simplicity. Minimizing potential failure points (167 times fewer components than competitors), DuraTrack HZ v3 consistently delivers higher reliability and superior uptime.

FAILURE-FREE WIND DESIGN.

DuraTrack HZ v3 was designed and field tested to withstand some of the harshest conditions on the planet. It is the only tracker on the market that reliably handles wind events with a fully integrated, fully automatic wind-load mitigation system.

ZERO SCHEDULED MAINTENANCE.

Three decades of solar tracker system design, engineering and testing has resulted in uncompromising reliability. Maintenance-free motors and gears, fewer moving parts, and industrial-grade components means maintenance-free energy generation.

INDICATIVE - NOT FOR CONSTRUCTION



DuraTrack® HZ v3

COST VERSUS VALUE

We believe value is more than the cost of a tracking system. It's about building with forgiving tolerances and fewer parts so construction crews can work efficiently. It means protecting your investment with a failure-free wind management system. It also includes increasing power density. But most of all, value is measured in operational uptime, or reliability.

THE GLOBAL LEADER IN RELIABILITY

Array has spent decades designing and perfecting the most reliable tracker on the planet. Fewer moving parts, stronger components and intelligent design that protects your investment in the harshest weather are but a few of the innovative differences that keep your system running flawlessly all day and you resting easy at night.



STRUCTURAL & MECHANICAL FEATURES/SPECIFICATIONS	
Tracking Type	Horizontal single axis
MW per Drive Motor	Up to 1.036800 MW DC using 360W crystalline
String Voltage	Up to 1,500V DC
Maximum Linked Rows	32
Maximum Row Size	100 modules crystalline, glass-on-glass, and bifacial; 240 modules First Solar 4; 72 modules First Solar 6
Drive Type	Rotating gear drive
Motor Type	2 HP, 3 PH, 480V AC
Motors per 1 MW DC	Less than 1
East-West / North-South Dimensions	Site / module specific
Array Height	54" standard, adjustable (48" min height above grade)
Ground Coverage Ratio (GCR)	Flexible, 28–45% typical, others supported on request
Terrain Flexibility	N-S tolerance: 0° - 8.5° standard, 15° optional Driveline: 40° in all directions
Modules Supported	Most commercially available, including frameless crystalline, thin film, and bifacial
Tracking Range of Motion	± 52° standard
Operating Temperature Range	-30°F to 140°F [-34°C to 55°C]
Module Configuration	Single-in-portrait standard, including bifacial. Two-or-three in landscape (frameless), four-in-landscape (thin film) also available.
Module Attachment	Single fastener, high-speed mounting clamps with integrated grounding. Traditional rails for crystalline in landscape, custom racking for thin film and frameless crystalline and bifacial per manufacturer specs.
Materials	HDG steel and aluminum structural members
Allowable Wind Load (IBC 2012)	135 mph, 3-second gust exposure C
Wind Protection	Passive mechanical system relieves wind and obstruction damage — no power required
ELECTRONIC CONTROLLER FEATURES/SPECIFICATIONS	
Solar Tracking Method	Algorithm with GPS input
Control Electronics	MCU plus Central Controller
Data Feed	MODBUS over Ethernet to SCADA system
Night-time Stow	Yes
Tracking Accuracy	± 2° standard, field adjustable
Backtracking	Yes
INSTALLATION, OPERATION & MAINTENANCE	
PE Stamped Structural Calculations & Drawings	Yes
On-site Training & System Commissioning	Yes
Connection Type	Fully bolted connections, no welding
In-field Fabrication Required	No
Dry Slide Bearings & Articulating Driveline Connections	No lubrication required
Scheduled Maintenance	None required
Module Cleaning Compatibility	Robotic, Tractor, Manual
GENERAL	
Annual Power Consumption (kWh per 1 MW)	400 kWh per MW per year, estimated
Land Area Required per 1 MW	Approx. 4 to 4.5 acres per MW @ 33% GCR (site and design specific)
Energy Gain vs. Fixed-Tilt	Up to 25%, site specific
Warranty	10 year structural, 5 year drive & control components
Patent Numbers	US patent 8,459,249 US patent 9,281,778 US patent 9,581,678 B2 and patents pending
Codes and Standards	UL Certified (3703 & 2703); IEC 62817

INDICATIVE EQUIPMENT SPECIFICATION SHEET:



TRANSFORMER

Three-phase pad-mounted compartmental type transformer



General

At Eaton, we are constantly striving to introduce new innovations to the transformer industry, bringing you the highest quality, most reliable transformers. Eaton's Cooper Power series Transformer Products are ISO 9001 compliant, emphasizing process improvement in all phases of design, manufacture, and testing. In order to drive this innovation, we have invested both time and money in the Thomas A. Edison Technical Center, our premier research facility in Franksville, Wisconsin. Such revolutionary products as distribution-class UltraSIL™ Polymer-Housed Evolution™ surge arresters and Envirotemp™ FR3™ fluid have been developed at our Franksville lab.

With transformer sizes ranging from 45 kVA to 12 MVA and high voltages ranging from 2400 V to 46 kV, Eaton has you covered. From fabrication of the tanks and cabinets to winding of the cores and coils, to production of arresters, switches, tap changers, expulsion fuses, current limit fuses, bushings (live and dead) and molded rubber goods, Eaton does it all. Eaton's Cooper Power series transformers are available with electrical grade mineral oil or Envirotemp™ FR3™ fluid, a less-flammable and bio-degradable fluid. Electrical codes recognize the advantages of using Envirotemp™ FR3™ fluid both indoors and outdoors for fire sensitive applications. The bio-based fluid meets Occupational Safety and Health Administration (OSHA) and Section 450.23 NEC Requirements.



Powering Business Worldwide

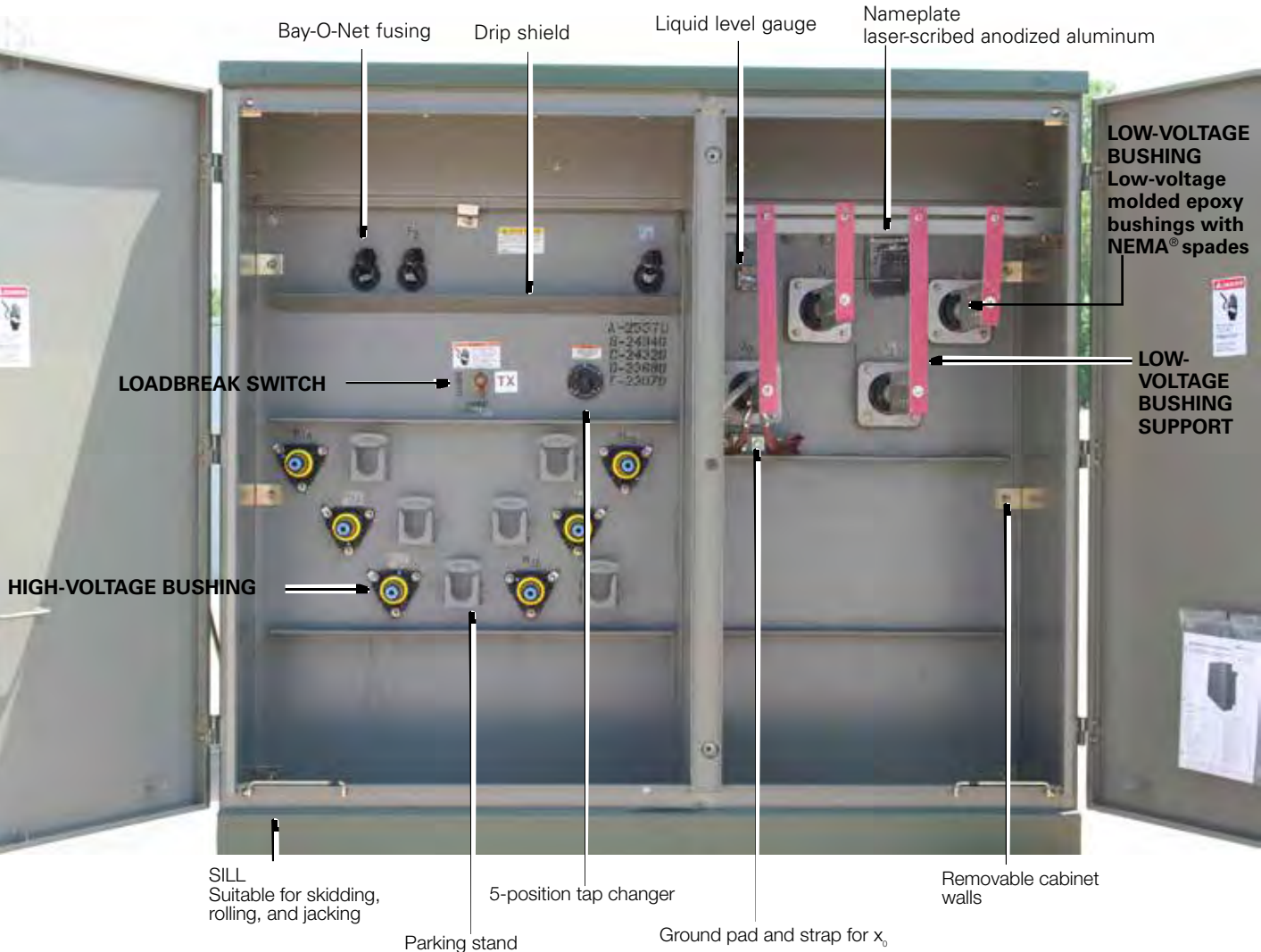


Figure 1. Three-phase pad-mounted compartmental type transformer.

Table 1. Product Scope

Type	Three Phase, 50 or 60 Hz, 65 °C Rise (55 °C, 55/65 °C), 65/75 °C, 75 °C
Fluid Type	Mineral oil or Envirotemp™ FR3™ fluid
Coil Configuration	2-winding or 4-winding or 3-winding (Low-High-Low), 3-winding (Low-Low-High)
Size	45 – 10,000 kVA
Primary Voltage	2,400 – 46,000 V
Secondary Voltage	208Y/120 V to 14,400 V
Specialty Designs	Inverter/Rectifier Bridge
	K-Factor (up to K-19)
	Vacuum Fault Interrupter (VFI)
	UL® Listed & Labeled and Classified
	Factory Mutual (FM) Approved®
	Solar/Wind Designs
	Differential Protection
	Seismic Applications (including OSHPD)
	Hardened Data Center

Table 2. Three-Phase Ratings**Three-Phase 50 or 60 Hz**kVA Available¹:

45, 75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 2500, 3000, 3750, 5000, 7500, 10000

¹Transformers are available in the standard ratings and configurations shown or can be customized to meet specific needs.**Table 3. Impedance Voltage**

Rating (kVA)	Low-voltage rating		
	≤ 600 V	2400 Δ through 4800 Δ	6900 Δ through 13800GY/7970 or 13800 Δ
45-75	2.70-5.75	2.70-5.75	2.70-5.75
112.5-300	3.10-5.75	3.10-5.75	3.10-5.75
500	4.35-5.75	4.35-5.75	4.35-5.75
750-2500	5.75	5.75	5.75
3750	5.75	5.75	6.00
5000		6.00	6.50

Note: The standard tolerance is ± 7.5%**Table 4. Audible Sound Levels**

Self-Cooled, Two Winding kVA Rating	NEMA® TR-1 Average
	Decibels (dB)
45-500	56
501-700	57
701-1000	58
1001-1500	60
1501-2000	61
2001-2500	62
2501-3000	63
3001-4000	64
4001-5000	65
5001-6000	66
6001-7500	67
7501-10000	68

Table 5. Insulation Test Levels

KV Class	Induced Test 180 or 400 Hz 7200 Cycle	kV BIL Distribution	Applied Test 60 Hz (kV)
1.2	Twice Rated Voltage	30	10
2.5		45	15
5		60	19
8.7		75	26
15		95	34
25		125	40
34.5		150	50

Table 6. Temperature Rise Ratings 0-3300 Feet (0-1000 meters)

	Standard	Optional
Unit Rating (Temperature Rise Winding)	65 °C	55 °C, 55/65 °C, 75 °C
Ambient Temperature Max	40 °C	50 °C
Ambient Temperature 24 Hour Average	30 °C	40 °C
Temperature Rise Hotspot	80 °C	65 °C

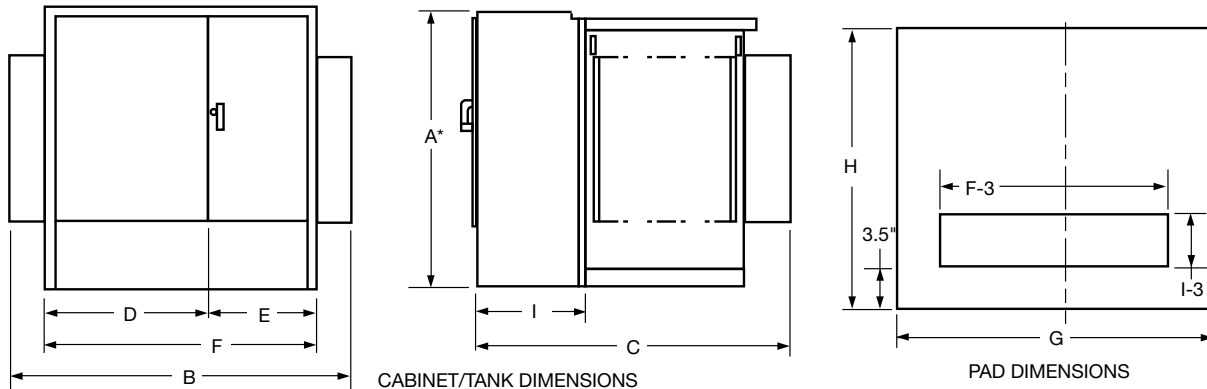


Figure 2. Transformer and pad dimensions.

* Add 9" for Bay-O-Net fusing.

Table 7. Fluid-filled—aluminum windings 55/65 °C Rise¹

65° Rise	DEAD-FRONT—LOOP OR RADIAL FEED—BAY-O-NET FUSING OIL FILLED—ALUMINUM WINDINGS										Gallons of Fluid	Approx. Total Weight (lbs.)
	OUTLINE DIMENSIONS (in.)											
kVA Rating	A*	B	C	D	E	F	G	H	I			
45	50	68	39	42	26	68	72	43	20	110	2,100	
75	50	68	39	42	26	68	72	43	20	115	2,250	
112.5	50	68	49	42	26	68	72	53	20	120	2,350	
150	50	68	49	42	26	68	72	53	20	125	2,700	
225	50	72	51	42	30	72	76	55	20	140	3,150	
300	50	72	51	42	30	72	76	55	20	160	3,650	
500	50	89	53	42	30	72	93	57	20	190	4,650	
750	64	89	57	42	30	72	93	61	20	270	6,500	
1000	64	89	59	42	30	72	93	63	20	350	8,200	
1500	73	89	86	42	30	72	93	90	24	410	10,300	
2000	73	72	87	42	30	72	76	91	24	490	12,500	
2500	73	72	99	42	30	72	76	103	24	530	14,500	
3000	73	84	99	46	37	84	88	103	24	620	16,700	
3750	84	85	108	47	38	85	88	112	24	660	19,300	
5000	84	96	108	48	48	96	100	112	24	930	25,000	
7500	94	102	122	54	48	102	100	126	24	1,580	41,900	

¹ Weights, gallons of fluid, and dimensions are for reference only and not for construction. Please contact Eaton for exact dimensions.

* Add 9" for Bay-O-Net fusing.

Table 8. Fluid-Filled—Copper Windings 55/65 °C Rise¹

65° Rise	DEAD-FRONT—LOOP OR RADIAL FEED—BAY-O-NET FUSING OIL FILLED—COPPER WINDINGS										Gallons of Fluid	Approx. Total Weight (lbs.)
	OUTLINE DIMENSIONS (in.)											
kVA Rating	A*	B	C	D	E	F	G	H	I			
45	50	64	39	34	30	64	69	43	20	110	2,100	
75	50	64	39	34	30	64	69	43	20	115	2,350	
112.5	50	64	49	34	30	64	69	53	20	115	2,500	
150	50	64	49	34	30	64	69	53	20	120	2,700	
225	50	64	51	34	30	64	73	55	20	140	3,250	
300	50	64	51	34	30	64	75	55	20	160	3,800	
500	50	81	53	34	30	64	85	57	20	200	4,800	
750	64	89	57	42	30	72	93	61	20	255	6,500	
1000	64	89	59	42	30	72	93	63	20	300	7,800	
1500	73	89	86	42	30	72	93	90	24	410	10,300	
2000	73	72	87	42	30	72	76	91	24	420	11,600	
2500	73	72	99	42	30	72	76	103	24	500	14,000	
3000	73	84	99	46	37	84	88	103	24	720	18,700	
3750	84	85	108	47	38	85	88	112	24	800	20,500	
5000	84	96	108	48	48	96	100	112	24	850	25,000	
7500	94	102	122	54	48	102	100	126	24	1,620	46,900	

¹ Weights, gallons of fluid, and dimensions are for reference only and not for construction. Please contact Eaton for exact dimensions.

* Add 9" for Bay-O-Net fusing.

Standard features

Connections and neutral configurations

- Delta - Wye: Low voltage neutral shall be a fully insulated X0 bushing with removable ground strap.
- Grounded Wye-Wye: High voltage neutral shall be internally tied to the low voltage neutral and brought out as the H0X0 bushing in the secondary compartment with a removable ground strap.
- Delta-Delta: Transformer shall be provided without a neutral bushing.
- Wye-Wye: High voltage neutral shall be brought out as the H0 bushing in the primary compartment and the low voltage neutral shall be brought as the X0- bushing in the secondary compartment.
- Wye-Delta: High voltage neutral shall be brought out as the H0 bushing in the primary compartment. No ground strap shall be provided (line to line rated fusing is required).

High and low voltage bushings

- 200 A bushing wells (15, 25, and 35 kV)
- 200 A, 35 kV Large Interface
- 600 A (15, 25, and 35 kV) Integral bushings (dead-front)
- Electrical-grade wet-process porcelain bushings (live-front)

Tank/cabinet features

- Bolted cover for tank access (45-2500 kVA)
- Welded cover with hand hole (>2500 kVA)
- Three-point latching door for security
- Removable sill for easy installation
- Lifting lugs (4)
- Stainless steel cabinet hinges and mounting studs
- Steel divider between HV and LV compartment
- 20" Deep cabinet (45-1000 kVA)
- 24" Deep cabinet (1500-7500 kVA)
- 30" Deep cabinet (34.5/19.92 kV)
- Pentahead captive bolt
- Stainless steel 1-hole ground pads (45-500 kVA)
- Stainless steel 2-hole ground pads (750-10,000 kVA)
- Parking Stands (dead-front)

Valves/plugs

- One-inch upper filling plug
- One-inch drain plug (45-500 kVA)
- One-inch combination drain valve with sampling device in low voltage compartment (750-10,000 kVA)
- Automatic pressure relief valve

Nameplate

- Laser-scribed anodized aluminum nameplate



Figure 3. Drain valve with sampler.



Figure 4. Automatic Pressure relief valve.



Figure 5. Liquid level gauge.



Figure 6. External Gauges.



Figure 7. External visible break with gauges.

Optional features

High and low voltage bushings

- 200 A (15, 25 kV) bushing inserts
- 200 A (15, 25 kV) feed thru inserts
- 200 A (15, 25 kV) (HTN) bushing wells with removable studs
- High-voltage 600 A (15, 25, 35 kV) deadbreak one-piece bushings
- Low voltage 6-, 8-holes spade
- Low voltage 12-, 16-, 20-holes spade (750-2500 kVA)
- Low voltage bushing supports

Tank/cabinet features

- Stainless steel tank base and cabinet
- Stainless steel tank base, cabinet sides and sill
- 100% stainless steel unit
- Service entrance (2 inch) in sill or cabinet side
- Touch-up paint (domestic)
- Copper ground bus bar
- Kirk-Key provisions
- Nitrogen blanket
- Bus duct cutout

Special designs

- Factory Mutual (FM)
- UL® Classified
- Triplex
- High altitude
- K-Factors
- Step-up
- Critical application
- Modulation transformers
- Seismic applications (including OSHPD)

Switches

- One, two, or three On/Off loadbreak switches
- 4-position loadbreak V-blade switch or T-blade switch
- Delta-wye switch
- 3-position V-Blade selector switch
- 100 A, 150 A, 300 A tap changers
- Dual voltage switch
- Visible break with VFI interrupter interlock
- External visible break (15, 25, and 35 kV, up to 3 MVA)
- External visible break with gauges (15, 25, and 35 kV, up to 3 MVA)

Gauges and devices

- Liquid level gauge (optional contacts)
- Pressure vacuum gauge (optional contacts and bleeder)
- Dial-type thermometer (optional alarm contacts)
- Cover mounted pressure relief device (optional alarm contacts)
- Ground connectors
- Hexhead captive bolt
- Molded case circuit breaker mounting provisions
- External gauges in padlockable box

Overcurrent protection

- Bay-O-Net fusing (Current sensing, dual sensing, dual element, high amperage overload)
- Bay-O-Net expulsion fuse in series with a partial range under-oil ELSP current limiting fuse (below 23 kV)
- Cartridge fusing in series with a partial range under-oil ELSP current limiting fuse (above 23 kV)
- MagneX™ interrupter with ELSP current-limiting fuse
- Vacuum Fault Interrupter (VFI)
- Visible break window
- Fuse/switch interlock

Valves/plugs

- Drain/sampling valve in high-voltage compartment
- Globe type upper fill valve

Overvoltage protection

- Distribution-, intermediate-, or station-class surge arresters
- Elbow arresters (for dead-front connections)

Metering/fan/control

- Full metering package
- Current Transformers (CTs)
- Metering Socket
- NEMA® 4 control box (optional stainless steel)
- NEMA® 7 control box (explosion proof)
- Fan Packages

Testing

- Customer test witness
- Customer final inspection
- Zero Sequence Impedance Test
- Heat Run Test
- ANSI® Impulse Test
- Audible Sound Level Test
- RIV (Corona) Test
- Dissolved Gas Analysis (DGA) Test
- 8- or 24-Hour Leak Test

Coatings (paint)

- ANSI® Bell Green
- ANSI® #61 Light Gray
- ANSI® #70 Sky Gray
- Special paint available per request

Nameplate

- Stainless steel nameplate

Decals and labels

- High voltage warning signs
- Mr. Ouch
- Bi-lingual warning
- DOE compliant
- Customer stock code
- Customer stenciling
- Shock and arc flash warning decal
- Non-PCB decal

Construction

Core

The three-legged, step-lap mitered core construction is manufactured using a high-quality cutting machine. For maximum efficiency, cores are precisely stacked, virtually eliminating gaps in the corner joints.

Five-legged wound core or shell-type triplex designs are used for wye-wye connected transformers, and other special transformer designs.

Cores are manufactured with precision cut, burr-free, grain-oriented silicon steel or amorphous metal, depending on customer preference or optimal material based upon performance requirements. Many grades of core steel are available for optimizing core loss efficiency.

Coils

Pad-mounted transformers feature a rectangular coil configuration with wire-wound, high-voltage primaries and sheet-wound secondaries. The design minimizes axial stress developed by short circuits and provides for magnetic balancing of tap connections.

Coils are wound using the highest quality winding machines providing exacting tension control and conductor placement for superior short-circuit strength and maximum efficiency.

Extra mechanical strength is provided by diamond pattern, epoxy-coated paper insulation, used throughout the coil, with additional epoxy at heavy stress points. The diamond pattern distribution of the epoxy and carefully arranged ducts, provide a network of passages through which cooling fluid can freely circulate.

Coil assemblies are heat-cured under calculated hydraulic pressure to ensure performance against short-circuit forces.

Core and coil assemblies

Pad-mounted transformer core and coil assemblies are braced with heavy steel ends to prevent the rectangular coil from distorting under short-circuit conditions. Plates are clamped in place using presses, and welded or bolted to form a solid core and coil assembly. Core and coil assemblies exceed ANSI® and IEEE® requirements for short-circuit performance. Due to the rigidity of the design, impedance shift after short-circuit is comparable to that of circular wound assemblies.

Tanks

Transformer tanks are designed for high strength and ease of handling, installation, and maintenance. Tanks are welded using precision-cut, hot rolled, pickled and oiled steel. They are sealed to protect the insulating fluid and other internal components.

Transformer tanks are pressure-tested to withstand 7 psig without permanent distortion and 15 psig without rupture.

Tank finish

An advanced multi-stage finishing process exceeds IEEE Std C57.12.28™-2014 standards. The eight-stage pre-treatment process assures coating adhesion and retards corrosion. It converts tank surfaces to a nonmetallic, water insoluble iron phosphate coating.

The paint method consists of two distinct layers of paint. The first is an epoxy primer (E-coat) layer which provides a barrier against moisture, salt and corrosives. The two-component urethane final coat seals and adds ultraviolet protection.

Vacuum processing

Transformers are dried and filled with filtered insulating fluid under vacuum, while secondary windings are energized. Coils are heated to drive out moisture, ensuring maximum penetration of fluid into the coil insulation system.

Insulating fluid

Eaton's Cooper Power series transformers are available with

electrical-grade mineral insulating oil or Envirotemp™ FR3™ fluid. The highly refined fluids are tested and degassed to assure a chemically inert product with minimal acid ions. Special additives minimize oxygen absorption and inhibit oxidation. To ensure high dielectric strength, the fluid is re-tested for dryness and dielectric strength, refiltered, heated, dried, and stored under vacuum before being added to the completed transformer.

Eaton's Cooper Power series transformers filled with Envirotemp™ FR3™ fluid enjoy unique fire safety, environmental, electrical, and chemical advantages, including insulation life extending properties.

A bio-based, sustainable, natural ester dielectric coolant, Envirotemp™ FR3™ fluid quickly and thoroughly biodegrades in the environment and is non-toxic per acute aquatic and oral toxicity tests.

Building for Environmental and Economic Sustainability (BEES) total life cycle assessment software, utilized by the US Dept. of Commerce, reports its overall environmental performance impact score at 1/4th that reported for mineral oil. Envirotemp™ FR3™ fluid has also earned the EPA Environmental Technology Verification of transformer materials.

With a fire point of 360 °C, Envirotemp™ FR3™ fluid is FM Approved® and Underwriters Laboratories (UL®) Classified "Less-Flammable" per NEC® Article 450-23, fitting the definition of a Listed



Figure 8. VFI transformer with visible break.

Product per NEC®.

Pad-mounted VFI transformer

Eaton's Cooper Power series VFI transformer combines a conventional distribution transformer with the proven Vacuum Fault Interrupter (VFI). This combination provides both voltage transformation and transformer over current protection in one space saving and money saving package. The pad-mounted VFI transformer protects the transformer and provides proper coordination with upstream protective devices. When a transformer fault or overload condition occurs, the VFI breaker trips and isolates the transformer.

The three-phase VFI breaker has independent single-phase initiation, but is three-phase mechanically gang-tripped. A trip signal on any phase will open all three phases. This feature eliminates single-phasing of three phase loads. It also enables the VFI breaker to be used as a three-phase load break switch.

Due to the resettable characteristics of the VFI breaker, restoring three-phase service is faster and easier.

The sealed visible break window and switch is an option that can be installed to provide visible break contact. This feature provides enhanced safety and allows an operator to see if the loadbreak switch contacts are in an open or closed position before performing

maintenance.

Envirotran™ FM Approved special protection transformer

Eaton's Cooper Power series Envirotran™ transformer is FM Approved and suitable for indoor locations. Factory Mutual Research Corporation's (FMRC) approval of the Envirotran transformer line makes it easy to comply with and verify compliance with Section 450.23, 2008 NEC, Less-Flammable Liquid-Filled Transformer Requirements for both indoor and outdoor locations.

Envirotran FM Approved transformers offer the user the benefit of a transformer that can be easily specified to comply with NEC, and makes FM Safety Data Sheet compliance simpler, while also providing maximum safety and flexibility for both indoor and outdoor installations.

Because the "FM Approved" logo is readily visible on the transformer and its nameplate, NEC compliance is now easily verifiable by the inspector.

Envirotran FM Approved transformers are manufactured under strict compliance with FMRC Standard 3990 and are filled with



FM Approved Envirotemp™ FR3™ fluid, a fire-resistant dielectric coolant.

Special application transformers

Data Center transformer

With focus rapidly shifting from simply maximizing uptime and supporting demand to improving energy utilization, the data center industry is continually looking for methods to increase its energy efficiency and reliability. Utilizing cutting edge technology, Eaton's Cooper Power series Hardened Data Center (HDC) transformers are the solution. Designed with special attention given to surge protection, HDC liquid-filled transformers provide superior performance under the harshest electrical environments. Contrary to traditional dry-type units, HDC transformers provide unsurpassed reliability, overloadability, operational life, efficiency, thermal loading and installed footprint. These units have reliably served more than 100 MW of critical data center capacity for a total of more than 6,000,000 hours without any reported downtime caused by a thermal or short-circuit coil failure.

The top priority in data center operations is uninterrupted service. Envirotran HDC transformers from Eaton, having substantially higher levels of insulation, are less susceptible to voltage surges. Eaton has experienced zero failures due to switching transients. The ANSI® and IEEE® standard impulse withstand ratings are higher for liquid-filled transformers, making them less susceptible to insulation failure. The Envirotran HDC transformer provides ultimate protection by increasing the BIL rating one level higher than standard liquid-filled transformer ratings. The cooling system of liquid-filled transformers provides better protection from severe overloads—overloads that can lead to significant loss of life or failure.

Data center design typically includes multiple layers of redundancy, ensuring maximum uptime for the critical IT load. When best in class transformer manufacturing lead times are typically weeks, not days, an unexpected transformer failure will adversely affect the facility's reliability and profitability. Therefore, the ability to determine the electrical and mechanical health of a transformer can reduce the probability of costly, unplanned downtime. Routine diagnostic tests, including key fluid properties and dissolved gas analysis (DGA), can help determine the health of a liquid-filled transformer. Although sampling is not required for safe operation, it will provide the user with valuable information, leading to scheduled repair or

replacement, and minimizing the duration and expense of an outage. With a dry-type transformer, there is no reliable way to measure the health or likelihood of an impending failure.

Solar transformer

As a result of the increasing number of states that are adopting aggressive Renewable & Alternative Energy Portfolio Standards, the solar energy market is growing—nearly doubling year over year. Eaton, a key innovator and supplier in this expanding market, is proud to offer its Cooper Power series Envirotran transformers specifically designed for Solar Photovoltaic medium-voltage applications. Eaton is working with top solar photovoltaic developers, integrators and inverter manufacturers to evolve the industry and change the way we distribute power.

In accordance with this progressive stance, every Envirotran Solar transformer is filled with non-toxic, biodegradable Envirotemp™ FR3™ dielectric fluid, made from renewable seed oils. On top of its biodegradability, Envirotemp™ FR3™ fluid substantially extends the life of the transformer insulation, saving valuable resources. What better way to distribute green power than to use a green transformer. In fact, delaying conversion to Envirotran transformers places the burden of today's environmental issues onto tomorrow's generations. Eaton can help you create a customized transformer, based on site specific characteristics including: temperature profile, site altitude, solar profile and required system life. Some of the benefits gained from this custom rating include:

- Reduction in core losses
- Improved payback on investment
- Reduction in footprint
- Improved fire safety
- Reduced environmental impact

For the solar photovoltaic industry, Eaton is offering standard step up transformers and dual secondary designs, including 4-winding, 3-winding (Low-High-Low) and 3-winding (Low-Low-High) designs.

Wind transformer

Eaton is offering custom designs for renewable energy power generation. Eaton manufactures its Cooper Power series Generator Step-Up (GSU) transformers for installation at the base of every wind turbine. Additionally, grounding transformers are available for wind power generation.

DOE efficiency

The United States Department of Energy (DOE) has mandated efficiency values for most liquid type, medium voltage transformers. As a result, all applicable Eaton's Cooper Power series transformers 2500 kVA and below conform to efficiency levels as specified in the DOE ruling "10 CFR Part 431 Energy Conservation Program."

Underwriters Laboratories® (UL®) Listed and Labeled/Classified

The Envirotran transformer from Eaton can be specified as UL® Listed & Labeled, and/or UL® Classified. Underwriters Laboratories (UL®) listing is a verification of the design and construction of the transformer to the ANSI® and IEEE® standards. UL® listing generally is the most efficient, cost-effective solution for complying with relevant state and local electrical codes. UL® Combination Classification/Listing is another way in which to comply with Section 450.23, 2008 NEC® requirements. This combines the UL® listed transformer with a UL® Classified Less-Flammable Liquid and complies with the use restrictions found within the liquid Classification.



K-Factor transformer

With a drastic increase in the use of ferromagnetic devices, arcing devices, and electric power converters, higher frequency loads have increased significantly. This harmonic loading has the potential to generate higher heat levels within a transformer's windings and leads by as much as 300%. Harmonic loading has the potential to induce premature failure in standard-design distribution transformers.

In addition to standard UL® "K-Factor" ratings, transformers can be designed to customer-provided specifications detailing precise loading scenarios. Onsite measurements of magnitude and frequency, alongside harmonic analysis of the connected load can be performed by Eaton engineers or a third party consultant. These field measurements are used to determine exact customer needs and outline the transformer specifications.

Eaton will design harmonic-resistant transformers that will be subjected to the unique harmonic loads. These units are designed to maintain normal temperature rise under harmonic, full-load conditions. Standard UL® "K-Factor" designs can result in unnecessary costs when the "next-highest" K-Factor must be selected for a calculated design factor. To save the customer these unnecessary costs, Eaton can design the transformer to the specific harmonic spectrum used in the application. Eaton's Cooper Power series K-factor transformers are filled with mineral oil or Envirotemp™ FR3™ fluid and enjoy the added benefits of dielectric cooling such as higher efficiencies than dry-type transformers.

Modulation transformer

Bundled with an Outboard Modulation Unit (OMU) and a Control and Receiving Unit (CRU), a Modulation Transformer Unit (MTU) is designed to remotely achieve two way communication.

The use of an MTU reduces travel time and expense versus traditional meter reading performed by high voltage electricians. Additionally, with MTU it is possible to manage and evaluate energy consumption data, providing reduced metering costs and fewer tenant complaints.

An MTU utilizes existing utility infrastructure, therefore eliminating the need to engineer and construct a dedicated communication network.

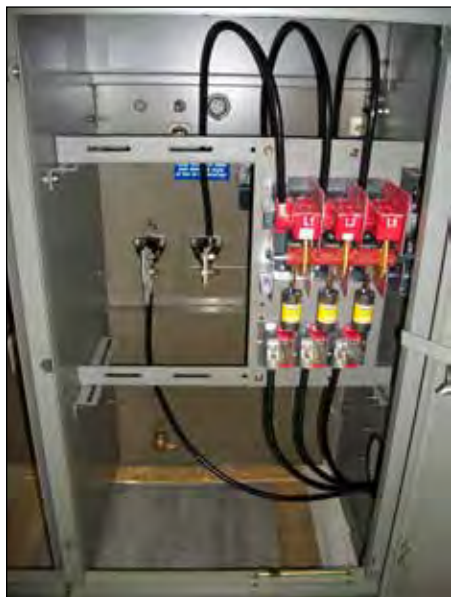


Figure 9. Modular transformer.

Inverter/rectifier bridge

Eaton complements its range of applications for transformers by offering dual winding designs. These designs are intended for connection to 12-pulse rectifier bridges.

Product attributes

To set us apart from other transformer manufactures, Eaton includes the following guarantees with every three-phase pad-mounted transformer.

Engineered to order (ETO)

Providing the customer with a well developed, cost-effective solution is the number one priority at Eaton. Using customer specifications, Eaton will work with the customer from the beginning to the end to develop a solution to fit their needs. Whether it is application specific, site specific, or a uniquely specified unit, Eaton will provide transformers with the best in class value and performance, saving the customer time and money.

Made in the U.S.A.

Eaton's three-phase pad-mounted transformers are produced right here in the United States of America. Our manufacturing facilities are positioned strategically for rapid shipment of products. Furthermore, should the need arise, Eaton has a broad network of authorized service repair shops throughout the United States.

Superior paint performance

Protecting transformers from nature's elements worldwide, Eaton's E-coat system provides unrivaled transformer paint life, and exceeds IEEE Std C57.12.28™-2014 and IEEE Std C57.12.29™-2005 standards. In addition to the outside of the unit, each transformer receives a gray E-coat covering in the interior of the tank and cabinet, providing superior rust resistance and greater visibility during service.

If the wide range of standard paint selections does not suit the customer's needs, Eaton will customize the paint color to meet their requirements.

Rectangular coil design

Eaton utilizes a rectangular coil design. This winding technique results in a smaller overall unit footprint as well as reducing the transformer weight. The smaller unit size does not hinder the transformer performance in the least. Units have proven short circuit withstand capabilities up to 10 MVA.

Testing

Eaton performs routing testing on each transformer manufactured including the following tests:

- **Insulation Power Factor:** This test verifies that vacuum processing has thoroughly dried the insulation system to required limits.
- **Ratio, Polarity, and Phase Relation:** Assures correct winding ratios and tap voltages; checks insulation of HV and LV circuits. Checks entire insulation system to verify all live-to-ground clearances.
- **Resistance:** This test verifies the integrity of internal high-voltage and low-voltage connections; provides data for loss upgrade calculations.
- **Routine Impulse Tests:** The most severe test, simulating a lightning surge. Applies one reduced wave and one full wave to verify the BIL rating.
- **Applied Potential:** Applied to both high-voltage and low-voltage windings, this test stresses the entire insulation system to verify all live-to-ground clearances.
- **Induced Potential:** 3.46 times normal plus 1000 volts for reduced neutral designs.
- **Loss Test:** These design verification tests are conducted to assure that guaranteed loss values are met and that test values are

within design tolerances. Tests include no-load loss and excitation current along with impedance voltage and load loss.

- Leak Test: Pressurizing the tank to 7 psig assures a complete seal, with no weld or gasket leaks, to eliminate the possibility of moisture infiltration or fluid oxidation.

Design performance tests

The design performance tests include the following:

- Temperature Rise: Our automated heat run facility ensures that any design changes meet ANSI® and IEEE® temperature rise criteria.
- Audible Sound Level: Ensures compliance with NEMA® requirements.
- Lightning Impulse: To assure superior dielectric performance, this test consists of one reduced wave, two chopped waves and one full wave in sequence, precisely simulating the harshest conditions.

Thomas A Edison Research and Test Facility

We are constantly striving to introduce new innovations to the transformer industry, bringing you the highest quality transformer for the lowest cost. Eaton's Cooper Power series Transformer Products are ISO 9001 compliant, emphasizing process improvement in all phases of design, manufacture, and testing. We have invested millions of dollars in the Thomas A. Edison Technical Center, our premier research facility in Franksville, Wisconsin affirming our dedication to introducing new innovations and technologies to the transformer industry. This research facility is fully available for use by our customers to utilize our advanced electrical and chemical testing labs.

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Envirotemp[®] FR3[®] fluid

Envirotemp FR3 fluid is a dielectric fluid intended for use as an insulation and cooling medium in electrical apparatus such as electrical distribution and power transformers.

Cooper Power Systems
1900 East North Street
Waukesha, Wisconsin 53188-3899 USA
Telephone: +01 262 524 3300
Internet: www.cooperpower.com
Emergency telephone (Chemtrec)
Inside USA: 800 424 9300
Outside USA: +01 703 527 3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

Envirotemp FR3 fluid is a proprietary formulation using food-grade vegetable oils combined with performance-enhancing additives. All components are listed in the EINECS inventory.

<u>Component</u>	<u>Proportion (wt%)</u>
Vegetable oil	> 98.5
Antioxidant additive	< 1.0
Cold flow additive	< 1.0
Colorant	< 1.0

3. HAZARDS IDENTIFICATION

Envirotemp FR3 fluid is a preparation not classified as dangerous according to Directive 1999/45/EC. Not expected to cause a severe emergency hazard.

Routes of entry

Eyes: Contact may occur as a result of splash or exposure to mist conditions. May cause irritation and redness.

Skin: Typically non-irritating. In some case, a sensitization to vegetable oils may cause localized redness

Ingestion: May cause gastric irritation.

Inhalation: Exposure may occur as a result of mist exposure. May cause respiratory irritation.

Signs and symptoms of exposure: none known

Medical conditions generally aggravated by exposure: There is a very small risk for an allergic reaction to soybean oil in persons allergic to soybeans themselves.

4. FIRST AID MEASURES

Inhalation: If inhaled, remove affected person from exposure to mists.

Eye contact: For eye contact, flush the eyes immediately with large amounts of water with the eyelids held away from the eye to ensure thorough rinsing.

Skin contact: For skin contact, remove by washing with soap and water. Get medical attention if irritation persists.

Ingestion: If swallowed, observe for signs of stomach discomfort or nausea. If symptoms persist, seek medical help. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Extinguishing media: CO₂ or dry chemical foam

Special fire fighting procedures: Use approved self-contained breathing apparatus with full facemask and full protective equipment in confined areas. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from source of ignition. Application of water to flaming oil can cause spreading.

Unusual fire and explosion hazards: Slight when exposed to flame. Can react with oxidizing materials. Clay materials (Fuller's earth, oil dry products) saturated with Envirotemp FR3 fluid can, under certain conditions, undergo a slow oxidation that releases heat. If the heat so released cannot escape, it is possible that the temperature may increase and ignite combustible materials in close contact.

6. ACCIDENTAL RELEASE MEASURES

Steps to take in case material is released or spilled: Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, or diatomaceous earth in drums for waste disposal. Prevent any material from entering drains or waterways. If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures.

In the USA, spills into navigable waters must be reported to the National Response Center, 800-424-8802

7. HANDLING AND STORAGE

Precautions to take in handling and storage: Avoid extremes of temperature in storage. Store Envirotemp FR3 fluid in labeled, tightly closed containers in cool, dry, isolated and well-ventilated areas, away from sources of ignition or heat. To maintain fluid for intended use as an electrical insulating fluid, eliminate exposure to oxygen and moisture.

Intermediate bulk storage container (tote): Prolonged exposure to ultraviolet radiation (sunlight) may affect color.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values:

	TWA (mg/m ³)	
	OSHA ¹ PEL	ACGIH ² TLV
Vegetable oil mists	–	10
Vegetable oil mists: total dust	15	–
Vegetable oil mists: respirable fraction	5	–

Hazardous Materials Identification System (HMIS):

Health	Flammability	Physical Hazard
0	1	0

Respiratory protection: Vaporization is not expected at ambient temperature. Therefore, the need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). For extreme cases, use of approved supplied-air respiratory protection may be necessary.

Ventilation: General mechanical ventilation can be used to control or reduce airborne concentrations of oil.

Protective gloves: Use gloves constructed of chemical resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.

Eye protection: Wear safety glasses or goggles to prevent eye contact. Eye baths should be readily available in the area of handling Envirotemp FR3 fluid.

¹ U.S. Occupational Health and Safety Administration

² American Conference of Governmental Industrial Hygienists

Other protective clothing or equipment: Wear regularly laundered coveralls or lab coat to minimize skin exposure.

Workplace hygienic practices: Wash with soap and water after contact. Avoid exposure to mists.

Environmental exposure controls: Have oil-absorbent materials easily available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor: clear light-green liquid with slight vegetable oil odor **pH:** neutral

Closed cup flash point: 310 – 320°C

Autoignition temperature: 401 – 404°C

Boiling point: >360°C

Relative density (H₂O = 1): 0.92

Vapor pressure (mm Hg): < 0.01 @ 20°C

Pour point: -18 to -24°C

Vapor density (air = 1): n/a

Evaporation rate (butyl acetate = 1): nil

Solubility in water: negligible; < 0.1%

Volatile organic compounds: < 0.001 g/L

Viscosity: 33 – 35 mm²/s at 40°C

Miscibility: mixes with other dielectric fluids except silicone

10. STABILITY AND REACTIVITY

Stability: Envirotemp FR3 fluid is stable under normal conditions of use.

Incompatibility (materials to avoid): Avoid contact with strong oxidizing agents.

Hazardous decomposition products: none

Hazardous Polymerization: will not occur

Stabilizers: not required

Hazardous exothermic reaction: Slight when exposed to flame; can react with oxidizing materials. Class III B liquid. Clay materials (Fuller's earth, oil dry products) saturated with Envirotemp FR3 fluid can, under certain conditions, undergo a slow oxidation that releases heat. If the heat so released cannot escape, it is possible that the temperature may increase and ignite combustible materials in close contact.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: none

NTP: no

IARC monographs: no

OSHA regulated: no

Envirotemp FR3 fluid base oils are "generally recognized as safe" (GRAS) by the U.S. Food and Drug Administration and allowed for human consumption as a food and as a component that is allowed in contact with human food.

12. ECOLOGICAL INFORMATION

Acute oral toxicity (OECD 420 - rats): LD₅₀ >2000 mg/kg

Acute aquatic toxicity (OECD 203 - trout): LC₅₀ >1000 mg/kg; NOAEC >1000 mg/kg

Aquatic biodegradation (OPPTS 835.3110): readily biodegradable, >99%

Biological oxidation demand (5-Day SM5210B): 250 ppm

Chemical oxygen demand (SM5220D): 560 ppm

BOD/COD ratio: 45%

Petroleum hydrocarbon content: none

Environmental physical hazard: Envirotemp FR3 fluid shares physical hazards common to all oils such as coating feathers, fur, and gills.

13. DISPOSAL CONSIDERATIONS

Recycling: Consult with local used oil recyclers, restaurant grease recyclers, fat rendering companies, or biodiesel producers.

Hazardous Waste: Envirotemp FR3 fluid itself, when discarded or disposed of, is not a hazardous waste.

Disposal: Incinerate or landfill in accordance with local regulations. Do not pour into drains or waterways.

14. TRANSPORT INFORMATION

Harmonized System Tariff Classification (Schedule B): 1507.90.4050

National Motor Freight Classification (NMFC): 155250

Euro Tariff: 15 07 90 00 00

15. REGULATORY INFORMATION

Envirotemp FR3 fluid itself, when discarded or disposed of, is not listed as a hazardous waste per 40 CFR 261 and is not a used oil per 40 CFR 279. Envirotemp FR3 fluid is a preparation not classified as dangerous according to Directive 1999/45/EC.

16. OTHER INFORMATION

Technical information available at the Cooper Power Systems website: www.cooperpower.com

This Material Safety Data Sheet has been prepared in order to help the users of Envirotemp FR3 fluid. The data contained herein is, to the best of our knowledge, accurate as of the date of preparation of this sheet.

Effective Date: September 22, 2011



EXHIBIT F

SITE RULES

NEE will use commercially reasonable efforts to follow and to cause its personnel to follow the following rules while on the Premises. Lessor may bar further access to the Premises by any individual who commits repeated, material violations of these rules after such individual has received at least three written warnings of a particular material violation from Lessor describing, and including reasonable evidence documenting, such material violation. In addition, any individual violating rules (d)(i), (iv), or (vi) at least three times after receipt of a third written warning with documented evidence of such violation, will be immediately expelled from the Premises and will be banned from the Premises thereafter. The rules are as follows:

- a) When not in active use by NEE, all access gates, as well as all interior gates, will remain closed at all times.
- b) Smoking is prohibited except in designated construction areas and in vehicles. NEE will employ reasonable precautions to prevent fires and will be responsible for all damage caused by NEE.
- c) NEE will keep the Premises clean and free of debris created by NEE, its contractors, or others brought on to the Premises by NEE. NEE will not use the Premises for storage of items that are not related to, used or to be used in connection with, or for the benefit of all or a portion of the Project.
- d) At no time will any of employees of NEE bring any of the following onto the Premises:
 - i. weapons of any type, including but not limited to, guns, bows and arrows, or sling shots;
 - ii. animal calling devices;
 - iii. fishing equipment or nets;
 - iv. dogs, cats or any other animals;
 - v. alcoholic beverages;
 - vi. illegal drugs or related paraphernalia.
- e) NEE, its employees, contractors, agents and any individual allowed onto the Premises by NEE will use reasonable efforts to confine their activities on the Premises to the designated access routes and to the areas upon which operations are then being conducted.
- f) No wood, plants, animals (dead or alive), antlers, artifacts or any other item that was not originally brought onto the Premises by NEE personnel will be removed from the Premises by such personnel, except that NEE can burn, remove and clear wood, plants and brush on the Premises.
- g) A speed limit of 25 miles per hour (15 miles per hour at night) will be strictly observed while using roads on the Premises.
- h) This Agreement does not cover or include any right or privilege of hunting or fishing on the Premises, all such rights being expressly reserved to Lessor.



EXHIBIT G



AN ALLETE COMPANY

APPENDIX M

EMERGENCY RESPONSE PLAN

Prepared for:

Louisa County, Virginia - Board of Supervisors
1 Woolfolk Avenue, Louisa, Virginia 23093

Applicant:

Louisa Solar 1 LLC
C/O New Energy Equity
2670 Patton Rd, Roseville, MN 55113

SECTION 1: INTRODUCTION

New Energy Equity (NEE) is committed to the safety and health of all of our workers and contract personnel, and visitors to our sites and work locations. Our continuing objective to provide safe work conditions and practices at all our work locations is our highest priority. We acknowledge the right all workers have to a safe and healthy work environment.

Since each emergency is unique, it is impossible to envision every potential event or combination of events that might contribute to, or result in, an emergency. This Emergency Response Plan (ERP) is based on an all-hazards approach that provides the flexibility to adapt to emergency regardless of the origin. This plan provides both a management and operational structure that identifies the functional relationship that must exist to ensure effective identification, response, and recovery from an emergency. Good judgment and common sense are critical in effective responses to emergency situations.

SECTION 2: OBJECTIVE

The objective of the ERP is to detail practices designed to address potential impacts from construction and operations of s NEE community solar garden project. (Project). This ERP plan provides guidance to construction, operations, contractors, and field personal on measures to minimize effects during construction and operations activities associated with the Project.

This ERP is to assist employees, sub-contractors, contractors, suppliers, and management in making quality decisions during times of crisis. This plan contains guidance in determining the appropriate actions to be undertaken to prevent injury and property loss from the occurrence of major incidents or accidents. This document acts as a guideline in the event of an emergency. The steps described may not occur in the same order, good judgment and common sense are critical for effective emergency response.

The ERP is intended to minimize hazards to human health and safety and to the environment from fire, explosion, or any unexpected sudden or non-sudden release of hazardous materials constituents to the air, soil, surface, or groundwater, and natural or human disasters. This plan will serve as the emergency action guide for employees, contractors, and visitors in the event of an emergency.

Section 2.1 Emergency Response Plan (ERP)

The following text includes standard language included in NEE contracts regarding emergency response. These measures may be modified in the final POD to include measures specifically designed for the project.

NOTICE: This attachment is intended to be an overview of NEE's or contractors' emergency response requirements and is not intended to be a comprehensive or exhaustive list.

This attachment is not intended to supersede or replace Contractor's obligations to comply with (and ensure Contractor Representatives comply with) all applicable laws, all reasonable directions and orders given by representatives of NEE RE, and all other guidelines, rules, and procedures of NEE that may be

given to Contractor from time to time, including without limitation, safety and health standards, policies, and procedures resulting from a pre-job risk assessment, amendments by NEE RE, or amendments resulting from changes in applicable laws.

SECTION 3: SETTING AND SITE ACCESS INCLUDING EMERGENCY ACCESS

Direct access to the site will be provided by the Kloeckner Road. There would be no need for internal access roads within the project site. The access would be constructed to allow fire and maintenance vehicle access.

SECTION 4: EMERGENCY RESPONSE REQUIREMENTS

Section 4.1 Regulatory Compliance

NEE and contractors will comply with all applicable federal, state, and local emergency response laws, regulations, and standards. NEE and contractors using good judgment, common sense, experience, and knowledge will identify such additional emergency response preparation as may be required to be performed safely.

Section 4.2 Emergency Coordinator

Before on-site services begin, NEE will ensure contractor(s) assign a designated emergency response coordinator, qualified by experience and/or education, is assigned for all services taking place. This person will be dedicated to managing the implementation of the emergency response plan, emergency response and may have additional project functions provided they do not interfere with the effective implementation of the program.

Section 4.3 Competent and Qualified Persons

NEE will ensure contractor(s) employ a “competent person” and/or “qualified person” capable of carrying out an effective emergency response preparation plan. Such person(s) will have the authority to take prompt corrective actions. Contractor(s) will provide NEE with the name and contact information of the assigned person(s) and/or any changes in the assignment.

Section 4.4 Fire Safety Plan (FSP)

NEE will ensure contractor(s) develop a Fire Safety Plan (FSP) that describes how the contractor will safely provide contractor’s services. Content of the plan will address regulatory compliance and any additional health and safety measures as may be required for the contractor’s services to be performed safely. A copy of the contractor’s FSP will be provided to NEE prior to the start of on-site work.

Section 4.5 Emergency Response Plan (ERP)

Contractor(s) will develop a written final Emergency Response Plan (ERP) in accordance with applicable federal, state, and local emergency response regulations and standards. Contractor(s) will include the Emergency Response Plan in contractor’s Project Safety Plan. Contractor(s) will train all contractor representatives on the provisions of the Emergency Response Plan.

The final ERP would be specific to the final site layout and location of site components and implemented to provide an integrated procedure for response to oil and hazardous materials spills, plant evacuation, medical/fire/law enforcement, and severe weather emergencies. The final ERP would be

consistent with applicable laws and regulations governing such emergencies.

Section 4.6 Health and Safety Program

Health and Safety Training is an important part of the final ERP. To ensure the instructions contained within the final ERP are properly followed during site/facility emergencies, a training program is to be developed and training provided to all employees, upon hire and after any changes in site/facility operations or layout. All staff to intervene in emergency situations that could affect their health or safety must receive training before undertaking their duties. The training must include exercises appropriate to the work site that simulate the potential emergencies identified in the final ERP.

Section 4.6 Fire Prevention

Listed below are specific procedures that shall be addressed by the site to minimize the occurrence of and impact from a fire emergency. Fire prevention is the responsibility of all personnel. Employees should follow safe practices to minimize fire hazards, and supervisors must ensure safe practices are followed daily.

- Contractor(s) will include the Fire Safety Plan (FSP) in contractor's ERP. Contractor(s) will train all contractor representatives on the provisions of the FSP. The FSP would be consistent with applicable laws and regulations governing such emergencies.
- All fire protection equipment will be inspected monthly by the Emergency Coordinator. All areas at each site/facility will be inspected monthly to check for unsafe conditions, such as blocked or locked fire exits, poor housekeeping, smoking in non-designated areas, flammable/combustible materials not stored properly and obstructed access to electrical rooms and panels, etc.
- The Project operator and or EPC contractor shall present basic fire-prevention training to all personnel working at the project site, and shall maintain documentation of all training and implement the following:
- All employees, contractors, and employees of contractors to do everything reasonable within their power, expertise, and assessment of human safety both independently and upon request of the County and the local fire department to prevent and suppress fires resulting from Project construction or maintenance activities on the lands to be occupied under this permit. In case of fire suppressed by the operator, the operator will report its occurrence to the County and the local fire department. The operator is responsible for all suppression costs and resource damage rehabilitation costs resulting from the suppression of any fire resulting from its operations and practices.
- The operator is responsible to ensure that each employee, subcontractor, or any other individual or company working on the project site is aware of the provisions of this fire plan, is familiar with the location and proper use of firefighting equipment and conducts themselves in a fire-safe manner.
- No material will be disposed of by burning in open fires.

- Exhaust systems of vehicles will have an acceptable muffler and will be in proper working condition. All motorized equipment and machinery will be equipped with spark arresters.
 - Vehicles will be parked only in cleared areas.
 - All smoking will be done only inside of vehicles or in areas cleared of flammable material.
 - Fuels and flammable materials, if required, will be stored in accordance with the Hazardous Materials Plan and in accordance with all applicable state and federal laws.
 - The proposed solar plant site shall be equipped with fire extinguishers and other equipment sufficient to extinguish small fires.
 - Welding operations are subject to the following additional provisions
 - There will be no welding when winds are over 15 miles per hour; and
 - Welding will occur only in areas cleared of all flammable vegetation and materials at a minimum radius of 30 feet from the welding operation.
 - Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees. All construction workers, plant personnel, and maintenance workers visiting the plant and/or transmission lines to perform maintenance activities shall receive training on the procedures to be followed in the event of a fire. Training records shall be maintained and be available for review by the County and the local fire department.
 - Local fire agencies shall have access to the solar farm site. Access gates shall be a minimum of 12 feet to allow fire access.
 - Minimize fire risk by removing vegetation. Measures to minimize fire risk shall include removal of dry vegetation, or equipment/vehicle that has the potential to spark a fire.

In the event of an emergency, immediate notification must be easily available for employees. In all circumstances regarding emergencies whether a specific incident such as an individual, to a serious or facility wide emergency incident, the preferred means of notification is through the immediate Supervisor who will then notify the operator so that he/she may make an announcement to the whole site. In situations where site- wide announcements are not available, notification will occur by phone or radio, or other site-specific method.

Section 4.7 Emergency Response

In the event of an emergency response, the following measures will be conducted by the individual discovering the emergency. First, personnel will assess the situation to determine potential safety concerns and hazards posed to personnel and the environment. Protective actions for life safety are the priority. All personnel will be moved or evacuated to a safe location. Access will be prohibited to the affected area to other employees or contractors. The final ERP will include a site-specific evacuation plan and a shelter in place plan.

The second priority is the stabilization of the incident. Anyone who witnesses an unusual situation that cannot be corrected routinely must notify their supervisor immediately and, while respecting the jurisdiction and ability, he/she must take the necessary measures to control the situation until the arrival of the Emergency Coordinator or supervisor.

Section 4.8 Emergency Reporting

The construction contractor will notify NEE construction supervisor and environmental monitor of any emergencies immediately. NEE will notify federal, state, and local authorities, as appropriate.

If an emergency threatens public or worker health:

- The contractor will make appropriate notification(s) to emergency personnel.
 - Emergency: 911

ATTACHMENT A:

SAMPLE EMERGENCY RESPONSE FORM

**CERTIFICATIONS, ACKNOWLEDGMENTS,
AND DESIGNATION OF EMERGENCY COORDINATOR**

The Construction Contractor(s) responsible for managing the material yards shall complete and submit the following information:

GENERAL INFORMATION

Business Name

Facility Street Address

()

City

County

Zip Code

Phone

Mailing Address (if different)

()

City

County

Zip Code

Phone

EMERGENCY COORDINATOR

()

()

()

Primary Emergency Coordinator

Business Phone

24-hour Phone

Pager/Cellular Phone

()

()

()

1st Alternate

Business Phone

24-hour Phone

Pager/Cellular Phone

()

()

()

2nd Alternate

Business Phone

24-hour Phone

Pager/Cellular Phone

EMERGENCY CHECKLIST

**** DIAL 911 FOR EMERGENCY RESPONSE****

Emergency Coordinator:	()	()
	(day phone)	(night phone)
First Alternate:	()	()
	(day phone)	(night phone)
Second Alternate:	()	()
	(day phone)	(night phone)

Contractor Telephone Number

Address

EMERGENCY NUMBERS

Emergency Response
(Ambulance, Fire, Police, Sheriff, Highway Patrol) call 911

Poison Control Center Phone: _____

Nearest Hospitals (2) _____ Phone: _____

_____ Phone: _____

Cleanup Contractor _____ Phone: _____

Other (specify) _____ Phone: _____

Other (specify) _____ Phone: _____

AGENCY NOTIFICATIONS (to be made by the Proponent's environmental manager or environmental field supervisor or emergency response coordinator)

Other (specify) _____ Phone #: _____

Other (specify) _____ Phone #: _____

Note: The Construction Contractor(s) shall verify and update the emergency numbers on this page before and during Project construction

I. EMERGENCY RESPONSE EQUIPMENT MONTHLY INSPECTION

A/U

- _____ Shovels
- _____ Absorbent material
- _____ Personal protective equipment (Tyvek suit, gloves, goggles and booties, as appropriate)
- _____ Fire-fighting equipment in good working condition
- _____ First aid supplies (e.g., medical supplies, squeeze bottle eye wash)
- _____ Communication equipment
- _____ Bung wrench (non-sparking)

II. EMERGENCY RESPONSE ACTIONS TAKEN REPORT

(Required for all unacceptable conditions)

Date: _____ Company (print): _____

Inspected by (print): _____ Signature: _____



EXHIBIT H

Site Selection Criteria

Siting renewable energy projects is contingent on several factors, key considerations include:

- **Landowner support** – Privately held entities such as NEE Energy do not utilize eminent domain authority when it comes to site selection and securing land for community solar project development. Accordingly, solar projects only occur on properties that have complete landowner support. Property owners typically contact NEE following outreach activities such as direct mail, phone calls, or digital campaigns promoting NEE efforts to acquire development opportunities. Once educated about the considerations of hosting a community solar garden, landowners can choose to participate and become a project partner.
- **Solar resource** – Not all sites have sufficient solar access to justify building a community solar garden. Energy production and project viability are dependent on how much available sunlight reaches the site. Sites with compromised solar resource due to topography, vegetation, or adjacent structures cannot be economically developed.
- **Parcel characteristics** – Sites must have sufficient acreage, appropriate dimensions, and acceptable topography to host a community solar garden. At a minimum, seven acres of developable area is needed but a good site typically has twenty to forty acres dedicated to the solar project. The parcel shape must also allow for efficient layout of the solar array(s). Narrow, elongated, or twisting parcel boundaries make it challenging to efficiently layout and build a solar array. Additionally, a relatively flat area is required for site development. While some gradient is acceptable, grades above 5% can significantly add to project costs and complicate engineering and construction. In general, NEE does not develop sites that require significant tree clearing, grading, or similar land disturbance.
- **Interconnection feasibility** – A community solar garden requires a *three-phase distribution* feeder or sub-transmission line nearby (within approximately a quarter mile) and the site must be within 4 miles of a utility substation to avoid cost prohibitive interconnections costs. Many sites are not chosen for development simply because there is no practicable way for energy produced on site to access the power grid.
- **Environmental impacts** – NEE evaluates parcels for various environmental attributes when developing community solar garden. Sites that offer the opportunity to avoid, minimize, or mitigate environmental impacts are pursued for further development efforts. Evaluation efforts include screening for archaeological, cultural, and historical resources; wetlands studies; investigating presence of endangered or threatened species; and identifying nearby receptors for visual impacts.



EXHIBIT I

**BUILDING CLEANER
ENERGY, LEAVING
BEHIND A BETTER WORLD.**

ABOUT NEW ENERGY EQUITY

New Energy Equity, an ALLETE company, is a national end-to-end solar development and finance company, having successfully completed more than 250 projects totaling more than 330 megawatts across the United States.

Our focus is on developing, financing, operating and managing solar power generation assets, providing clean electricity to commercial, industrial, municipal, and utility customers. We have ranked on Solar Power World's "Top Solar Contractors" list every year since its inception and were voted one of the fastest-growing energy companies in D.C., Maryland, and Virginia by Inc. Magazine.

THE NEW ENERGY ADVANTAGE

A Personal Approach

When you partner with us, you'll receive a tailored approach and our commitment of integrity, ingenuity, dedication, and diligence, so that we thrive and succeed together. We pride ourselves on developing lasting relationships with the landowners we work with and their local communities.

A Proven Track Record

NEE has a proven track record of completing a much higher percentage of our projects than our competitors. Last year alone we developed more than 50 community solar projects across the US.

Solar Development Expertise

Our team includes experts in all aspects of solar projects including development, engineering, land acquisition, program management, legal diligence, construction, and financing. We share a dedication to clean energy and the nation's energy transformation.

SHARING THE BENEFITS OF SOLAR

With increased solar panel efficiency, lower install costs, and the opportunity for energy bill savings, the solar industry is the fastest growing renewable energy industry in the world. Entire communities can benefit from solar too, with community solar projects. Offering electricity savings for everyone, community solar projects utilize otherwise unused land by sharing the power generated between all residents.

SERVICES

**Commercial Development
CSG Development
Asset Management
Financing
O&M**



2022 - 2021 - 2020 - 2019
2018 - 2017 - 2016 - 2015
2014 - 2013 - 2012



**View our 250+
completed projects at:**

www.newenergyequity.com/experience



HQ:
2530 Riva Road, Suite 200
Annapolis, MD 21401



LOCAL OFFICE:
2670 Patton Road
Roseville, MN 55113



development@newenergyequity.com



443-267-5012



EXHIBIT J



Notice Criteria Tool

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

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

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

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

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

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

* Structure Type:	SOLAR Solar Panel ▼			
	Please select structure type and complete location point information.			
Latitude:	37	Deg	31	M 3.99 S N ▼
Longitude:	78	Deg	27	M 47.05 S W ▼
Horizontal Datum:	NAD83 ▼			
Site Elevation (SE):	643	(nearest foot)		
Structure Height :	10	(nearest foot)		
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes			

Results

You do not exceed Notice Criteria.

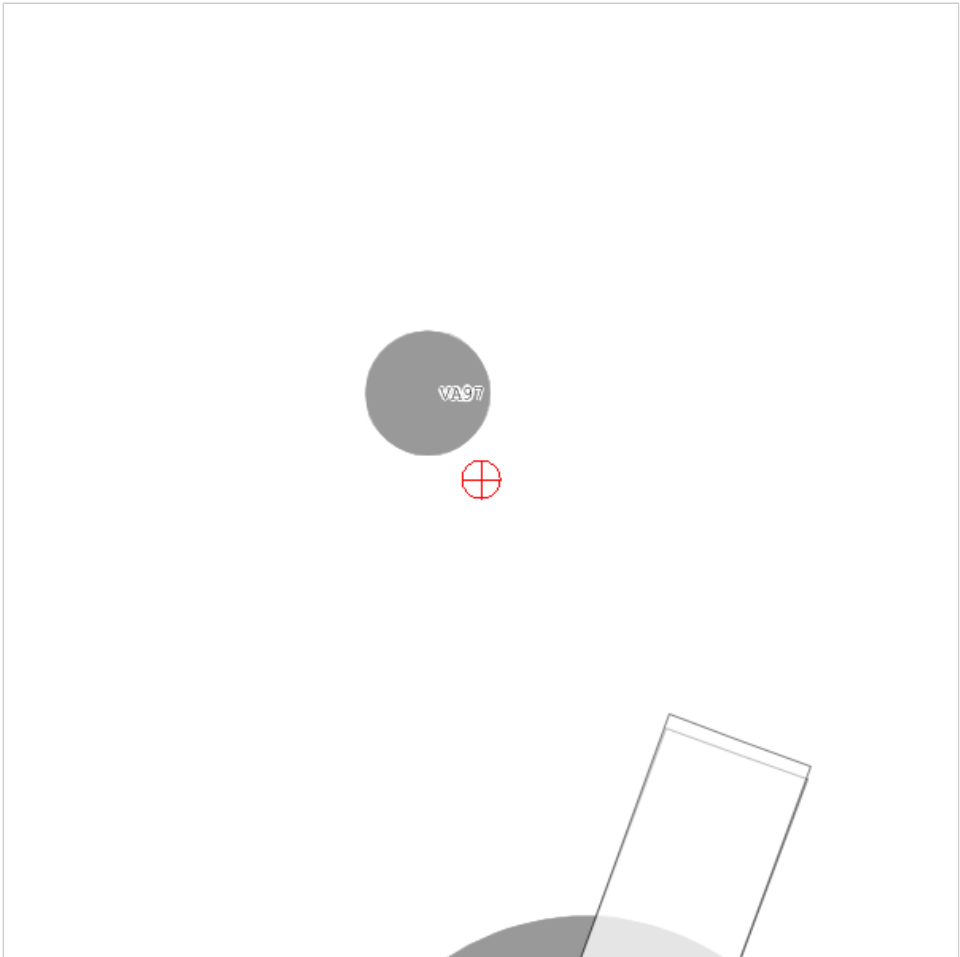




EXHIBIT K

Glare Study Executive Summary

Background:

BUCKINGHAM SOLAR 1 LLC utilized the ForgeSolar glare analysis tool (FSGAT) to assess potential glare ratings from the proposed Whispering Creek Solar Project, a 5 MWac Shared Solar Garden (SSG) photovoltaic generation facility (“the project”) located on 24.08 acres of private land in a rural area in Dillwyn, VA.

Solar panel glare refers to the reflection of sunlight off the surface of solar panels, which in some specific situations and locations are able to cause temporary bright light that may impact nearby buildings, infrastructure, or individuals. While solar panels are designed to absorb and convert sunlight into electricity, they are also reflective to some extent.

Observation Points:

Eight (8) Observation Points were placed at different points around the site to analyze glare from multiple viewpoints.

If found, glare predicted to occur at observation points was categorized into an ocular hazard color code (green, yellow, or red) based on the intensity and angle of incoming light. For these hazards to occur, there must be no physical barriers, which would lower or even eliminate the hazard.

- "Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
- "Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
- “Red”, glare was not found to occur.

Results:

Table 1 - Glare Rating Assessment Results				
Location	Potential For Glare Rating	Details	Duration	Glare Mitigated by Buffer?
Fixed Tilt Array and OP 1, 2, 3, and 4.	N/A	No glare found	N/A	N/A
Fixed Tilt Array and OP 5.	Green and Yellow	Potential for Green and Yellow hazard effects found.	Annual Green Glare - 1,373 minutes or 22.9 hours Annual Yellow Glare – 467 minutes or 7.8 hours	Partially by existing mature trees

Fixed Tilt Array and OP 6.	Green and Yellow	Potential for Green and Yellow hazard effects found.	Annual Green Glare - 805 minutes or 13.4 hours Annual Yellow Glare – 1,501 minutes or 25.0 hours	Partially by existing mature trees
Fixed Tilt Array and OP 7.	Green	Potential for Green hazard effects found.	Annual Green Glare - 785 minutes or 13.1 hours	Partially by existing mature trees
Fixed Tilt Array and OP 8.	Green	Potential for Green hazard effects found.	Annual Green Glare - 669 minutes or 11.2 hours	Partially by existing mature trees

Conclusion:

Glare modeling indicates that glare from solar panels potentially could occur under certain conditions, less than 20 minutes a day, such as when the sun is at a low angle. This is because the angle of incidence between the sun, the solar panels, and the observer's line of sight plays a significant role in determining the intensity and direction of the glare. However, in reviewing the project site plan, this risk is mitigated. To mitigate the potential problems associated with solar panel glare, several measures were taken:

- a. Proper Panel Orientation: Project plans the use of fixed tilt solar panels, to minimize glare. As a result, the panels are facing south towards a heavily wooded area owned by the participating landowner. The angle of the solar panels were set to further support eliminate any visual impacts to the residential neighbor to the west, and the traveling public along the public road.
- b. Surface Treatments: Applying anti-reflective coatings or texturing the surface of solar panels can help reduce their reflectivity. This reduces the amount of light reflected and scattered, thereby minimizing glare. The project utilizes solar module with an Anti-Reflective Coating.
- c. Setback and Placement: Proper planning and placement of solar installations can help minimize the impact of glare. Consideration was given to nearby buildings, infrastructure, and areas where glare could potentially affect visibility. Existing topography, mature forest, setbacks from the public road and existing tree along E James Anderson Highway between the solar array mitigate such concerns. The host landowner owns the private property that buffer the solar array, playing a significant role in eliminating concerns of a unknowing bystanders have the necessary observer's line of sight to see the potential glare 20 minutes a day.

Overall, while solar panel glare can be a potential concern, it is a manageable issue with proper planning, design, and consideration of the surrounding environment. By implementing appropriate measures, the negative effects of glare can be significantly reduced, allowing solar energy to be harnessed effectively and safely.

FORGESOLAR GLARE ANALYSIS

Project: **VA - Whispering Creek**

Proposed 5 MWac community solar garden in Dillwyn, VA.

Site configuration: **Whispering Creek 6-2-23-temp-0**

Site description: Glare Analysis

Created 28 Jun, 2023

Updated 28 Jun, 2023

Time-step 1 minute

Timezone offset UTC-8

Minimum sun altitude 0.0 deg

DNI peaks at 1,000.0 W/m²

Category 5 MW to 10 MW

Site ID 94199.16519

Ocular transmission coefficient 0.5

Pupil diameter 0.002 m

Eye focal length 0.017 m

Sun subtended angle 9.3 mrad

PV analysis methodology V2



Summary of Results Glare with potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	
PV array 1	0.0	180.0	3,632	60.5	1,968	32.8	-

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

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	1,373	22.9	467	7.8
OP 6	785	13.1	0	0.0
OP 7	805	13.4	1,501	25.0
OP 8	669	11.2	0	0.0

Component Data

PV Arrays

Name: PV array 1

Axis tracking: Fixed (no rotation)

Tilt: 0.0°

Orientation: 180.0°

Rated power: -

Panel material: Smooth glass without AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	37.517101	-78.466138	573.89	3.00	576.89
2	37.518292	-78.466138	572.18	3.00	575.18
3	37.520028	-78.464593	557.82	3.00	560.82
4	37.520011	-78.463477	596.69	3.00	599.69
5	37.517003	-78.462522	631.79	3.00	634.79
6	37.516999	-78.462517	631.79	3.00	634.79
7	37.517016	-78.465730	581.91	3.00	584.91

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	37.516186	-78.460522	564.52	5.00
OP 2	2	37.517020	-78.459578	559.87	5.00
OP 3	3	37.515897	-78.459106	577.87	3.00
OP 4	4	37.513718	-78.460994	535.04	5.00
OP 5	5	37.517880	-78.470457	593.96	5.00
OP 6	6	37.518739	-78.471938	594.87	5.00
OP 7	7	37.517376	-78.468526	584.47	5.00
OP 8	8	37.519827	-78.473462	592.27	5.00

Obstruction Components

Name: Obstruction 1

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.516833	-78.465613	573.45
2	37.516856	-78.462311	632.25
3	37.520109	-78.463264	589.98
4	37.520126	-78.463741	584.61

Name: Obstruction 2

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.516972	-78.466837	564.42
2	37.516384	-78.465764	547.29

Name: Obstruction 3

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.518664	-78.467694	571.00
2	37.519293	-78.466761	587.58
3	37.520638	-78.465184	582.90
4	37.520961	-78.464658	581.53
5	37.520706	-78.463510	586.88

Name: Obstruction 4

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.519061	-78.471112	590.13
2	37.518393	-78.469610	593.16

Glare Analysis Results

Summary of Results Glare with potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV array 1	0.0	180.0	3,632	60.5	1,968	32.8	-

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

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	1,373	22.9	467	7.8
OP 6	785	13.1	0	0.0
OP 7	805	13.4	1,501	25.0
OP 8	669	11.2	0	0.0

PV: PV array 1 potential temporary after-image

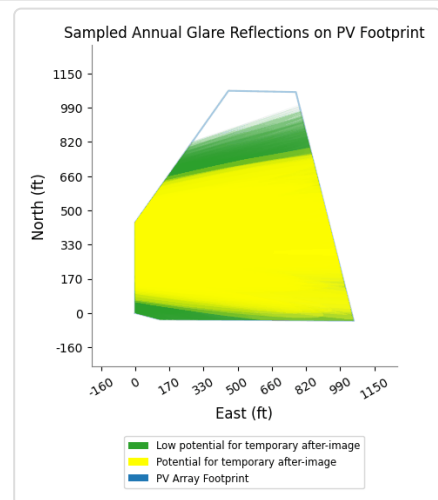
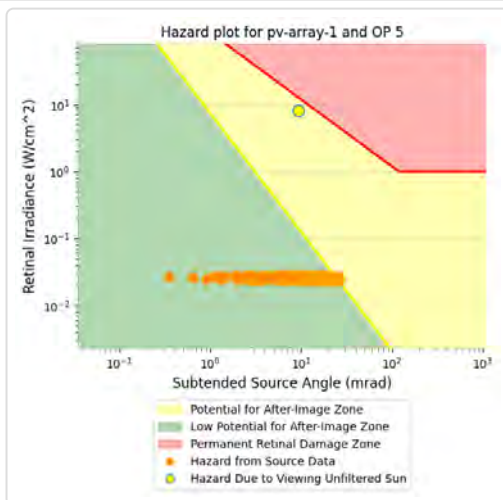
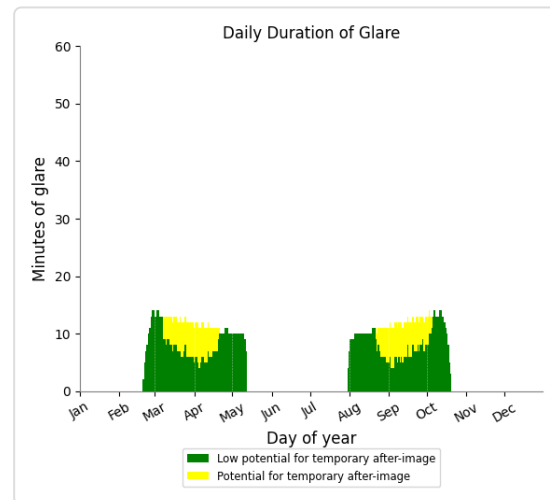
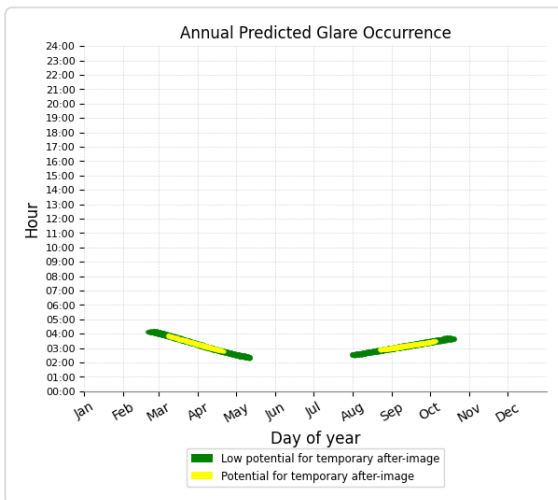
Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 5	1,373	22.9	467	7.8
OP 7	805	13.4	1,501	25.0
OP 6	785	13.1	0	0.0
OP 8	669	11.2	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0

PV array 1 and OP 5

Yellow glare: 467 min.

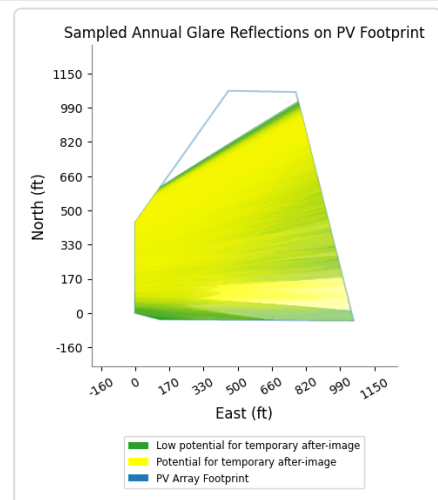
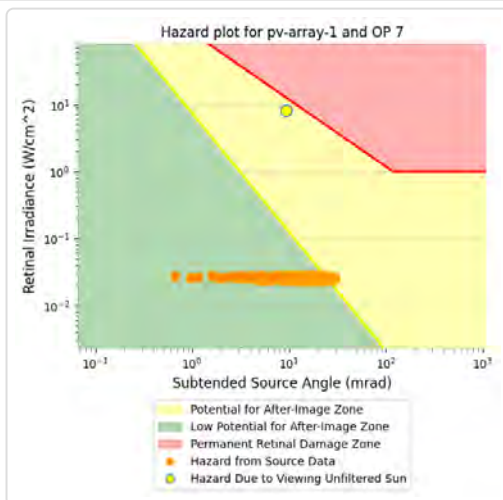
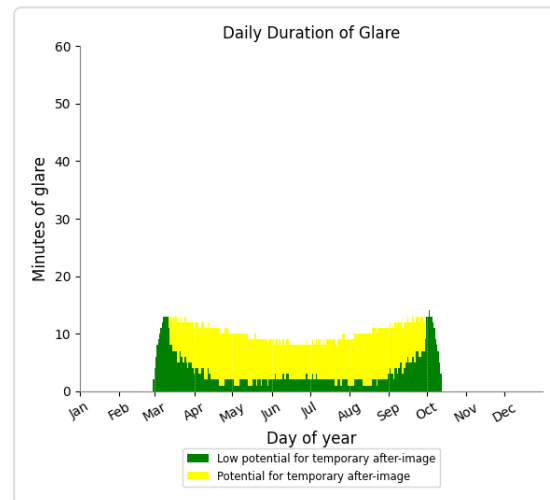
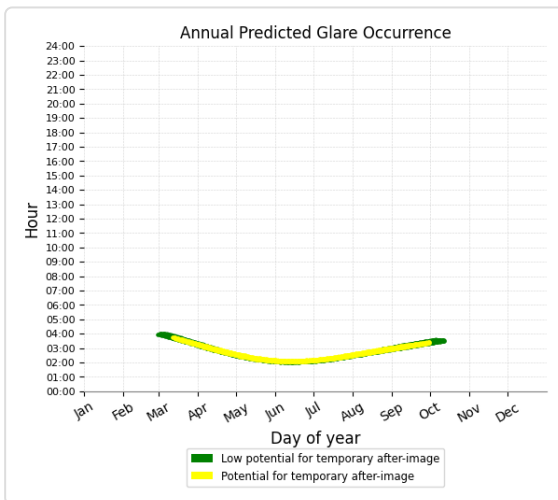
Green glare: 1,373 min.



PV array 1 and OP 7

Yellow glare: 1,501 min.

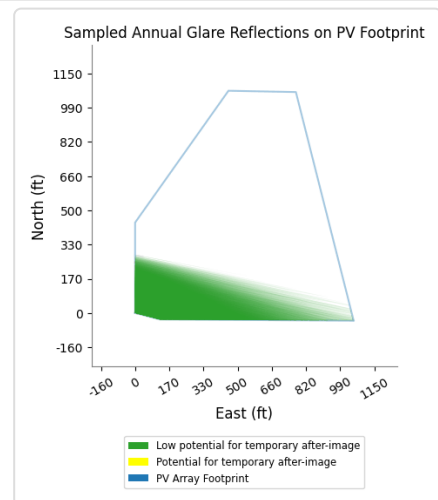
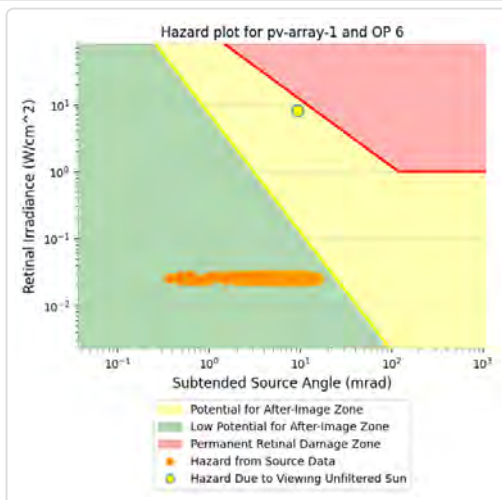
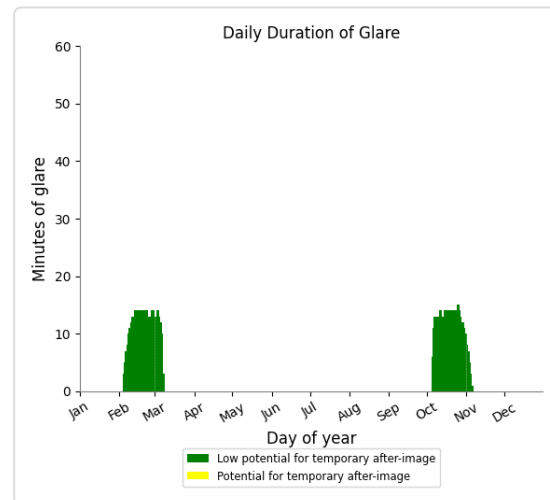
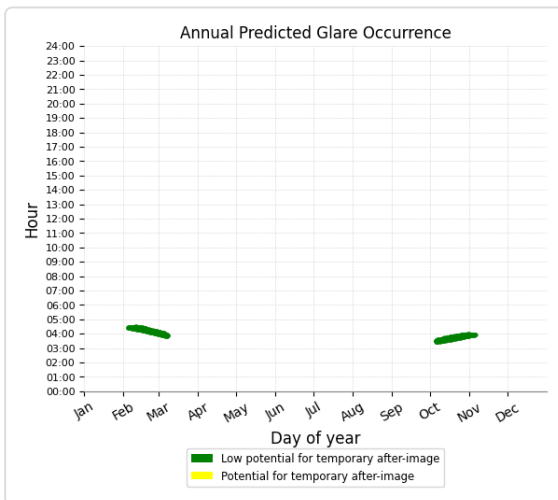
Green glare: 805 min.



PV array 1 and OP 6

Yellow glare: none

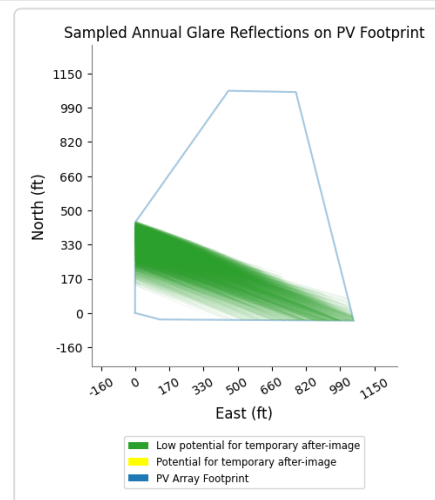
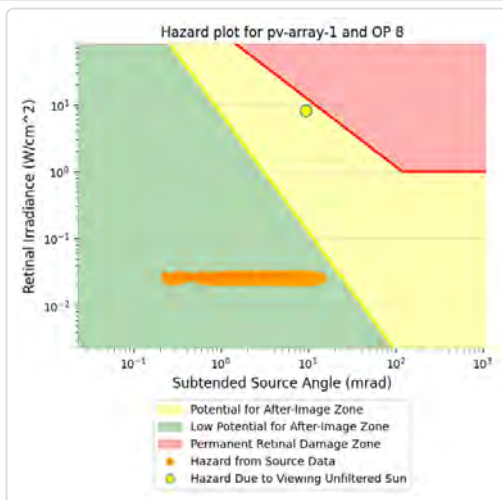
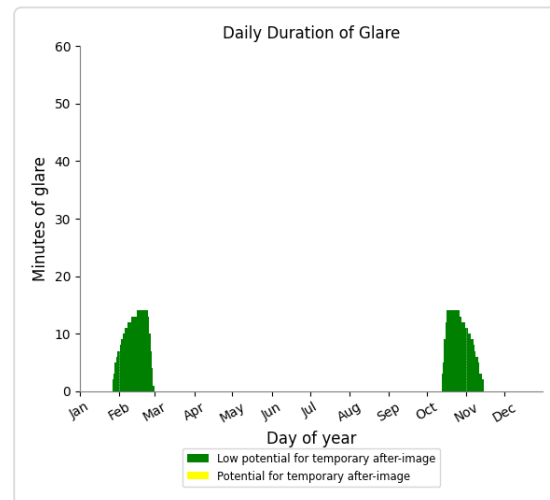
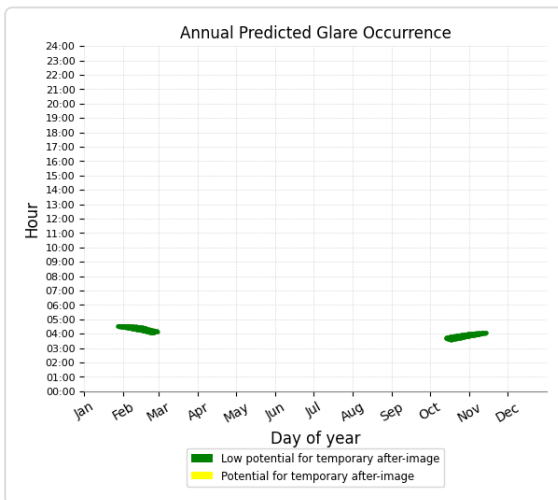
Green glare: 785 min.



PV array 1 and OP 8

Yellow glare: none

Green glare: 669 min.



PV array 1 and OP 1

No glare found

PV array 1 and OP 2

No glare found

PV array 1 and OP 3

No glare found

PV array 1 and OP 4

No glare found

Assumptions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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FORGESOLAR GLARE ANALYSIS

Project: **VA - Whispering Creek**

Proposed 5 MWac community solar garden in Dillwyn, VA.

Site configuration: **Whispering Creek 6-2-23-temp-0**

Site description: Glare Analysis

Created 28 Jun, 2023

Updated 28 Jun, 2023

Time-step 1 minute

Timezone offset UTC-8

Minimum sun altitude 0.0 deg

DNI peaks at 1,000.0 W/m²

Site ID 94199.16519

Ocular transmission coefficient 0.5

Pupil diameter 0.002 m

Eye focal length 0.017 m

Sun subtended angle 9.3 mrad

PV analysis methodology V2



Glare Policy Adherence

The following table estimates the policy adherence of this glare analysis according to the **2021** U.S. Federal Aviation Administration Policy:

Review of Solar Energy System Projects on Federally-Obligated Airports

This policy may require the following criteria be met for solar energy systems on airport property:

- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics, including 1-minute time step.

ForgeSolar is not affiliated with the U.S. FAA and does not represent or speak officially for the U.S. FAA. ForgeSolar cannot approve or deny projects - results are informational only. Contact the relevant airport and FAA district office for information on policy and requirements.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
ATCT(s)	N/A	No ATCT receptors assessed

The referenced policy can be read at <https://www.federalregister.gov/d/2021-09862>

Component Data

This report includes results for PV arrays and Observation Point ("OP") receptors marked as ATCTs. Components that are not pertinent to the policy, such as routes, flight paths, and vertical surfaces, are excluded.

PV Arrays

Name: PV array 1
Axis tracking: Fixed (no rotation)
Tilt: 0.0°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	37.517101	-78.466138	573.89	3.00	576.89
2	37.518292	-78.466138	572.18	3.00	575.18
3	37.520028	-78.464593	557.82	3.00	560.82
4	37.520011	-78.463477	596.69	3.00	599.69
5	37.517003	-78.462522	631.79	3.00	634.79
6	37.516999	-78.462517	631.79	3.00	634.79
7	37.517016	-78.465730	581.91	3.00	584.91

Observation Point ATCT Receptors

No ATCT receptors were included in the analysis.

Obstruction Components

Name: Obstruction 1

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.516833	-78.465613	573.45
2	37.516856	-78.462311	632.25
3	37.520109	-78.463264	589.98
4	37.520126	-78.463741	584.61

Name: Obstruction 2

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.516972	-78.466837	564.42
2	37.516384	-78.465764	547.29

Name: Obstruction 3

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.518664	-78.467694	571.00
2	37.519293	-78.466761	587.58
3	37.520638	-78.465184	582.90
4	37.520961	-78.464658	581.53
5	37.520706	-78.463510	586.88

Name: Obstruction 4

Top height: 60.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	37.519061	-78.471112	590.13
2	37.518393	-78.469610	593.16

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV array 1	0.0	180.0	0	0.0	0	0.0	-

No ATCT receptors were included in the analysis.

PV: PV array 1

No ATCT receptors assessed.

Assumptions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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Buckingham County Planning Commission
October 23, 2023
Administration Building
6:00 PM
Public Hearing Case 23-SUP332

Owner/Applicant: Landowner Jessie M Woodson-Johnson
3781 Petersville Church Road
New Canton VA 23123

Applicant CWJ Properties LLC
3781 Petersville Church Road
New Canton VA 23123

Property Information: Tax Map 86 Parcel 9 containing approximately One acre, located at 3973 Petersville Church Road New Canton VA 23123, State Route 613, Marshall Magisterial District.

Zoning District: Agricultural District (A-1)

Request: The Applicant wishes to Obtain a Special Use Permit to Operate an Adult Home/Assisted Living Facility.

Background/Zoning Information: The parcel is located State Route 613 at 3973 Petersville Church Road New Canton VA 23123, Tax Map 86 Parcel 9 containing approximately one acre, Marshall Magisterial District. The landowner is Jessie M Woodson-Johnson, and the applicant is CWJ Properties LLC. This property is zoned Agriculture (A-1). The Zoning Ordinance does not allow an Adult Home/Assisted Living Facility as a Permitted Use. However, Within the A-1 Agricultural District, an Adult Home/Assisted Living Facility may be permitted by the Buckingham County Board of Supervisors by a Special Use Permit following recommendation by the Planning Commission in accordance with this ordinance and the Code of Virginia. The Planning Commission may recommend and the Board may impose conditions to ensure protection of the district if the Special Use Permit is approved. The application is attached.

Below are conditions that you may consider attaching to the request if approved:

1. That all federal, state and local regulations, ordinances and laws be strictly adhered to.
2. Right of ways and roadway shoulders shall not be used for parking.
3. The property shall be kept neat and orderly.

4. That the applicant pursues a commercial solid waste container and follow the County Solid Waste Ordinance.

5. That all documentation submitted by the applicant in support of this special use permit request becomes a part of the conditions except that any such documentation that may be inconsistent with these enumerated conditions shall be superseded by these conditions.

6. Nothing in this approval shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.

7. The County Zoning Administrator and one other County staff member, as appointed by the County Administrator, shall be allowed to enter the property, with proper notice, if a complaint is registered against the property for noncompliance with this permit. Any complaints not solely related to this permit will be given to the appropriate department or agency.

8. In the event that any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable

9. That any infraction of the above mentioned conditions could lead to a stop order and discontinuation of the special use permit, if it be the wishes of the Board of Supervisors.

10. That the applicant(s) and landowner(s) understands the conditions and agrees to the conditions.

SPECIAL USE PERMIT APPLICATION CHECKLIST
BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINIMUM SUBMISSION
REQUIREMENTS

The following table lists the information necessary to review a special use application. All items are required, unless otherwise stated, and must be submitted in order for the application to be accepted for review. This completed checklist must be submitted with the application.

Adjacent Property Owners List and Affidavit (pages 4, 5 & 6 attached). This list can be obtained from the Clerk of Courts Office: ☒ YES ☐ NO

Completed application for special use permit (page 3 attached). If not signed by the owner, a Power of Attorney must accompany the application: ☒ YES ☐ NO

Interest Disclosure Affidavit (page 7 attached). Must be signed by the owner: ☒ YES ☐ NO

Power of Attorney (page 10 attached). Required if anyone other than the owner is signing the application form or proffer statement on behalf of the owner: YES ☒ NO

Written Narrative (page 11 guidance in preparing the Written Narrative): ☒ YES ☐ NO

Fees: ☒ YES ☐ NO

Deed: ☒ YES ☐ NO

Plat (15 copies). The plat information may be incorporated into the Special Use Permit General Site Plan, in which case, copies of a separate plat are not required. The plat must be prepared by a certified land surveyor or licensed civil engineer and contain the following:

- A. Bearings and distances of a scale of 1" = 100' or less for all property lines and existing and proposed zoning lines: ☒ YES ☐ NO
- B. Area of land proposed for consideration, in square feet or acres: ☒ YES ☐ NO
- C. Scale and north point: ☒ YES ☐ NO
- D. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES ☐ NO

Tax Map (15 copies). Identify property that special use is being considered for and identify by name all adjacent landowners. ✓

Special Use General Site Plan (15 copies) The General Site Plan must contain the following:

1. Vicinity Map – Please show scale: YES NO N/A
2. Owner and Project Name: YES NO N/A
3. Parcel Identification numbers, name, present zoning, and zoning and use of all abutting or adjoining parcels: YES NO N/A
4. Property lines of existing and proposed zoning district lines: YES NO N/A
5. Area of land proposed for consideration, in square feet or acres: YES NO N/A
6. Scale and north point: YES NO N/A
7. Names of boundary roads or streets and widths of existing right-of-ways: YES NO N/A
8. Easements and encumbrances, if present on the property: YES NO N/A
9. Topography indicated by contour lines: YES NO N/A
10. Areas having slopes of 15% to 25% and areas having slopes of 25% or greater clearly indicated by separate shading devices (or written indication of “no areas having slopes of 15% to 25% or greater”): YES NO N/A
11. Water Courses to include the approximate location of the 100 year floodplain (if applicable) based on FEMA maps (or written indication of “not in floodplain”): YES NO N/A
12. Delineation of existing mature tree lines or written indication of “no mature tree lines”: YES NO N/A
13. Proposed roads with right-of-way width that will connect with or pass through the subject property: YES NO N/A
14. General locations of major access points to existing streets: YES NO N/A
15. List of the proposed density for each dwelling unit type, and/or intensity of each non-residential use: YES NO N/A
16. Location of any open space and buffer areas, woodland conservation areas, storm water management facilities, and community and public facilities: YES NO N/A
17. Location of existing and proposed utilities, above or underground: YES NO N/A
18. Vehicular and pedestrian circulation plan, including traffic counts and typical street sections, right-of-way improvements, access points, travel ways, parking, loading, stacking, sidewalks, and trails: YES NO N/A
19. Layouts and orientation of buildings and improvements, building use, height, setbacks from property lines and restriction lines: YES NO N/A
20. Location and design of screening and landscaping: YES NO N/A
21. Building architecture: YES NO N/A
22. Site lighting proposed: YES NO N/A
23. Area of land disturbance in square feet and acres: YES NO N/A
24. Erosion and Sediment Control Plan submitted (10,000 square feet or more): YES NO N/A
25. Historical sites or gravesites on general site plan: YES NO N/A
26. Show impact of development of historical or gravesite areas: YES NO N/A
27. A copy of the current status of all real estate taxes of all property owned in Buckingham County. If real estate taxes are not current, an explanation in writing and signed by the owner shall accompany this application. Any liens or other judgments against property shall also be explained in writing and signed by the owner: YES NO N/A

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: August 24, 2023

Special Use Permit Request: To obtain a special use permit to
operate an adult home/assisted living facility.

Purpose of Special Use Permit: To operate an adult home/assisted living
facility.

Zoning District: A1 Number of Acres: 1

Tax Map Section: 86 Parcel: 9 Lot: _____ Subdivision: _____ Magisterial Dist.: Marshall

Street Address: 3973 Petersville Church Road, New Canton, VA 23123

Directions from the County Administration Building to the Proposed Site: Travel east on James Anderson
Hwy (Rt. 60) and turn left on James Madison Hwy (Rt. 15) North to a right turn on
Teddy M. Hill Road (Rt. 632). Keep traveling on Rt. 632 and make a left turn on
Petersville Church Road (Rt. 613). Travel approximately 4.5 miles
and 3973 Petersville Church Road (proposed project) on left side.

Name of Applicant: CWS Properties, LLC

Mailing Address: 3781 Petersville Church Road, New Canton, VA 23123

Daytime Phone: _____ Cell Phone: (434) 390-7577

Email: jrajrjli@gmail.com Fax: _____

Name of Property Owner: Jessie M. Woodson-Johnson

Mailing Address: 3781 Petersville Church Road, New Canton, VA 23123

Daytime Phone: _____ Cell Phone: (434) 390-7577

Email: jrajrjli@gmail.com Fax: _____

Signature of Owner: Jessie M. Woodson-Johnson Date: August 24, 2023

Signature of Applicant: Jessie M. Woodson-Johnson Date: August 24, 2023

Please indicate to whom correspondence should be sent:

☒ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer
☒ Applicant

ADJACENT PROPERTY OWNER'S LIST

(Required)

The applicant shall provide a list of all adjoining landowners, including subject property and all property immediately across the street/road from the subject property. Any body of water does not constitute a boundary line for this purpose, therefore a body of water and the property adjoining the subject property but separated by a body of water is still considered an adjoining landowner. County boundary lines and those adjoining property owners in the next County are considered adjoining property owners if the land adjoins the subject's property. Adjoining landowners can be verified through the Buckingham County Clerk of Courts or the Clerk's Office in the adjoining County, or by personal contact. The list shall include the name, address, town/city, zip code, road route number, tax map section number, parcel number, lot number, and subdivision. The list shall be typewritten or printed legibly. Failure to list all adjoining landowners could delay the process.

1. Name: Jessie M. Woodson-Johnson and Lonnie Johnson

Mailing Address: 3781 Petersville Church Road, New Canton, VA 23123

Physical Address: 3973 Petersville Church Road, New Canton, VA 23123

Tax Map Section: 86 Parcel: 9 Lot: _____ Subdivision: _____

2. Name: Emmett M. Johnson and Julia Muldraw

Mailing Address: c/o Rhonda Grimes, 153 Windraft Drive, Chesterfield, VA 23220

Physical Address: _____

Tax Map Section: 86 Parcel: 8 Lot: _____ Subdivision: _____

3. Name: Jessie M. Woodson-Johnson

Mailing Address: 3781 Petersville Church Road, New Canton, VA 23123

Physical Address: _____

Tax Map Section: 86 Parcel: 10 Lot: _____ Subdivision: _____

4. Name: Jessie M. Woodson-Johnson and Lonnie Johnson

Mailing Address: 3781 Petersville Church Road, New Canton, VA 23123

Physical Address: _____

Tax Map Section: 86 Parcel: 11 Lot: _____ Subdivision: _____

6. Name: Allen Davis

Mailing Address: 1311 River Road West, Crozier, VA 23030

Physical Address: HAMILTON DISTRICT, Cumberland, VA 23040

Tax Map Section: 26 Parcel: A1 Lot: _____ Subdivision: _____

7. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

8. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

9. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

10. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

11. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

This 17th day of August, year 2023,

I Jessie Woodson-Johnson hereby make oath that
(printed name of owner/contract purchaser/authorized agent)

the list of adjoining landowners is a true and accurate list as submitted with my application.

Signed: (to be signed in front of notary public)

Jessie M. Woodson-Johnson
(owner / contract purchaser / authorized agent – please circle one)

NOTARY:
COMMONWEALTH OF VIRGINIA

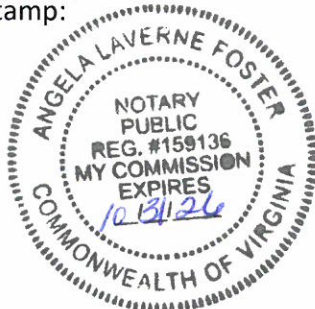
COUNTY OF Prince Edward

STATE OF Virginia

Subscribed and sworn to me on the 17th day of August,

of the year 2023. My Commission expires on 10-31-26.

Notary Public Signature: Angela Laverne Foster
Stamp:



INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA

COUNTY OF BUCKINGHAM, VIRGINIA

On this 17th day of August, of the year 2023,

I Jessie Woodson-Johnson (printed name of owner)

hereby make oath that no member of the Buckingham County Board of Supervisors nor the Buckingham County Planning Commission has interest in such property either individually, or by ownership of stock in a corporation owning such land, or by partnership, or as a holder of ten percent (10%) or more of the outstanding shares of stock in or as a director or officer of any corporation owning such land, directly or indirectly by such members of his/her immediate household, except as follows:

Signature of Owner: (to be signed in front of notary public)

Jessie M. Woodson-Johnson

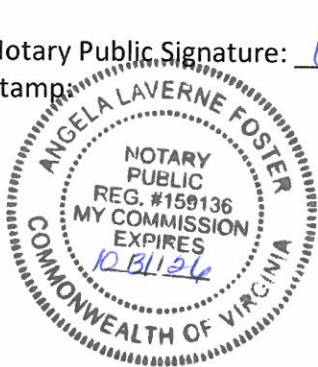
NOTARY PUBLIC

COUNTY OF Prince Edward STATE OF Virginia

Subscribed and sworn to me on this 17th day of August,
of the year 2023. My commission expires 10/31/2026.

Notary Public Signature:

Stamp:



**CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR
PENDING DEVELOPMENT APPLICATIONS**

Case Number / File Name: _____

Visual Inspection Findings (describe what is on the property now):

A new modular House

County Records Check (describe the history of this property):

Physical location has always a site for a single-
family home and applicant who reared there.

Were any historical sites or gravesites found on site, or be suspected by a reasonable person to be on the site? Yes _____ No ☒

If yes, please explain and show on the site plan the location of such and explain any historical significance:

Will this proposal have any impact on the historical site or gravesite? Yes _____ No ☒

If yes, please explain any impact:

Owner/Applicant Signature: Jessie M. Woodson Johnson Date: August 24, 2023

Printed Name: Jessie M. Woodson Johnson Title: _____

APPLICATION FOR A TRAFFIC IMPACT DETERMINATION

Please fill out the following information before presenting to VDOT:

Case Number / File Name: _____

Applicant: Jessie Woodson-Johnson

Location: 3973 Petersville Church Rd.

Proposed Use: Adult Home - Assisted Living Facility

For VDOT use only:

_____ A Traffic Impact Statement is required per 24 VAC 30-155-60.

☒ A Traffic Impact Statement is not required. The traffic generated by the proposed zoning change / development does not exceed normal thresholds.

_____ The Traffic Impact Analysis has been waived by the Zoning / Planning Department for the following reasons:

Does the existing entrance meet VDOT requirements for the proposed use?
Yes ☒ No _____ If no, please explain the necessary steps to bring into compliance with the requirements for the proposed use:

Signature of VDOT Resident Engineer: [Signature]

Printed Name: Charles D. Edwards Date: 8-15-23

SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

On this _____ day of _____, in the year of _____,

I _____ the owner of _____
(printed name of landowner) (Tax Map Number)

Hereby make, constitute, and appoint _____
(printed name)

my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/her said full power and authority to do and perform all acts and make all representation necessary, without limitation whatsoever, to make application for said zoning. The right, powers, and authority of said attorney-in-fact herein granted shall commence and be in full force and effect on the day _____ of the month _____ in the year of _____ and shall remain in full force and effect thereafter until actual notice by certified mail with return receipt requested is received by the Zoning / Planning Office of Buckingham County stating that the terms of this power have been revoked or modified.

Signature of Landowner (to be signed in front of Notary Public):

NOTARY PUBLIC

County of _____ State of _____

Subscribed and sworn before me on the _____ day of _____

in the year _____. My commission expires _____.

Signature of Notary Public: _____

Stamp:

WRITTEN NARRATIVE

The Written Narrative shall describe the relationship of the proposed project to the relevant components of the Comprehensive Plan. Please be very detailed and describe in depth each and every component 1 through 15. The following outline is provided to aid you in preparing the written narrative:

1. Land Use
2. Community Design
3. Cultural Resources
4. Economic Development
5. Environment
6. Fire and Rescue, Law Enforcement
7. Housing
8. Libraries
9. Parks and Open Spaces
10. Potable Water
11. Sewage
12. Schools
13. Telecommunications
14. Transportation
15. Solid Waste

If this proposal is for an event, describe the handling of the entire event, including but not limited to: number of participants, schedule of events, police, security, food, beverages, water, sanitation, emergencies, crowd control, entrances and exits, traffic control, signage, advertisement, parking, fee collection, control of animals, trash disposal, site clean-up, fighting, alcohol, abuse of alcohol and/or illegal substances

WRITTEN NARRATIVE

The Census QuickFacts for Buckingham County estimated a population of 16,982 as of July 1, 2022. Within this estimate, 20.4% are 65 age and over (See attachment). Unlike a nursing home facility, this proposed project will not accept residents that have an elevated level of care, e.g., feeding, bathing, dressing, assistance in the bathroom, with ambulation, and transferring. Buckingham County is fortunate to have the Heritage Hall Nursing Facility in Dillwyn, Virginia, to accommodate individuals who need this level of care.

As the population ages, there is a need for adult/assisted living facilities to provide a safe home environment. There are vulnerable adults and disabled individuals living alone who require certain assistances with minimal care. Unfortunately, in my line of work, I have seen and represented too many individuals abused, neglected and exploited by strangers, neighbors, caregivers, and even family members. This proposed project will be a home-centered environment that is safe and supervised.

The Land Use is a proposed project to house adults who are able to feed, bathe, and dress themselves. Services provided will be housing on a 24-hour, seven (7) days a week, food preparation, laundry services, medication management (stored in a safe area), and recreation.

This proposed project will start initially as a private facility to house no less than three (3) residents, or the number of individuals as the current regulation requires. In order to house more than that number, we plan to obtain licensure from the Department of Social Services Division of Licensing because we anticipate growth in number of residents and housing. It is our desire and intent to obtain licensure for this business within the next year so that my family and I will be able to expand this much-needed service.

The Design of the Community is quiet and peaceful. The proposed project is located in the Marshall District at 3973 Petersville Church Road, New Canton, Virginia. Traveling US-60 East, turn left on US-15 North. Travel approximately 9.2 miles and turn right on Rt. 622 (Trents Mill Road). Travel 3.8 miles and turn left on Rt. 613 (Petersville Church Road). Travel approximately 4.0 miles and arrive at the proposed project on the left (visible 911 address posted). En route to the proposed project is the well-established Petersville Baptist Church, which is approximately .5 miles on the right

prior to reaching the proposed project. There are approximately 10 houses located on Petersville Church Road, and everyone is respectful and friendly. It is estimated that there are less than 10 vehicles traveling passed the proposed project on a daily basis. This location is less than .5 miles from the Cumberland County line traveling pass the proposed project.

In regard to **Cultural Resources**, there are no archaeological, historic, or cultural landscapes visible or is known in the vicinity of the proposed project.

The proposed project will add to the **Economic Development** in Buckingham County. According to the website of the Virginia Department of Social Services, there are no adult/assisted living facilities in Buckingham County. The last know adult home that I am aware of was Mary's Rest Home. With the approval of the proposed project, business will add to the economy in Buckingham County.

The **Environment** of the proposed project is located in a quiet setting. There is adequate outdoor space for the residents to enjoy. There are no other commercial businesses located on this road, and there are no foreseeable problems with traffic expected. **Fire, Rescue, and Law Enforcement** are within a 20 to 30 miles radius.

As stated above, this proposed **housing** project is located in the Marshall District in Buckingham County, Virginia. The location of the proposed project was where I was reared. My father built the home in the 1950's and it is where he and my mother raised six (6) children and two (2) grandchildren. Since the home no longer had any value, it was taken down and replaced in April of this year with a four (4) bedroom and two bath modular home. This will be the location of the first proposed project.

Libraries, Parks and Open Spaces, Potable Water are not applicable or in close proximity to the proposed project. The closest library and parks are approximately 20 miles away in Dillwyn, Virginia, and approximately 10 to 20 miles in Cumberland County. The proposed project will have a septic system for **sewage**. The **school system** is not applicable to the proposed project. Currently, there are no school buses traveling the Petersville Church Road to pick-up students. **Telecommunication** will be communicated using a landline and mobile phones, and potentially Wi-Fi and broadband when it comes to the area.

There are no public bus **transportation** services in this area. Transportation to medical appointments and emergency rooms will be provided to the residents by their relatives, Medicaid transportation, county rescue services (if needed), and the owners of

the proposed project when needed. Residents with vehicles will be able to use their own vehicles for transportation.

Solid waste container will be utilized at the proposed project location.

In conclusion, this proposed project will help alleviate fear, anxiety, isolation, loneliness, injuries, unsanitary living conditions, poor hygiene, and medication management. This proposed project will give the resident and relatives peace of mind that they are cared for in a home environment, and that they are safe from scammers and unscrupulous people if they were living alone or left alone. This proposed project will be operated by my family and I to help contribute to a much-needed service in Buckingham County.

SIGNAGE AT PROPERTY

The Buckingham County Zoning Ordinance requires the following:

The applicant in any case which requires a public hearing shall post signs furnished by the agent on each parcel involved at least 21 days prior to the public hearing indicating that a public hearing is eminent, the date, a rezoning issue, and a County contact number. The signs shall be placed on the VDOT right-of-way closest to the applicant's property line and shall be clearly visible from the road with bottom of the sign not less than one and one half feet above the ground. If more than one public road abuts the property, the signs shall be placed in the same manner as above for each abutting road. If no road abuts a property, then the agent shall define an area for the signs. The agent may ask the applicant that the sign be moved to another area either on the property to achieve greater public visibility. The applicant shall be responsible for keeping the signs free from grass, weeds, and any other plants or vines that may obstruct the public's view. The applicant shall contact the Virginia Department of Transportation for any information concerning where the right-of-way is located. The applicant shall be responsible for the signs should VDOT or their contractor conduct mowing or clearing of the right-of-way in the area where the sign is located.

Any signs required shall be maintained at all times by the applicant up to the time of the final public hearing. No person, except the applicant or the agent or an authorized agent of either, shall remove or tamper with any sign furnished during the period it is required to be maintained under this section. All signs erected under this ordinance shall be removed by the applicant within 15 days following a decision at the final public hearing and shall be returned to the agent. The applicant shall purchase the signs at a fee as determined by the Board of Supervisors and shall be non-refundable. The applicant shall be responsible for the replacement of the sign(s) and shall contact the agent as soon as possible for another sign to be replaced as the manner described above. Should the sign(s) have to be replaced more than twice, this section shall no longer be forced upon the applicant.

I have read, understand and agree to the above requirements.

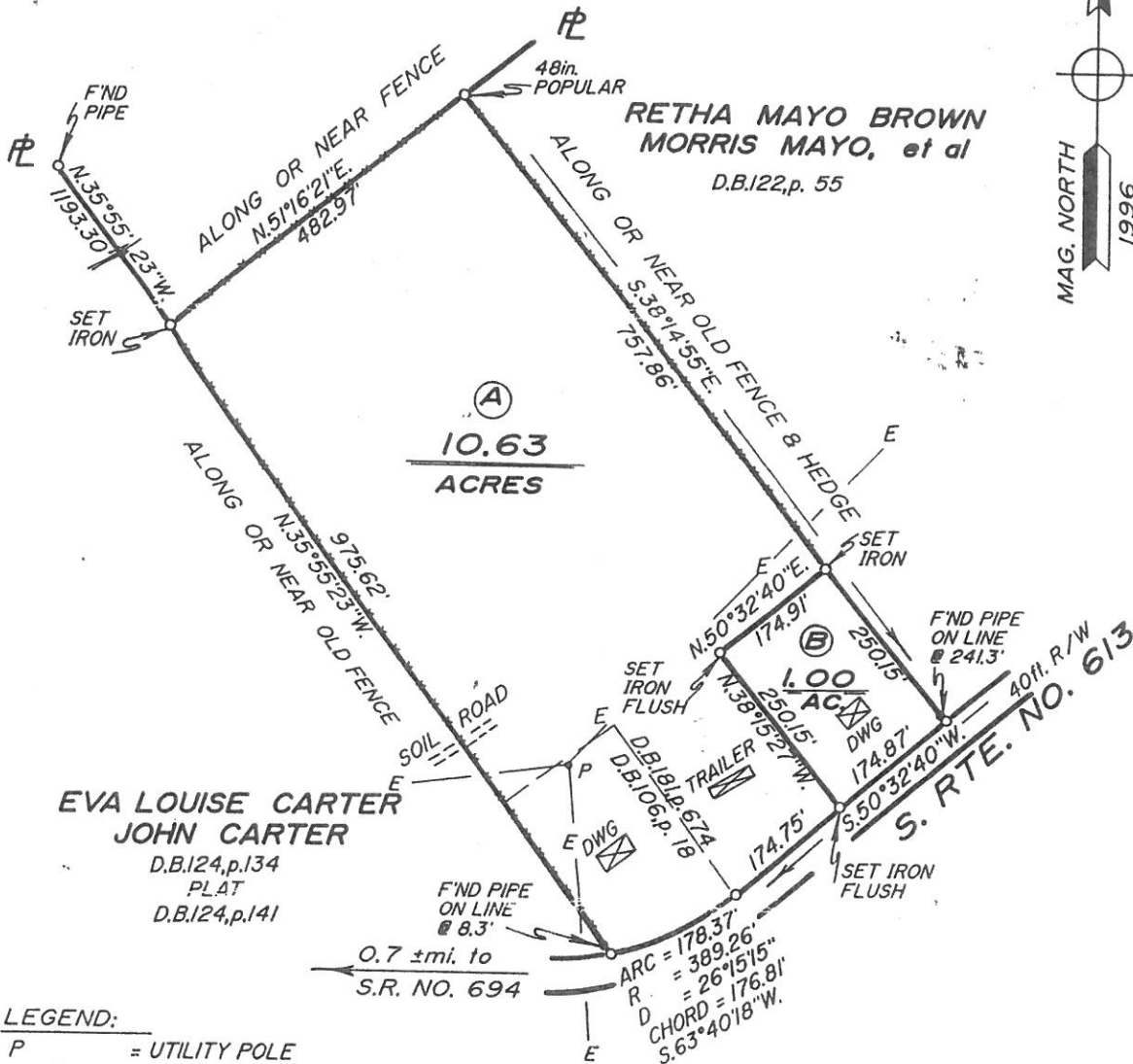
Applicant/Owner: Jessie M. Warden-Johnson

Date: August 24, 2023

MAXEY LINES & ASSOCIATES, P.C.
P.O. BOX 90 • FARMVILLE • VIRGINIA • 23901
TEL: 804-392-8827

**RICHARD SPENCER
CARTER, JR.**
D.B.184,p. 06

**RETHA MAYO BROWN
MORRIS MAYO, et al**
D.B.122,p. 55



NOTES:

1. TAX MAP NO. 86 - 11 PARCEL A; AND 86 - 10 PARCEL B.
2. THIS PLAT HAS BEEN PREPARED WITHOUT BENEFIT OF A TITLE REPORT AND DOES NOT THEREFORE NECESSARILY INDICATE ALL ENCUMBRANCES ON THE PROPERTY.

*Family Transaction
For Recordation -
Rebecca A Carter 5/31/96*

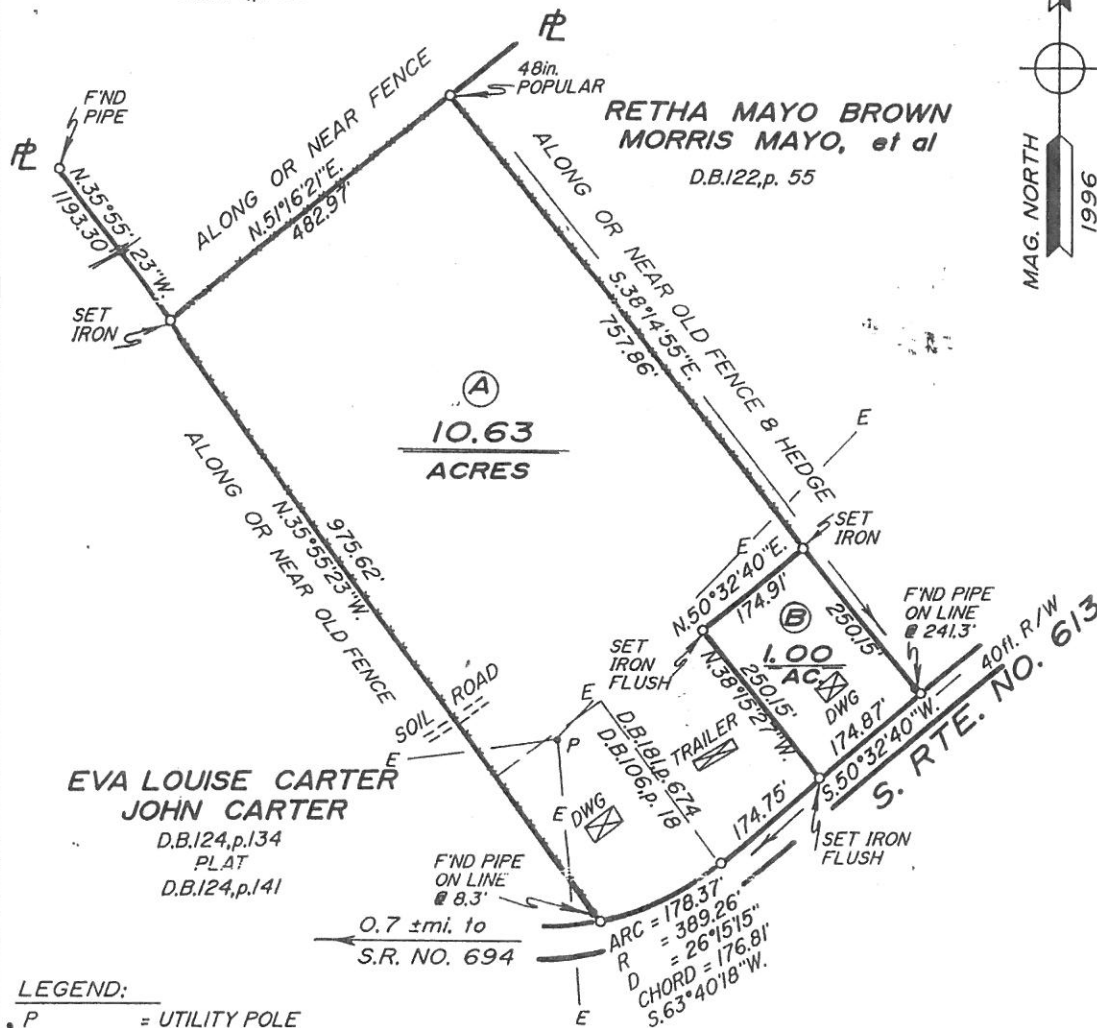
MAXEY - LINES & ASSOCIATES, P.C.

P.O. BOX 90 • FARMVILLE • VIRGINIA • 23901

TEL: 804-392-8827

**RICHARD SPENCER
CARTER, JR.**
D.B.184,p. 06

**RETHA MAYO BROWN
MORRIS MAYO, et al**
D.B.122,p. 55



LEGEND:

- P = UTILITY POLE
— E = OVERHEAD ELECTRIC LINE(S)

NOTES:

1. TAX MAP NO. 86 - 11 PARCEL A; AND 86 - 10 PARCEL B.
2. THIS PLAT HAS BEEN PREPARED WITHOUT BENEFIT OF A TITLE REPORT AND DOES NOT THEREFORE NECESSARILY INDICATE ALL ENCUMBRANCES ON THE PROPERTY.

family transaction
for Recordation -
Rebecca A Carter 5/31/96

0' 200' 400'

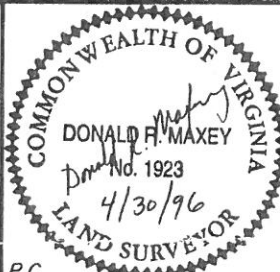
To all parties interested in title to premises surveyed: This plat agrees with found plats, deed descriptions, ground evidence, and local witnesses as near as possible. DRAWN BY: H.H.T.

SCALE: 1 in. = 200 ft. DATE: APRIL 29, 1996 TOTAL ACREAGE: 11.63 ACRES
REQUESTED BY: JESSIE WOODSON-JOHNSON

OWNER(S): Lot A JESSIE WOODSON-JOHNSON D.B.106,p.18; D.B.181,p.674
Lot B ALEXANDER WOODSON D.B. 78,p. 85

LOCATED IN: MARSHALL DISTRICT, BUCKINGHAM COUNTY, VA.

PURPOSE: To delineate parcel A and B containing 10.63 acres and 1.00 acres respectively.



P.C.

F.B. 717 - 1218

COMM. NO. 96S0110

#949

THIS DEED of Bargain and Sale entered this 15th day of May, 1996, by and between **ALEXANDER WOODSON**, Widower herein called Grantor, and **JESSIE WOODSON JOHNSON**, Herein called Grantee, Provides:

THAT for and in consideration of the Grantee's promise to care for and keep the Grantor for the rest of his life, for expenses not to exceed \$100.00 per month, and to be responsible for all repairs and maintenance on the house, not to exceed \$100.00 per month, the grantor doth hereby give and convey unto the Grantee, with General Warranty of Title, in fee simple absolute, subject to the following; and the Grantor doth hereby reserve unto himself a life estate for and during his natural life, in the following described property, to-wit:

All that certain tract or parcel of land, with the building and improvements thereon, lying and being in the Marshall Magisterial District, Buckingham County, Virginia containing one (1) acre, situated on the, North of State Route 613 and designated as Lot B on a Plat made by Maxey-Hines and Associates, dated April 29, 1996, attached hereto and made a part hereof; and being the same land conveyed to the Grantor herein by Deed from Martha Waddy, unmarried, et als, dated June 13, 1967 and recorded in the Clerk's Office of the Circuit Court of Buckingham County in Deed Book 78 at Page 85.

THE said Grantor covenants that he has the right to convey the said land unto the Grantee; that the Grantee shall have quiet and peaceable possession of said land, free from

all encumbrances; and that he will execute such other and further assurances of title as may be requisite.

WITNESS the following signature and seal:

Alexander Woodson (SEAL)
ALEXANDER WOODSON
NOTARY PUBLIC

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM, to-wit:

I, V. Dail Braxton, a Notary Public in and for the County aforesaid do hereby certify that **Alexander Woodson**, whose name is signed to the foregoing document has acknowledged the same before me this 21st day of May, 1996.

My Commission expires: 8-31-96

V. Dail Braxton
NOTARY PUBLIC

VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY.

St. R. TAX	<u>32</u>	<u>85</u>
Co. R. TAX	<u>10</u>	<u>95</u>
Transfer	<u>1</u>	<u>00</u>
Clerk	<u>12</u>	<u>00</u>
Lib. (145)	<u>1</u>	<u>00</u>
Grantor Tax	<u>22</u>	<u>00</u>
Total \$	<u>79</u>	<u>80</u>

The foregoing instrument with acknowledgement was admitted to record on May 31 1996 at 10:00 A. M. in D.B. 210 Page (s) 389-390
Teste: MALCOLM A. BOOKER, JR., CLERK

BY: Jane Bryant, DEPUTY CLERK

see plat next page

TENTATIVE SCHEDULE FOR A SPECIAL USE PERMIT

The application, site plan, written narrative, and all information requested in this application must be filled out in its entirety and supplied to the Buckingham Zoning / Planning Office and the fee must be paid before this case will be allowed to move forward.

Case will be introduced at a regularly scheduled Planning Commission meeting held on the fourth Monday of every month. Planning Commission may set a Public Hearing at this time to be held during a regularly scheduled meeting. Public Hearings offer an opportunity for citizens to speak concerning the case.

Following the Planning Commission Public Hearing, the Planning Commission may make a recommendation to approve / deny / or table the case for more information. Once the Planning Commission makes a recommendation to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. The Board of Supervisors meetings are held on the second Monday of every month. The Board of Supervisors may set a Public Hearing at this time to be held during a regularly scheduled meeting. The Board of Supervisors will make the final decision to approve or deny the application after the public hearing.

Example Timeline:

- | | |
|-------------|--|
| January 25 | Case is introduced to Planning Commission. Planning Commission sets Public Hearing for next regularly scheduled meeting on February 22. |
| February 22 | Planning Commission Public Hearing. Planning Commission recommends to approve / deny / or table for more information. Once the Planning Commission reaches a decision to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. |
| March 8 | Case is introduced to Board of Supervisors. |
| April 12 | Board of Supervisors may approve / deny / table for more information. |

The Planning Commission and the Board of Supervisors has a right to call extra public hearings at their discretion if the Board(s) decide they are needed.

You or your agent are encouraged to attend these meetings to answer any questions that may arise concerning your application / proposal. The County strongly encourages the applicant to visit the area around his proposed site and understand what the adjoining landowner concerns are.

T A X R E C E I P T

BUCKINGHAM COUNTY
 CHRISTY L CHRISTIAN
 (434) 969-4744
 POST OFFICE BOX 106
 BUCKINGHAM VA 23921

Ticket #:00001680001 @@

Date : 8/24/2023
 Register: KJ1/KJ1
 Trans. #: 10059
 Dept # : SPUSE
 Acct# :

SPECIAL USE PERMIT - ZONING
 86-9

JOHNSON JESSIE

Previous Balance	\$.00
Principal Being Paid	\$	200.00
Penalty	\$.00
Interest	\$.00
Amount Paid	\$	200.00
*Balance Due	\$.00
Cash		200.00

Pd by JOHNSON JESSIE
 BALANCE DUE INCLUDES PENALTY/INTEREST THRU THE MONTH 8/2023

T A X T I C K E T - Y E A R 2 0 2 3
BUCKINGHAM COUNTY
CHRISTY L CHRISTIAN
(434) 969-4744
POST OFFICE BOX 106
BUCKINGHAM VA 23921

Ticket #:00060890001
Date : 4/28/2023

Dept # : RE2023
ACCT # : 4721

REAL ESTATE 2023
RT 613 - 5 MI S OF 86 9
CAMPBELLS CORNER 1 AC

Previous Principal	
Balance \$	37.13
IMPROVEMENTS	
USE VALUE	
LAND VALUE	13500
DISCOUNT AMT	.00
ACRES	1.000
Penalty \$.00
Interest \$.00
*Balance Due \$.00

JOHNSON JESSIE WOODSON
3781 PETERSVILLE CHURCH RD
NEW CANTON VA
23123

* Penalty & Interest calculated through 2023/08.

(DUPLICATE)

T A X T I C K E T - Y E A R 2 0 2 3
BUCKINGHAM COUNTY
CHRISTY L CHRISTIAN
(434) 969-4744
POST OFFICE BOX 106
BUCKINGHAM VA 23921

Ticket #:00060890002
Date : 4/28/2023

Dept # : RE2023
ACCT # : 4721

REAL ESTATE 2023
RT 613 - 5 MI S OF 86 9
CAMPBELLS CORNER 1 AC

Previous Principal	
Balance \$	37.12
IMPROVEMENTS	
USE VALUE	
LAND VALUE	13500
DISCOUNT AMT	.00
ACRES	1.000
Penalty \$.00
Interest \$.00
*Balance Due \$	37.12

JOHNSON JESSIE WOODSON
3781 PETERSVILLE CHURCH RD
NEW CANTON VA
23123

* Penalty & Interest calculated through 2023/08.

(DUPLICATE)

Buckingham County Planning Commission
October 23, 2023
Administration Building
6:00 PM
Introduction Case 23-SUP333

Owner/Applicant:	Landowner	Martin Slate River Farm LLC 2107 Ames Circle Chesapeake VA 23321
	Applicant	Verizon Wireless Stuart Squier 3126 W Cary St #604 Richmond VA 23221

Property Information: Tax Map 65 Parcel 16, containing approximately 64.8 acres, located on TBD Ranson Road Dillwyn VA 23936 (Right on US-60 then left on Route 63 for 4 miles, Left on VA-20N for 4.5 miles, Left on Route 659 for 2 miles, Access drive on left---directions given by Applicant), Slate River Magisterial District.

Zoning District: Agricultural District (A-1)

Request: To Obtain a Special Use Permit for the Purpose of Constructing a 199' Monopole Communications Tower. The Applicant is asking the Planning Commission to schedule a Public Hearing for this request.

Background/Zoning Information: This property is located at TBD Ranson Road Dillwyn VA 23936, Slate River Magisterial District, Tax Map 65-16, containing approximately 64.8 acres. The landowner is Martin Slate River Farm LLC, and the applicant is Verizon Wireless, Stuart Squier. This property is zoned Agriculture (A-1). The Zoning Ordinance does not permit a Communications Tower as a Permitted Use. However, Within the A-1 Agricultural District, Radio Stations, Television Stations, and Cable TV Facilities, Communication Station and/or Tower or Related Facilities in Accordance with Article 9 of this Ordinance may be permitted by the Buckingham County Board of Supervisors by a Special Use Permit following recommendation by the Planning Commission in accordance with this ordinance and the Code of Virginia. The Planning Commission may recommend and the Board may impose conditions to ensure protection of the district if the Special Use Permit is approved. CityScape, as the Wireless Telecommunications Expert for the County of Buckingham, "concludes is a preponderance of evidence that construction of a new personal wireless communications facility in the area is technically justified and is essential for the Applicant to achieve its objective of seamless service in the County. CityScape also believes the location and height proposed are technically

appropriate. Therefore, CityScape recommends approval of a new wireless facility with Verizon as anchor tenant at the proposed location and tower height of one hundred ninety-nine (199) feet. The choice of the monopole's color is at the discretion of the County.

Below are conditions that you may consider attaching to the request if approved:

- 1) Prior to permitting, Applicant shall submit FAA Form 7460-1 to obtain a No Hazard Determination in order to assure that the intended height and radio-frequency usage are clear of any air traffic procedures and radio operations in the area.; and,
- 2) Prior to issuance of building permits, the Applicant shall submit satisfactory SHPO and NEPA documentation; and,
- 3) Prior to permitting, the Applicant shall submit a signed letter stating that the tower will be designed with breakpoint technology to have a fall radius of 40 feet or less; and,
- 4) All vertical feedlines shall be installed within the monopole shaft and all access ports shall be sealed to prevent wildlife access; and,
- 5) Prior to permitting, the Applicant shall submit an engineering report, signed by a Professional Engineer licensed in the Commonwealth of Virginia, certifying that the tower will have the structural capacity for the proposed US Cellular equipment and similar installations of five other wireless providers; and,
- 6) The Applicant shall submit final construction drawings for the facility which shall be certified by a Virginia Professional Engineer and include breakpoint technology in its tower design; and,
- 4) If an emergency power backup generator is used, its noise level shall not exceed 65dBa at the nearest property edge. Testing shall be limited to the hours between 9:00A.M. and 4:00P.M, (Monday through Friday); and,
- 5) Should the highest antennas arrays be lowered in the future for capacity needs, the unused top portion of the tower shall be removed; and,
- 6) No advertising shall be installed on the fencing near the ground compound; and,
- 7) That all federal, state and local regulations, ordinances and laws be strictly adhered to.
- 8) In the event that any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable.

9) That any infraction of the above mentioned conditions could lead to a stop order and discontinuation of the special use permit, if it be the wishes of the Planning Commission or Board of Supervisors.

10) The County Zoning Administrator and one other County staff member, as appointed by the County Administrator, shall be allowed to enter the property, with proper notice, if a complaint is registered against the property for noncompliance with this permit. Any complaints not solely related to this permit will be given to the appropriate department or agency.

11) If the building permit is not obtained within six (6) months from the date of approval then the Special Use Permit shall be null and void.

12) That the applicant (s) understands the conditions and agrees to the conditions.

13) Tower shall not be constructed until a tenant is ready to locate on the tower immediately after building.

14) The construction of the tower must be complete within 2 years from the date of approval or this permit will be null and void.

15) At the County's discretion, if concealment is not an option, the tower, antennas and all other ancillary equipment mounted on the tower shall be painted a color deemed the least visually obtrusive.

Would it be the pleasure of the Planning Commission to schedule a Public Hearing?

November 27, 2023 at 6pm?

**VERIZON - “RANSONS” SITE
TELECOMMUNICATION TOWER AND ANTENNA SYSTEMS FACILITY**

Project Description:

Cellco Partnership, d/b/a as Verizon Wireless (“Verizon”), respectfully requests approval of a Special Use Permit pursuant to Article 2 and Article 9 Section Five (5)(b)(i) of the Buckingham County Zoning Ordinance in order to allow the installation of a Wireless Communications Facility in the A-1 Agricultural District. The proposed facility would include a steel monopole that is 195-foot tall, with an additional four feet of height for the lightning rod, for a total maximum height of 199 feet. The monopole will initially be equipped with panel antennas, radios, and associated components for Verizon’s use. This project is intended to expand Verizon’s network of services into an area of Buckingham County that currently has low to marginal levels of wireless coverage, while also meeting the needs for increased network capacity in the surrounding areas that are being served by existing, neighboring facilities that are currently overstressed.

The proposed facility will include a sectored mounting array allowing space for up to twelve (12) antennas to be attached, and Verizon’s array, which will also have remote radio heads and fiber optics junction boxes connected behind those antennas. Verizon’s base station cabinets housing transmit / receive radios and an emergency back-up generator with other boxes for electrical and communications utilities such as power meters, fiber optic and telephone service circuits to be attached on an H-frame stand. The monopole and all base station equipment will be installed within a 50’ x 50’ fenced compound and 5,625 square-foot leased area leased from the property’s owner, Martin Slate River Farm, LLC. In addition to allowing the deployment of the different technologies for which Verizon is licensed to provide throughout Buckingham County, the monopole serving this facility will also be engineered and constructed with additional structural capacity to support the co-location of antennas and components of additional providers of wireless services.

Character of the Area:

The subject property is identified as Tax Map Number 65-16, which is accessed from an existing entrance on the south side of Ranson Road (State Route 659), and approximately 1,000 feet west of the intersection with Turner Lane. Access to the facility will be provided by an improved, existing gravel drive approximately 1,000 feet long into the existing cleared area. The proposed facility will be located approximately 1,100 feet southwest of the nearest off-site dwelling, which is located on the property identified as Tax Map Number 65-53. All of the adjacent properties are similarly zoned A-1 Agricultural with the surrounding properties being rural in character with dwellings and farm use structures dispersed among open fields and forested areas.

Network Objectives:

Verizon is licensed, by the Federal Communications Commission (FCC), to provide state-of-the-art wireless telecommunications services within Buckingham County using a combination of four (4) separate bands on the frequency spectrum. These consist of the 850 MHz band for Cellular (CDMA), the 1900 MHz frequency band for Personal Communications Services (PCS), the 4G Long Term Evolution (LTE) on 700 MHz band and Advance Wireless Services (AWS) on the 2100 MHz band. The current network offers data upload and download transmission speeds that are much faster than the previous generations of wireless technologies and Verizon has also recently added high-definition calling capabilities in the form of its Voice Over LTE (VOLTE) service.

The proposed facility will provide expanded in-building coverage and additional capacity for residents, small businesses, and other nearby establishments in this area near Ransons. The site will also provide service improvements at the street level and to people traveling in cars on Ranson Road, Route 20, and other nearby local roads.

In addition to serving coverage needs in the immediate area, this facility will also provide improvements to overall network performance by adding more network capacity to transfer data throughout a much greater area. This objective is important for network stability, because it reduces the total number of customers must rely on the marginal levels of

coverage currently being provided by existing, neighboring facilities at farther distances away from this site. If the proposed facility is constructed, then the users that currently receive marginal coverage will have access to stronger signals that are in concentrated in closer proximity, while those closer to other existing facility sites will also experience improvements, because there will now be less competition for access to the services provided by other facilities.

Buckingham County's Wireless Communication Tower Ordinance and Virginia State Code:

Section One: Purpose

The purpose of this article is to facilitate collocation of radio, television, and wireless communication towers and wherever possible, minimize the impacts of wireless communication facilities (hereinafter WCF) on surrounding areas. Certification of all the following requirements must be made to the Administrator before a building permit for any tower construction, tower modification, antenna collocation, antenna attachment, or antenna modification will be issued.

Section Two: Applicability

The following shall apply to the development activities including installation, construction, or modification of the following wireless communications facilities: (1) Existing WCF. (2) Proposed WCF. (3) Public WCF. (4) Replacement of an existing WCF. (5) Collocation on existing WCF. (6) Modification(s) to existing collocation or antenna array (7) Attached WCF. (8) Antenna element replacement(s) (9) Concealed WCF. (10) Broadcast transmission facilities (11) Wireless Broadband facilities (12) Small Cell Facilities

The applicant is proposing a new, non-concealed freestanding WCF on non-publicly owned property.

Section Three: Exempt Installations

This section is not applicable to this application.

Section Four: Permitted Uses (By Right with certification)

This section is not applicable to this application.

Section Five: Special Use Permit Required - listed by siting hierarchy from highest to lowest. Preference always given to publicly owned property first (see supplemental document for publicly owned property list).

(1) Second Replacement of WCF

(2) Replacement of existing WCF where the replacement will require an existing non-illuminated WCF to become illuminated.

(3) Non-concealed attached WCF (only on transmission distribution poles).

(4) Concealed freestanding WCF

(5) Non-concealed freestanding WCF.

a. On publicly-owned property (i). Monopole tower (ii). Lattice tower (iii). Guyed tower

b. On non publicly-owned property (i). Monopole tower (ii). Lattice tower 58 (iii). Guyed tower

The applicant is proposing a new, non-concealed freestanding WCF of monopole tower design, on non-publicly owned property.

Section Six: Submittal Requirements for Permitted and Special Uses

All submittal requirements are listed in Supplemental document

Article 9 – Telecommunications Supplemental Document

Section One: Uses of County-Owned Lands

The following Buckingham County-owned properties are available for new wireless telecommunication infrastructure subject to all the zoning requirements of this document and the Zoning Ordinance.

Property	Address	MP Site ID	Infrastructure Type	Infrastructure Maximum Height
Household Waste & Recycling Center	29420 N. James Madison Highway	5	Monopole	125'
Household Waste & Recycling Center	720 Plank Road	10	Monopole	199'
Water Tank	52 Dillwyn Primary Road	14	Concealed Antenna Attachments	n/a
Household Waste & Recycling Center	Section 138, Lot 16	15	Concealed	125'
Water Treatment Plant	1788 Troublesome Creek Road	18	Monopole	199'
Household Waste & Recycling Center	16836 W. James Anderson Highway	26	Monopole	199'
Buckingham County Courthouse	13043 W. James Anderson Highway	27	Monopole Flag Pole/concealed attached	125'
Buckingham County Administrative Offices	13360 W. James Anderson Highway	28	Monopole Flag Pole/concealed attached	125'
Undeveloped Land	Section 137, Parcel 121A	29	Concealed	125'

Undeveloped Land	Section 137, Lot 47	30	Concealed	125'
Water Tank	16830 W. James Anderson Hwy	32	Concealed Antenna Attachments	n/a
Animal Shelter	9659 Andersonville Road	34	Monopole	199'
Old landfill	Off Andersonville Road	35	Monopole	199'

Of the above provided list of County-owned properties, the Water Treatment Plant at 1788 Troublesome Creek Rd in Dillwyn is the closest to the subject property. But it is approximately 4.65 miles to the south, and is too far away to achieve Verizon Wireless's coverage objective for the Ransons area. All of the other listed County-owned lands are further away from Ransons.

Section Two: Submittal Requirements for each type of facility

#1 For All New WCFs outside the right-of-way: In addition to the submittal requirements of any subsection below, each applicant shall submit a completed application form and required application fees as part of its submittal package.

(1) Prior to application submittal.

(a) The applicant shall contact the Zoning Administrator to confirm submittal requirements and Planning Commission and Board of Supervisor meeting dates.

The applicant attended a pre-application meeting with county staff by teleconference on February 1, 2023 and confirmed submittal requirements.

(b) Balloon Test for all new freestanding macro cell WCFs outside the right-of way greater than 50 feet in height

1. The applicant shall arrange to raise a balloon of a color or material that provides maximum visibility and no less than three feet in diameter, at the maximum height of the proposed WCF and within 50 horizontal feet of the center of the proposed antenna support structure.

2. The applicant shall inform in writing the zoning administrator, abutting property owners, elected County Supervisor, and appointed Supplemental Document to Article 9 5 Planning Board Commissioner of the district of the date and times of the test at least 14 days in advance.

3. The applicant shall request in writing permission from the abutting property owners to access their property during the balloon test to take pictures of the balloon and to evaluate the visual impact of the proposed tower on their property.

4. The date, time and location of the balloon test shall be advertised in a locally distributed paper by the applicant at least seven but no more than 14 days in advance of the test date. The advertisement shall also include an alternate inclement weather date for the balloon test.

5. Signage similar to rezoning signage shall be posted on the property to identify the location on the property where the balloon is to be launched. This signage shall be posted a minimum of seventy-two hours prior to the balloon test. If unsuitable weather conditions prevail on the date of the balloon test then cancellation of the test shall be clearly noted on the signage.

6. The balloon shall be flown for at least four consecutive hours during daylight hours on the date chosen.

7. The applicant shall record the weather during the balloon test.

8. If the wind during the balloon test is above 20 miles per hour then the balloon test shall be postponed and moved to the alternate inclement weather date provided in the advertisement

The applicant held a balloon test April 26, 2023. All requirements above were observed. Please refer to the enclosed Balloon Test Log for test details, evidence of public notice, and public comments.

(2) Provided with application:

(a) For all new macro facility towers, the applicant shall demonstrate that the following notice was mailed (via certified mail) to all other wireless service providers licensed to provide service within the county as well as known tower owners as indicated on the list of wireless service providers provided by the county:

"Pursuant to the requirements of the Buckingham County Zoning Ordinance, Article 9 is hereby providing you with notice of our intent to meet with the county staff in a pre-application conference to discuss the location of a free-standing wireless communications facility that would be located at _____ (physical address, latitude and longitude (NAD83)). In general, we plan to construct a support structure of _____ feet in height for the purpose of providing _____ (type of wireless service) _____. Please inform the County Staff if you have any desire for placing additional wireless facilities or equipment within 2 miles of our proposed facility. Please provide us and Buckingham Planning Department with this information within twenty business days after the date of this letter. Your cooperation is sincerely appreciated. Sincerely, (pre-application applicant, wireless provider)"

Notification letters were sent by certified mail to T-Mobile and AT&T on June 2, 2023 notifying those carriers of this SUP application. Copies of the letters and the certified mail receipts are attached.

(b) An affidavit by a radio frequency engineer demonstrating: (NOTE: These documents are needed to justify a facility and to determine if the proposed Supplemental Document to Article 9 6 location is the only or best one in the designated geographic area of the proposed facility.)

(1) No existing wireless communications facilities located within the geographic area meets the applicant's engineering requirements, and why.

(2) Existing wireless communications facilities are not of sufficient height to meet the applicant's engineering requirements, and cannot be increased in height.

(3) Existing wireless communications facilities do not have sufficient structural integrity to support the applicant's proposed wireless communications facilities and related equipment, and the existing facility cannot be sufficiently improved.

(4) Other limiting factors that render existing wireless communications facilities unsuitable.

(5) Costs of concealment technology that exceed facility development costs shall not be presumed to render the technology unfeasible.

The applicant respectfully submits that requiring an affidavit "to justify a facility" is not permissible under Va. Code § 15.2-2316.4:2.A.2 (providing that a locality may not "Require an applicant to provide proprietary, confidential, or other business information to justify the need for the project").

However, the applicant voluntarily discloses that the geographic search area designated by Verizon Wireless radio engineers for this project is a ring approximately one mile across centered in the vicinity of Ransons. There are no existing communications towers or other structures suitable for collocation within the geographic search area.

(c) Sixteen sets (11"× 17") of signed and sealed site plans by a surveyor or engineer licensed in the State of Virginia, including antenna support structure elevations, and landscape plans if required, and one reduced copies (8 ½"× 11"), of the foregoing preliminary grading plans may be included on site plans or separately submitted in equal quantities. The site plans shall identify adjacent land owners, land uses, height of principal building, size of lots, and existing zoning and land use designation.

Printed site plans are included with this application.

(d) An identification card for the subject property from the office of the Commissioner of the Revenue for the County or a tax bill showing the ownership of the subject parcel.

A 2022 tax receipt for the subject parcel is included with this application.

(e) Proof that a property and/or WCF owner's agent has appropriate authorization to act upon the owner's behalf (if applicable).

A Special Limited Power of Attorney document signed by the property owner and notarized is included with this application.

(f) For monopoles using breakpoint technology a written statement by a registered professional engineer licensed by the State of Virginia specifying the design structural failure modes of the proposed facility.

The proposed facility is set back 110% of its height, or 220 feet, from the nearest parcel line. The "fall zone" is located completely on the subject parcel and therefore it will not be designed for breakpoint technology.

(g) Materials detailing the locations of existing wireless communications facilities to which the proposed antenna will be a handoff candidate; including latitude, longitude, and power levels of the proposed and existing antenna is required.

The applicant respectfully submits that network traffic information is proprietary business information protected from disclosure in land use applications, pursuant to Va. Code § 15.2-2316.4:2.A.2 (providing that a locality may not "Require an applicant to provide proprietary, confidential, or other business information to justify the need for the project, including propagation maps and telecommunications traffic studies...").

(h) A map showing the designated search ring.

The applicant respectfully submits that a search ring map is proprietary business information and protected from disclosure in land use applications, pursuant to Va. Code § 15.2-2316.4:2.A.2.

(i) Identification of the intended service providers of the WCF.

This wireless communications facility is proposed by Verizon Wireless, who will be the first carrier located on the monopole at the highest level. The facility will be engineered to support other carriers who wish to collocate on the monopole in the future.

(j) Title report or American Land Title Association (A.L.T.A.) survey showing all easements on the subject property, together with a full legal description of the property.

A title report prepared by the Law Offices of James G. Prince dated 10/19/2022 is included with this application. A title review letter and survey completed by Dewberry Engineers Inc. dated 4/7/2023 is included with this application package.

(k) The applicant shall supply a statement on applicant letterhead of compliance with all FCC rules regarding interference to other radio services.

A signed statement of compliance is included with this application.

(l) The applicant shall supply a statement on applicant letterhead of compliance with all FCC rules regarding human exposure to radio frequency energy.

A signed statement of compliance is included with this application.

(m) One original and two copies of a survey of the property delineating an area equal to 200 percent (200%) of the height of the WCF as measured from the boundary of the equipment compound of the tower in all directions. This survey shall include all property lines and buildings and be completed by a professional surveyor, licensed in the State of Virginia, showing all existing uses, structures, and improvements.

A survey completed by Dewberry Engineers Inc dated April 3, 2023 is included with this application package.

(n) A landscape plan in accordance with the provisions of Section 7 (8) of Article 9 in the Zoning Ordinance, to include without limitation, any required buffer.

A landscape plan is shown on Sheet Z-2 of the site plan drawings submitted with this application. The landscaping consists of 19 evergreen trees for facility screening in accordance with Section (8) of the Development Standards.

(o) If the United States Fish and Wildlife Service require the applicant to submit any information to them concerning the proposed wireless communications facility, the applicant shall also furnish a copy of any material submitted to the United States Fish and Wildlife Service to the county as part of the application package.

Not applicable to this application.

(p) All other documentation, evidence, or materials necessary to demonstrate compliance with the applicable approval criteria set forth in this document and the Buckingham County Zoning Ordinance.

The applicant agrees to provide such additional information, reserving any rights under law that protect the applicant's proprietary business information from disclosure.

(3) Provide with building permit: (a) Prior to issuance of a building permit, proof of FAA compliance with Subpart C of the Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace," if applicable. (b) Prior to issuance of a building permit a stamped or sealed structural analysis of the proposed WCF prepared by a registered professional engineer licensed in the State of Virginia indicating the proposed and future loading capacity of the WCF. (c) Prior to issuance of a building permit, proof of Virginia Department of Historic Resources (VDHR) approval and State Historic Protection and Preservation Office (SHPPPO) approval, if required.

The applicant agrees to provide the above documents at the time of application for a building permit.

#2 Attached, collocated, collocation modifications of existing arrays, or combined antenna on an existing WCF.

This section is not applicable to this application.

#3 Replacement of WCFs.

This section is not applicable to this application.

#4 Freestanding concealed WCFs

This section is not applicable to this application.

#5 Non-concealed WCFs. (a) It is intended that all new non-broadcasting towers be 199' or less in height. However, should a tower be required in excess of 199', all new non-broadcast facilities shall be subject to the following additional requirements:

1. Propagation maps and corresponding data including but not limited to topographic and demographic variables for the intended service area shall be provided for review illustrating with detail that the service area and intercoupling hand-

off will be sufficiently compromised to require an additional antenna support structure(s) for network deployment, which would not otherwise be required.

2. It shall be noted on the site plan that the tower shall be designed to allow for a future reduction of elevation to no more than 199', or the replacement of the tower with a monopole type structure at such time as the wireless network has developed to the point that such a reduction in height can be justified. (b) Photo-simulated post construction renderings of the completed proposed antenna support structure, equipment cabinets, and ancillary structures shall at a minimum include renderings from the vantage point of any adjacent roadways and occupied or proposed non-residential or residential structures and other locations as determined by the Administrator, proposed exterior paint and stain samples for any items to be painted or stained, and pictures of exterior building materials and roof materials. (c) The applicant shall provide simulated photographic evidence of the proposed WCFs appearance from any and all residential and village zones as identified on the zoning map that are within 1,000 feet and vantage points approved by the Administrator including the facility types the applicant has considered and the impact on adjacent properties including: 1. Overall height. 2. Configuration. 3. Physical location. 4. Mass and scale. 5. Materials and color. 6. Illumination. 7. Architectural design.

The proposed facility will consist of a 195-foot tall monopole tower, topped with a 4-foot tall lightning rod for overall height of 199'. It is therefore not subject to (1) and (2) above.

#6 Antenna Element Replacement

This section is not applicable to this application.

#7 Small Cell Facility

This section is not applicable to this application.

Section Three : Other Submittal requirements for WCFs

(a) Demonstration of Visual and Aesthetic Impacts:

1. The applicant shall provide a statement as to the potential visual and aesthetic impact of the proposed WCF on all adjacent properties and roadways, trails, and travel ways.

The proposed facility is sited near the center of a 64.8-acre parcel, set back 1,010' from the parcel frontage on Ranson Road. The property is covered by a mix of existing mature trees and cleared land. The surrounding properties on the south side of Ranson Road are similarly-sized large lots with similar mixtures of mature trees and cleared land. There are several smaller parcels with residential structures on the north side of Ranson Road.

The top of the proposed 199' facility will be visible from the surrounding area. However it will be constructed in a monopole design that presents a slim profile with no steel lattice structure and no guy wires. Due to the overall height of 199' the monopole will have no marker lights or other kind of lighting that would make it visible at night. Additionally, due to the large setback from the road, width of the parcel, and existing vegetation, the equipment compound at the base of the tower will not be visible from any point off the subject property. The facility will have an overall minimal visual impact on the surrounding area.

2. Except where the facility will be located entirely within an existing structure, a scaled plan and a scaled elevation view and other supporting drawings, calculations, and other documentation required by the agent, signed and sealed by an appropriate licensed professional. The plans and supporting drawings, calculations and documentation shall show:

i. The benchmarks and datum used for elevations. The datum shall coincide with the Virginia State Plane Coordinate System, South Zone, North American Datum of 1983 (NAD83), United States Survey Feet North American Vertical Datum of 1988 (NAVD88), and the benchmarks shall be acceptable to the County.

ii. The design of the facility, including the specific type of support structure and the design, type, location, size, height and configuration of all existing and proposed antennas and other equipment.

iii. Except where the facility would be attached to an existing structure or is less than fifty (50) feet, the topography within two thousand (2,000) feet of the proposed facility, in contour intervals shown on United States Geological Survey topographic survey maps or the best topographic data available.

iv. The height, caliper and species of all trees where the drip-line is located within fifty (50) feet of the facility that are relied upon to establish the proposed height and/or screening of the monopole.

The above requirement is Not Applicable to this application because existing trees are not being relied upon to establish the proposed height and/or screening of the monopole.

All trees that will be adversely impacted or removed during installation or maintenance of the facility shall be noted, regardless of their distances to the facility.

The proposed facility is sited in an area of a tree farm that has been recently harvested and replanted with small pine saplings for harvest, and low brush is growing there. The area is labeled as "brush" on Sheets Z-1 and Z-2 of the plans, along with "brush clearing limits." No mature trees will be impacted in the equipment compound area. Some trees along the proposed access drive will be cleared to improve the drive, this area is labeled as "tree clearing limits" on Sheet Z-1.

v. All existing and proposed setbacks, parking, fencing and landscaping.

(b) The location of all existing and proposed access ways

A set of plans showing the above information is included with this application.

Interference with public safety communications. In order to facilitate the regulation, placement, and construction of WCFs, and to ensure that all parties are complying to the fullest extent possible with the rules, regulations, and/or guidelines of the FCC, each owner of a WCF or applicant for a WCF shall agree in a written statement to the following:

1. Compliance with "good engineering practices" as defined by the FCC in its rules and regulations.
2. Compliance with all FCC rules and regulations relating to radio frequency interference (RFI).

A signed statement of compliance is included with this application.

3. In the case of an application for collocated telecommunications facilities, the applicant, together with the owner of the subject site, shall use their best efforts to provide a composite analysis of all users of the site to determine that the applicant's proposed facilities will not cause radio frequency interference with the county's public safety communications equipment and will implement appropriate technical measures, antenna element replacement, to attempt to prevent such interference.

This section is not applicable to this request.

4. Whenever the county has encountered radio frequency interference with its public safety communications equipment, and it believes that such interference has been or is being caused by one or more WCFs, the following steps shall be taken: i. The county shall provide notification to all WCF service providers operating in the county of possible interference with the public safety communications equipment, and upon such notifications, the owners shall

use their best efforts to cooperate and coordinate with the county and among themselves to investigate and mitigate the interference, if any, utilizing the procedures set forth in the joint wireless industry-public safety "Best Practices Guide," released by the FCC in February 2001, including the "good engineering practices," as may be amended or revised by the FCC from time to time. ii. If any WCF owner fails to cooperate with the county in complying with the owner's obligations under this section or if the FCC makes a determination of radio frequency interference with the county public safety communications equipment, the owner who failed to cooperate and/or the owner of the WCF which caused the interference shall be responsible, upon FCC determination of radio frequency interference, for reimbursing the county for all costs associated with ascertaining and resolving the interference, including but not limited to any engineering studies obtained by the county to determine the source of the interference. For the purposes of this subsection, failure to cooperate shall include failure to initiate any response or action as described in the "Best Practices Guide" within 24 hours of county's notification.

Noted.

Section Seven: Development standards

(a) Height shall be 199' or less with the exception of replacement of and existing WCF (See supplemental document for replacement details)

The proposed facility is a 195-foot tall monopole topped with a 4-foot lightning rod for an overall height of 199-feet. The proposed facility is in compliance with this requirement.

(b) Setbacks according to each type of facility

(a) Collocated, combined WCF or antenna array and equipment (1) shall be subject to the setbacks of the underlying zoning district. (2) When a collocated or combined WCF is to be located on a nonconforming building or structure, then the existing permitted nonconforming setback shall prevail.

(b) Attached antenna a. located on a nonconforming building or structure, then the existing permitted nonconforming setback shall prevail. b. New equipment cabinets are subject to the underlying zoning setbacks.

(c) Replacement WCF of an existing tower a. shall not be required to meet new setback standards so long as the new tower and its equipment compound are no closer to any property lines or dwelling units as the tower and equipment compound being replaced. The intent is to encourage the replacement process, not penalize the WCF owner for the change out of the old facility.

(4) Small Cell Facilities b. shall be co-located when feasible as a first option on existing utility poles, County owned infrastructure (with the County's consent), existing wireless support structures or base stations in the immediate area; c. may be developed as replacements for existing utility poles or wireless support structures provided the new facility does not exceed the size of the former facility.

(6) New freestanding concealed and non-concealed towers and equipment compounds

(a) shall be subject to the setbacks described below for breakpoint technology:

1. If the antenna support structure has been constructed using breakpoint design technology (see Definitions), the minimum setback distance shall be equal to 110 percent of the distance from the top of the structure to the breakpoint level of the structure, plus the minimum side and rear yard requirements. For example, on a 100-foot tall monopole with a breakpoint at 80 feet, the minimum setback distance would be 22 feet (110 percent of 20 feet, the distance from the top of the monopole to the breakpoint) plus the minimum side or rear yard setback requirements for that zoning district.

The proposed tower will not be designed with "breakpoint technology."

2. If the tower has not been constructed using breakpoint design technology, the minimum setback distance shall be equal to 110 percent of the height of the proposed antenna support structure.

The proposed tower facility has an overall height of 199' including lightning rod. The proposed tower is sited 220' from the nearest parcel line, which slightly exceeds 110 percent of the overall height. The proposed tower is in compliance with this requirement.

(7) Commercial messages shall not be displayed on any tower. The only signage that is permitted upon a tower, equipment cabinets, or fence shall be informational, and for the purpose of identifying the tower (such as ASR registration number), as well as the party responsible for the operation and maintenance of the facility, and any additional security and/or safety signs as applicable.

Noted.

(8) Buffers. In all allowable locations the WCF equipment compound shall be landscaped with a minimum ten-foot wide perimeter buffer containing the following planting standards: 1. One row of evergreen trees with a minimum two inches caliper, 25-foot on center. 2. Evergreen shrubs capable of creating a continuous hedge and obtaining a height of at least five feet shall be planted, minimum three gallon or 24 inches tall at the time of planting, five-foot on center. 3. All plants and trees shall be indigenous to this part of Virginia. 4. Existing trees and shrubs on the site should be preserved and may be used in lieu of required landscaping where approved by the Administrator. 5. Alternative landscaping plans which provide for the same buffer as 1 and 2 above but an propose alternative siting location on the entire subject property on which the proposed facility is projected may be considered and approved by the zoning administrator, provided the proposed alternative maximizes screening as provided above, and is otherwise consistent with the requirements of this section. If in the future the property is redeveloped the property owner may be required to provide the ten-foot wide perimeter buffer around the WCF equipment compound meeting the planning standards of 1 and 2 above.

The proposed facility will be surrounded by a planted landscape buffer consisting of evergreen trees and shrubs per the above standard. A landscape plan is included on Sheet Z-2 of the Plans.

(9) A section of fence at least six (6) feet in height shall be provided completely around the base of the tower and any associated equipment inside any required buffer area.

The proposed facility will be enclosed by an eight (8) foot tall fence topped with an additional foot of stranded barbed-wire as an anti-climbing measure.

(10) The facility shall not interfere with the radio, television, or communications reception of nearby property owners in residence at the time of construction. The applicant shall take steps to successfully eliminate any such interference. Compliance with American National Standards Institute (ANSI) standards for electromagnetic radiation shall be required in order to protect the public from excessive exposure to electromagnetic radiation. The WCF applicant shall certify through a written statement that the facility meets or exceeds current ANSI standards as adopted by the FCC. (see supplemental document for further information on Interference agreement)

Noted

(11) All towers and other structures shall meet all safety requirements of all applicable building codes.

Noted

(12) All non-concealed WCFs structures (excluding antenna and cables) greater than 50' shall be galvanized steel.

The proposed monopole will be constructed of galvanized steel.

(13) All freestanding towers up to 150 feet in height shall be engineered and constructed to accommodate no less than five (5) antenna arrays. All towers great than 150 feet shall be engineered and constructed to accommodate no less than six (6) antenna arrays.

The proposed 195' monopole will be engineered and constructed to accommodate a total of six (6) arrays as shown on Sheet Z-3 of the Plans.

(14) Abandonment. 61 1. WCFs and the equipment compound, including the foundation(s) down to twelve inches (12") below grade, shall be removed at the owner's expense, within 180 days of cessation of use (i.e. the termination of all radio frequency transmissions from the tower), unless the abandonment is associated with a replacement antenna structure, general submittal requirements, in which case the removal shall occur within 90 days of cessation of use. 2. An owner wishing to extend the time for removal or reactivation shall submit an application stating the reason for such extension. The county may extend the time for removal or reactivation up to 60 additional days upon a showing of good cause. If the antenna support structure or antenna is not removed within this time, the county may give notice that it will contract for removal within 30 days following written notice to the owner. Thereafter, the county may cause removal of the antenna support structure with costs being borne by the owner. 3. Upon removal of the WCF and equipment compound, the development area shall be returned to its natural state and topography and vegetated consistent with the natural surroundings or consistent with the current uses of the surrounding or adjacent land at the time of removal.

Noted. The Applicant's lease with the property owners provides for removal of the facility within ninety (90) days of the Applicant's termination of the lease with the property owner.

Consistency with the Comprehensive Plan and the purposes to be served by zoning:

The Buckingham County Comprehensive Plan, Adopted September 14, 2015, identifies Community Services and Facilities as important priorities under Policy Area #6. The Policy identifies telecommunications as an important "hard" facility integral to Buckingham County's overall community well being.

Improved wireless communications coverage promotes this priority. Wireless coverage supports and enhances existing agricultural use in the county by improving communications in rural areas and supporting wireless technologies used in farming.

Improved wireless communications in this area will further the County's goals of maintaining and improving public safety through emergency services by providing citizens and first responders with improved cell phone coverage on private property and on neighboring roadways.

The Plan also identifies Economic Development and Job Creation as important goals under Policy Area #7. Wireless infrastructure is important for attracting new industries and business and retaining existing ones. Good wireless service can support teleworking and remote learning for students, which are indispensable to many workers and companies.

Conclusion:

Verizon Wireless is confident that the proposed Telecommunications Facility meets the Zoning Ordinance's criteria for approval of Special Use Permits and it will not conflict with any of the goals and objectives that are set forth in Buckingham County's Comprehensive Plan. Approval of this application will support the provision of Verizon Wireless's full range of wireless communications and data services within an area of the county that currently needs greater access to high quality voice, data and broadband services. While this facility will directly benefit customers in close proximity to this site, it will also facilitate greater improvements to Verizon's overall network in Buckingham County by offloading strains on other existing facilities in outlying areas. This is because the total number of users who are relying on services currently provided by neighboring on-air sites will be reduced, which means those sites will then have fewer users that are competing for access to the network.

The tower serving this facility will meet the County's design preferences of a galvanized finish and it will also employ a monopole structural design, which has a smaller profile than self-supporting lattice structures. The base station cabinet, generator and H-frame stand will be screened from off-site views by the planted landscape screening surrounding the facility. Therefore, it will not impose any unexpected, adverse impacts upon the neighboring properties or the adjacent roadways.

Sincerely,

A handwritten signature in black ink, appearing to read "Stuart P. Squier".

Stuart P. Squier, AICP
GDNsites

Site Development Consultant to Verizon Wireless

SPECIAL USE PERMIT APPLICATION CHECKLIST
BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINIMUM SUBMISSION
REQUIREMENTS

The following table lists the information necessary to review a special use application. All items are required, unless otherwise stated, and must be submitted in order for the application to be accepted for review. This completed checklist must be submitted with the application.

Adjacent Property Owners List and Affidavit (pages 4, 5 & 6 attached). This list can be obtained from the Clerk of Courts Office: ☒ YES NO

Completed application for special use permit (page 3 attached). If not signed by the owner, a Power of Attorney must accompany the application: ☒ YES NO

Interest Disclosure Affidavit (page 7 attached). Must be signed by the owner: ☒ YES NO

Power of Attorney (page 10 attached). Required if anyone other than the owner is signing the application form or proffer statement on behalf of the owner: ☒ YES NO

Written Narrative (page 11 guidance in preparing the Written Narrative): ☒ YES NO

Fees: ☒ YES NO

Deed: ☒ YES NO

Plat (15 copies). The plat information may be incorporated into the Special Use Permit General Site Plan, in which case, copies of a separate plat are not required. The plat must be prepared by a certified land surveyor or licensed civil engineer and contain the following:

- A. Bearings and distances of a scale of 1" = 100' or less for all property lines and existing and proposed zoning lines: ☒ YES NO
- B. Area of land proposed for consideration, in square feet or acres: ☒ YES NO
- C. Scale and north point: ☒ YES NO
- D. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES NO

Tax Map (15 copies) ✓ Identify property that special use is being considered for and identify by name all adjacent landowners.

Special Use General Site Plan (15 copies) The General Site Plan must contain the following:

1. Vicinity Map – Please show scale: ☒ YES NO N/A
2. Owner and Project Name: ☒ YES NO N/A
3. Parcel Identification numbers, name, present zoning, and zoning and use of all abutting or adjoining parcels: ☒ YES NO N/A
4. Property lines of existing and proposed zoning district lines: ☒ YES NO N/A
5. Area of land proposed for consideration, in square feet or acres: ☒ YES NO N/A
6. Scale and north point: ☒ YES NO N/A
7. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES NO N/A
8. Easements and encumbrances, if present on the property: YES NO ☒ N/A
9. Topography indicated by contour lines: ☒ YES NO N/A
10. Areas having slopes of 15% to 25% and areas having slopes of 25% or greater clearly indicated by separate shading devices (or written indication of “no areas having slopes of 15% to 25% or greater”): YES NO ☒ N/A
11. Water Courses to include the approximate location of the 100 year floodplain (if applicable) based on FEMA maps (or written indication of “not in floodplain”): YES NO ☒ N/A
12. Delineation of existing mature tree lines or written indication of “no mature tree lines”: ☒ YES NO N/A
13. Proposed roads with right-of-way width that will connect with or pass through the subject property: ☒ YES NO N/A
14. General locations of major access points to existing streets: ☒ YES NO N/A
15. List of the proposed density for each dwelling unit type, and/or intensity of each non-residential use: YES NO ☒ N/A
16. Location of any open space and buffer areas, woodland conservation areas, storm water management facilities, and community and public facilities: YES NO ☒ N/A
17. Location of existing and proposed utilities, above or underground: ☒ YES NO N/A
18. Vehicular and pedestrian circulation plan, including traffic counts and typical street sections, right-of-way improvements, access points, travel ways, parking, loading, stacking, sidewalks, and trails: YES NO ☒ N/A
19. Layouts and orientation of buildings and improvements, building use, height, setbacks from property lines and restriction lines: ☒ YES NO N/A
20. Location and design of screening and landscaping: ☒ YES NO N/A
21. Building architecture: ☒ YES NO N/A
22. Site lighting proposed: YES NO ☒ N/A
23. Area of land disturbance in square feet and acres: ☒ YES NO N/A
24. Erosion and Sediment Control Plan submitted (10,000 square feet or more): YES ☒ NO N/A To be submitted with Land Disturbance Permit application
25. Historical sites or gravesites on general site plan: YES NO ☒ N/A
26. Show impact of development of historical or gravesite areas: YES NO ☒ N/A
27. A copy of the current status of all real estate taxes of all property owned in Buckingham County. If real estate taxes are not current, an explanation in writing and signed by the owner shall accompany this application. Any liens or other judgments against property shall also be explained in writing and signed by the owner: ☒ YES NO N/A

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: April 27, 2023

Special Use Permit Request: Communication Tower in A-1 Agricultural District

Purpose of Special Use Permit: To permit construction and operation of a 199-foot overall height wireless telecommunications facility to provide communication coverage to the Ransons area.

Zoning District: A-1 Agricultural Number of Acres: 64.8ac

Tax Map Section: 65 Parcel: 16 Lot: _____ Subdivision: _____ Magisterial Dist.: 6

Street Address: Ranson Road (Unaddressed parcel)
Directions from the County Administration Building to the Proposed Site: Right on US-60 then left on Rte 631 for 4mi. Left on VA-20 N for 4.5mi. Left on Rte 659 for 2mi. Access drive on left.


Name of Applicant: Verizon Wireless c/o Stuart P. Squier, AICP
Mailing Address: 3126 W. Cary St. #604, Richmond, VA 23221

Daytime Phone: 804-901-7433 Cell Phone: _____
Email: stuart.squier@gdnsites.com Fax: _____

Name of Property Owner: Martin Slate River Farm, LLC
Mailing Address: 2107 Ames Circle, Chesapeake, VA 23321

Daytime Phone: 804-901-7433 Cell Phone: _____
Email: stuart.squier@gdnsites.com Fax: _____

Signature of Owner: See attached Power of Attorney Date: _____

Signature of Applicant:  Date: 4/18/2023

Please indicate to whom correspondence should be sent:
☐ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer
☒ Applicant

ADJACENT PROPERTY OWNER'S LIST

(Required)

The applicant shall provide a list of all adjoining landowners, including subject property and all property immediately across the street/road from the subject property. Any body of water does not constitute a boundary line for this purpose, therefore a body of water and the property adjoining the subject property but separated by a body of water is still considered an adjoining landowner. County boundary lines and those adjoining property owners in the next County are considered adjoining property owners if the land adjoins the subject's property. Adjoining landowners can be verified through the Buckingham County Clerk of Courts or the Clerk's Office in the adjoining County, or by personal contact. The list shall include the name, address, town/city, zip code, road route number, tax map section number, parcel number, lot number, and subdivision. The list shall be typewritten or printed legibly. Failure to list all adjoining landowners could delay the process.

1. Name: Tolbert, David E.

Mailing Address: PO Box 849, Dillwyn, VA 23936

Physical Address: 3553 Ranson Rd, Dillwyn, VA 23936

Tax Map Section: 65 Parcel: 55A Lot: Subdivision:

2. Name: Baker, Robert A

Mailing Address: C/O Barbara Santostefano 66 Valley Stream Ct., Mountain Top, PA 18707

Physical Address: 3671 and 3689 Ranson Rd, Dillwyn, VA 23936

Tax Map Section: 65 Parcel: 53 Lot: Subdivision:

3. Name: Thomas, Lenora E J

Mailing Address: 3752 Ranson Rd., Dillwyn, VA 23936

Physical Address: 3752 Ranson Rd., Dillwyn, VA 23936

Tax Map Section: 65 Parcel: 43 Lot: Subdivision:

4. Name: Patteson Eldridge Tucker &

Mailing Address: C/O Andrea Hall 17035 Bright Water Ln SE, Huntsville, AL 35803

Physical Address: Unaddressed 282ac parcel adjoining subject parcel to the east

Tax Map Section: 80 Parcel: 1 Lot: Subdivision:

6. Name: Raglands Cherry Lane Estate LLC

Mailing Address: 6509 S. Constitution Rte, Dillwyn, VA 23936

Physical Address: Unaddressed 15ac parcel adjoining subject parcel to the east

Tax Map Section: 80 Parcel: 2A Lot: Subdivision:

7. Name: Cherry Lane Farm LLC

Mailing Address: 921 Ashby Station Rd, Front Royal, VA 22630

Physical Address: Unaddressed 123ac parcel adjoining subject parcel to the south

Tax Map Section: 80 Parcel: 2 Lot: Subdivision:

8. Name: Maxey, Robert S. Jr.

Mailing Address: C/O Jerry Nixon, 5019 Shannon Hill Rd., Kents Store, VA 23084

Physical Address: Unaddressed 54ac parcel adjoining subject parcel to the southwest

Tax Map Section: 80 Parcel: 4 Lot: Subdivision:

9. Name: Nixon, Michael Darryl

Mailing Address: 2017 Shade Hunter Ln, Maidens, VA 23102

Physical Address: Unaddressed 48ac parcel adjoining subject parcel to the west

Tax Map Section: 65 Parcel: 15 Lot: Subdivision:

10. Name: Raglands Cherry Lane Estate LLC

Mailing Address: 6509 S. Constitution Rte., Dillwyn, VA 23936

Physical Address: Unaddressed 48ac parcel adjoining subject parcel to the west on Ranson Rd

Tax Map Section: 65 Parcel: 17 Lot: Subdivision:

11. Name: Redwood Hunt Club Inc.

Mailing Address: C/O Scott Hall, 575 Smiths Paradise Ln., Union Hall, VA 24176

Physical Address: 3519 Ranson Rd., Dillwyn, VA 23936

Tax Map Section: 65 Parcel: 41 Lot: Subdivision:

ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

This 18th day of April, year 2023

I Stuart Squier hereby make oath that
(printed name of owner/contract purchaser/authorized agent)

the list of adjoining landowners is a true and accurate list as submitted with my application.

Signed: (to be signed in front of notary public)

[Signature]

(owner / contract purchaser / authorized agent - please circle one)

NOTARY:
COMMONWEALTH OF VIRGINIA

COUNTY OF Richmond

STATE OF Virginia

Subscribed and sworn to me on the 18th day of April

of the year 2023. My Commission expires on July 31, 2024.

Notary Public Signature: Alma D. Ford

Stamp:



INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM, VIRGINIA

On this 10TH day of MARCH, of the year 2023,

I JOHN E. MARTIN SR (printed name of owner)
hereby make oath that no member of the Buckingham County Board of Supervisors nor
the Buckingham County Planning Commission has interest in such property either
individually, or by ownership of stock in a corporation owning such land, or by
partnership, or as a holder of ten percent (10%) or more of the outstanding shares of
stock in or as a director or officer of any corporation owning such land, directly or
indirectly by such members of his/her immediate household, except as follows:

NONE

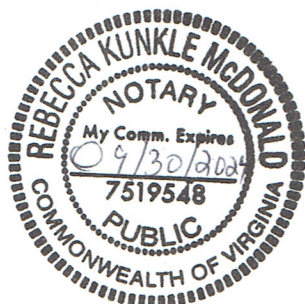
Signature of Owner: (to be signed in front of notary public)

John E Martin Jr

NOTARY PUBLIC
COUNTY OF Portsmouth STATE OF Virginia

Subscribed and sworn to me on this 10TH day of March,
of the year 2023. My commission expires 09/30/2024.

Notary Public Signature: Rebecca Kunkle McDonald
Stamp:



**CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR
PENDING DEVELOPMENT APPLICATIONS**

Case Number / File Name: Verizon Wireless "Ransons" raw land

Visual Inspection Findings (describe what is on the property now):

The 64-acre parcel consists of open and wooded land including an unimproved road.

The proposed location of the communications facility has been cleared since approximately

2018. There are no existing structures on the property.

County Records Check (describe the history of this property):

The property was transferred in 2017 and 2004. Verizon performed a preliminary

screening of the area for historic resources and found no records of historic resources

within the 1/2-mile Area of Potential Effect.

Were any historical sites or gravesites found on site, or be suspected by a reasonable person to be on the site? Yes _____ No X

If yes, please explain and show on the site plan the location of such and explain any historical significance:


There is an internal but separate parcel to the subject parcel that contains a cemetery. The internal parcel is

identified as Parcel ID 65-42 and the subject parcel for this application is Parcel ID 65-16. This request will not

impact the cemetery in any way and the applicant has no rights to use/enter/modify that separate parcel.

Will this proposal have any impact on the historical site or gravesite? Yes ____ No X

If yes, please explain any impact:

Owner/Applicant Signature:  Date: 3/27/2023

Printed Name: Stuart Squier for Verizon Wireless Title: Authorized Agent

APPLICATION FOR A TRAFFIC IMPACT DETERMINATION

Please fill out the following information before presenting to VDOT:

Case Number / File Name: Verizon Wireless "Ransons" raw land

Applicant: Verizon Wireless

Location: Ranson Road (Unaddressed parcel 65-16)

Proposed Use: Wireless telecommunication facility

For VDOT use only:

 A Traffic Impact Statement is required per 24 VAC 30-155-60.

X A Traffic Impact Statement is not required. The traffic generated by the proposed zoning change / development does not exceed normal thresholds.

 The Traffic Impact Analysis has been waived by the Zoning / Planning Department for the following reasons:

Does the existing entrance meet VDOT requirements for the proposed use?

Yes X No If no, please explain the necessary steps to bring into compliance with the requirements for the proposed use:

Signature of VDOT Resident Engineer: Scott D. Frederick, P.E.

Printed Name: SCOTT D. FREDERICK Date: 5/26/2023

SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

On this 21 day of FEBRUARY, in the year of 2023,

I Martin Slate River Farm, LLC the owner of 65-16
(printed name of landowner) (Tax Map Number)

Hereby make, constitute, and appoint Stuart Squier of GDN Sites and Lori Schweller of Williams Mullen
(printed name)

my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/her said full power and authority to do and perform all acts and make all representation necessary, without limitation whatsoever, to make application for said zoning. The right, powers, and authority of said attorney-in-fact herein granted shall commence and be in full force and effect on the day 21 of the month FEBRUARY in the year of 2023 and shall remain in full force and effect thereafter until actual notice by certified mail with return receipt requested is received by the Zoning / Planning Office of Buckingham County stating that the terms of this power have been revoked or modified.

Signature of Landowner (to be signed in front of Notary Public):
MARTIN SLATE RIVER FARM, LLC, a Virginia limited liability company

By: John E. Martin, Jr.

John E. Martin, Jr., Manager

NOTARY PUBLIC

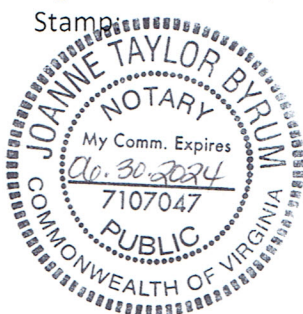
County of Portsmouth State of Virginia

Subscribed and sworn before me on the 21st day of February

in the year 2023. My commission expires June 30, 2024.

Signature of Notary Public: Joanne Taylor Byrum

Stamp:



WRITTEN NARRATIVE

The Written Narrative shall describe the relationship of the proposed project to the relevant components of the Comprehensive Plan. Please be very detailed and describe in depth each and every component 1 through 15. The following outline is provided to aid you in preparing the written narrative:

1. Land Use
2. Community Design
3. Cultural Resources
4. Economic Development
5. Environment
6. Fire and Rescue, Law Enforcement
7. Housing
8. Libraries
9. Parks and Open Spaces
10. Potable Water
11. Sewage
12. Schools
13. Telecommunications
14. Transportation
15. Solid Waste

If this proposal is for an event, describe the handling of the entire event, including but not limited to: number of participants, schedule of events, police, security, food, beverages, water, sanitation, emergencies, crowd control, entrances and exits, traffic control, signage, advertisement, parking, fee collection, control of animals, trash disposal, site clean-up, fighting, alcohol, abuse of alcohol and/or illegal substances

SIGNAGE AT PROPERTY

The Buckingham County Zoning Ordinance requires the following:

The applicant in any case which requires a public hearing shall post signs furnished by the agent on each parcel involved at least 21 days prior to the public hearing indicating that a public hearing is eminent, the date, a rezoning issue, and a County contact number. The signs shall be placed on the VDOT right-of-way closest to the applicant's property line and shall be clearly visible from the road with bottom of the sign not less than one and one half feet above the ground. If more than one public road abuts the property, the signs shall be placed in the same manner as above for each abutting road. If no road abuts a property, then the agent shall define an area for the signs. The agent may ask the applicant that the sign be moved to another area either on the property to achieve greater public visibility. The applicant shall be responsible for keeping the signs free from grass, weeds, and any other plants or vines that may obstruct the public's view. The applicant shall contact the Virginia Department of Transportation for any information concerning where the right-of-way is located. The applicant shall be responsible for the signs should VDOT or their contractor conduct mowing or clearing of the right-of-way in the area where the sign is located.

Any signs required shall be maintained at all times by the applicant up to the time of the final public hearing. No person, except the applicant or the agent or an authorized agent of either, shall remove or tamper with any sign furnished during the period it is required to be maintained under this section. All signs erected under this ordinance shall be removed by the applicant within 15 days following a decision at the final public hearing and shall be returned to the agent. The applicant shall purchase the signs at a fee as determined by the Board of Supervisors and shall be non-refundable. The applicant shall be responsible for the replacement of the sign(s) and shall contact the agent as soon as possible for another sign to be replaced as the manner described above. Should the sign(s) have to be replaced more than twice, this section shall no longer be forced upon the applicant.

I have read, understand and agree to the above requirements.

Applicant/Owner:  Stuart Squier for Verizon Wireless

Date: 3/27/23

TENTATIVE SCHEDULE FOR A SPECIAL USE PERMIT

The application, site plan, written narrative, and all information requested in this application must be filled out in its entirety and supplied to the Buckingham Zoning / Planning Office and the fee must be paid before this case will be allowed to move forward.

Case will be introduced at a regularly scheduled Planning Commission meeting held on the fourth Monday of every month. Planning Commission may set a Public Hearing at this time to be held during a regularly scheduled meeting. Public Hearings offer an opportunity for citizens to speak concerning the case.

Following the Planning Commission Public Hearing, the Planning Commission may make a recommendation to approve / deny / or table the case for more information. Once the Planning Commission makes a recommendation to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. The Board of Supervisors meetings are held on the second Monday of every month. The Board of Supervisors may set a Public Hearing at this time to be held during a regularly scheduled meeting. The Board of Supervisors will make the final decision to approve or deny the application after the public hearing.

Example Timeline:

January 25	Case is introduced to Planning Commission. Planning Commission sets Public Hearing for next regularly scheduled meeting on February 22.
February 22	Planning Commission Public Hearing. Planning Commission recommends to approve / deny / or table for more information. Once the Planning Commission reaches a decision to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting.
March 8	Case is introduced to Board of Supervisors.
April 12	Board of Supervisors may approve / deny / table for more information.

The Planning Commission and the Board of Supervisors has a right to call extra public hearings at their discretion if the Board(s) decide they are needed.

You or your agent are encouraged to attend these meetings to answer any questions that may arise concerning your application / proposal. The County strongly encourages the applicant to visit the area around his proposed site and understand what the adjoining landowner concerns are.

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: April 27, 2023

Special Use Permit Request: Communication Tower in A-1 Agricultural District

Purpose of Special Use Permit: To permit construction and operation of a 199-foot overall height wireless telecommunications facility to provide communication coverage to the Ransons area.

Zoning District: A-1 Agricultural Number of Acres: 64.8ac

Tax Map Section: 65 Parcel: 16 Lot: _____ Subdivision: _____ Magisterial Dist.: 6

Street Address: Ranson Road (Unaddressed parcel)
Directions from the County Administration Building to the Proposed Site: Right on US-60 then left on Rte 631 for 4mi. Left on VA-20 N for 4.5mi. Left on Rte 659 for 2mi. Access drive on left.

Name of Applicant: Verizon Wireless c/o Stuart P. Squier, AICP
Mailing Address: 3126 W. Cary St. #604, Richmond, VA 23221

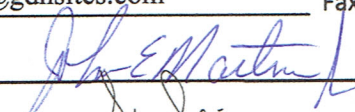
Daytime Phone: 804-901-7433 Cell Phone: _____

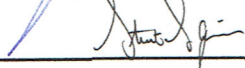
Email: stuart.squier@gdnsites.com Fax: _____

Name of Property Owner: Martin Slate River Farm, LLC
Mailing Address: 2107 Ames Circle, Chesapeake, VA 23321

Daytime Phone: 804-901-7433 Cell Phone: _____

Email: stuart.squier@gdnsites.com Fax: _____

Signature of Owner:  Date: 9/14/2023

Signature of Applicant:  Date: 4/18/2023

Please indicate to whom correspondence should be sent:
☐ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer
☒ Applicant

**County of Buckingham, Virginia
Telecommunications Site Review
Application for New Structure**

CityScape
CONSULTANTS, INC.
2423 S. Orange Avenue, #317
Orlando, FL 32806
Tel: 877.438.2851 Fax: 877.220.4593

October 12, 2023

Ms. Nicci Edmondston
Zoning Administrator
County of Buckingham
13380 W. James Anderson Highway
Buckingham, VA 23921

Applicant/Provider: GDNsites/Verizon Wireless
Provider Site Name: Ransons
Site Location: Ranson Road, Dillwyn, VA 23936
Latitude: N 37° 38' 01.82" **Longitude:** W 78° 30' 46.12"
Proposed Structure: 195' Monopole with 4-foot Lightning Rod on top

Dear Ms. Edmondston,

At your request, on behalf of Buckingham County, Virginia ("County"), CityScape Consultants ("CityScape"), in its capacity as Telecommunications Consultant for the County, has considered the merits of an application submitted by GDNsites on behalf of Cellco Partnership, d/b/a Verizon Wireless (collectively "Applicant" or "Verizon"), to construct a new one hundred ninety-five (195) foot *monopole tower* with a four (4) foot attached lightning rod, *see Figure 1*. This facility is intended to accommodate the antennas for Verizon and five other future collocations. The subject property, which is zoned A-1 Agricultural and is 64.8 acres, is owned by Martin Slate River Farm, LLC. The proposed tower would be located about 0.21 mile south-southwest of the intersection of Ranson Road and The Barn Road, in the community of Ransons in Buckingham County, *see Figure 2*. The proposed tower height complies with the County's *intended* height limitation of one hundred and ninety-nine (199) feet above ground for a non-replacement tower.

The proposed Facility has been evaluated from the following perspectives:

- Whether the proposed tower facility, as specified, is justified due to technological reasons and is essential for the Applicant to provide its telecommunications service; and,
- Whether the proposed facility follows the guidelines of the Telecommunications Act of 1996 and subsequent federal legislation and is compliant with the Commonwealth of Virginia and Buckingham County Codes and all other pertinent rules and regulations; and,
- Whether the application is complete and complies with Article 9, "Radio, Television and Wireless Communication Tower Amendment of the Zoning Ordinance of Buckingham County; and the "Supplemental Document to Article 9".

County of Buckingham, Virginia

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This application proposes to construct a new macro cell wireless facility that includes a one hundred and ninety-five (195) foot *monopole type* tower plus four-foot lightning rod for a total height of 199 feet, along with a fenced-in equipment compound. Section 704 of the Federal Telecommunications Act of 1996 (“the Telecom Act”) specifically preserves the authority of state **and** local governments over decisions regarding the placement, construction, and modification of personal wireless service facilities, so long as such regulation 1) does not involve matters preempted by federal law or regulation, 2) does not unreasonably discriminate among providers of functionally equivalent services and 3) does not prohibit or have the effect of prohibiting the development of a provider’s personal wireless network.

Development of a Personal Wireless Network

From time to time, wireless providers add macro cell sites to resolve coverage gaps between existing towers. As more and more consumer wireless devices are deployed in a given wireless service area, increasing network capacity becomes the driving factor to build additional sites that are localized closer to the wireless provider’s subscribers. This will involve the construction of additional wireless facilities that may overlap signal footprints with the provider’s existing facilities. These new facilities are necessary to offload wireless connection requests coming into the existing adjacent towers so that they do not operate over their capacity to handle the volume of subscriber connection requests. This practice has been ongoing in urban and suburban areas for many years and will continue in rural agricultural and residential areas. Verizon’s stated service goals, described in the narrative statement in the Application, are to: 1) improve coverage in an area of the County currently having marginal service; 2) provide expanded in-building coverage and additional capacity for homes and businesses in and near the community of Ransons; and 3) provide service improvements for vehicles traveling along Route 20, Ranson Road and other local roads.

Evidence of Need for the Proposed Facility

The Applicant has chosen not to provide documentation required by the County Ordinance that would demonstrate the justification for the proposed tower, instead invoking Virginia Code § 15.2-2316.4:2.A.2 which prohibits the County from “require[ing] an applicant to provide proprietary, confidential, or other business information to justify the need for the project, including propagation maps and telecommunications traffic studies.” Specifically, the Applicant takes exception to Section Two, #1(2)(b) (an affidavit from the RF engineer), #1(2)(g) (details of Applicant’s nearby existing facilities) and #1(2)(h) (a map showing the search ring) of the County’s Article 9 Telecommunications Supplemental Document. Although the Applicant did not provide a search ring map, they did provide a general geographical description of the search area.

Notwithstanding the absence of the additional information from the Applicant, CityScape has determined there is a preponderance of evidence that a new wireless tower is needed in this region of the County for Verizon to make needed improvements to its wireless service.

Alternative Sites Evaluation

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CityScape performed a search of all known existing communication towers greater than one hundred (100) feet in height within 5 miles of the proposed site, *see Figure 3*. The only two structures found are the SBA tower 3.1 miles north of the proposed site and the T-Mobile tower 2.2 miles east-northeast of the proposed tower. Neither are within Verizon's search ring which the Applicant states is approximately one mile wide (0.5 mile radius) and centered in the vicinity of the community of Ransons. Furthermore, in the judgement of this engineer, neither site is suitable for collocation given the Applicant's stated coverage objectives for Verizon.

As a courtesy to the County, the Verizon RF engineer examined the possibility of collocating on the T-Mobile, the closer of the two. This tower is 195 feet tall (excluding the lightning rod) so the highest possible collocation spot would be about 185 feet. The engineer replied that "the T-Mobile tower would be an option if [Verizon] had an [antenna height] of 250 [feet]" but "would rather look for something closer to the Ransons [search ring]." An antenna height of 250 feet or more would likely require replacing the existing 195-foot monopole with a taller lattice or guyed tower, which are the least preferred tower types listed in Article 9, Section Five. Also, modification of that structure would require approval of that tower owner, as would temporary displacement of the existing T-Mobile wireless equipment currently mounted on that tower. Additionally, with the added height, aviation obstruction lights would be required making the mitigated structure more visible than the facility proposed by the Applicant.

Regarding the possibility of building on a county-owned property listed in Article 9, Section One, the Applicant stated the following:

"Of the...list of County-owned properties, the Water Treatment Plant at 1788 Troublesome Creek Rd in Dillwyn is the closest to the subject property. But it is approximately 4.65 miles to the south, and is too far away to achieve Verizon Wireless's coverage objective for the Ransons area. All of the other listed County-owned lands are further away from Ransons."

CityScape has verified the above statement to be true.

Evaluation of Applicant's Proposal

Buckingham County has certain rights concerning height, location and type of support structure as well as the ability to assure the proposed facility is following FCC safety specifications and local building codes. While the County has the discretion to regulate the above, the County cannot prevent the Applicant from developing its wireless network according to federal law. As stated previously, CityScape is satisfied there is preponderant evidence that the Applicant requires an additional facility in the area to keep up with the demand for coverage improvement and higher data speeds.

The Applicant submitted a letter from Verizon dated April 7, 2023, stating that the proposed facility will be designed "to comply with all applicable rules regarding radio-frequency interference upon other

County of Buckingham, Virginia

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facilities and uses as mandated by the FCC” and “to comply with all applicable rules regarding human exposure to radio-frequency energy as mandated by the FCC.”

In the letter, Verizon further states:

“If it is determined in the future that any of the company’s antennas and/or other supporting equipment at this facility are functioning in any way that does not comply with [FCC] rules, then Verizon will take all necessary measures to ensure that the specific equipment is either repaired in a manner that resolves the issue(s).”

According to the Applicant’s application documents, the proposed Verizon antennas would be at an elevation of one hundred ninety two (192) feet above ground; the remote radio units and components would be installed on the tower just below the antennas. Up to five future collocators’ antennas would be accommodated at the site per County Code, (see **Figure 1**). All future collocation applications must be reviewed to assure compliance with structural limitations and local, state and federal law including FCC regulations.

The County Code requires 110% setback for a 199-foot structure which equates to a 219-foot minimum spacing from the tower location to the property lines. The Applicant is showing approximately 220 feet to the closest property line¹ Thus, the proposal meets this County setback requirement without employing breakpoint technology.

The Applicant proposes to improve an existing dirt path by upgrading it to a gravel access drive off Ranson Road to access the proposed fifty-by-fifty (50 x 50) foot equipment compound within which the tower and ancillary equipment is proposed to be built (see **Figure 4**). An eight-foot-high chain link fence is proposed for installation on the perimeter of the compound, topped with barbed wire as a climbing deterrent. The compound appears to have enough equipment space for six total providers.

The Applicant proposes to build a non-concealed monopole tower on non-publicly owned property, which is third from last in the County’s hierarchy of siting preferences ((6)b.(i) of Section Five of the Article 9 Supplement Document. The County has the authority to regulate the type of tower to be used, and if the support structure should be concealed if it is deemed to be in a sensitive viewshed.

In most instances, wireless providers are resistant to mounting their equipment inside concealed monopoles due to inadequate space for the antennas to optimally perform and the possibility of the components to overheat in the confined space. If there is a concern of the remote radio heads (RRUs) overheating inside of a canister, placing them in the ground equipment compound instead of inside a concealed monopole is an option. However, RRUs are best placed in the air as close to the antennas as possible because placing the RRUs on the ground increases the lengths of the RF cables between the RRUs and the antennas, which reduces the RF power being fed to the antennas due to significantly

¹ See Overall Site Plan, Sheet Z-2 of Zoning Drawings by Dewberry Engineers, Revision 2, Dated 6/7/23.

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higher power loss in longer lengths of feed lines. This results in less signal coverage which becomes particularly significant in the higher frequency bands being used by wireless providers. For this reason, CityScape can validate the need for a non-concealed facility in this location.

The Applicant apparently did not notify the Federal Aviation Administration (FAA) on an FCC 7460-1 form of the proposed tower, instead using the FCC's TOWAIR on-line application which indicated that notification to the FAA would not be required for the proposed location at 199 feet tower height. However, this favorable finding is not conclusive. The Applicant should obtain and submit a Determination of No Hazard from the FAA at 199 feet stating that no lighting and marking are required. If, as expected, the tower does not require such lighting and/or painting, the structure could be left with a galvanized metallic finish or other finish color agreeable to the County which would be deemed less visually obtrusive.

CityScape reviewed all application materials provided by the Applicant as required by the County's land use regulations between May 5 and September 9, 2023. During that time, much discussion and a conference call were held concerning the potential use of an existing T-Mobile tower (formerly Shentel) off River Ridge Road. The original narrative provided by the Applicant on May 5, 2023 provided the following statement: "Verizon Wireless conducted an FCC Antenna Structure Registration search of the intended coverage area and found there are no registered support structures of any height within three (3) miles. For this reason, co-location is infeasible."

CityScape pointed out to the Applicant that the FCC's Antenna Structure Registration (ASR) Database, with few exceptions, only provides information on towers over two hundred (200) feet. The existing T-Mobile tower on River Ridge Road located 2.2 miles from the proposed tower site is not in the FCC's ASR database. The Applicant explained on a conference call held on July 11, 2023, that the three-mile ASR search area referenced in the narrative was not actually Verizon's search area and that an approximate one-mile wide (0.5 mile radius) circle more accurately described Verizon's search ring for the proposed new tower. Consequently, the Applicant was required to submit a new Special Use Permit Application and supporting documentation addressing corrections to the referenced search area.

The Applicant provided a new Special Use Permit with all the required signatures on September 21, 2023, and CityScape deemed the application complete on that same day.

Summary

CityScape concludes there is a preponderance of evidence that construction of a new personal wireless communications facility in the area is technically justified and is essential for the Applicant to achieve its objective of seamless service in the County. CityScape also believes the location and height proposed are technically appropriate. Therefore, CityScape recommends approval of a new wireless facility with Verizon as anchor tenant at the proposed location and tower height of one hundred ninety-nine (199) feet. The choice of the monopole's color is at the discretion of the County.

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If the County elects to approve the new wireless facility, it should do so with the following conditions:

1. Prior to issuance of building permits, the Applicant shall submit satisfactory SHPO and NEPA documentation; and,
2. Prior to permitting, the Applicant shall submit an engineering report, signed by a Professional Engineer licensed in the Commonwealth of Virginia, certifying that the tower will have the structural capacity for the proposed Verizon equipment and similar installations of five other wireless providers; and,
3. The Applicant shall submit final construction drawings for the facility which shall be certified by a Virginia Professional Engineer; and,
4. At the County's discretion, if concealment is not an option, the tower, antennas and all other ancillary equipment mounted on the tower shall be painted a color deemed the least visually obtrusive; and,
5. All vertical feedlines shall be installed within the monopole shaft and all access ports shall be sealed to prevent wildlife access; and,
6. The Applicant shall submit FAA Form 7460-1 to obtain a No Hazard Determination in order to assure that the intended height and radio-frequency usage are clear of any air traffic procedures and radio operations in the area.

We certify that, to the best of our knowledge, all the information included herein is accurate at the time of this report. CityScape is employed only by public entities and has unbiased opinions. All recommendations are based on technical merit without prejudice or bias per prevailing laws and codes.

Respectfully submitted,



B. Benjamin Evans
Senior Project Engineer
CityScape Consultants, Inc.



Susan Rabold, Project Manager
CityScape Consultants, Inc.

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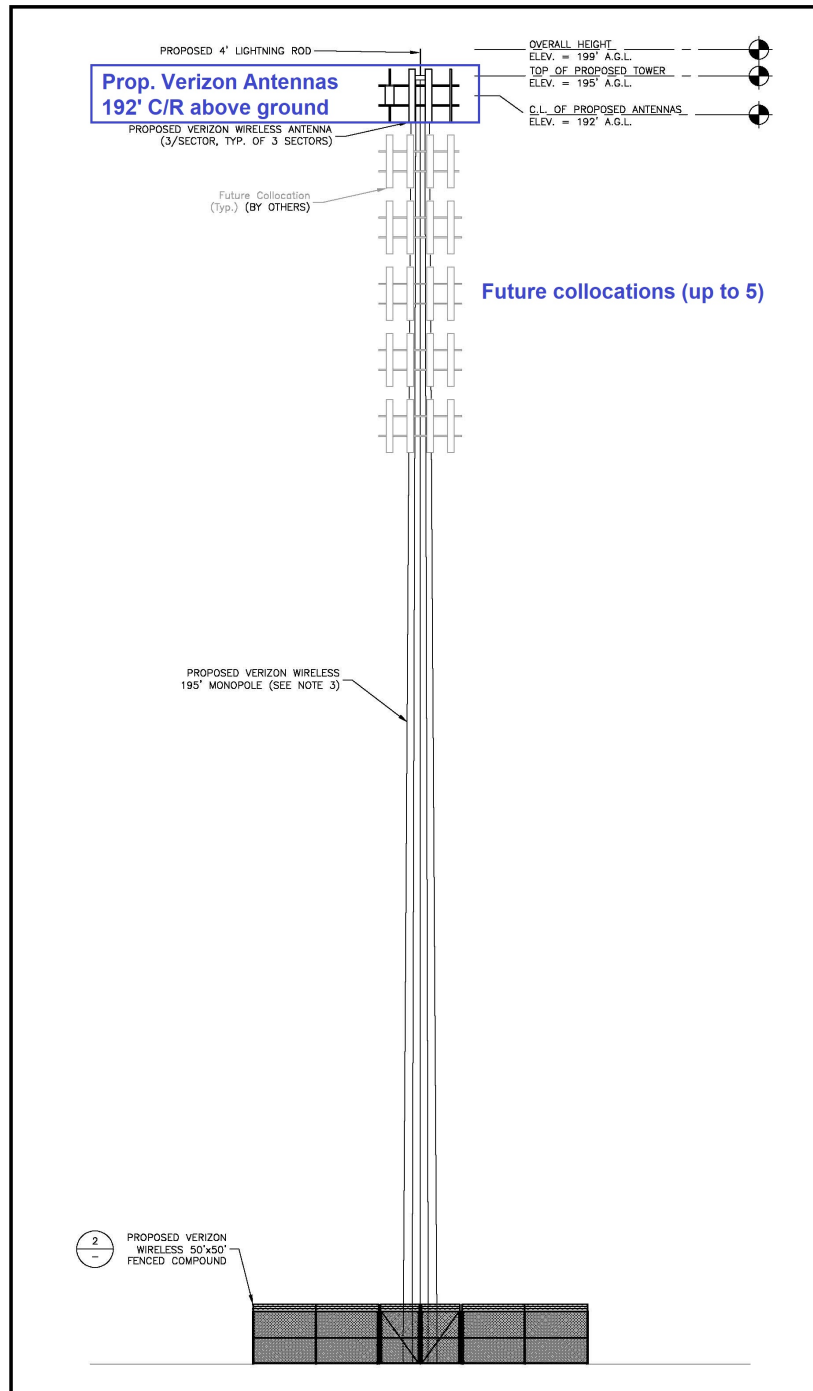


Figure 1. Tower Elevation Sketch

**County of Buckingham, Virginia
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CityScape

C O N S U L T A N T S , I N C .

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Figure 2. Vicinity Map of Proposed Facility Location (Google Map)

**County of Buckingham, Virginia
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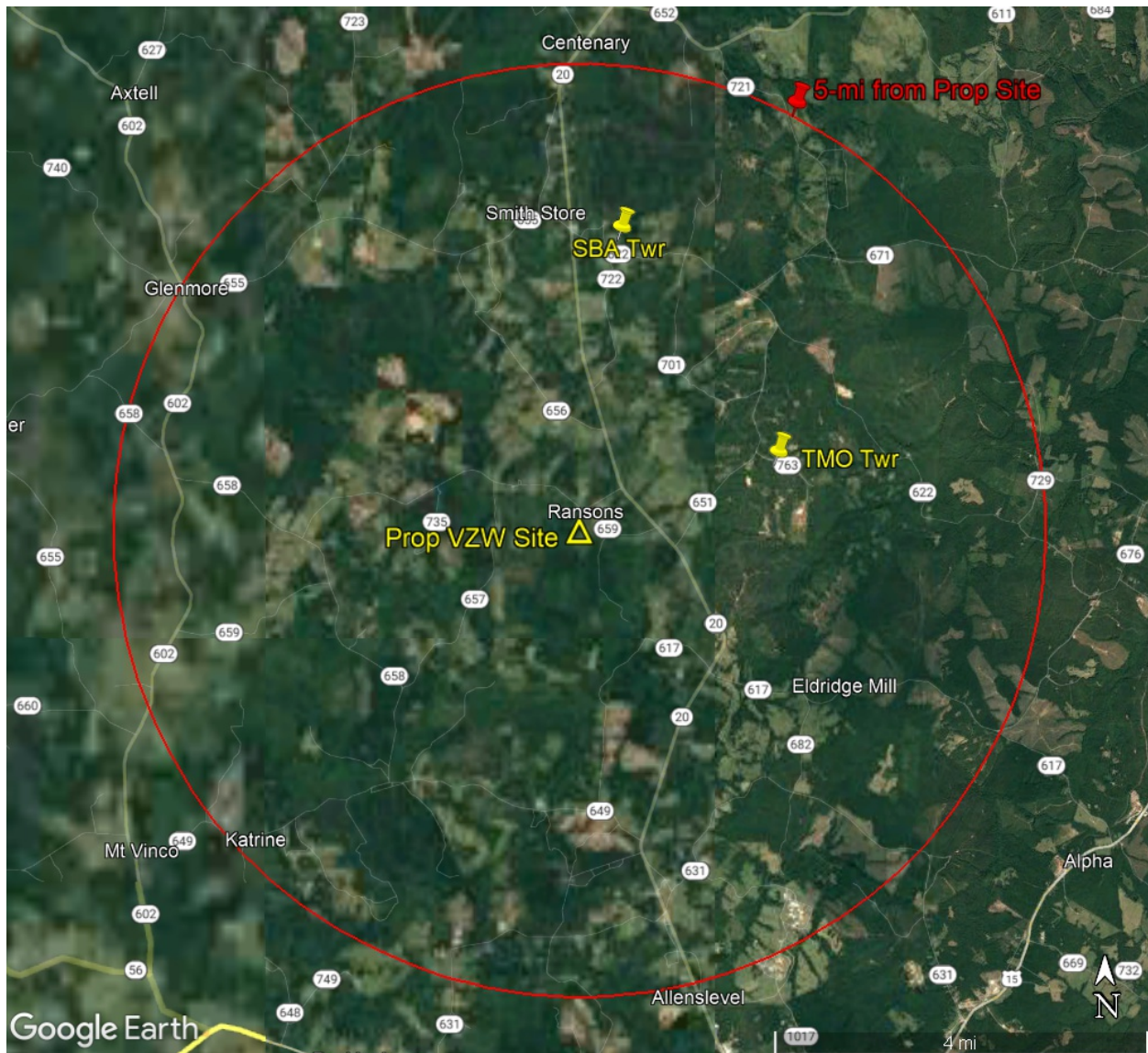


Figure 3. Google Map showing Proposed Site and Existing Towers within 5 miles

County of Buckingham, Virginia Telecommunications Site Review Application for New Structure

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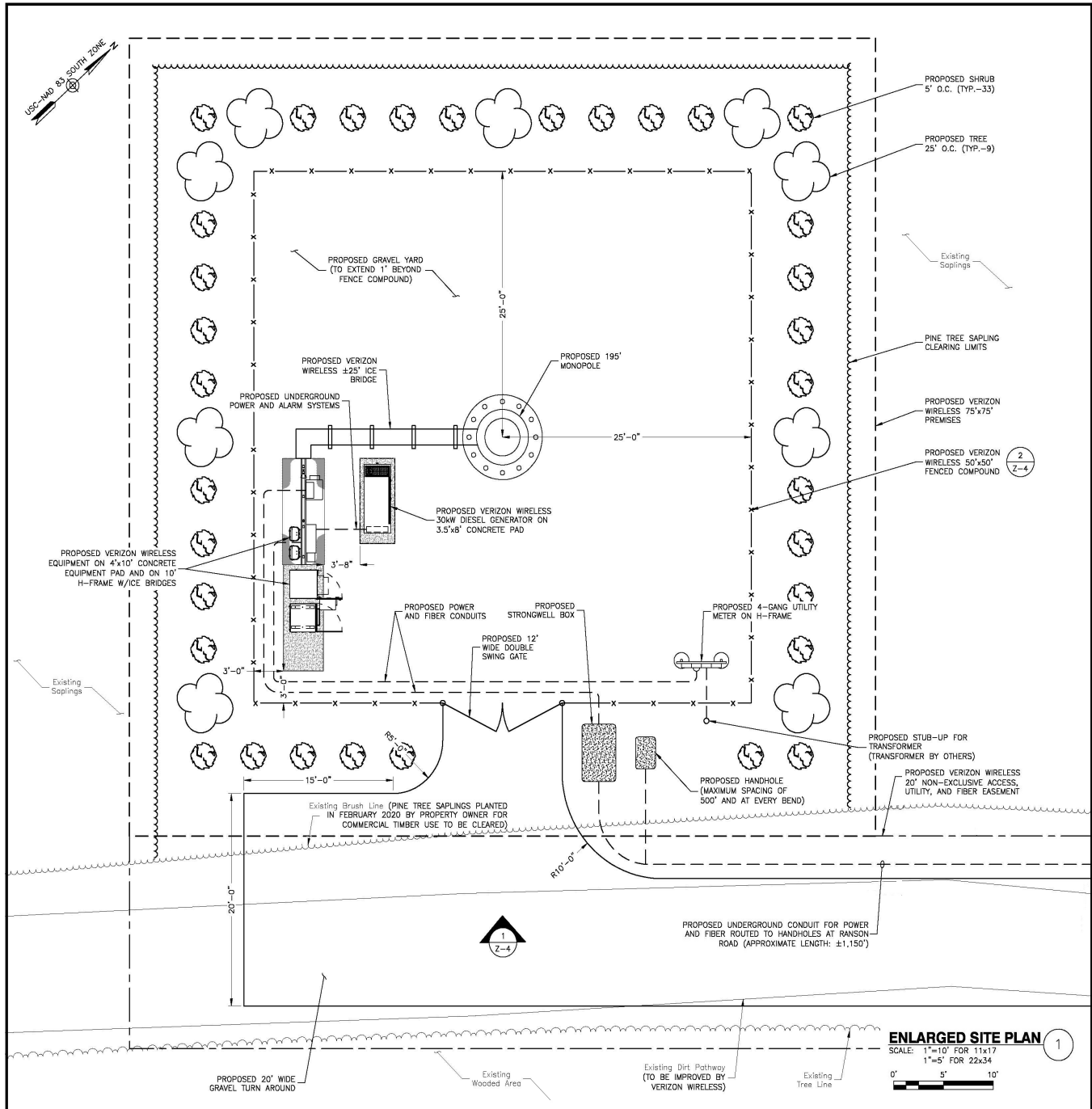


Figure 4. Ground Compound Detail



RANSONS
RANSON ROAD
DILLWYN, VIRGINIA 23936

E911 ADDRESS YES ☐ NO ☒

PROJECT DESCRIPTION

THE SITE WILL CONSIST OF OF A NEW 75'x75' PREMISES AND AN 50'X50' FENCED COMPOUND. LOCATED WITHIN THE FENCED COMPOUND WILL BE A NEW 195' MONOPOLE, EQUIPMENT, GENERATOR AND H-FRAME.

UTILITIES INFO:

POWER: DOMINION
866.366.4357
TELEPHONE: VERIZON
877.297.7816



2 WORKING DAYS
BEFORE YOU DIG
811
TOLL FREE
MISS UTILITY

EMERGENCY INFO:

JURISDICTION:
BUCKINGHAM COUNTY
LOCAL FIRE AND RESCUE:
434.969.1772
LOCAL POLICE:
434.969.1772

PROJECT TEAM

REAL ESTATE: NATE HOLLAND	PHONE NUMBER: 757.305.8420
ZONING: STUART SQUIER	PHONE NUMBER: 804.901.7433
CONSTRUCTION: ARIAN ZOTO	PHONE NUMBER: 757.672.2339
UTILITIES: ARIAN ZOTO	PHONE NUMBER: 757.672.2339
ENVIRONMENTAL CONSULTANT: ANDREW HENDRICKS	PHONE NUMBER: 703.478.0055

REV. NO.	DESCRIPTION	BY	DATE	REV. NO.	DESCRIPTION	BY	DATE
0	FOR ZONING	MKW	12/16/22				
1	REVISED SURVEY	MKW	04/07/23				
2	ZONING COMMENTS	LMW	06/07/23				

A & E CONSULTING TEAM

ARCHITECTURE AND ENGINEERING:
DEWBERRY ENGINEERS INC.
4805 LAKE BROOK DRIVE, SUITE 200
GLEN ALLEN, VA 23060

PHONE # 804.205.3348
CONTACT: HILLARY SIEGALL, PE

PHONE # 804.205.3353
CONTACT: BRAD ROSE, SENIOR PROJECT MANAGER

PROJECT SUMMARY

PROPERTY OWNER:
MARTIN SLATE RIVER FARM LLC
RANSONS ROAD
DILLYWYN, VIRGINIA 23936

TOWER OWNER:
VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

PROJECT INFO:
CANDIDATE NAME: RANSONS

APPLICANT INFO:
VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222
PHONE: 804.543.7313
CONTACT: STEVE FANSHAW

PROJECT DATA:
ZONING: AGRICULTURAL
PARCEL ID: 65-16
ACREAGE: 64.80 ACRES
JURISDICTION: BUCKINGHAM COUNTY
SITE TYPE: RAWLAND
TOWER TYPE: MONOPOLE
TOWER HEIGHT: 195'
OVERALL HEIGHT: 199'
PREMISES: 5,625 SF
AREA OF DISTURBANCE: ±27,625 SF

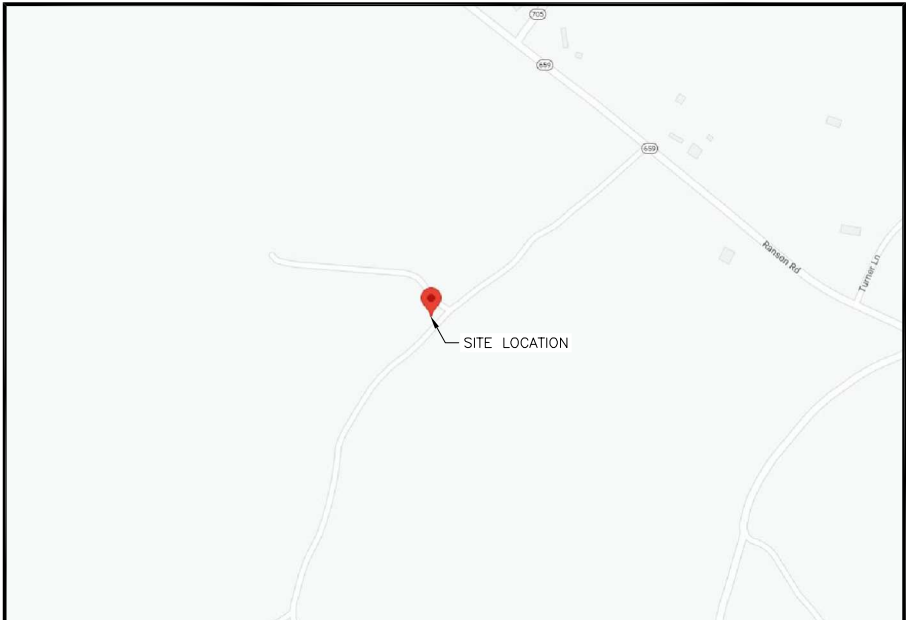
CENTER OF PROPOSED TOWER*:
LATITUDE: 37° 38' 01.82" N / 37.633839
LONGITUDE: 78° 30' 46.12" W / -78.512811
ELEVATION: 475' AMSL
*PER 2C SURVEY CERTIFICATION PREPARED BY
DEWBERRY ENGINEERS, INC. DATED 12/09/22

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

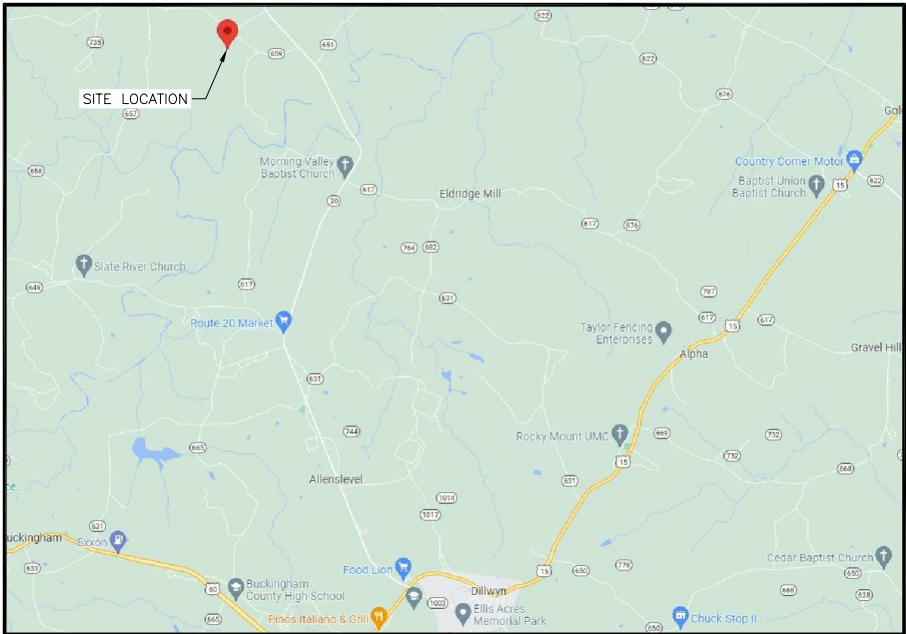
DIRECTIONS FROM GOODES BRIDGE SWITCH (2501 GOODES BRIDGE RD., RICHMOND, VA 23224):
TURN LEFT ONTO US-360W. 4.2 MILES, TURN RIGHT ONTO COURTHOUSE RD. 1.8 MI, TURN LEFT TO MERGE ONTO VA-76S. 2.2 MI, TAKE THE VA-288N EXIST TOWARD US-60/MIDLOTHIAN. 0.8 MI, KEEP LEFT AND MERGE ONTO VA-288N. 3.5 MI, EXIT ONTO US-60W/MIDLOTHIAN TURNPIKE TOWARD POWHATAN W. 48.5 MI, TURN RIGHT ONTO US-15N. 1.4 MI, TURN LEFT ONTO VA-20N. 7.1 MI, TURN LEFT ONTO STATE RTE 659. 0.7 MI, TURN LEFT ONTO GRAVEL ACCESS. 0.2 MI, DESTINATION WILL BE ON THE RIGHT.

DIRECTIONS



LOCAL MAP

N.T.S.



VICINITY MAP

N.T.S.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE GOVERNING AUTHORITIES.

- 2018 INTERNATIONAL BUILDING CODE (IBC)
- 2017 NATIONAL ELECTRIC CODE (NEC)
- 2018 NFPA 101, LIFE SAFETY CODE
- MANUAL OF STEEL CONSTRUCTION, 14th EDITION
- AMERICAN CONCRETE INSTITUTE
- ANSI/TIA-222-H
- ANTENNA SUPPORTING STRUCTURES AND ANTENNAS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE IBC 2018 SECTION 1609 WIND LOADS, EXCEPTION #5 REFERENCING TIA-222
- LOCAL BUILDING CODE
- CITY/COUNTY ORDINANCES



VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

RANSONS

ZONING DRAWINGS

2	06/07/23	ZONING COMMENTS
1	04/07/23	REVISED SURVEY
0	12/16/22	FOR ZONING



Dewberry Engineers Inc.

4805 Lake Brook Drive, Suite 200
Glen Allen, VA 23060
Phone: 804.290.7957
Fax: 804.290.7928
www.dewberry.com



DRAWN BY: MKW

REVIEWED BY: BAR

CHECKED BY: HGS

PROJECT NUMBER: 50141740

SITE ADDRESS:














RANSON ROAD
DILLWYN, VIRGINIA 23936

SHEET TITLE

TITLE SHEET

SHEET NUMBER

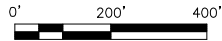
T-1

LEGEND	
	Existing Property Line
	Existing Fence
	Existing Roadway
	Existing Treeline
	Existing Brush Line
	LOCUS PROPERTY LINE
	PROPOSED ACCESS ROAD
	PROPOSED FENCE
	PROPOSED ACCESS/UTILITY/FIBER EASEMENT
	PROPOSED PREMISES
	PROPOSED UNDERGROUND CONDUIT
	PROPOSED TREE CLEARING LIMITS
	PROPOSED BRUSH CLEARING LIMITS

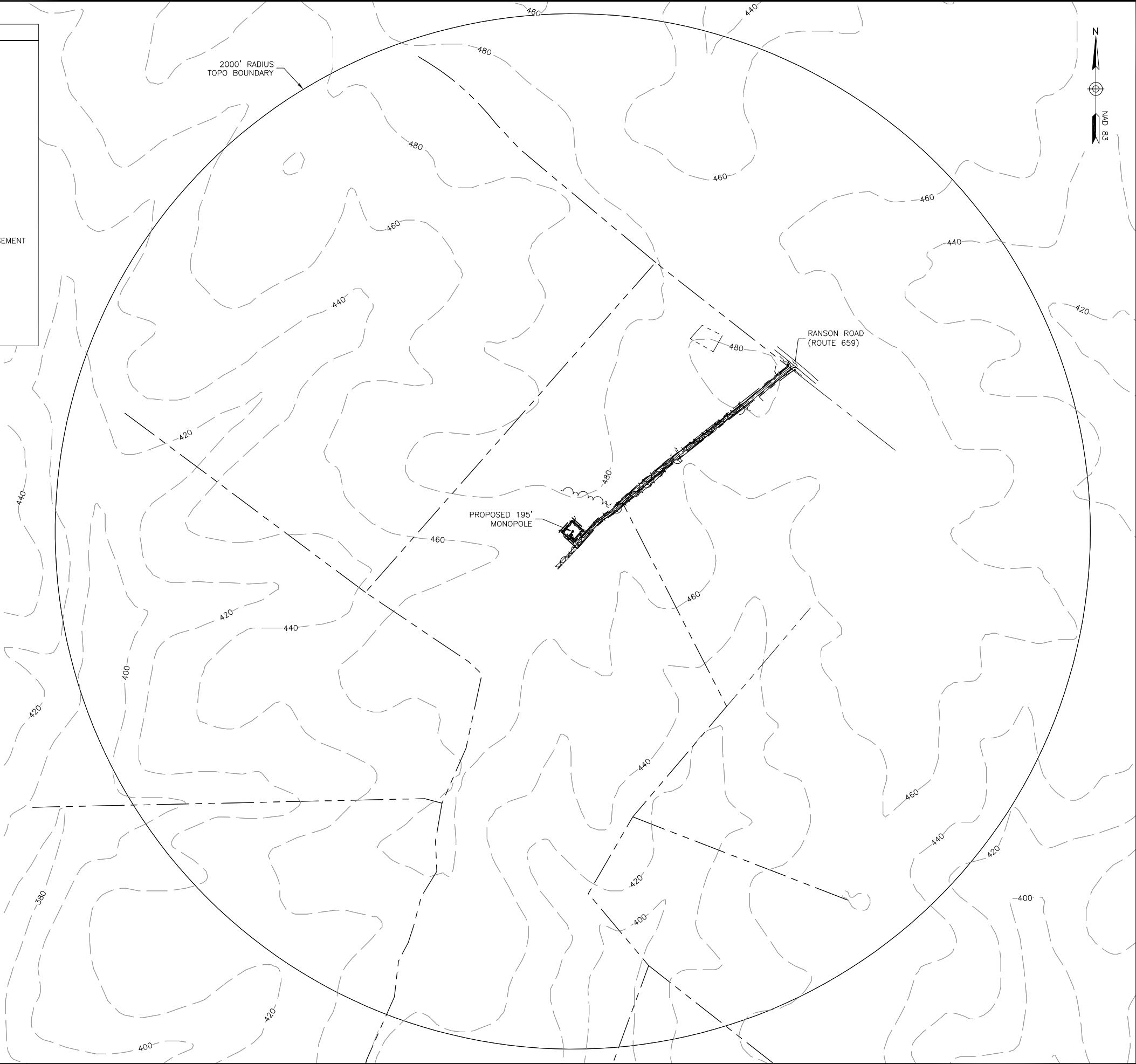
- NOTES:
- SOME EXISTING & PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
 - FIELD VISIT WAS CONDUCTED ON 10/05/2022.
 - TOWER AND FOUNDATION DESIGN BY OTHERS.
 - ADJACENT PARCEL BOUNDARIES OBTAINED FROM BUCKINGHAM COUNTY GIS.
 - 20' CONTOURS OBTAINED FROM USGS.

2000' TOPO BOUNDARY

SCALE: 1"=400' FOR 11x17
1"=200' FOR 22x34



1



VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

RANSONS

ZONING DRAWINGS

2	06/07/23	ZONING COMMENTS
1	04/07/23	REVISED SURVEY
0	12/16/22	FOR ZONING



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REVIEWED BY: BAR

CHECKED BY: HGS

PROJECT NUMBER: 50141740

SITE ADDRESS:

RANSON ROAD
DILLWYN, VIRGINIA 23936

SHEET TITLE

2000' TOPO
BOUNDARY

SHEET NUMBER

Z-0

LEGEND	
	Existing Property Line
	Existing Fence
	Existing Roadway
	Existing Major Contour
	Existing Treeline
	Existing Brush Line
	LOCUS PROPERTY LINE

RAGLANDS CHERRY LANE ESTATE LLC
6509 S. CONSTITUTION ROUTE
PARCEL ID: 65-17
ZONE: A-1

MICHAEL DARRYL NIXON
PROPERTY ADDRESS: N/A
PARCEL ID: 65-15
ZONE: A-1

MARTIN SLATE RIVER FARM LLC
RANSON ROAD
PARCEL ID: 65-16
ZONE: A-1

ELDRIDGE TUCKER
PATTESON & ANDREA HALL
PROPERTY ADDRESS: N/A
PARCEL ID: 80-1
ZONE: A-1

RAGLANDS CHERRY LANE ESTATE LLC
6509 S. CONSTITUTION ROUTE
PARCEL ID: 80-2A
ZONE: A-1

ROBERT S. MAXEY JR.
PROPERTY ADDRESS: N/A
PARCEL ID: 80-4
ZONE: A-1

CHERRY LANE FARM LLC
PROPERTY ADDRESS: N/A
PARCEL ID: 80-2
ZONE: A-1

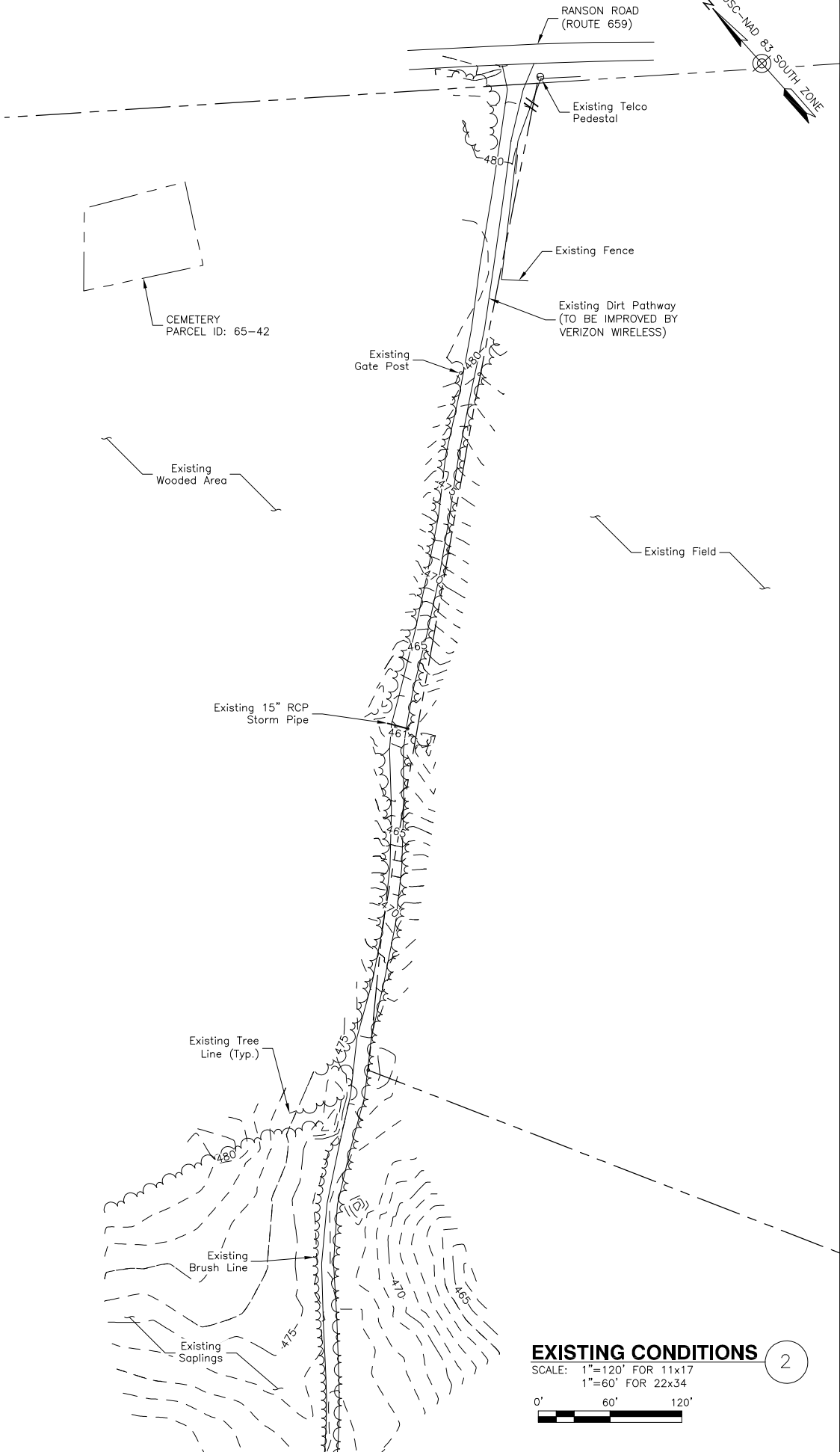
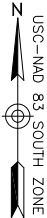
OVERALL EXISTING CONDITIONS

SCALE: 1"=400' FOR 11x17
1"=200' FOR 22x34
0' 200' 400'

1

NOTES:

- SOME EXISTING & PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
- ADJACENT PARCEL BOUNDARIES OBTAINED FROM BUCKINGHAM COUNTY GIS.



EXISTING CONDITIONS

SCALE: 1"=120' FOR 11x17
1"=60' FOR 22x34
0' 60' 120'

2

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

RANSONS

ZONING DRAWINGS

2	06/07/23	ZONING COMMENTS
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PROJECT NUMBER: 50141740

SITE ADDRESS:

RANSON ROAD
DILLWYN, VIRGINIA 23936

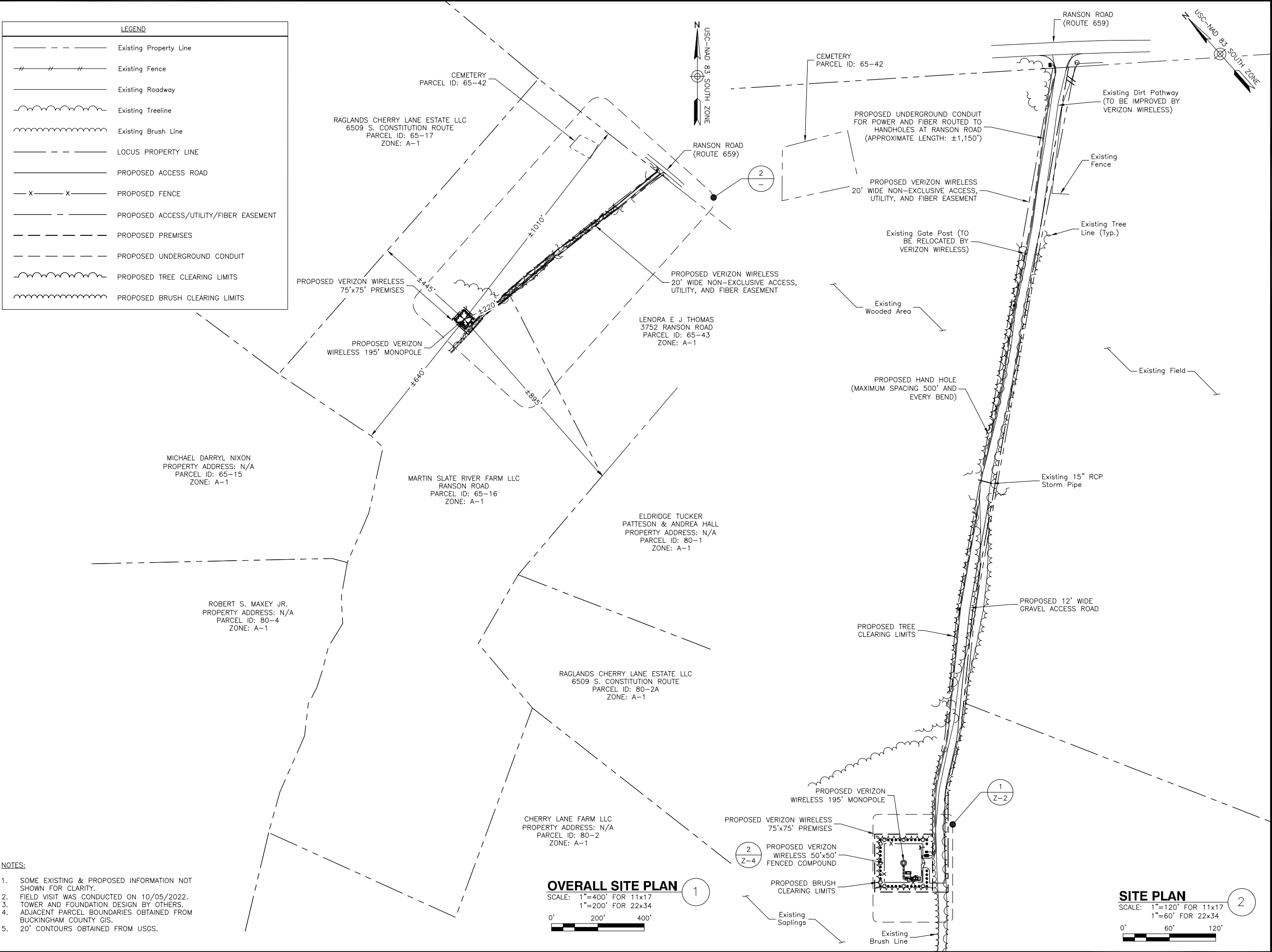
SHEET TITLE

EXISTING CONDITIONS

SHEET NUMBER

Z-1

LEGEND	
	Existing Property Line
	Existing Fence
	Existing Roadway
	Existing Treeline
	Existing Brush Line
	LOCUS PROPERTY LINE
	PROPOSED ACCESS ROAD
	PROPOSED FENCE
	PROPOSED ACCESS/UTILITY/FIBER EASEMENT
	PROPOSED PREMISES
	PROPOSED UNDERGROUND CONDUIT
	PROPOSED TREE CLEARING LIMITS
	PROPOSED BRUSH CLEARING LIMITS



VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

RANSONS

ZONING DRAWINGS

2	06/07/23	ZONING COMMENTS
1	04/07/23	REVISED SURVEY
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DRAWN BY:	MKW
REVIEWED BY:	BAR
CHECKED BY:	HGS
PROJECT NUMBER:	50141740
SITE ADDRESS:	

RANSON ROAD
DILLWYN, VIRGINIA 23936

SHEET TITLE
SITE PLAN
SHEET NUMBER

Z-2

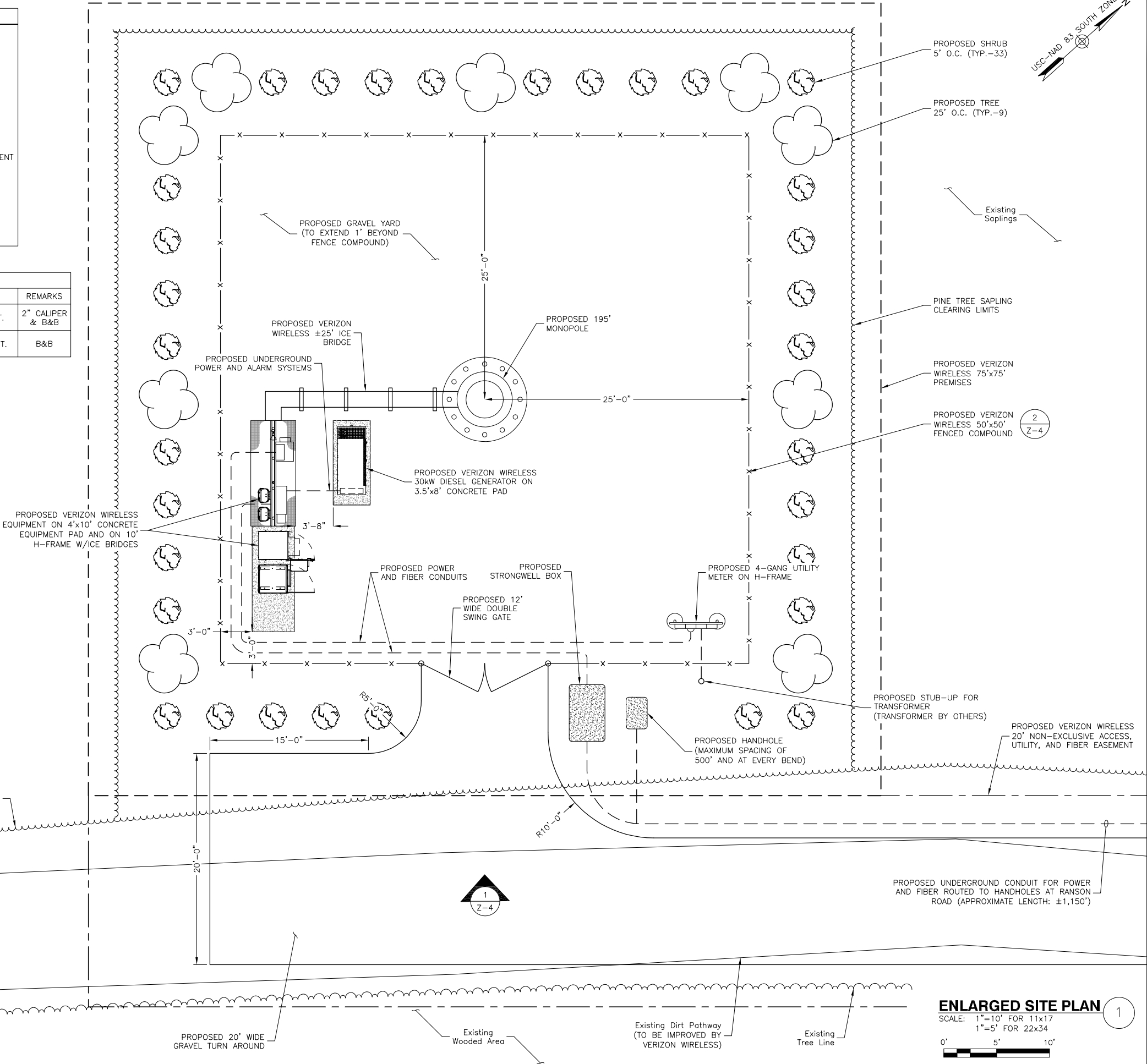
LEGEND	
	Existing Roadway
	Existing Treeline
	Existing Brush Line
	PROPOSED ACCESS ROAD
	PROPOSED FENCE
	PROPOSED ACCESS/UTILITY/FIBER EASEMENT
	PROPOSED PREMISES
	PROPOSED UNDERGROUND CONDUIT
	PROPOSED BRUSH CLEARING LIMITS

LANDSCAPING					
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
9	CL	CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS	7' HT.	2" CALIPER & B&B
33	LAIN	VIBURNUM JAPONICUM	JAPANESE VIBURNUM	24" HT.	B&B

NOTE: SEE ENLARGED SITE PLAN FOR PLANTING LAYOUT.

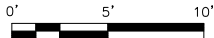
NOTES:

1. SOME EXISTING & PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. FIELD VISIT WAS CONDUCTED ON 10/05/2022.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. ADJACENT PARCEL BOUNDARIES OBTAINED FROM BUCKINGHAM COUNTY GIS.
5. 20' CONTOURS OBTAINED FROM USGS.



ENLARGED SITE PLAN

SCALE: 1"=10' FOR 11x17
1"=5' FOR 22x34



VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

RANSONS

ZONING DRAWINGS

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0	12/16/22	FOR ZONING



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DRAWN BY:	MKW
REVIEWED BY:	BAR
CHECKED BY:	HGS
PROJECT NUMBER:	50141740
SITE ADDRESS:	

RANSON ROAD
DILLWYN, VIRGINIA 23936

SHEET TITLE

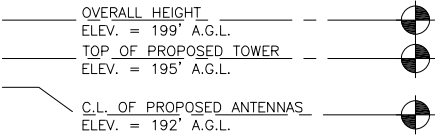
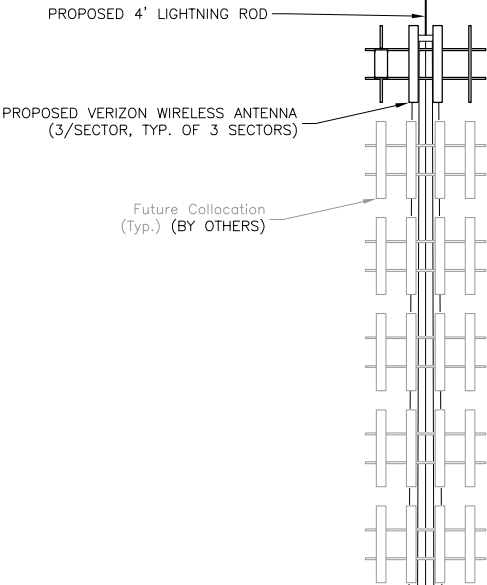
ENLARGED SITE PLAN

SHEET NUMBER

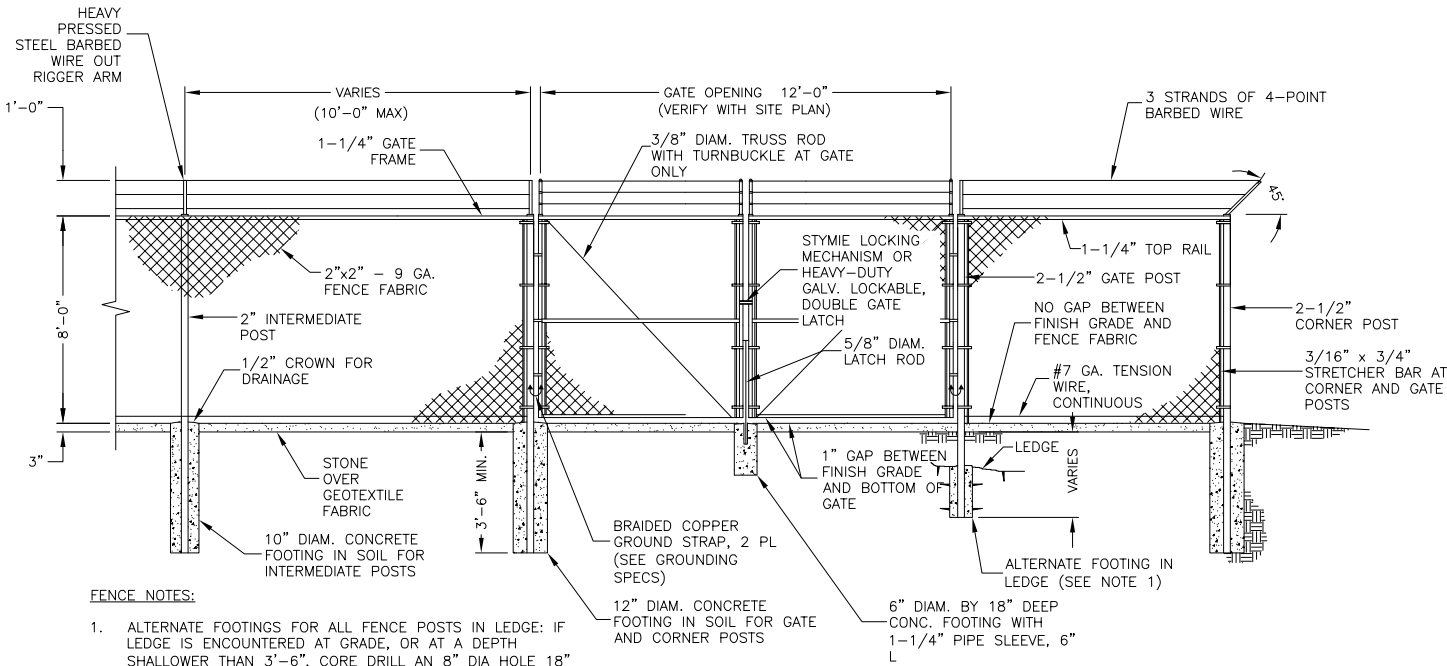
Z-3

LEGEND		
A.G.L.	-	ABOVE GROUND LEVEL
C.L.	-	CENTER LINE

- NOTES:
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 - ADJACENT PARCEL BOUNDARIES OBTAINED FROM BUCKINGHAM COUNTY GIS.
 - 20' CONTOURS OBTAINED FROM USGS.



PROPOSED VERIZON WIRELESS 195' MONOPOLE (SEE NOTE 3)



- FENCE NOTES:
- ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN LEDGE: IF LEDGE IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE LEDGE. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF LEDGE IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.
 - ATTACH EACH GATE WITH 1-1/2 PAIR OF NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL.

FENCE AND ACCESS GATE

SCALE: N.T.S.

2

ELEVATION

SCALE: 1"=20' FOR 11x17
1"=10' FOR 22x34

0' 10' 20'

1

PROPOSED VERIZON WIRELESS 50'x50' FENCED COMPOUND

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

RANSONS

ZONING DRAWINGS

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0	12/16/22	FOR ZONING

Dewberry

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Phone: 804.290.7957
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www.dewberry.com



DRAWN BY: MKW

REVIEWED BY: BAR

CHECKED BY: HGS

PROJECT NUMBER: 50141740

SITE ADDRESS:

RANSON ROAD
DILLWYN, VIRGINIA 23936

SHEET TITLE

ELEVATION

SHEET NUMBER

Z-4



*Consultants to Verizon Wireless
3126 West Cary Street PMB #604
Richmond, Virginia 23221*

May 31, 2023

AT&T
208 S. Akard St.
Dallas, TX
75202

Subject: Notification of Verizon Wireless Special Use Permit Application for "Ransons" 195' monopole tower in Buckingham County, VA

To whom it may concern,

Pursuant to the requirements of the Buckingham County Zoning Ordinance, Article 9 is hereby providing you with notice of our intent to meet with the county staff in a pre-application conference to discuss the location of a free-standing wireless communications facility that would be located at Ranson Road, Dillwyn, VA (coordinates: 37.633839, -78.512811). In general, we plan to construct a support structure of 195' feet in height for the purpose of providing LTE wireless service. Please inform the County Staff if you have any desire for placing additional wireless facilities or equipment within 2 miles of our proposed facility. Please provide us and Buckingham Planning Department with this information within twenty business days after the date of this letter. Your cooperation is sincerely appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Stuart P. Squier". The signature is fluid and cursive, with a large, stylized "S" at the beginning.

Stuart P. Squier, AICP
Zoning Manager | GDNsites for Verizon Wireless
p: (804) 901-7433 | f: (888) 844-1702
stuart.squier@gdnsites.com



*Consultants to Verizon Wireless
3126 West Cary Street PMB #604
Richmond, Virginia 23221*

May 31, 2023

T-Mobile
PO Box 37380
Albuquerque, NM
87176-7380

Subject: Notification of Verizon Wireless Special Use Permit Application for "Ransons" 195' monopole tower in Buckingham County, VA

To whom it may concern,

Pursuant to the requirements of the Buckingham County Zoning Ordinance, Article 9 is hereby providing you with notice of our intent to meet with the county staff in a pre-application conference to discuss the location of a free-standing wireless communications facility that would be located at Ranson Road, Dillwyn, VA (coordinates: 37.633839, -78.512811). In general, we plan to construct a support structure of 195' feet in height for the purpose of providing LTE wireless service. Please inform the County Staff if you have any desire for placing additional wireless facilities or equipment within 2 miles of our proposed facility. Please provide us and Buckingham Planning Department with this information within twenty business days after the date of this letter. Your cooperation is sincerely appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Stuart P. Squier". The signature is fluid and cursive, with the first name "Stuart" being more prominent.

Stuart P. Squier, AICP
Zoning Manager | GDNsites for Verizon Wireless
p: (804) 901-7433 | f: (888) 844-1702
stuart.squier@gdnsites.com

929T 02T8 T000 0222 T202

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Dallas, TX 75202

OFFICIAL USE

Certified Mail Fee	\$4.15	0065	22
Extra Services & Fees (check box, add fee as appropriate)			
<input type="checkbox"/> Return Receipt (hardcopy)	\$	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	\$0.00	
Postage	\$0.63		
Total Postage and Fees	\$4.78		
06/02/2023			
Postmark Here			
Sent To AT&T			
Street and Apt. No., or PO Box No. 208 S. Akard St.			
City, State, ZIP+4 [®] Dallas, TX 75202			
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions			

929T 02T8 T000 0222 T202

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Extra Services & Fees (check box, add fee as appropriate)			
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<input type="checkbox"/> Return Receipt (electronic)	\$	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	\$0.00	
Postage	\$0.63		
Total Postage and Fees	\$4.78		
06/02/2023			
Postmark Here			
Sent To T-Mobile			
Street and Apt. No., or PO Box No. PO Box 37380			
City, State, ZIP+4 [®] Albuquerque, NM 87176			
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions			

Buckingham County Planning Commission
October 23, 2023
Administration Building
6:00 PM
Introduction Case 23-SUP334

Owner/Applicant:	Landowners	Bickford Family Lands LLC P O Box 192 New Canton VA 23123 Dick Purcell Land Cattle and Timber P O Box 308 Louisa VA
	Applicant	Mountain Pine Arvonias LLC & Mountain Pine Arvonias II LLC Hodson Energy 28 Liberty St Ste 627 New York NY 1005-1400

Property Information: Tax Map 43 Parcel 41, Tax Map 54 Parcel 190, Tax Map 54 Parcel 157, Tax Map 43 Parcel 50, Tax Map 43 Parcel 50 Lot A, Tax Map 43 Parcel 51. The approximate acreage of all properties in this request is 1,065 acres. The parcels are located both north and south of Blinkys Road, State Route 672, where Bear Garden Creek crosses under the road, Marshall Magisterial District.

Zoning District: Agricultural District (A-1)

Request: The Applicant wishes to Obtain a Special Use Permit to allow for the construction and operation of the Project on the Property. The Applicant proposes to install solar photovoltaic (PV) modules to produce up to 80 MWac. The power generated will be linked to the electrical transmission grid via the existing overhead 230 kV high voltage on-site transmission line. The Applicant is asking the Planning Commission to hold a public hearing for this request.

Background/Zoning Information: The parcels are located both north and south of Blinkys Road, State Route 672, where Bear Garden Creek crossed under the road, Marshall Magisterial District. Tax Map 43 Parcel 41, Tax Map 54 Parcel 190, Tax Map 54 Parcel 157, Tax Map 43 Parcel 50, Tax Map 43 Parcel 50 Lot A, Tax Map 43 Parcel 51. The landowners are Bickford Family Lands LLC Dick Purcell Land Cattle and Timber. The applicant is Mountain Pine Arvonias LLC and Mountain Pine Arvonias II LLC, Hodson Energy. This property is zoned Agriculture (A-1). The Zoning Ordinance does not permit a Public Utility Generating Plant as a Permitted Use. However, Within the A-1 Agricultural District, Public utility generating plants, public utility booster or relay stations, transformer substations, meters and other facilities, including railroads and facilities, and water and sewage facilities may be permitted by the Buckingham County Board

of Supervisors by a Special Use Permit following recommendation by the Planning Commission in accordance with this ordinance and the Code of Virginia. The Planning Commission may recommend and the Board may impose conditions to ensure protection of the district if the Special Use Permit is approved. Mountain Pine Arvonía LLC and Mountain Pine Arvonía II LLC (the "Applicant") requests a Special Use Permit ("SUP") to allow for the construction and operation of a 80 MW utility-scale solar facility (the "Project") on approximately 1,065 acres of private land in Buckingham County, Virginia (the "Property"). The Arvonía Solar Project (the "Project") is an upcoming 80-megawatt (MWac) solar photovoltaic facility located in Buckingham County. The Project is being developed by Hodson Energy and is legally referred to as Mountain Pine Arvonía, LLC & Mountain Pine Arvonía II, LLC (the "Applicant"). Situated near the intersection of Route 672 (Blinkys Rd) and Route 670 (CG Woodson Rd), the Project involves (6) separate land parcels, owned by two distinct property owners. The total area for the Project is approximately 1,065 acres, which is currently used for timber production with some agriculture. The development footprint, including solar panels, fencing, and access roads, will be contained in approximately 595 acres of the overall site. Access to the Project will be available through entrances located along Route 672 and Route 670.

Hodson Energy has researched prior solar applications to the County and utilized the guidance given by Buckingham County Planning Commission and Board of Supervisors in their approach to solar developments. The conditions set forth in prior approvals have formed the basis of the Project design parameters. It is our hope that this due diligence and care toward the direction set forth by the Buckingham County Board of Supervisors will result in a successful project for all parties involved.

Once operational, the Arvonía Solar Project will provide approximately 156,000 MWh of clean energy to the local transmission grid, which is enough to power approximately 12,854 homes annually. Solar energy is clean, safe, and ecologically beneficial. The Project will emit no carbon pollution, release no heavy metals, acid gases or small particles, require no water to operate, and displace traditional sources of electric generation. In fact, the Arvonía Solar Project will offset 61,713 tons of carbon annually, equivalent to the carbon sequestered by 73,034 acres of U.S. forests every year.

Below are conditions that you may consider attaching to the request if approved:

1. **Inspections.** MOUNTAIN PINE ARVONIA LLC AND MOUNTAIN PINE ARVONIA II LLC or any successors, assignees, current or future lessee, sub-lessee, or owner of the solar energy facility (the "Applicant") consent to annual administrative inspections by Planning Department Staff for verification of compliance with the requirements of this SUP after the completion of the construction of the Project. During construction of the Project, the County and its assigns and designees shall have access to the site for inspections and to assure compliance with the conditions of the SUP.
2. **Compliance with Conditions.** The Applicant shall sign the list of the adopted conditions for this SUP signifying acceptance and intent to comply with these conditions.
3. **Compliance with Laws; Erosion and Sediment Control and Stormwater.** That all federal, state, and local laws, regulations, permit requirements and ordinances will be adhered to including but not limited to:
 - a. All active solar systems and solar equipment used in this Project shall meet the requirements of the National Electrical Code (NEC), National Electrical Safety Code (NESC), American Society of Civil

Engineers (ASCE), American National Standards Institute (ANSI), Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), or International Electrotechnical Commission (IEC) as applicable and comply with state building code and shall be inspected by a County building inspector through the building permit process.

b. An Erosion and Sediment Control Plan must be submitted to the County and approved by the Soil and Water Conservation District and the Virginia Department of Environmental Quality prior to any land disturbance. Prior to Applicant's submission of the Erosion and Sediment Control Plan, the Applicant will contact the County's erosion and sediment control reviewer and use reasonable efforts to arrange a meeting on the Property with the Applicant's engineer. The County may obtain an independent third party review of the Erosion and Sediment Control Plan at the expense of the Applicant.

c. The erosion and sediment control plan shall be prepared in accordance with the Virginia Erosion and Sediment Control Handbook. As an additional precaution, the erosion and sediment control plan will be implemented as a sequential progression, demonstrating that not more than 25% of the Maximum Extents (a "Phase") be initially disturbed during construction without temporary seeding or other stabilization in accordance with the Virginia Erosion and Sediment Control Handbook. Temporary seeding or other stabilization in accordance with the Virginia Erosion and Sediment Control Handbook shall be implemented as soon as possible, and no more than 7 days after final grading in a Phase is complete. As soon as the stabilization of a phase, as referenced in sentence 2 of this condition, has been completed, construction activity (disturbance) may commence in a subsequent Phase. This condition shall not prevent continued construction activities in a previous Phase after a previous Phase has been stabilized in accordance with the Virginia Erosion and Sediment Control Handbook, and such stabilized areas will not be subject to the 25% limitation of sentence 2 of this condition; however continued construction activities, excluding maintenance of erosion and sediment control and stormwater management features or associated activities, shall not be re-initiated in a previous Phase until at least 50% vegetative cover (as determined by an independent inspector) has been established in that Phase or 60 days after a Phase has been temporarily stabilized, whichever is sooner. During this period, the applicant shall take continued action implementing best management practices to promote successful establishment of vegetative cover in a Phase. The erosion and sediment control plan will provide the means and measures in accordance with the Virginia Erosion and Sediment Control Handbook to achieve stabilization of the disturbed areas and to comply with this condition.

d. During the construction of the Project, the Applicant shall require the following:

(1) All Erosion and Sediment Control facilities will be inspected by a qualified third party inspector: (i) at least every four calendar days; or (ii) as least once every five calendar days and within 48 hours following any runoff producing storm event. Any discrepancies should be noted and corrective action should be taken to ensure facilities are operating properly. Corrective measures include regularly cleaning out sediment basins and traps, stabilizing eroded banks or spillway structures, cleaning inlets and outlets and repairing damaged silt fence shall be prioritized.

(2) Runoff at stormwater outfalls will also be observed just as often for characteristics listed in the land disturbance permit (clarity, solids, etc.).

(3) A record of the amount of rainfall at the Project during land disturbing activities.

(4) A record of major land disturbing activities, including dates when clearing, grading and excavating occurred in each Phase. Dates when construction activities are either temporarily or permanently ceased in the Phase should be recorded along with stabilization areas.

e. The County may inspect the Project during construction as determined by the County and shall retain all enforcement rights under applicable law.

f. A Stormwater Management Plan must be submitted to the Virginia Department of Environmental Quality (VDEQ) and approved by VDEQ prior to any land disturbance. The Applicant will obtain approval of a Stormwater Pollution Prevention Plan ("SWPPP"). The Applicant and its contractor will have operational day-to-day control of the Project and must implement the SWPPP measures. The Applicant will cause the active up-to-date SWPPP to be made publicly available either electronically or at a location viewable not less than once per month upon request by the public. The Applicant and its contractors will ensure that the applicable subcontractors are trained on appropriate best management practices and requirements in the SWPPP.

g. The Project shall fully comply with all applicable provisions of the Buckingham County Zoning Ordinance, to the extent not modified herein, throughout the life of this SUP.

4. **Expiration.** The building permit application must be submitted within 2 years of obtaining the Special Use Permit and the commercial generation of solar electricity shall begin within 24 months of the approval of the building permit or this SUP shall be null and void. The building permit deadline will be extended for 12 months (3 years total), and the construction time period extended by 12 months (30 months total) by administrative approval of the County Administrator after consultation with the Board of Supervisors due to delays in state permits, interconnection approval, or other good cause demonstrated by the Applicant. Any timeframe under which the Commonwealth is under an Executive Order of the Governor declaring a statewide emergency will toll the timeframe specified in this condition.

5. **Definitions.** All racking, solar modules, inverters, breakers, switches, cabling, communications components, and other ancillary components necessary to convert solar energy to electricity and interconnect to the electrical transmission are considered "Solar Equipment" and subject to the requirements for such, together with setback requirements of that district and other requirements, unless otherwise stated in these conditions. Solar Equipment shall not include access roads and transmission lines and poles. "Project Area" shall include all areas within the Property line boundary that include, but not limited to the following: Solar Equipment, ingress/egress, access roads, fencing, parking, laydown areas, setbacks, buffers, storage area, wetlands, erosion and sediment control features, storm water management features, and other ancillary components. Battery storage and other energy storage methods are not approved as part of this SUP and will require separate special use permitting. The "Property" is defined as 1,065-acres consisting of the following parcels situated in Buckingham County Tax Map 43 Parcel 41, Tax Map 54 Parcel 190, Tax Map 54 Parcel 157, Tax Map 43 Parcel 50, tax Map 43 Parcel 50 Lot A, Tax Map 43 Parcel 51.

6. **Binding Obligation.** This SUP shall be binding on the Applicant or any successors, assignees, current or future lessee, sub-lessee, or owner of the solar energy facility.

7. **General Plan.** The construction of the Project shall be in substantial conformance with these conditions and in general conformance with the Special Use Preliminary Site Plan prepared by HODSON ENERGY dated OCTOBER 3, 2023 (the "General Plan"). The Solar Equipment and accompanying stormwater features shall be limited to no more than 700 acres of the 1,065-acre Property as shown on the Site Plan. Modifications to the Site Plan shall be permitted at the time of building permit based on

state and federal approvals and final engineering and design requirements that comply with these conditions.

8. **Construction Hours.** All site activity required for the construction and operation of the solar energy facility shall be limited to the following:

a. All pile driving activity shall be limited to the hours from the earlier of sunrise or 8 a.m. to the later of 6 p.m. or sunset, Monday through Friday. Applicant may request permission from the Zoning Administrator to conduct piling driving activity on Saturday or Sunday, but such permission will be granted or denied at the sole discretion of the Zoning Administrator; and

b. All other construction activity within the Project Area shall be limited to the hours from the earlier of sunrise or 8 a.m. to the later of 6 p.m. or sunset, Monday through Sunday in accordance with the provisions of the County's Noise Ordinance and shall not be unreasonably loud for a sustained duration of time as monitored at the property line of the Project Area.

9. **Noise.** After completion of construction, the solar energy facility, during normal operation, but excluding maintenance, shall not produce noise that exceeds 50 dbA as measured at the property lines of the Project Area boundary, unless the owner of the adjoining affected property has given written agreement to a higher level.

10. **Setback from Existing Residential Dwellings.** A minimum three hundred and fifty (350) foot setback shall be maintained from Solar Equipment to any adjoining or adjacent residential dwellings (and not the property line) that exist at the time of the approval by the Board of Supervisors. This requirement may be reduced or waived for the life of the solar energy facility, if agreed to, in writing, by the owner of the residence. Transmission lines and poles, security fence, and project roads may be located within the setbacks only where necessary. During construction, the setback may be used for the staging of materials and parking if the buffer is not disturbed. The Applicant shall retain and maintain existing vegetation and timber in the setback that are under the control of the Applicant and located on the Property.

11. **Setback to Property Lines and Rights of Way.**

a. **Property Line.** A minimum of a fifty (50) foot setback from Solar Equipment to the property line shall be provided around the perimeter of the Solar Equipment where it is adjacent to property not owned by the same property owner as covered in the SUP at the time of the approval by the Board of Supervisors.

b. **Right of Way.** The Applicant shall provide a minimum of a seventy-five (75) foot setback from Solar Equipment to any adjoining public right of way.

c. Transmission Lines and poles, security fence, and project roads may be located within the setbacks only where necessary.

12. **Setback to Perennial Streams and Connected Wetlands.** As an additional erosion and sediment control and stormwater management precaution, a minimum fifty (50) foot setback shall be maintained from Solar Equipment to the edge of all perennial streams and connected wetlands located within the

Project Area. Transmission lines and poles, project roads, erosion and sediment control and stormwater management features may be located within the setbacks where necessary.

13. Buffer.

a. Within the setback, the Applicant shall retain at least a fifty (50) foot buffer of existing vegetation and timber with the intent to substantially obscure from view the Solar Equipment and security fence from the property line. Along the property line where there is no vegetation or timber to retain, the Applicant will supplement the buffer with new plantings in the fifty (50) foot buffer.

b. Along existing public right-of-way (ROW) where there is existing timber, the Applicant shall retain at least a fifty (50) foot buffer of existing vegetation and timber with the intent to substantially obscure from view the Solar Equipment and security fence from the public right-of-way. Along existing public rights-of-way where there is not at least 50' of vegetation and timber remaining to substantially obscure from view the Solar Equipment and security fence, the Applicant will create a buffer of at least fifty (50) feet. The new buffer will include timber, evergreens, cedars or other vegetation as determined by the Applicant with the advice of a professional arborist and subject to the prior written approval of the Zoning Administrator prior to the issuance of a building permit. All plantings installed in the buffer shall have an anticipated five-year height of six (6) to eight (8) feet after planting and an anticipated mature height of at least twenty (20) feet. Any new plantings shall be planted during the appropriate time of year after the completion of construction of the Project. The buffer may be included in the setback area.

c. The Applicant will maintain all buffer areas with the advice and support of a professional arborist or forester for the duration of the Project's operational life. Such maintenance may include thinning, trimming, seeding or other modifications to the buffer to ensure the health of the vegetated buffer areas, public safety, and the energy efficiency of the Project. In the event the health of the vegetation within the buffer area is compromised and no longer substantially obscures the visibility of the Solar Equipment and security fence, the Applicant will plant a new buffer, or supplement the remaining buffer, including timber, evergreens, cedars or other vegetation as determined by the Applicant with the advice of a professional arborist or forester.

d. A performance bond reflecting the estimated costs of anticipated landscaping maintenance, as determined by the Applicant with the advice of a professional arborist or forester, shall be posted by the Applicant prior to construction. This ensures buffer landscaping is adequately maintained for the life of the Project.

14. Fencing. The Applicant shall install a security fence around the Solar Equipment that is a minimum six (6) feet in height. Fencing must be installed on the interior of the vegetative buffer required in this section so that it is screened from the ground level view of adjacent property owners. The fencing shall be always maintained while the facility is in operation.

15. Lighting. Construction lighting shall be minimized and shall be directed downward. Post--construction lighting shall be limited to security lighting only and shall be full cut-off lighting pointed in a down direction. All post-construction lighting shall be dark sky compliant.

16. **Interconnection.** The Project shall not receive a building permit until evidence has been given to Buckingham County that the electric utility company has a signed an interim interconnection service agreement or interconnection service agreement with the permittee.

17. **Decommissioning.** If the solar energy facility is inactive completely or substantially discontinuing the delivery of electricity to an electrical grid) for a continuous twelve (12) month period it shall be considered abandoned. The Applicant shall provide notice to County Administrator immediately upon the Project becoming abandoned, inactive and/or shutting down operation. The Applicant or its successor and/or assign ("Project Owner") shall decommission the Project within twelve (12) months abandonment, inactivity, or substantially discontinuing the delivery of electricity to an electrical grid, whichever occurs first. The decommissioning shall be in accordance with a Decommissioning Agreement between the Applicant, Project Owner and the County. If the Project (or relevant part) is not removed within the specified time, the County may cause the removal of the Project with costs being borne by the Project Owner as will be provided for in the approved Decommissioning Agreement. The costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to a bond, letter of credit, cash, or a parent guarantee by an investment grade entity. The Applicant's cost estimate of the decommissioning shall not include the salvage value of the Solar Equipment. The cost estimate of the decommissioning shall be updated by the Applicant every five (5) years and be provided to the County. At its option, the County may require the surety amount be increased based on the new cost of decommissioning. The Decommissioning Agreement shall be agreed upon and the surety shall be provided before the issuance of the building permit.

18. **Decommissioning Timeframe.** The Project shall be decommissioned within twelve (12) months. The decommissioning shall require (i) the removal of any Project facilities installed or constructed thereupon, (ii) the filling in and compacting of all trenches or other borings or excavations made in association with the Project and (iii) the removal of all debris caused by the Project from the surface and 36" below the surface of the Property.

19. **Training of Emergency Services.** The Applicant shall coordinate with the County's emergency services staff to provide materials, education, and/or training to the departments serving the solar energy facility regarding how to safely respond to on-site emergencies. Prior to construction, the Applicant shall ensure that emergency services staff has keys and other access to the Property and the Applicant shall provide the County and emergency services with safety data sheets (SDSs) on the Solar Equipment for the life of the project.

20. **Access Roads and Signage.** Access roads are to be marked by the Applicant with identifying signage. The manufacturers' or installers' identification and appropriate warning signage shall be posted on or near the panels in a clearly visible manner. The signage must identify the owner and provide a 24-hour emergency contact phone number. Each access gate must also have the signage that identifies the owner and provides a 24-houremergency contact phone number.

21. **Construction Management.** The following measures will be taken:

a. A Construction Traffic Management Plan and mitigation measures shall be developed by the Applicant and submitted to the Virginia Department of Transportation (VDOT) and Buckingham County for review. The Plan shall address traffic control measures, an industry standard pre- and post-construction road evaluation, proposed work zones and delivery locations, and any necessary localized

repairs (i.e., potholes, wash-boarding of gravel, shoulder rutting, culvert crushing, etc.) to the public road that are required as a result of damage from the Project.

b. During construction, each project entrance will have a dedicated wash station to mitigate natural debris from unintentionally leaving the Project Area. The Applicant will take all reasonable precautions to minimize impact and damage to public roads including regular maintenance, washing and sweeping. If a traffic issue arises during the construction of the Project, the Applicant shall immediately develop with input from the County and VDOT and implement appropriate measures to mitigate the issue.

c. During construction, the Applicant will hold a Townhall every quarter within the County, inviting county officials, neighboring landowners, and the broader Buckingham community. During these townhalls, the Applicant will provide a report on the Project's construction progress from the previous quarter and summarize construction activity to occur in the subsequent quarter, and provide an opportunity to receive citizen comments.

22. **Parking.** Parking of vehicles or staging of equipment or materials related construction or decommissioning of the Project shall be limited to the Project Area.

23. **Glare.** All panels will use anti reflective coatings. Exterior surfaces of the collectors and related equipment shall have a non-reflective finish and solar panels shall be designed and installed to limit glare to a degree that no after image would occur, towards vehicular traffic and any adjacent building.

24. **Height.** No aspect of the Solar Equipment shall exceed 17 feet in height, as measured from grade at the base of the structure to its highest point. Such height restriction shall not apply to electrical distribution facilities, substations, or transmission lines.

25. **No County Obligations.** Nothing in this SUP shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.

26. **Severability of Conditions.** If any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable.

27. **Enforcement.** Any infraction of the above-mentioned conditions could lead to a stop order and discontinuation or revocation of the special use permit in accordance with Virginia law.

28. **Solar Panel Technology.** The Applicant will be restricted from utilizing photovoltaic panels with internal components containing cadmium telluride. Only silicon type panels, or those other panels that have been established as optimal standard best practice shall be utilized by the Applicant.

29. **Ground Cover; Pollinators.** Prior to the start of construction, the Applicant will perform no less than 10 soil tests in areas across the Project Area to achieve an appropriate sample size of Project Area. The soil tests will be used to inform and develop a comprehensive and detailed vegetative management plan with the intended effect to revegetate the Project Area with ground cover. The vegetative management plan may include the optimal seed types, fertilizer rates, and liming rates (if necessary) to be used for temporary and permanent stabilization. Once operational, the Applicant will maintain

ground cover in good condition throughout the operation of the Project. Where grubbing is not required for the construction or operation of the solar farm, or for the installation of erosion control and stormwater management features, existing stumps shall remain in place. The Applicant will consider implementation of Pollinator Habitats where appropriate and in accordance with applicable laws and regulations.

Would it be the pleasure of the Planning Commission to schedule a public hearing for this request?

November 27, 2023 6pm?

SPECIAL USE PERMIT APPLICATION CHECKLIST
BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINIMUM SUBMISSION
REQUIREMENTS

The following table lists the information necessary to review a special use application. All items are required, unless otherwise stated, and must be submitted in order for the application to be accepted for review. This completed checklist must be submitted with the application.

Adjacent Property Owners List and Affidavit (pages 4, 5 & 6 attached). This list can be obtained from the Clerk of Courts Office: ☒ YES ☐ NO

Completed application for special use permit (page 3 attached). If not signed by the owner, a Power of Attorney must accompany the application: ☒ YES ☐ NO

Interest Disclosure Affidavit (page 7 attached). Must be signed by the owner: ☒ YES ☐ NO

Power of Attorney (page 10 attached). Required if anyone other than the owner is signing the application form or proffer statement on behalf of the owner: YES ☒ NO

Written Narrative (page 11 guidance in preparing the Written Narrative): ☒ YES ☐ NO

Fees: ☒ YES ☐ NO

Deed: ☒ YES ☐ NO

Plat (15 copies). The plat information may be incorporated into the Special Use Permit General Site Plan, in which case, copies of a separate plat are not required. The plat must be prepared by a certified land surveyor or licensed civil engineer and contain the following:

- A. Bearings and distances of a scale of 1" = 100' or less for all property lines and existing and proposed zoning lines: ☒ YES ☐ NO
- B. Area of land proposed for consideration, in square feet or acres: ☒ YES ☐ NO
- C. Scale and north point: ☒ YES ☐ NO
- D. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES ☐ NO

Tax Map (15 copies). Identify property that special use is being considered for and identify by name all adjacent landowners.

Special Use General Site Plan (15 copies) The General Site Plan must contain the following:

1. Vicinity Map – Please show scale: ☒ YES NO N/A
2. Owner and Project Name: ☒ YES NO N/A
3. Parcel Identification numbers, name, present zoning, and zoning and use of all abutting or adjoining parcels: ☒ YES NO N/A
4. Property lines of existing and proposed zoning district lines: ☒ YES NO N/A
5. Area of land proposed for consideration, in square feet or acres: ☒ YES NO N/A
6. Scale and north point: ☒ YES NO N/A
7. Names of boundary roads or streets and widths of existing right-of-ways : ☒ YES NO N/A
8. Easements and encumbrances, if present on the property: ☒ YES NO N/A
9. Topography indicated by contour lines: ☒ YES NO N/A
10. Areas having slopes of 15% to 25% and areas having slopes of 25% or greater clearly indicated by separate shading devices (or written indication of "no areas having slopes of 15% to 25% or greater"): ☒ YES NO N/A
11. Water Courses to include the approximate location of the 100 year floodplain (if applicable) based on FEMA maps (or written indication of "not in floodplain"):
YES NO ☒ N/A All flood plains will be avoided.
12. Delineation of existing mature tree lines or written indication of "no mature tree lines":
☒ YES NO N/A Viewshed analysis included
13. Proposed roads with right-of-way width that will connect with or pass through the subject property: ☒ YES NO N/A
14. General locations of major access points to existing streets: ☒ YES NO N/A
15. List of the proposed density for each dwelling unit type, and/or intensity of each non-residential use: YES NO ☒ N/A
16. Location of any open space and buffer areas, woodland conservation areas, storm water management facilities, and community and public facilities: ☒ YES NO N/A
17. Location of existing and proposed utilities, above or underground: ☒ YES NO N/A
18. Vehicular and pedestrian circulation plan, including traffic counts and typical street sections, right-of-way improvements, access points, travel ways, parking, loading, stacking, sidewalks, and trails: ☒ YES NO N/A
19. Layouts and orientation of buildings and improvements, building use, height, setbacks from property lines and restriction lines: ☒ YES NO N/A
20. Location and design of screening and landscaping: ☒ YES NO N/A
21. Building architecture: YES NO ☒ N/A
22. Site lighting proposed: YES NO ☒ N/A
23. Area of land disturbance in square feet and acres: ☒ YES NO N/A
24. Erosion and Sediment Control Plan submitted (10,000 square feet or more):
YES NO ☒ N/A This will be submitted prior to construction
25. Historical sites or gravesites on general site plan: YES ☒ NO N/A Addressed: Cultural Resources Study
26. Show impact of development of historical or gravesite areas: ☒ YES NO N/A
27. A copy of the current status of all real estate taxes of all property owned in Buckingham County.
If real estate taxes are not current, an explanation in writing and signed by the owner shall accompany this application. Any liens or other judgments against property shall also be explained in writing and signed by the owner: ☒ YES NO N/A

Confirmation Number: 11521472

Virginia

**Buckingham County
Payments**



Transaction Details

Buckingham Payment

MISC

Account/Map/Bill Number

43-41 54-190 54-157 43-50

Name

MOUNTAIN PINE ARVONIA LLC

Tax Year being paid

MOUNTAIN PINE ARVONIA II

Parcel Number #2 (If applicable)

43-50A

Parcel Number #3 (If applicable)

43-51

Credit Card Payment Address Information

Order Number	11521472
Customer Name	HELENA WELLS
Email Address	FRANK@HODSONINC.COM
Address	42789 DEAUVILLE PARK CT FREMONT, CA 94538
Phone Number	(804) 223-2212
Credit Card Number	4XXXXXXXXXXXX8665
Credit Card Type	Visa
Expiration Date	0828
Operator Name	
Transaction Time	10/6/2023 2:51:03 PM
Authorization Code	00525G
Convenience Fee Authorization Code	08230G
Transaction ID	2129090852
Purchase Type	sale
Agency Total	200.00
Convenience Fee	\$5.00
Total Amount Charged to Card	205.00

ONE OR BOTH CHARGES WILL APPEAR AS PAYGOV.US ON YOUR CARD STATEMENT.

For questions about this payment, please call (866) 480-8552.

PayGov, LLC

5144 E. Stop 11 Rd. Indianapolis, IN 46237

<http://paygov.us>

Disputing a charge with your credit card company may result in an additional \$40.00 charge.

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: _____

Special Use Permit Request: Mountain Pine Arvonía, LLC & Mountain Pine Arvonía II, LLC (the "Applicant" or "Arvonía Solar") to allow for the construction of an 80 MWac utility-scale solar facility (the "Project") on approximately 1,065 acres of private land in Buckingham County (the "Property").

Purpose of Special Use Permit: The Applicant requests a Special Use Permit (SUP) to allow the construction and operation of the Project on the Property. The Applicant proposes to install solar photovoltaic (PV) modules to produce up to 80 MWac. The power generated will be linked to the electrical transmission grid via the existing overhead 230 kV high voltage on-site transmission line.

Zoning District: Agricultural (A-1) Number of Acres: +/-1,065

Tax Maps Section: 43-41, 54-190, 54-157, 43-50, 43-50A, 43-51 Magisterial Dist.: Distrt 1

Street Address: 37.685803, -78.301164, both north and south of Blinkys Rd (Rt. 672) where Bear Garden Creek crosses under the road.

Directions from the County Administration Building to the Proposed Site: Turn right on U.S. Route 60 for 3.7 Miles. Turn left on U.S. Route 15 North for 15.5 miles. Turn right onto State Route 672 (Blinkys Rd) for approximately 1.4 miles and enter the site on the left.

Name of Applicant: Mountain Pine Arvonía, LLC & Mountain Pine Arvonía II, LLC
Mailing Address: 28 Liberty St Ste 627, New York, NY 10005-1400 ATTN: Hodson Energy

Daytime Phone: (917) 478-6465

Cell Phone: 804-223-2212

Email: Frank@Hodsoninc.com

Fax: _____

Name of Property Owner: Buckford Family Lands, LLC

Mailing Address: P.O. Box 192, New Canton, VA 23123

Daytime Phone: (434) 581-1842 Cell Phone: (434) 960-5247

Email: buckfordtimber@gmail.com Fax: (434) 581-1843

Signature of Owner:  Date: 8/31/23

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: _____

Special Use Permit Request: Mountain Pine Arvonias, LLC & Mountain Pine Arvonias II, LLC (the "Applicant" or "Arvonias Solar") to allow for the construction of an 80 MWac utility-scale solar facility (the "Project") on approximately 1,065 acres of private land in Buckingham County (the "Property").

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Name of Applicant: Mountain Pine Arvonias, LLC & Mountain Pine Arvonias II, LLC
Mailing Address: 28 Liberty St Ste 627, New York, NY 10005-1400 ATTN: Hodson Energy

Daytime Phone: (917) 478-6465

Cell Phone: 804-223-2212

Email: Frank@Hodsoninc.com

Fax: _____

Name of Property Owner: Dick Purcell Land Cattle and Timber

Mailing Address:

PO Box 308, 117 Sims Ave., Louisa VA

Daytime Phone: 540 847 2768 Cell Phone: _____

Email: dickpurcellland@gmail.com Fax: _____

Signature of Owner: Richard G Purcell, President Date: Sep 19, 2023
Richard G Purcell, President (Sep 19, 2023 11:25 EDT)

APPLICATION FOR A SPECIAL USE PERMIT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: _____

Special Use Permit Request: Mountain Pine Arvonía, LLC & Mountain Pine Arvonía II, LLC (the "Applicant" or "Arvonía Solar") to allow for the construction of an 80 MWac utility-scale solar facility (the "Project") on approximately 1,065 acres of private land in Buckingham County (the "Property").

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Mailing Address: 28 Liberty St Ste 627, New York, NY 10005-1400 ATTN: Hodson Energy

Daytime Phone: (917) 478-6465

Cell Phone: 804-223-2212

Email: Frank@Hodsoninc.com

Fax: _____

Name of Property Owner: BTG Pactual OEF Property 2, L.P.

Mailing Address:

1180 Peachtree Street NE, Suite 1810, Atlanta, GA 30309

Daytime Phone: 706-264-8084 Cell Phone: _____

Email: david.duncan@btgpactual.com Fax: _____

Signature of Owner:  Date: Sep 8, 2023

Signature of Applicant:  Date: 10/6/23

Please indicate to whom correspondence should be sent:

☐ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer
☒ Applicant

Adjacent Property Owner List

Parcel #	Owner	Address 1	City/State	ZIP	Zoning
42-218	TAYLOR HARRISON C/O DENISE K SMITH	300 W 135 STREET #4R	NEW YORK, NY	10030	A-1 Agricultural District
42-219	BERK-MAR LAND LLC	267 HIDDEN SPRINGS RD	NEW CANTON, VA	23123	A-1 Agricultural District
43-32	TAYLOR HARRISON HEIRS OF C/O DENISE K SMITH	300 W 135 STREET #4R	NEW YORK, NY	10030	A-1 Agricultural District
43-40	JOHNSON EMMA C/O ROWENA LITTLE	319 TONEY LANE	NEW CANTON, VA	23123	A-1 Agricultural District
43-42	VAN DEN BERG CORNELIA MARTHA	PO BOX 188	ARVONIA, VA	23004	A-1 Agricultural District
43-49	VAN DEN BERG CORNELIA MARTHA	PO BOX 188	ARVONIA, VA	23004	A-1 Agricultural District
43-9A	BERK-MAR LAND LLC	267 HIDDEN SPRINGS RD	NEW CANTON, VA	23123	A-1 Agricultural District
43-9A1	JONES BERKLEY LEE & SHANNON L JONES	750 BLINKYS RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-184	BERK-MAR LAND LLC	267 HIDDEN SPRINGS RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-187	HUDSON HERBERT ALLEN JR	974 SLEEPY HOLLOW RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-188	OLIVER WILLIAM LEE & PATRICIA C	907 SCHROEDER RD	POWHATAN, VA	23139	A-1 Agricultural District
54-189	OLIVER DOUGLAS SPENCER	3800 GLENMORE RD	SCOTTSVILLE, VA	24590	A-1 Agricultural District

55-1	BERGER JEFFREY F & JENNIFER B	9865 HONEYBEE DR	MECHANICSVILLE, VA	23116	A-1 Agricultural District
55-2	WEYERHAEUSER COMPANY ATTN TAX DEPT	205 PERRY LANE RD	BRUNSWICK, GA	31525	A-1 Agricultural District
55-9	STINSON RAY W & TRESCHA H STINSON	693 NUBBIN HILL RD	NEW CANTON, VA	23123	A-1 Agricultural District
70-59	NUBBIN HILL FARM	16 CG WOODSON RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-150	FLIPPEN BRUCE M	209 INGRAM AVE	COLONIAL HEIGHTS, VA	23834	A-1 Agricultural District
54-134	BRYANT CAROLINE P & HARRY W BRYANT	2384 CHAPEL RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-134A	PANKEY GEORGE ADAM	28270 N JAMES MADISON HWY	NEW CANTON, VA	23123	A-1 Agricultural District
54-138	ROBERTS ROBERT S JR	2415 CHAPEL RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-139	ROBERTS ROBERT JR	2415 CHAPEL RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-158	PANKEY GEORGE ALBERT & SUSAN	2552 CHAPEL RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-159	PANKEY GEORGE A	2552 CHAPEL RD	NEW CANTON, VA	23123	A-1 Agricultural District
55-10	FLIPPEN THOMAS E & LISA J FLIPPEN	1148 CHAPEL RD	NEW CANTON, VA	23123	A-1 Agricultural District
55-9	STINSON RAY W & TRESCHA H STINSON	693 NUBBIN HILL RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-3-6	OLIVER DOUGLAS SPENCER	3800 GLENMORE RD	SCOTTSVILLE, VA	24590	A-1 Agricultural District

54-3-1	OLIVER WILLIAM & PATRICIA OLIVER	907 SCHROEDER RD	POWHATAN, VA	23129	A-1 Agricultural District
54-3-2	OLIVER WILLIAM L & PATRICIA	907 SCHROEDER RD	POWHATAN, VA	23139	A-1 Agricultural District
54-3-3	OLIVER JAMES LEWIS JR &LYNN FRAYSER	910 SLEEPY HOLLOW RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-3-4	LIVELY MARY O & LEONARD F	914 SLEEPY HOLLOW RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-183	MCALLISTER BRENDA Y & JOHN A	909 SLEEPY HOLLOW RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-184	BERK-MAR LAND LLC	267 HIDDEN SPRINGS RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-187	HUDSON HERBERT ALLEN JR	974 SLEEPY HOLLOW RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-188	OLIVER WILLIAM LEE & PATRICIA C	907 SCHROEDER RD	POWHATAN, VA	23139	A-1 Agricultural District
54-189	OLIVER DOUGLAS SPENCER	3800 GLENMORE RD	SCOTTSVILLE, VA	24590	A-1 Agricultural District
54-3-5	OLIVER JAMES L JR	910 SLEEPY HOLLOW RD	NEW CANTON, VA	23123	A-1 Agricultural District
54-191	CROCKETT WILLIAM F	74 TRICES LAKE RD	COLUMBIA, VA	23038	A-1 Agricultural District
54-2-3	KIMBLE JOANNE LIFE EST JOANNE B C/O JOANNE L KIMBLE	721 SLEEPY HOLLOW RD	NEW CANTON, VA	23123	A-1 Agricultural District
43-48A	PEINS BARRY W & GERTRUDE	1631 BLINKYS RD	NEW CANTON, VA	23123	A-1 Agricultural District
43-29	HAYS VERNON W & CHARLA S HAYS	2615 CARLTON TERRACE	KINGSLAND, TX	78639	A-1 Agricultural District

43-31	STINSON STEVEN P	1007 BLINKYS RD	NEW CANTON, VA	23123	A-1 Agricultural District
31-134	JONES LEWIS W & BARBARA ANN JONES	41 GLENMORE DR	NEW ROCHELLE, NY	10801	A-1 Agricultural District
31-135A	MAXWELL KENNETH L	289 BREMO BLUFF RD	BREMO BLUFF, VA	23022	A-1 Agricultural District
43-23	LOVING R EASTON JR & PAMELA C	9477 JAMES MADISON HWY	FORK UNION, VA	23055	A-1 Agricultural District
43-24	INGRAM JAMES B & SHIRLEY H INGRAM	PO BOX 7	NEW CANTON, VA	23123	A-1 Agricultural District
43-26	LOVING R EASTON JR & PAMELA C	9477 JAMES MADISON HWY	FORK UNION, VA	23055	A-1 Agricultural District
43-29	HAYS VERNON W & CHARLA S HAYS	2615 CARLTON TERRACE	KINGSLAND, TX	78639	A-1 Agricultural District
43-4	MCGREW GERALD D	16402 ST PETERS CHURCH RD	MONTPELIER, VA	23192	A-1 Agricultural District
43-62	CHAMBERS MARJORIE D	PO BOX 126	NEW CANTON, VA	23123	A-1 Agricultural District
43-48	PEINS WALTER L JR & THERESA R PEINS	2037 BLINKYS RD	NEW CANTON, VA	23123	A-1 Agricultural District
43-63	WOODSON HATTIE S C/O TRAVIS WOODSON	499 LIBERTY RD	NEW CANTON, VA	23123	A-1 Agricultural District
43-54	JONES FRANCES E	1493 TEXAS SCHOOL RD	WINGINA, VA	24599	A-1 Agricultural District
43-55	JONES HENRY BERNARD & ELEANOR M	8396 SPRING HOLLOW DR	RICHMOND, VA	23227	A-1 Agricultural District
43-56	BOLLING BEATRICE J	PO BOX 18	NEW CANTON, VA	23123	A-1 Agricultural District

43-51A	SCRUGGS JEAN	PO BOX 73	NEW CANTON, VA	23123	A-1 Agricultural District
43-52	LOVING R EASTON JR & PAMELA C	9477 JAMES MADISON HWY	FORK UNION, VA	23055	A-1 Agricultural District
43-58	SCRUGGS JEAN	PO BOX 73	NEW CANTON, VA	23123	A-1 Agricultural District
43-59	WOODSON HATTIE MARIE C/O TRAVIS A WOODSON	499 LIBERTY RD	NEW CANTON, VA	23123	A-1 Agricultural District
43-73	SCRUGGS DELANO R & JEAN W SCRUGGS	28080 N JAMES MADISON HWY	NEW CANTON, VA	23123	A-1 Agricultural District

ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

This 6 day of October, year 2023,

I Frank Hopkins hereby make oath that
(printed name of owner/contract purchaser/authorized agent)

the list of adjoining landowners is a true and accurate list as submitted with my application.

Signed: (to be signed in front of notary public)

[Signature]

(owner / contract purchaser / authorized agent please circle one)

NOTARY:
COMMONWEALTH OF VIRGINIA

COUNTY OF Buckingham

STATE OF Virginia

Subscribed and sworn to me on the 6 day of October,

of the year 2023. My Commission expires on 11/30/2024.

Notary Public Signature: [Signature]

Stamp:



INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA

COUNTY OF BUCKINGHAM, VIRGINIA

On this 2nd day of October, of the year 2023

I John E. Bickford (printed name of owner)

hereby make oath that no member of the Buckingham County Board of Supervisors nor the Buckingham County Planning Commission has interest in such property either individually, or by ownership of stock in a corporation owning such land, or by partnership, or as a holder of ten percent (10%) or more of the outstanding shares of stock in or as a director or officer of any corporation owning such land, directly or indirectly by such members of his/her immediate household, except as follows:

John E. Bickford - Bickford Family Lands, LLC - is
member of Buckingham County Planning Commission.
20% ownership of Tax MAP 43-A-51, 50, & 50A

Signature of Owner: (to be signed in front of notary public)

John E. Bickford

NOTARY PUBLIC

COUNTY OF Buckingham STATE OF Virginia

Subscribed and sworn to me on this 2nd day of October

of the year 2023. My commission expires 07/31/2024.

Notary Public Signature: [Signature]

Stamp:



INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM, VIRGINIA

On this 4TH day of OCTober, of the year 2023

I RICHARD G. PORCELL, PRESIDENT (printed name of owner)
hereby make oath that no member of the Buckingham County Board of Supervisors nor
the Buckingham County Planning Commission has interest in such property either
individually, or by ownership of stock in a corporation owning such land, or by
partnership, or as a holder of ten percent (10%) or more of the outstanding shares of
stock in or as a director or officer of any corporation owning such land, directly or
indirectly by such members of his/her immediate household, except as follows:

Signature of Owner: (to be signed in front of notary public)

Richard G. Porcell PRESIDENT OF RICK PORCELL
LAND, CATTLE AND TIMBER CORPORATION

NOTARY PUBLIC

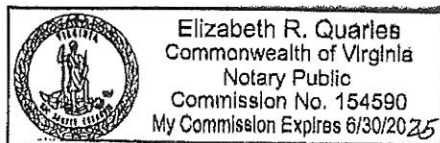
COUNTY OF LOUISA STATE OF VA

Subscribed and sworn to me on this 4TH day of OCTober

of the year 2023. My commission expires JUNE (30, 2025).

Notary Public Signature: Elizabeth R. Quarles

Stamp:



**CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR
PENDING DEVELOPMENT APPLICATIONS**

Case Number / File Name: _____

Visual Inspection Findings (describe what is on the property now):

Two previously recorded architectural resources are partially within the Project area. A Desktop Cultural

Resources Report was commissioned and a full Phase 1 Cultural will be completed for DEQ

PBR requirements. All significant cultural areas will be avoided.

County Records Check (describe the history of this property):

The Applicant has performed a Desktop Cultural Analysis consulting with the VA Department of Historic

Resources. The Applicant will coordinate findings with the Buckingham Historical Society to ensure all areas

of historical importance are avoided. Our study revealed 23 historic sites within the property.

Were any historical sites or gravesites found on site, or be suspected by a reasonable person to be on the site? Yes ☒ No ☐

If yes, please explain and show on the site plan the location of such and explain any historical significance:

A small part of a historic graveyard may cross into the northeast corner of the Project area.

A further survey would be needed to determine if it is in fact in the Project boundary.

The Project will be buffered from this area in accordance with State regulations.

Will this proposal have any impact on the historical site or gravesite? Yes ☐ No ☒

If yes, please explain any impact:

A survey will be completed prior to construction and any existing grave site will be avoided and

buffered in accordance with State regulations.

Owner/Applicant Signature: Frank Hopkins Date: 10/6/23

Printed Name: Frank Hopkins Title: _____

APPLICATION FOR A TRAFFIC IMPACT DETERMINATION

Please fill out the following information before presenting to VDOT:

Case Number / File Name: TBD/Not Assigned

Applicant: Mountain Pine Arvonía & Mountain Pine Arvonía II

Location: Tax Maps, 43-50, 43-50A, 43-51, 43-41, 54-190, 54-157 (New Canton)

Proposed Use: Solar

For VDOT use only:

 A Traffic Impact Statement is required per 24 VAC 30-155-60.

 X A Traffic Impact Statement is not required. The traffic generated by the proposed zoning change / development does not exceed normal thresholds.

 The Traffic Impact Analysis has been waived by the Zoning / Planning Department for the following reasons:

Does the existing entrance meet VDOT requirements for the proposed use?

Yes No X If no, please explain the necessary steps to bring into compliance with the requirements for the proposed use:

Access points to Department maintained roadways will be evaluated through the County site plan review process for compliance with Department regulations and standards.

The DRAFT Arvonía Solar Traffic Route and Evaluation Study dated September 2023 provided to the Department by the applicant does not provide sufficient information to fully evaluate the construction traffic impacts. Study comments can follow after a formal submission through the County review process.

Signature of VDOT Resident Engineer: Brian Lokker, PE Digitally signed by Brian Lokker, PE
Date: 2023.10.06 12:00:32 -04'00'

Printed Name: B.Lokker, PE (Asst RE) Date: 10-6-23

SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

On this _____ day of _____, in the year of _____,

I _____ the owner of _____
(printed name of landowner) (Tax Map Number)

Hereby make, constitute, and appoint _____
(printed name)

my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/her said full power and authority to do and perform all acts and make all representation necessary, without limitation whatsoever, to make application for said zoning. The right, powers, and authority of said attorney-in-fact herein granted shall commence and be in full force and effect on the day _____ of the month _____ in the year of _____ and shall remain in full force and effect thereafter until actual notice by certified mail with return receipt requested is received by the Zoning / Planning Office of Buckingham County stating that the terms of this power have been revoked or modified.

Signature of Landowner (to be signed in front of Notary Public):

NOTARY PUBLIC

County of _____ State of _____

Subscribed and sworn before me on the _____ day of _____

in the year _____. My commission expires _____.

Signature of Notary Public: _____

Stamp:

WRITTEN NARRATIVE

The Written Narrative shall describe the relationship of the proposed project to the relevant components of the Comprehensive Plan. Please be very detailed and describe in depth each and every component 1 through 15. The following outline is provided to aid you in preparing the written narrative:

1. Land Use
2. Community Design
3. Cultural Resources
4. Economic Development
5. Environment
6. Fire and Rescue, Law Enforcement
7. Housing
8. Libraries
9. Parks and Open Spaces
10. Potable Water
11. Sewage
12. Schools
13. Telecommunications
14. Transportation
15. Solid Waste

If this proposal is for an event, describe the handling of the entire event, including but not limited to: number of participants, schedule of events, police, security, food, beverages, water, sanitation, emergencies, crowd control, entrances and exits, traffic control, signage, advertisement, parking, fee collection, control of animals, trash disposal, site clean-up, fighting, alcohol, abuse of alcohol and/or illegal substances

SIGNAGE AT PROPERTY

The Buckingham County Zoning Ordinance requires the following:

The applicant in any case which requires a public hearing shall post signs furnished by the agent on each parcel involved at least 21 days prior to the public hearing indicating that a public hearing is eminent, the date, a rezoning issue, and a County contact number. The signs shall be placed on the VDOT right-of-way closest to the applicant's property line and shall be clearly visible from the road with bottom of the sign not less than one and one half feet above the ground. If more than one public road abuts the property, the signs shall be placed in the same manner as above for each abutting road. If no road abuts a property, then the agent shall define an area for the signs. The agent may ask the applicant that the sign be moved to another area either on the property to achieve greater public visibility. The applicant shall be responsible for keeping the signs free from grass, weeds, and any other plants or vines that may obstruct the public's view. The applicant shall contact the Virginia Department of Transportation for any information concerning where the right-of-way is located. The applicant shall be responsible for the signs should VDOT or their contractor conduct mowing or clearing of the right-of-way in the area where the sign is located.

Any signs required shall be maintained at all times by the applicant up to the time of the final public hearing. No person, except the applicant or the agent or an authorized agent of either, shall remove or tamper with any sign furnished during the period it is required to be maintained under this section. All signs erected under this ordinance shall be removed by the applicant within 15 days following a decision at the final public hearing and shall be returned to the agent. The applicant shall purchase the signs at a fee as determined by the Board of Supervisors and shall be non-refundable. The applicant shall be responsible for the replacement of the sign(s) and shall contact the agent as soon as possible for another sign to be replaced as the manner described above. Should the sign(s) have to be replaced more than twice, this section shall no longer be forced upon the applicant.

I have read, understand and agree to the above requirements.

Applicant/Owner: 

Date: 10/6/23

TENTATIVE SCHEDULE FOR A SPECIAL USE PERMIT

The application, site plan, written narrative, and all information requested in this application must be filled out in its entirety and supplied to the Buckingham Zoning / Planning Office and the fee must be paid before this case will be allowed to move forward.

Case will be introduced at a regularly scheduled Planning Commission meeting held on the fourth Monday of every month. Planning Commission may set a Public Hearing at this time to be held during a regularly scheduled meeting. Public Hearings offer an opportunity for citizens to speak concerning the case.

Following the Planning Commission Public Hearing, the Planning Commission may make a recommendation to approve / deny / or table the case for more information. Once the Planning Commission makes a recommendation to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. The Board of Supervisors meetings are held on the second Monday of every month. The Board of Supervisors may set a Public Hearing at this time to be held during a regularly scheduled meeting. The Board of Supervisors will make the final decision to approve or deny the application after the public hearing.

Example Timeline:

- | | |
|-------------|--|
| January 25 | Case is introduced to Planning Commission. Planning Commission sets Public Hearing for next regularly scheduled meeting on February 22. |
| February 22 | Planning Commission Public Hearing. Planning Commission recommends to approve / deny / or table for more information. Once the Planning Commission reaches a decision to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. |
| March 8 | Case is introduced to Board of Supervisors. |
| April 12 | Board of Supervisors may approve / deny / table for more information. |

The Planning Commission and the Board of Supervisors has a right to call extra public hearings at their discretion if the Board(s) decide they are needed.

You or your agent are encouraged to attend these meetings to answer any questions that may arise concerning your application / proposal. The County strongly encourages the applicant to visit the area around his proposed site and understand what the adjoining landowner concerns are.



MOUNTAIN PINE ARVONIA, LLC
MOUNTAIN PINE ARVONIA II, LLC
BUCKINGHAM COUNTY, VA

OCTOBER 6, 2023

PREPARED FOR SUBMISSION TO:

COUNTY OF BUCKINGHAM, VIRGINIA
DEPARTMENT OF ZONING/PLANNING
PO Box 242, BUCKINGHAM, VA 23921

PREPARED FOR SUBMISSION BY:

HODSON ENERGY
4870 SADLER ROAD, SUITE 300,
GLEN ALLEN, VA 23060

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Project Narrative

The Arvonias Solar Project (the "Project") is an upcoming 80-megawatt (MWac) solar photovoltaic facility, located in Buckingham County. The Project is being developed by Hodson Energy and is legally referred to as Mountain Pine Arvonias, LLC & Mountain Pine Arvonias II, LLC (the "Applicant"). Situated near the intersection of Route 672 (Blinkys Rd) and Route 670 (CG Woodson Rd), the Project involves (6) separate land parcels, owned by two distinct property owners. The total area for the Project is approximately 1,065 acres, which is currently used for timber production with some agriculture. The development footprint, including solar panels, fencing, and access roads, will be contained in approximately 595 acres of the overall site. Access to the Project will be available through entrances located along Route 672 and Route 670.

Hodson Energy has researched prior solar applications to the County and utilized the guidance given by Buckingham County Planning Commission and Board of Supervisors in their approach to solar developments. The conditions set forth in prior approvals have formed the basis of the Project design parameters. It is our hope that this due diligence and care toward the direction set forth by the Buckingham County Board of Supervisors will result in a successful project for all parties involved.

Once operational, the Arvonias Solar Project will provide approximately 156,000 MWh of clean energy to the local transmission grid, which is enough to power approximately 12,854 homes annually. Solar energy is clean, safe, and ecologically beneficial. The Project will emit no carbon pollution, release no heavy metals, acid gases or small particles, require no water to operate, and displace traditional sources of electric generation. In fact, the Arvonias Solar Project will offset 61,713 tons of carbon annually, equivalent to the carbon sequestered by 73,034 acres of U.S. forests every year.

1. Site Location and Characteristics

The Arvonias Solar Project is located in the heart of the new Canton District east of James Madison Hwy, west of CG Woodson, and bisected by Blinkys Rd. Hodson chose and designed this site with multiple inputs and considerations to deliver the best possible project for Buckingham County. Among our considerations, we put high importance on the following factors.

- Distance: The site is situated at a considerable distance from residential homes which has allowed for increased setbacks to ensure that residents continue to enjoy a rural atmosphere.
- Electrical Infrastructure: A 230kV high-voltage transmission line passes through the property, enabling an on-site Point of Interconnection. All necessary facilities, including the project's own substation will be housed on the premises.
- Terrain: The land is predominantly flat, reducing concerns about water drainage and eliminating the need for extensive grading. Our submission includes a full wetland study to help delineate and provide adequate buffers from Bear Creek and other waterways inside the parcels.
- Environmental Barriers & Corridors: The location is currently designated for commercial timber activities, and the remaining trees around the boundary will function as a natural shield from neighboring properties and roadways. There is existing vegetation providing screening on the majority of the project and we have conditioned this proposal to fill in any gaps in the buffer. Moreover, we are protecting large swaths of land to maintain wildlife corridors throughout the Project.

- Historical Use: This area has historically been utilized for silviculture, mining, and other agricultural uses.

2. Project Specifics and Equipment

The Project will utilize single axis tracking technology, which involves solar panels attached to a rotating bar that follows the sun's path throughout the day. This technology features a straightforward, frequently replicated modular design. The Project layout includes rows of solar panels affixed to vertical posts with horizontal support axes. The setup will have tracker-mounted panels and inverters which are used for converting DC power to AC. After the Project's operational lifespan concludes, the Project will be decommissioned leaving behind only the substation that connects the Project to the grid.

The Project will employ crystalline module technology for its solar panels, which are based on silicon. While the exact solar panel model is yet to be determined, the project will use "Tier 1" solar panels and equipment. These Tier 1 panels are anticipated to deliver solar power throughout the entire 25-year warranty duration of the panels. With an 80MWac capacity, the Project is set to incorporate around 189,237 panels.

Interconnection

The Project will utilize a point of interconnection at the existing 230kv line that traverses the northeast part of the Project. A substation will be built on the site adjacent to this line and it is denoted on the site plan.

Site Access

The Project will have 4 entrances all of which are existing. The southern section of the Project will be accessed by Sleep Hollow Rd and Chapel Rd while the northern section of the Project will be accessed by entrances on Blinky's and CG Woodson. All of these entrances will have property signage to alert the public of the project boundaries. The entrances will also all feature a Knox box to ensure emergency personnel access to the site in the event of an emergency.

Security and Fencing

The site will be encompassed by a six-foot-high security fence to ensure the safety of the public and prevent any unauthorized access to the site. This fence will be located interior to the vegetative buffer that encircles the entirety of the Project. Both the fencing and buffer will be maintained to ensure the site is secure and obscured from view.

Construction

The construction approach for the Project will align with standard practices employed in the US for building large-scale, ground-mounted solar facilities that produce wholesale power. The site first must be secured, and the boundaries are organized into construction zones. Stormwater and erosion controls are subsequently set up to constrain run off and ensure responsible control of water flows. The site is then cleared, and the trees are removed with a perimeter buffer of natural vegetation left to ensure mature trees are left to protect viewshed. Grading is then performed to even out areas and create a flat enough surface for the equipment to be installed. Attention is given to maximize the existing benefits of

the terrain and install panels in areas that minimize the amount of grading required. Finally, internal roads are constructed followed by the substation, racks, panels, and fencing.

The construction phase of the Project will feature heavy equipment to clear land, create roads, and drive piles. The racks and panels themselves will be assembled by hand and will cause little to no interruption to neighboring properties. Pile driving is needed to set the piles for the racks and panels to be assembled. We have conditioned the Project to protect neighbors from unwanted noise during off hours by restricting pile driving activities to Monday through Friday from 8am to 6pm. This should afford neighboring properties as little interruption to their daily lives for the duration of the construction phase. Once constructed, the Project will likely go unnoticed to adjacent neighbors.

3. Comprehensive Plan Consistency

3.1 Land Use

The Arvon Solar Project is designated as Rural/Agricultural/Forestry Areas in the 2015-2020 Buckingham County Comprehensive Plan. The Comprehensive Plan defines these areas as:

“The Rural/Agricultural/Forestry Areas are intended to preserve and enhance the essential character and resources of rural portions of the County where agriculture and forestry uses exist while accommodating some rural residential development (low density, rural in character and on private well and septic systems). During the 10- to 20-year period of the Plan, the Rural/Agricultural/Forestry Areas are the lowest priority for new residential development.”

The Arvon Solar Project site is currently used for timber harvesting, and as a solar farm, the Project will meet the very low impact desired from the Comprehensive Plan. This Project will create no new houses or have a need for septic wells or public water and sewer infrastructure. The Project is also conditioned with generous setbacks and viewshed protections to ensure the rural character of the area. Once complete, the Project will operate in general obscurity with minimal impact to neighboring properties.

The Arvon Solar Project will also help meet the County’s long-term preservation goals. The Project will exist for 40 years and then be decommissioned. This will ensure that rural lands are preserved into the future but will also prevent residential development from occupying Rural/Agricultural/Forestry Areas. The Comprehensive Plan denotes a preference for the conservation of rural areas and agricultural land as the County grows. This Project will help aid in that effort by setting aside approximately 1,065 acres for 40 years where it will generate electricity and be decommissioned. When the site is decommissioned, the land can again be returned to any number of agricultural or conservation uses.

The Project will utilize native grasses and pollinators as ground cover. Such native vegetation will enrich and regenerate the soil, there will be no timber harvests to disturb the land, which will potentially enhance the soil quality by the decommissioning phase. This vegetation and ground cover will also promote the presence of pollinators on the site. Furthermore, the Project has integrated wildlife corridors into its design to reduce disruptions to wildlife movement. Bear Creek runs uninterrupted throughout the entire site allowing a variety of local fauna to traverse the site freely.

The Comprehensive Plan's first listed policy area is dedicated to land conservation, and it states that "It is important to maintain a balance between development and preservation objectives throughout the County."¹ The Applicant recognizes that solar development is not one of the listed forms of land conservation but would assert that, once decommissioned, the site would have effectively been preserved over a 40-year period. Unlike many of the programs that allow for conservation through tax deferrals, this Project will generate significant amounts of revenue for the County. It will also give property owners more tools to maximize the possible value of their land. The Comprehensive Plan specifically states that "there are other tools and programs available to rural property owners which aid them in preserving their land holdings while, hopefully, obtaining a desired rate of return on their equity."² Allowing property owners to develop utility-scale solar is another tool for landowners to utilize in maximizing a return on their equity.

The Comprehensive Plan denotes a preference for utilizing proffered conditions to ensure development does not put a strain on government finances. The plan states, "proffered conditions should be encouraged to minimize the impact that such development may have on the County's fiscal responsibility in providing services to the residents of such development."³ The Project is coming before the County with 28 conditions already proposed by the Applicant. These conditions are designed to make sure the Project is a good neighbor to the surrounding area and are also intended to make sure the Project is beneficial financially to the County. Moreover, the Project has initiated the negotiation of a Siting Agreement to further benefit the County. The Siting Agreement is being negotiated with the County Administrator and County Attorney, and once in execution form, the Board of Supervisors will vote on the Siting Agreement separately. If approved, the Siting Agreement creates a substantial accordance with the Comprehensive Plan per section 15.2-2232 of the Virginia Code.

3.2 Community Design

Overview

The Buckingham County Comprehensive Plan acknowledges the importance of building a strong tax base and that the source of those taxes may come from different and unique sources. It states, "Community facilities and services are made possible by individuals, families, businesses, and industries working together to serve Buckingham County. The provision of such facilities and services is usually determined by the tax income that can be obtained from local population and businesses."⁴ The Comprehensive Plan goes on to note, "In addition, some private or quasi-public facilities such as educational institutions and some utility systems are important resources for the local community and must be taken into account when analyzing the full range of public resources available to the citizens of this locality."⁵ The Arvonja Solar Project meets the intent of the Comprehensive Plan completely as the Project is private/quasi-public and will generate significant tax revenue as outlined in the provided financial analysis.

¹ Buckingham County Comprehensive Plan, Page 154

² Buckingham County Comprehensive Plan, Page 154

³ Buckingham County Comprehensive Plan, Page 187

⁴ Buckingham County Comprehensive Plan, pg. 95

⁵ Buckingham County Comprehensive Plan, pg. 95

This Project will also have a very low impact on the surrounding area. The Arvon Solar Project will not generate additional road traffic or local service demand from County resources. The Project site will be heavily buffered and the viewshed will be protected so that citizens will not see it. The classic zoning concerns around health and safety for citizens are not an issue with this project. Benign and innocuous, the Project will operate quietly without producing pollutants or affecting the general welfare of neighboring properties. The Project will be a good neighbor and will be a key part of ensuring that the power generated in the County is clean and positive for County residents.

The Applicant is submitting this application in full accordance with the Buckingham County Zoning Ordinance. Special attention has been paid to prior precedence from other utility-scale solar applications to ensure that the intent of the Board is met in the volunteered conditions set forth in this application. This Project has gone above and beyond to exceed the ordinance and create additional buffers to protect local waterways and cultural resources in the area.

Viewshed

The Applicant has engaged Timmons Engineering to provide a landscaping plan as well as a viewshed analysis. The Project is conditioned currently to a buffer of 75 feet from any property line and 300 feet from any structure. This should provide a substantial visual buffer from any neighboring properties ensuring that nearby residents continue to enjoy their rural quality of life. The viewshed analysis has revealed that the only area in need of planting is where the Project borders CG Woodson Dr. There is currently a cornfield planted that will transition into a tree buffer to ensure that the site is uniformly buffered with trees.

Sound

The proposed utility-scale solar Project in Buckingham County, Virginia is designed to ensure that no unreasonably loud noises are created during its operation. To achieve this, the Applicant has proposed two conditions regarding sound.

First, all site activity required for the construction and operation of the solar energy facility shall be limited to certain hours, with pile driving activity being restricted to the hours between sunrise or 8 a.m. and the later of 6 p.m. or sunset, Monday through Saturday. All other construction activity on site shall be permitted Monday through Sunday in accordance with the provisions of the County's Noise Ordinance.

Secondly, after completion of construction, the solar energy facility, during normal operation and excluding maintenance, shall not produce noise that exceeds 50 dbA as measured at the property lines of the Project boundary, unless the owner of the adjoining affected property has given written agreement to a higher level. During the night, there will be no audible noise at the property line from the Project. The inverters produce a low-level hum, only during daylight hours, when the system is generating energy. This noise level has been described as roughly equivalent to that of a dishwasher. Even in idealized sound-travel conditions, at 100 feet, the sound emitted from this inverter will be reduced to under 50 dbA or the equivalent of a modern refrigerator.

As seen in the Special Use Preliminary Site Plan, the design locates the inverters at least 100 feet from the Project boundary, and the inverters and substation transformers are the only components that produce any audible sounds. The sound at the Project boundary during operations will not exceed the

County requirements in its noise ordinance. The site will be a great neighbor to the surrounding area and nearby residents will continue to enjoy the rural living to which they are accustomed.

Glare

The proposed Project will not produce any hazardous glare as solar panels are designed to absorb as much light as possible, resulting in minimal reflection or refraction. In fact, panels typically reflect or refract less than two percent of the light, which is similar to the reflectivity of water and significantly less reflective than standard glass.

Property Values

To assess the potential impact of the Project on neighboring property values, the Applicant has commissioned a Property Value Impact Study conducted by Kirkland Appraisals, LLC. The study, which is attached to this application and dated September 25, 2023, reviews recently completed solar projects, known as "matched pairs," and analyzes associated property values in the vicinity of those projects. According to the study, the proposed Project is expected to have no impact on the value of adjoining or abutting properties and is in harmony with the surrounding area (Appendix 12). The study reveals that many people living near similar projects express positive attributes, including protection from future development of residential or intrusive uses, reduced dust, odor, and chemicals from former farming operations, protection from light pollution at night, quietness, and minimal traffic. The Property Value Impact Study provides further detail on these findings.

County Resources

Solar power is considered a low-impact land use, and it is expected to have minimal to no impact on the County's resources. Unlike other forms of development, such as commercial or residential housing, solar projects do not require additional services such as roads, utilities, schools, or law enforcement. Therefore, the proposed Project will not place a significant burden on the County's resources. On the contrary, it is expected to increase the County's tax base and associated revenues. Please see the attached Mangum Financial Analysis that outlines the significant benefit to the County's tax base while also requiring very little of the County's resources. Solar is a unique use in that respect in that it creates an outsized beneficial impact on County finances in a way other uses cannot.

Decommissioning

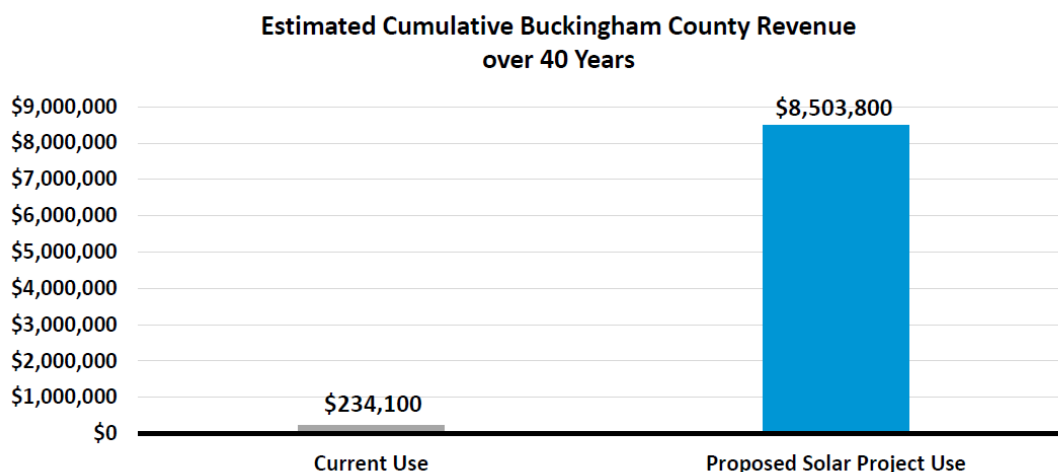
Upon the Project's conclusion, it will undergo decommissioning based on a comprehensive decommissioning and restoration plan, which will be presented to Buckingham County before obtaining building permit approvals. To safeguard the landowner and the community from decommissioning expenses, a bond or letter of credit will be established. Post-decommissioning, the land is set to revert back to the landowner to do any by-right use listed in the Zoning Ordinance. We have commissioned a Decommissioning Plan that is attached to this application under Appendix 11. This serves as a reference for the County during their review of the Project's forthcoming plan. As outlined in the sample, all of the Project's infrastructure will be taken apart and cleared. The property will be restored to its original state during this phase. With mutual agreement from the County and landowner, some or all access roads from the Project might remain for ongoing use. A majority of the Project's materials will retain some value and can be recycled. However, our Decommissioning Plan has gone the extra step of not considering salvage value as part of the plan. A related surety bond will be filed with Buckingham County before construction begins (Appendix 11).

3.3 Cultural Resources

The Project is anticipated to have no effects on cultural and historical assets, given its location and the extensive cultural assessments mandated at the state permitting stage. Comprehensive cultural studies conducted by our engineering partners will be presented to the Virginia Department of Historic Resources (VDHR) for endorsement and agreement. Due to the property having been used for timber in the past, it is unlikely that historical artifacts would be found on the site due to prior tree clearing. It is possible that artifacts could be found near the streams where timber activities normally do not occur (Appendix 7). The studies also revealed that there were some mining shafts and sites historic to the site. We have had our site design avoid these areas and have given generous buffers to any wetland and stream.

3.4 Economic Development

The Project has commissioned an independent economic analysis through Mangum Economics to determine the effect of the Arvonja Solar Project on the local economy as well as the revenues to the County. The construction of the Project will impact the local economy through the addition of new construction jobs, ancillary spending by those working in the community, as well as direct tax revenue to the County. The study found that the construction phase would create 18 jobs, pay construction workers approximately \$900,000 in wages and benefits, and generate 11.9 million dollars for the local economy. The Project would also generate approximately 8,503,800 dollars over the lifetime of the Project (Appendix 6).



The Arvonja Solar Project provides a unique opportunity for the County to capitalize on a use that generates tremendous tax revenues for the County while requiring little in the way of County services. The Project will not need local water, sewer, new road infrastructure, police coverage, or generate school-age children. One of those cost drivers is inherent in almost any other form of development and utility-scale solar is free of all of them while also sharing revenue generated from the Project with the County. Buckingham County Comprehensive Plan Specialty Policy Area #7 of the Comprehensive Plan states that “Buckingham County considers “economic development” high on its list of goals” and also notes the importance of a strong tax base.” Due to the high revenue, low public cost nature of solar projects, the Arvonja Solar Project will address this Comprehensive Plan goal better than most any use.

3.5 Environment

Solar energy is a clean generation source that provides electricity without burning fossil fuels. Not only will this Project help Virginia achieve its green energy milestones, but it will also help shift the Commonwealth's current energy portfolio away from burning fossil fuels. The aggregate transition across the Commonwealth away from fossil fuels will result in cleaner air and water for everyone. Buckingham County residents will benefit directly from having a clean and reliable source of energy being produced in the County limits.

The Project commissioned an Environmental Resource Overview and Assessment Report (Appendix 8) as well as a Cultural Resources Overview and Assessment Report (Appendix 7) of the parcels involved in the Arvonja Solar Project. Since the Project site flows into the James, we have gone above and beyond existing regulations by designing a 100 ft buffer from all wetland areas on site to better protect the James River from stormwater runoff. This aligns with not only the Comprehensive Plan but the intent section of the zoning ordinance which states, "development is: to be encouraged to take place in clusters to promote efficient and cost-effective use of land; to be situated so as to make possible future economies in the provision of services by the public and private sections; and to be so located as to protect the watershed, protect surface and groundwater supplies, discourage development in flood plains, wetlands, and conservation areas."⁶ This Project was designed to exceed the intent of the Buckingham County Zoning Ordinance and ensure that the Project protects local habitats.

3.6 Fire and Rescue, Law Enforcement

The Arvonja Solar Project will be a very safe Project for the County and will not strain local emergency resources. The Comprehensive plan favors residential and commercial development to occur close to County services stating:

"These areas are located the furthest distance from the County's centralized public services creating public safety concerns about dangerously long response times for fire, rescue, and law enforcement. In these areas, many of the roads cannot handle the traffic associated with large residential subdivision development. Protecting and preserving farmland, forest uses, livestock operations, wetlands, significant wildlife habitats, and water resources are of primary importance to these areas."

Since this Project will not generate residential units or commercial demand, it would stand that the inverse of the Comprehensive Plan's guidance would prefer developments that do not require service to be located further from County services. This Project will not generate any additional need for fire, rescue, or law enforcement capacity or otherwise put a strain on County resources. This Project will be remotely monitored 24/7 and any issue that may arise will result in swift notification of local first responders. The Applicant is committed to working in concert with the local fire department to provide any training that may be necessary to ensure a safe response if necessary.

3.7 Housing

The area surrounding the Project site features many large low-density residential lots. This Project will feature 300-foot buffers from neighboring residences providing an extensive visual shield from neighboring properties. The effect of siting a solar facility on the subject parcels will prevent further

⁶ Buckingham County Zoning Ordinance, pg. 8

housing of any type from being constructed in this area. The Applicant has provided an appraisal study performed by Kirkland Appraisals showing no change in the property values of neighboring housing as a result of this project.

3.8 Libraries

This Project will not affect libraries in any way as a result of being constructed.

3.9 Parks and Open Spaces

This Project will not affect any parks or open spaces. The Project's land is currently used for timber harvesting. This Project will remain on private land and will effectively have no change to the outside public given the substantial buffers.

3.10 Potable Water

This Project will have no effect on the potable water of the surrounding areas. Solar panels are a safe technology and do not create toxic runoff that could harm local flora, fauna, or people. We have worked closely with our engineers to ensure that stormwater areas have been accounted for and generous buffers have been implemented on our ephemeral, intermittent, and major waterways. The buffers provided in this design are also in excess of that required of a timber operation, and this Project will help filter and protect drainage to the James River over the lifetime of the project.

3.11 Sewage

This Project will not utilize sewer or septic systems on-site. The Project will also not impact or interfere with any neighboring properties' septic systems. In the event that a structure needs to be constructed on the property, permits will be sought through the County and all regulations will be complied with. There are no such plans to construct a building at this time.

3.12 Schools

The Project will not impact established schools or the County's future plans regarding schools and other educational facilities. There are no nearby schools and after construction, the site will not generate any significant traffic that would affect bus routes. The tax revenues generated from the Arvonja Solar Project to the County could potentially aid in meeting some of the County's school budget needs.

3.13 Telecommunications

This Project will not disturb local telecommunications or in any way hinder the existing telecom infrastructure. Each solar project is required to have a fiber optic cable incorporated into the project to assist in monitoring the electrical generation on site. This fiber optic cable will be run to the Project site and may provide additional conduit that could be shared to bring other utility service to the area.

3.14 Transportation

The Project has prepared a Traffic and Route Evaluation Study produced by Timmons Engineering which has been reviewed by the local VDOT office for approval. The Project has four proposed entrances all of which are existing to the site. The entrances have been used in the past as entrances for timbering. This Project seeks to continue using those entrances in the construction and ongoing maintenance of the site. The study found that the volume on the existing roads is low, and the addition of construction traffic would not exceed capacity at any of the proposed entrances. The entrances off of Sleepy Hollow

and Chapel Rd also do not support through traffic and are only utilized by neighboring residents. It may be pertinent during construction to implement traffic control measures on Blinky's Rd and CG Woodson, and VDOT will be consulted for peak times and type of control to be implemented (Appendix 9).

During the construction phase, laydown areas will be designated temporarily for staging and assembly to store construction machinery, equipment, and to prepare solar facility components. These temporary zones, encompassing staging, parking, and assembly, will be situated strictly within the Project's limits to prevent blockages and unauthorized parking on public pathways. Considering the current state of the roads, planned access locations, and the daily traffic averages for the selected access routes, it is expected that the construction-related traffic will not have a significant impact on local traffic. Once operational, the Project is projected to produce minimal traffic, with only a few trips anticipated daily.

3.15 Solid Waste

The components that make up a utility-scale solar project have value and up to 90% of those components can be recycled currently. The panels are primarily made up of silicon, aluminum, and glass, all of which are in demand to create new panels. As the solar industry has continued to grow and demand for the panels has increased, businesses starting up in support of these efforts are growing as well. There is already an existing recycling plant up in operation in Ohio with First Solar and a large recycling facility was recently announced in Yuma, Arizona. As the industry grows and plants are decommissioned, the industry is quickly moving to put in place recycling plants to recover valuable materials. The value inherent in those materials will likely prevent the panels from ending up in a land fill, and it should be expected that any replaced panels will be repurposed responsibly.

APPLICATION FOR A TRAFFIC IMPACT DETERMINATION

Please fill out the following information before presenting to VDOT:

Case Number / File Name: TBD/Not Assigned

Applicant: Mountain Pine Arvonias & Mountain Pine Arvonias II

Location: Tax Maps, 43-50, 43-50A, 43-51, 43-41, 54-190, 54-157 (New Canton)

Proposed Use: Solar

For VDOT use only:

 A Traffic Impact Statement is required per 24 VAC 30-155-60.

 X A Traffic Impact Statement is not required. The traffic generated by the proposed zoning change / development does not exceed normal thresholds.

 The Traffic Impact Analysis has been waived by the Zoning / Planning Department for the following reasons:

Does the existing entrance meet VDOT requirements for the proposed use?

Yes No X If no, please explain the necessary steps to bring into compliance with the requirements for the proposed use:

Access points to Department maintained roadways will be evaluated through the County site plan review process for compliance with Department regulations and standards.

The DRAFT Arvonias Solar Traffic Route and Evaluation Study dated September 2023 provided to the Department by the applicant does not provide sufficient information to fully evaluate the construction traffic impacts. Study comments can follow after a formal submission through the County review process.

Signature of VDOT Resident Engineer: _____

Printed Name: B.Lokker, PE (Asst RE) Date: 10-6-23

Buckingham County Planning Commission

October 23, 2023

Administration Building

6:00 PM

Introduction Case 23-ZMA335

Owner/Applicant: Landowner Buckingham County
P O Box 252
Buckingham VA 23921

Applicant Buckingham County
Nicci Edmondston, Authorized Agent
P O Box 252
Buckingham VA 23921

Property Information: Tax Map 138 Parcel 15, containing approximately 8.78 acres, located at or near 284 Industrial Park Road Dillwyn VA 23921, Curdsville Magisterial District.

Zoning District: Neighborhood Commercial (NC-1)

Request: Zoning Map Amendment-The Applicant is Requesting Rezoning from Neighborhood Commercial (NC-1) to Recreational Access (RA-1) for conformity with County usage.

Background/Zoning Information: This property is located at or near 284 Industrial Park Road Dillwyn VA 23936. This property is currently zoned Neighborhood Commercial NC1. The landowner and applicant is Buckingham County. This request is made due to necessary compliance to the Zoning Ordinance regarding the usage of the property. This lot has been used by the Buckingham County Recreation Department for a number of years as a playground/park area for the soccer program, and this use is not allowed by right in the Neighborhood Commercial NC1 Zoning District. It was recently determined that County Owned property and usage should be in accordance with the standards of the Buckingham County Zoning Ordinance.

Would it be the pleasure of the Planning Commission to schedule a public hearing for this request?

November 27, 2023 6pm?

REZONING APPLICATION CHECKLIST
BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINIMUM SUBMISSION
REQUIREMENTS

The following table lists the information necessary to review a rezoning application. All items are required, unless otherwise stated, and must be submitted in order for the application to be accepted for review. This completed checklist must be submitted with the application.

Adjacent Property Owners List and Affidavit (pages 5, 6 & 7 attached). This list can be obtained from the Clerk of Courts Office: ☒ YES ☐ NO

Completed application for rezoning (pages 3 & 4 attached). If not signed by the owner, a Power of Attorney must accompany the application: ☒ YES ☐ NO

Interest Disclosure Affidavit (page 8 attached). Must be signed by the owner: ☒ YES ☐ NO

Power of Attorney (page 11 attached). Required if anyone other than the owner is signing the application form or proffer statement on behalf of the owner: ☒ YES ☐ NO

Written Narrative (page 12 guidance in preparing the Written Narrative): ☒ YES ☐ NO

Fees: ☒ YES ☐ NO

Deed: ☒ YES ☐ NO

Plat (15 copies). The plat information may be incorporated into the Rezoning General Site Plan, in which case, copies of a separate plat are not required. The plat must be prepared by a certified land surveyor or licensed civil engineer and contain the following:

- A. Bearings and distances of a scale of 1" = 100' or less for all property lines and existing and proposed zoning lines: ☒ YES ☐ NO
- B. Area of land proposed for consideration, in square feet or acres: ☒ YES ☐ NO
- C. Scale and north point: ☒ YES ☐ NO
- D. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES ☐ NO

Rezoning General Site Plan (15 copies) The General Site Plan must contain the following:

- 1. Vicinity Map – Please show scale: ☒ YES ☐ NO ☐ N/A
- 2. Owner and Project Name: ☒ YES ☐ NO ☐ N/A
- 3. Parcel Identification numbers, name, present zoning, and zoning and use of all abutting or adjoining parcels: ☒ YES ☐ NO ☐ N/A
- 4. Property lines of existing and proposed zoning district lines: ☒ YES ☐ NO ☐ N/A
- 5. Area of land proposed for consideration, in square feet or acres: ☒ YES ☐ NO ☐ N/A
- 6. Scale and north point: ☒ YES ☐ NO ☐ N/A
- 7. Names of boundary roads or streets and widths of existing right-of-ways: ☒ YES ☐ NO ☐ N/A

8. Easements and encumbrances, if present on the property: YES NO N/A
9. Topography indicated by contour lines: YES NO N/A
10. Areas having slopes of 15% to 25% and areas having slopes of 25% or greater clearly indicated by separate shading devices (or written indication of "no areas having slopes of 15% to 25% or greater"): YES NO N/A
11. Water Courses to include the approximate location of the 100 year floodplain (if applicable) based on FEMA maps (or written indication of "not in floodplain"): YES NO N/A
12. Delineation of existing mature tree lines or written indication of "no mature tree lines": YES NO N/A
13. Proposed roads with right-of-way width that will connect with or pass through the subject property: YES NO N/A
14. General locations of major access points to existing streets: YES NO N/A
15. List of the proposed density for each dwelling unit type, and/or intensity of each non-residential use: YES NO N/A
16. Location of any open space and buffer areas, woodland conservation areas, storm water management facilities, and community and public facilities: YES NO N/A
17. Location of existing and proposed utilities, above or underground: YES NO N/A
18. Vehicular and pedestrian circulation plan, including traffic counts and typical street sections, right-of-way improvements, access points, travel ways, parking, loading, stacking, sidewalks, and trails: YES NO N/A
19. Layouts and orientation of buildings and improvements, building use, height, setbacks from property lines and restriction lines: YES NO N/A
20. Location and design of screening and landscaping: YES NO N/A
21. Building architecture: YES NO N/A
22. Site lighting proposed: YES NO N/A
23. Area of land disturbance in square feet and acres: YES NO N/A
24. Erosion and Sediment Control Plan submitted (10,000 square feet or more): YES NO N/A
25. Historical sites or gravesites on general site plan: YES NO N/A
26. Show impact of development of historical or gravesite areas: YES NO N/A
27. A copy of the current status of all real estate taxes of all property owned in Buckingham County. If real estate taxes are not current, an explanation in writing and signed by the owner shall accompany this application. Any liens or other judgments against property shall also be explained in writing and signed by the owner: YES NO N/A

APPLICATION FOR A ZONING MAP AMENDMENT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: 10/6/2023

Zoning Map Amendment: NC-1 to RA-1

Purpose of Zoning Map Amendment: conformity with County usage

Zoning District: NC-1 Number of Acres: 8.78

Tax Map Section: 138 Parcel: 15 Lot: _____ Subdivision: _____ Magisterial Dist.: _____

Street Address: lot or near 284 Industrial Park Road
Directions from the County Administration Building to the Proposed Site: _____

Rt 60, left Rt 15, right on Main St

Name of Applicant: Buckingham County

Mailing Address: PO Box 252 Buckingham VA 23921

Daytime Phone: 434.969.4242 Cell Phone: _____

Email: Kcarter@buckinghamcounty.virginia.gov Fax: _____

Name of Property Owner: Buckingham County

Mailing Address: PO Box 252 Buckingham VA 23921

Daytime Phone: 434.969.4242 Cell Phone: _____

Email: Kcarter@buckinghamcounty.virginia.gov Fax: _____

Signature of Owner: Buckingham County Board of Supervisors - Fullitt Date: _____

Signature of Applicant: Buckingham County Board of Supervisors - Fullitt Date: _____

Please indicate to whom correspondence should be sent:

☒ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer
☒ Applicant

APPLICATION FOR A ZONING TEXT AMENDMENT

CASE NUMBER: _____
(Case Number Assigned by Zoning Administrator)

DATE OF APPLICATION: _____

Zoning Text Amendment: _____

Purpose of Zoning Text Amendment: _____

Permitted Use List: Yes: _____ No: _____ Special Use Permit List: Yes: _____ No: _____

Zoning District: _____ Number of Acres: _____

Tax Map Section: _____ Parcel : _____ Lot : _____ Subdivision: _____ Magisterial Dist.: _____

Street Address: _____

Directions from the County Administration Building to the Proposed Site: _____

Name of Applicant: _____

Mailing Address: _____

Daytime Phone: _____ Cell Phone: _____

Email: _____ Fax: _____

Name of Property Owner: _____

Mailing Address: _____

Daytime Phone: _____ Cell Phone: _____

Email: _____ Fax: _____

Signature of Owner: _____ **Date:** _____

Signature of Applicant: _____ **Date:** _____

Please indicate to whom correspondence should be sent:

☐ Owner of Property ☐ Contractor Purchaser / Lessee ☐ Authorized Agent ☐ Engineer ☐ Applicant

ADJACENT PROPERTY OWNER'S LIST

(Required)

The applicant shall provide a list of all adjoining landowners, including subject property and all property immediately across the street/road from the subject property. Any body of water does not constitute a boundary line for this purpose, therefore a body of water and the property adjoining the subject property but separated by a body of water is still considered an adjoining landowner. County boundary lines and those adjoining property owners in the next County are considered adjoining property owners if the land adjoins the subject's property. Adjoining landowners can be verified through the Buckingham County Clerk of Courts or the Clerk's Office in the adjoining County, or by personal contact. The list shall include the name, address, town/city, zip code, road route number, tax map section number, parcel number, lot number, and subdivision. The list shall be typewritten or printed legibly. Failure to list all adjoining landowners could delay the process.

1. Name: James Madison Highway LLC

Mailing Address: 200 Carter Rd Charlottesville VA 22902

Physical Address: _____

Tax Map Section: 125 Parcel: 5 Lot: 6 Subdivision: _____

2. Name: James Madison Highway LLC

Mailing Address: 200 Carter Rd Charlottesville VA 22902

Physical Address: _____

Tax Map Section: 125 Parcel: 5 Lot: 5 Subdivision: _____

3. Name: Buckingham Solar Properties LLC

Mailing Address: 12508 Paradise Spring Rd Clifton VA 20124

Physical Address: _____

Tax Map Section: 125 Parcel: 5 Lot: 4 Subdivision: _____

4. Name: Central Virginia Christian School

Mailing Address: 70 Box 8 Buckingham VA 23921

Physical Address: _____

Tax Map Section: 138 Parcel: 15 Lot: A1 Subdivision: _____

6. Name: Buckingham County

Mailing Address: PO Box 252 Buckingham VA 23921

Physical Address: _____

Tax Map Section: 138 Parcel: 15 Lot: C Subdivision: _____

7. Name: JRE Dillum LLC

Mailing Address: 11053 Leadbetter Rd Ashland VA 23005

Physical Address: _____

Tax Map Section: 138 Parcel: 15 Lot: B Subdivision: _____

8. Name: Buckingham County

Mailing Address: PO Box 252 Buckingham VA 23921

Physical Address: _____

Tax Map Section: 125 Parcel: 19 Lot: _____ Subdivision: _____

9. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

10. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

11. Name: _____

Mailing Address: _____

Physical Address: _____

Tax Map Section: _____ Parcel: _____ Lot: _____ Subdivision: _____

ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

This 6th day of October, year 2023,

I Karl Carter hereby make oath that
(printed name of owner/contract purchaser/authorized agent)

the list of adjoining landowners is a true and accurate list as submitted with my application.

Signed: (to be signed in front of notary public)

White - for Buckingham County Board of Supervisors

(owner / contract purchaser / authorized agent – please circle one)

NOTARY:
COMMONWEALTH OF VIRGINIA

COUNTY OF Buckingham

STATE OF Virginia

Subscribed and sworn to me on the 6th day of October,

of the year 2023. My Commission expires on 01/31/2027.

Notary Public Signature: Jennifer B. Lann
Stamp:

JENNIFER B. LANN
NOTARY PUBLIC
REG. #7141618
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES JANUARY 31, 2027

INTEREST DISCLOSURE AFFIDAVIT

STATE OF VIRGINIA

COUNTY OF BUCKINGHAM, VIRGINIA

On this 10th day of October, of the year 2023,

I Karl Carter for Buckingham County (printed name of owner)
hereby make oath that no member of the Buckingham County Board of Supervisors nor
the Buckingham County Planning Commission has interest in such property either
individually, or by ownership of stock in a corporation owning such land, or by
partnership, or as a holder of ten percent (10%) or more of the outstanding shares of
stock in or as a director or officer of any corporation owning such land, directly or
indirectly by such members of his/her immediate household, except as follows:

Signature of Owner: (to be signed in front of notary public)

Karl Carter for Buckingham County Board of Supervisors

NOTARY PUBLIC

COUNTY OF Buckingham STATE OF Virginia

Subscribed and sworn to me on this 6th day of October,

of the year 2023. My commission expires 01/31/2027.

Notary Public Signature: Jennifer B. Lann
Stamp:

JENNIFER B. LANN
NOTARY PUBLIC
REG. #7141618
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES JANUARY 31, 2027

**CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR
PENDING DEVELOPMENT APPLICATIONS**

Case Number / File Name: _____

Visual Inspection Findings (describe what is on the property now):

Raw land, no development on this lot,
currently used as soccer/athletic field
8.7 acres of original 173 acres per plat 1925.

County Records Check (describe the history of this property):

County acquired property August 11, 1992
from G.M. Davis.

Were any historical sites or gravesites found on site, or be suspected by a reasonable person to be on the site? Yes _____ No X

If yes, please explain and show on the site plan the location of such and explain any historical significance:

Will this proposal have any impact on the historical site or gravesite? Yes _____ No _____

If yes, please explain any impact:

Owner/Applicant Signature: [Signature] Date: 10/6/2023

Printed Name: Karl Carter Title: County Administrator

APPLICATION FOR A TRAFFIC IMPACT DETERMINATION

Please fill out the following information before presenting to VDOT:

Case Number / File Name: _____

Applicant: Buckingham County

Location: TBD Industrial Park Rd

Proposed Use: Park/Playground- Recreational Use

For VDOT use only:

_____ A Traffic Impact Statement is required per 24 VAC 30-155-60.

X _____ A Traffic Impact Statement is not required. The traffic generated by the proposed zoning change / development does not exceed normal thresholds.

_____ The Traffic Impact Analysis has been waived by the Zoning / Planning Department for the following reasons:

Does the existing entrance meet VDOT requirements for the proposed use?

Yes _____ No X If no, please explain the necessary steps to bring into compliance with the requirements for the proposed use:

There is currently at-grade vehicular access (not delineated or graveled) from Main St. (Rt 1003), as spectators generally park there during practice/games. Permanent access in the future from either Main St. or the private road would be easily accomplished. This section of Main St. is posted 35 mph and sight distance is more than suitable in each direction to allow for a commercial application if needed.

Should Buckingham desire to move forward with delineating access to a parking area on the parcel from Rt 1003, please provide a site plan for Department review/consideration. The access shall be designed/constructed in accordance with VDOT's Road Design Manual, Appendix F. Upon site plan acceptance, permit issuance for construction can follow.

Signature of VDOT Resident Engineer: Brian Lokker, PE Digitally signed by Brian Lokker, PE
Date: 2023.10.13 12:31:12 -04'00'

Printed Name: Brian Lokker, PE - Asst RE

10/13/23
Date:

SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA
COUNTY OF BUCKINGHAM

On this 6th day of October, in the year of 2023,
I Karl Carter the owner of 138-15
(printed name of landowner) (Tax Map Number)

Hereby make, constitute, and appoint Cheryl Edmonds
(printed name)

my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/her said full power and authority to do and perform all acts and make all representation necessary, without limitation whatsoever, to make application for said zoning. The right, powers, and authority of said attorney-in-fact herein granted shall commence and be in full force and effect on the day 23 of the month October in the year of 2023 and shall remain in full force and effect thereafter until actual notice by certified mail with return receipt requested is received by the Zoning / Planning Office of Buckingham County stating that the terms of this power have been revoked or modified.

Signature of Landowner (to be signed in front of Notary Public):

John H. for Buckingham County Board of Supervisors

NOTARY PUBLIC

County of Buckingham State of Virginia

Subscribed and sworn before me on the 6th day of October

in the year 2023. My commission expires 01/31/2027.

Signature of Notary Public: Jennifer B. Lann
Stamp:

JENNIFER B. LANN
NOTARY PUBLIC
REG. #7141618
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES JANUARY 31, 2027

WRITTEN NARRATIVE

The Written Narrative shall describe the relationship of the proposed project to the relevant components of the Comprehensive Plan. Please be very detailed and describe in depth each and every component 1 through 15. The following outline is provided to aid you in preparing the written narrative:

1. Land Use
2. Community Design
3. Cultural Resources
4. Economic Development
5. Environment
6. Fire and Rescue, Law Enforcement
7. Housing
8. Libraries
9. Parks and Open Spaces
10. Potable Water
11. Sewage
12. Schools
13. Telecommunications
14. Transportation
15. Solid Waste

If this proposal is for an event, describe the handling of the entire event, including but not limited to: number of participants, schedule of events, police, security, food, beverages, water, sanitation, emergencies, crowd control, entrances and exits, traffic control, signage, advertisement, parking, fee collection, control of animals, trash disposal, site clean-up, fighting, alcohol, abuse of alcohol and/or illegal substances

SIGNAGE AT PROPERTY

The Buckingham County Zoning Ordinance requires the following:

The applicant in any case which requires a public hearing shall post signs furnished by the agent on each parcel involved at least 21 days prior to the public hearing indicating that a public hearing is eminent, the date, a rezoning issue, and a County contact number. The signs shall be placed on the VDOT right-of-way closest to the applicant's property line and shall be clearly visible from the road with bottom of the sign not less than one and one half feet above the ground. If more than one public road abuts the property, the signs shall be placed in the same manner as above for each abutting road. If no road abuts a property, then the agent shall define an area for the signs. The agent may ask the applicant that the sign be moved to another area either on the property to achieve greater public visibility. The applicant shall be responsible for keeping the signs free from grass, weeds, and any other plants or vines that may obstruct the public's view. The applicant shall contact the Virginia Department of Transportation for any information concerning where the right-of-way is located. The applicant shall be responsible for the signs should VDOT or their contractor conduct mowing or clearing of the right-of-way in the area where the sign is located.

Any signs required shall be maintained at all times by the applicant up to the time of the final public hearing. No person, except the applicant or the agent or an authorized agent of either, shall remove or tamper with any sign furnished during the period it is required to be maintained under this section. All signs erected under this ordinance shall be removed by the applicant within 15 days following a decision at the final public hearing and shall be returned to the agent. The applicant shall purchase the signs at a fee as determined by the Board of Supervisors and shall be non-refundable. The applicant shall be responsible for the replacement of the sign(s) and shall contact the agent as soon as possible for another sign to be replaced as the manner described above. Should the sign(s) have to be replaced more than twice, this section shall no longer be forced upon the applicant.

I have read, understand and agree to the above requirements.

Applicant/Owner: Buckingham County Board of Supervisors - [Signature]

Date: 10/6/2003

TENTATIVE SCHEDULE FOR A REZONING AMENDMENT

The application, site plan, written narrative, and all information requested in this application must be filled out in its entirety and supplied to the Buckingham Zoning / Planning Office and the fee must be paid before this case will be allowed to move forward.

Case will be introduced at a regularly scheduled Planning Commission meeting held on the fourth Monday of every month. Planning Commission may set a Public Hearing at this time to be held during a regularly scheduled meeting. Public Hearings offer an opportunity for citizens to speak concerning the case.

Following the Planning Commission Public Hearing, the Planning Commission may make a recommendation to approve / deny / or table the case for more information. Once the Planning Commission makes a recommendation to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. The Board of Supervisors meetings are held on the second Monday of every month. The Board of Supervisors may set a Public Hearing at this time to be held during a regularly scheduled meeting. The Board of Supervisors will make the final decision to approve or deny the application after the public hearing.

Example Timeline:

- | | |
|-------------|--|
| January 25 | Case is introduced to Planning Commission. Planning Commission sets Public Hearing for next regularly scheduled meeting on February 22. |
| February 22 | Planning Commission Public Hearing. Planning Commission recommends to approve / deny / or table for more information. Once the Planning Commission reaches a decision to approve or deny, this recommendation will be forwarded to the Board of Supervisors at their next regularly scheduled meeting. |
| March 8 | Case is introduced to Board of Supervisors. |
| April 12 | Board of Supervisors may approve / deny / table for more information. |

The Planning Commission and the Board of Supervisors has a right to call extra public hearings at their discretion if the Board(s) decide they are needed.

You or your agent are encouraged to attend these meetings to answer any questions that may arise concerning your application / proposal. The County strongly encourages the applicant to visit the area around his proposed site and understand what the adjoining landowner concerns are.

The County is requesting a zoning map amendment for TM 138-15, from NC1 Neighborhood Commercial to RA1 Recreational Access. This request is made due to necessary compliance to the Zoning Ordinance regarding the usage of the property. This lot has been used by the Buckingham County Recreation Department for a number of years for the soccer program, and it was recently determined that County Owned property and usage should be in accordance with the standards of the Buckingham County Zoning Ordinance.

BOOK 179 PAGE 351

#1433

THIS DEED, made this 11th day of August, 1992, by and between G. M. DAVIS, unmarried, party of the first part (grantor), and COUNTY OF BUCKINGHAM, a political subdivision of the Commonwealth of Virginia, party of the second part (grantee).

WITNESSETH, that for and in consideration of the sum of \$20.00 and other valuable consideration paid by the party of the second part to the party of the first part, the receipt of which is hereby acknowledged, said party of the first part does hereby bargain, sell, grant and convey, with General Warranty and, except as hereinafter set forth, English Covenants of Title, unto the party of the second part all the following described real estate, to-wit:

All that certain tract or parcel of land, with improvements thereon and appurtenances thereunto belonging, situated in Curdsville Magisterial District of Buckingham County, Virginia, containing One Hundred Sixty-Seven and eighty-four/hundredths (167.84) acres, more or less, being bounded on the northeast by the centerline of Virginia Secondary Route #1003, on the southeast by lands of B. D. LeSueur, on the southwest by lands now or formerly of Virginia Payne, and on the northwest by lands now or formerly of Davis, lands of Sprouse, and lands of Nicholas; said lands being the residue of a 173 acre parcel described by a plat of survey prepared by J. G. Trent, C.S.B., dated April of 1925, and recorded in the Clerk's Office of the Circuit Court of Buckingham County in Deed Book 78, at page 172, after deducting therefrom an off-conveyance of 5.16 acres described by a plat of survey prepared by Carroll Gillispie, CLS/SBC, dated August 10, 1977 and recorded in the aforesaid Clerk's Office in Deed Book 106, at page 289. Said lands being in all respects the same lands conveyed unto G. M. Davis from Muriel S. Hartley et vir by deed dated August 13, 1979 and recorded in the aforesaid Clerk's Office in Deed Book 114, at page 681 et seq.

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This conveyance is made subject to: any and all conditions, restrictions, and/or rights of way which are a matter of public record; and, any and all easements and/or rights of way which are apparent on the ground from an inspection of the lands hereinabove described or apparent on an inspection of the plat hereinabove referenced.

WITNESS the following signature and seal.


G. M. DAVIS (SEAL)

STATE OF VIRGINIA AT LARGE
COUNTY OF BUCKINGHAM, to-wit:

I, Linda H. Meador, a notary public in and for the State of Virginia at Large, do hereby certify that G. M. DAVIS, whose name is signed to the writing above, has acknowledged the same before me in my county aforesaid.

Given under my hand this 11 day of August, 1992.

My commission expires 8-31-94.

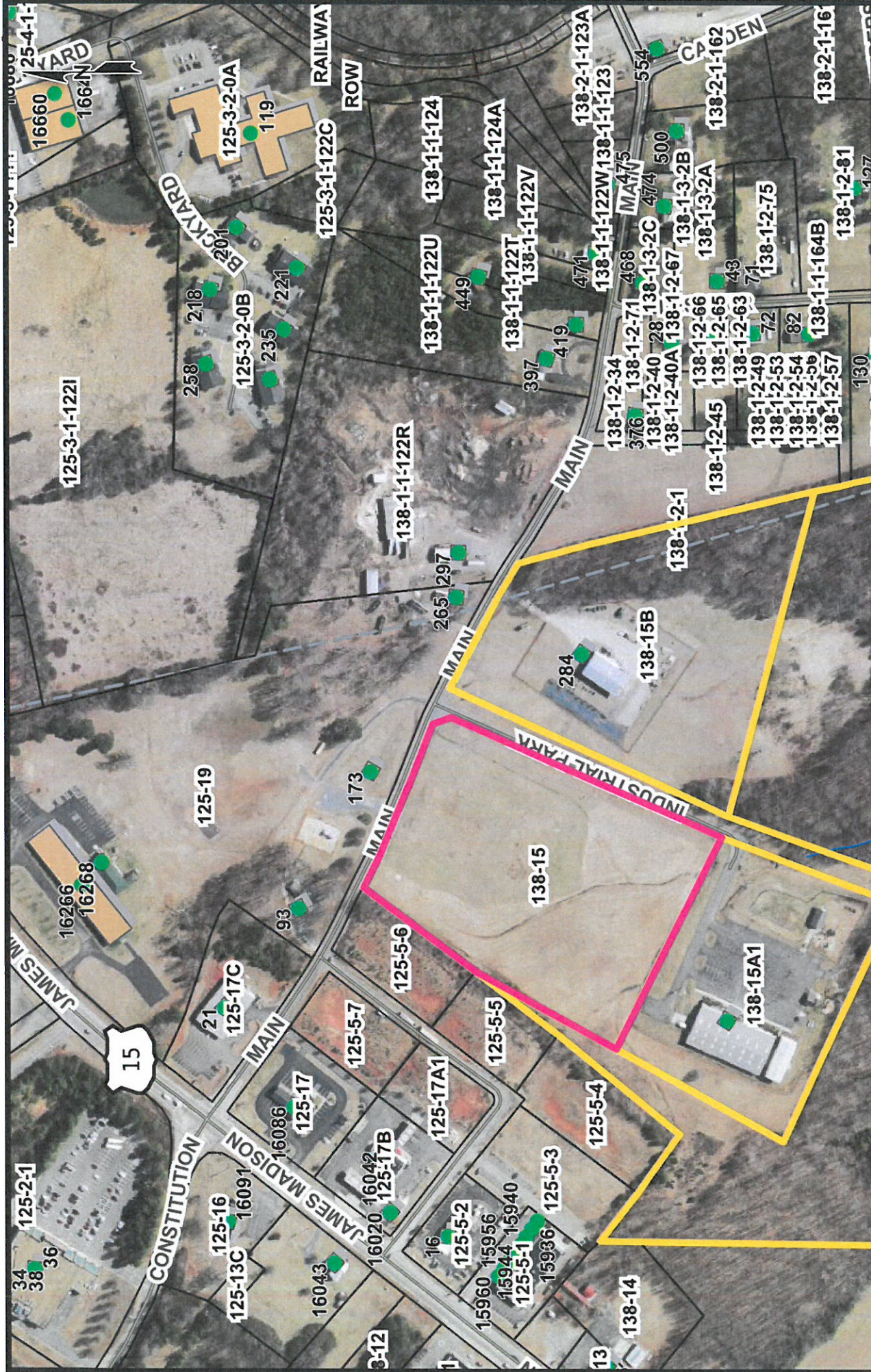

NOTARY PUBLIC

J. ROBERT SHODDY, JR.
Attorney and Counselor at Law
P. O. BOX 325
DELUWYN, VIRGINIA 22736

VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY.	
St. R. Tax	
Co. R. Tax	
Transfer	1.00
Clerk	12.00
Lto. (145)	1.00
Grantor Tax	300.00
Total \$	314.00

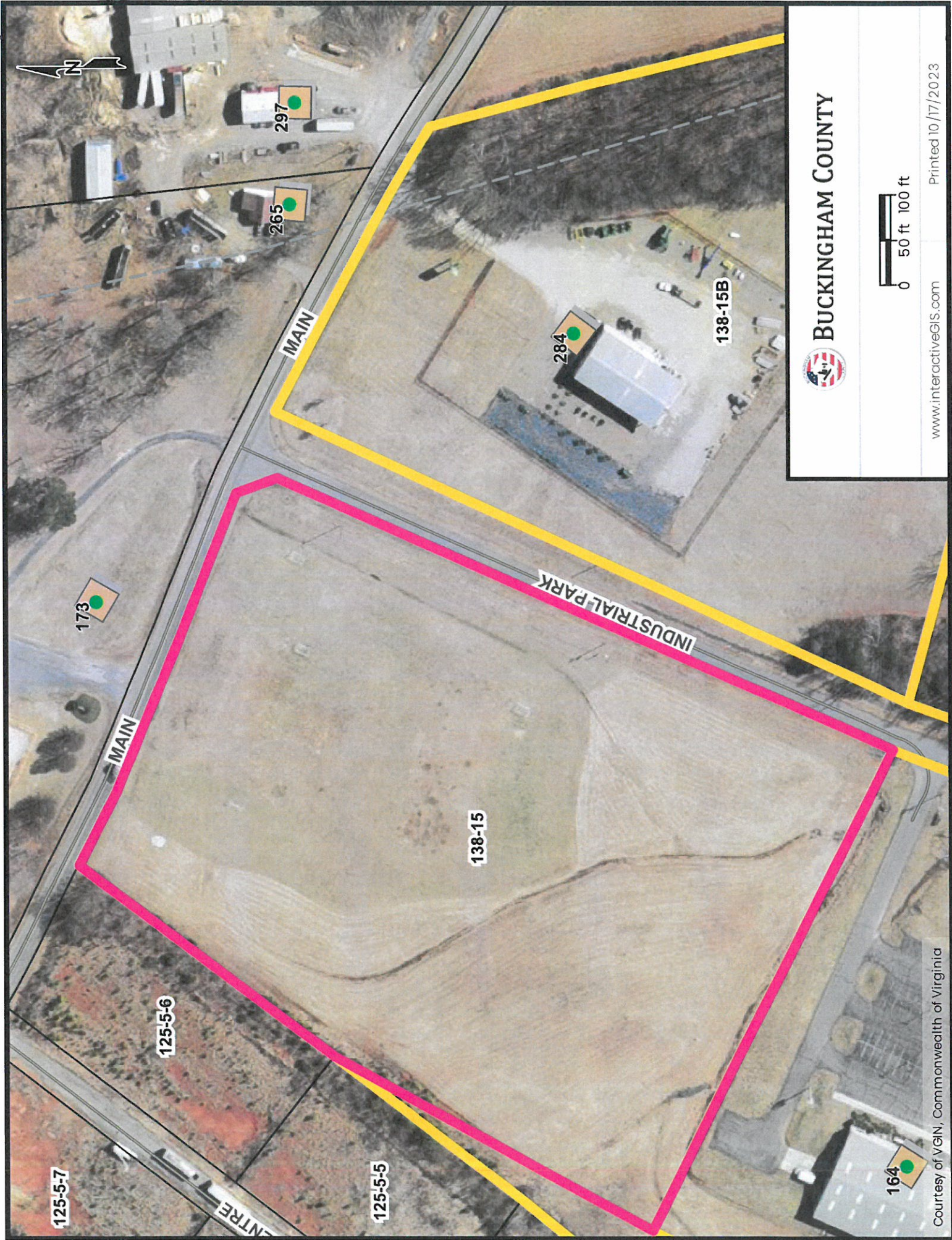
The foregoing instrument with acknowledgement was admitted to record on 8-17 1992 at 12:50 PM in B. 1179 Page(s) 351-352
Test: MALCOLM BOOKER, JR. CLERK
BY: OLIVER B. Wynn DEPUTY CLERK





BUCKINGHAM COUNTY





BUCKINGHAM COUNTY



Property Identification Run Dt: 10/03/2023 Owner Name/Address
 Map #: 138 15 COUNTY OF BUCKINGHAM
 Acct #: 000007790-001 PO BOX 252
 Address: INDUSTRIAL PARK RD BUCKINGHAM VA 23921
 City/St:

Legal Description 001 of 01
 RT 1003 - 1/2 MI SE OF
 DILLWYN 8.78 AC

Deed Bk/Pg: 179/ 351/

Occupancy: EXEMPT Year Built:
 Dwl Type: MH/Type:N/ Year Rmld:
 Use/Class: /EXEMPT: LOCAL GOVT Year Effrt:
 Year Assd: 2020 Condition:
 Zoning: On Site Date: (JLC) 7/16/2019
 Dist: 01 CURDSVILLE Review Date: ()

Acreage: 8.780
 Land Use:
 Total Mineral:
 Total Land: 43900
 Total Imp:
 Total Value: 43900

----- Improvement Description -----
 Exterior Interior Site
 SITE-PAVED
 SITE-ROLLING

----- Land Valuation -----

M	Cls	Desc	G	Size	Dpth	Rate	FV/Pct	Value
A	21	EXEMPT	A	8.780		5000.00		43900
				Total Land Value	8.780			43900

----- Comments -----
 COUNTY INDUSTRIAL PARK
 07 DB349-247 PM252 9.079AC TO BULLOCK TM 138-15B
 14 RA ASSEMBLAGE P/O 162.9AC
 22 DB499-574 A-307A DECL W/PL S/O 125.28AC NEW
 22 TM 138-15C AC CHG
 22 DB499-636 ESMNT THRU TM 138-15 TO TM 138-15C

 Total Property Value 43900

Sec	Type	Str/Ht	Description	Area
Total Square Feet				
		Cur. Value	Prev. Value	%Chg.
Land		43900	682200	(94%)
Improvements				
Total		43900	682200	(94%)
Average Price Per Acre			5000	

10/17/23 15:35:01 Real Estate Maintenance REVIEW User SLBAI
Acct# 000007790 001 BUCKINGHAM COUNTY eBill? _ L-Chg 6/24/2022
Owner/Name Address Adr Chg Y *Status _ *Dist: 01 _ 000 Batch
COUNTY OF BUCKINGHAM SSN#1: SSN#2:
PO BOX 252 INDUSTRIAL PARK
000000 _ INDUSTRIAL PARK RD
BUCKINGHAM VA 23921 0000 00000 0000
EDZ: CDA:
Dsc1 RT 1003 - 1/2 MI SE OF Dsc2 DILLWYN 8.78 AC *Blck Internet _
Dsc3 Dsc4 *Blck E-Check _
Map# PAG 138 INS DC BLK LOT 15 SUB
GPIN Grantor:

Land 43900 Acres (3) 8780 Assessment Loan# Mor
Use Class 7 4 *Zone ID# JLC Code ACH FG/\$
Impv. Par.(1)/Cd Date 00000000 Bill#
Mtn Land Ty/Rn/Lnd / Batch 1st Half
Timber P BkPg St Excl 00 1H Addtl
Mineral D BkPg 179 351 2nd Half
Tot Value 43900 W BkPg BIPermt 0000000 2H Addtl
Total Tax Instrmt 0000 0000000 Tot. Tax
Cons/Date / 00000000 Prort Dt 00000000
F3=Exit F4=Suppl F11=Transf F18=Attach F24=More Keys

District 12 - Neighborhood Commercial (NC-1)

Purpose

It is the intent to encourage cluster development of residential, commercial and public uses, thereby helping to discourage random scattering of these uses throughout agricultural and forested areas. While the primary purpose of this district is to permit business uses, some industry which will be unlikely to generate noise, light, odors, smoke or other obnoxious influences may be allowed.

Permitted Uses

Antique Shops

Art, Craft and Hobby Stores (Supplies and Works)

Auto Truck Sales, Agricultural/Industrial Equipment, used & new

Barber & Beauty Shops

Cabinetmaking, furniture and upholstery shops

Caterers

Churches

Convenience Stores

Day Care Centers

Data/Technology Center

Drug Stores

Dry Cleaning & Laundry Service drop-off/pick-up stations

Emergency Service Facilities

Financial Institutions, Including But Not Limited to Banks, Savings and Loans and Credit Unions

Food and Food products - frozen food manufacturing, candy manufacturing, bakery, beverage and bottling, butcher (excluding containment of live animals and rendering)

Funeral Homes

Golf Courses & Driving Ranges

Greenhouses, Garden shop, Nurseries

Hardware Stores

Libraries

Medical Clinics, including veterinary

Manse. Church-Owned Dwellings

Motels. Hotels, Bed & Breakfast

Museums

Nursing homes and assisted living facilities

Off-Street Parking

Public Utilities

Offices, Professional

Restaurants

Retail Stores - gift/novelty shops, apparel stores, Sporting Goods Shop (without shooting range), Jewelry etc.

Special Uses

the following uses may be permitted by the Board of Supervisors by a Special Use Permit following the recommendation by the Planning Commission in accordance with this ordinance and the Code of Virginia but are not limited to the following:

Amusement Centers - Bowling Alleys, Pool Halls, Skating Rinks, Swim Clubs, Theaters
Assembly Halls - community centers, lodge halls
Assembly of electrical appliances, electronic and telecommunication instruments and devices
Auction Barns
Automotive Wash Operations
Automotive Sales Lot to Include the Sale of Recreational Vehicles, Trailers, and Boats
Auto Repair & Lube shops, Towing Service
Colleges
Dog Businesses - Kennels, Grooming, Boarding, Training, Trials
Dormitories
Drive-In Restaurants
Drive-in Theatres
Flea Markets
Laboratories (pharmaceutical and/or medical)
Laundromats & Dry Cleaners
Parks & Playgrounds
Parking Facilities, Commercial
Public Parking Garages
Radio & TV Stations
Residential Housing - including but not limited to Apartments, Condominiums, Duplexes, Townhouses, Single family dwellings
Schools, Public & Private
Tattoo Parlors/Galleries
Telecommunications (See Article 9)
Warehousing to include Mini-Storage Facilities

Area Regulations

For uses utilizing individual sewerage systems, the required area for any such use shall be approved by the health official. The administrator may require a greater area if considered necessary by the health official. There is no minimum lot size for lots served by public water and sewer, but there shall be sufficient land area to support all required setbacks, parking and landscaping.

Setbacks

Storage of Hazardous Waste
Storage of Pesticides Intended for Repackaging or Resale
Installation of Long Distance Pipelines
Application or Land-filling of Industrial or Residential Waste
Relocation of Stream Beds
Establishment of Feed Lots of More than 100 Head
Bulk Storage of Petroleum or Asphalt
Swimming, Skiing & etc
Operation of Motor Vehicles on the Dam or Spillway. Except for Maintenance Purposes
Use of Gasoline Boat Motors on the Reservoir

Clear Cutting of Timber to Within 2,000 feet of Reservoir, Unless Best Management Practices are followed in which case the Distance will be 200 feet

Livestock Access in the Reservoir
Docks or Other Structures
Apartment Complexes or Housing Developments within 2,000 Feet of Reservoir
Establishments of Commercial Activities Requiring Wastewater Treatment Facilities

Erosion and Sedimentation

All access roads, entrances, and building sites must meet all State and local Soil Erosion and Sedimentation Regulations.

District Boundaries

The delineation of the district boundaries shall be shown on the Watershed District Maps of Buckingham County, Virginia.

Special Use Permits

The following uses shall be permitted only by special use permit approved by the Buckingham County Board of Supervisors:

Exploration, Development, or Operation of Oil or Natural Gas Wells
Development or Operation of Strip Mine or Quarry
Establishment of any Facility Requiring Construction of Wastewater Treatment Facilities

Area Regulations

The delineation of the district boundaries shall be based on technical studies specific to the water supply and approved by the Board of Supervisors

DISTRICT 8 -RECREATIONAL ACCESS DISTRICT (RA-1)

Purpose

The purpose of this district is to protect and preserve the natural beauty and aesthetic or cultural value of the approaches and entrances to public areas, and to 'prohibit uses and developments of a type that might depreciate or destroy the park-like environment.

Permitted Uses

In Recreational Access District (RA-1) the following uses are permitted:

- Agricultural and Forestry Operations Conservation Areas
- Lodges, Hunting, Boating, & Golf Clubs Parks & Recreation Areas
- Churches and Cemeteries Homes, Single-Family
- Playgrounds
- Public Buildings

Special Use Permit

The following uses shall be permitted only by special use permit approved by the Buckingham County Board of Supervisors but shall not be limited to the following:

Public Utility Booster or Relay Stations, Transformer Substations, Transmission Lines and Towers, Pipes, Meters, and Other Facilities for the Provision and Maintenance of Public Utilities

Area Regulations – Minimum Lot Size

The following minimum areas are required dependent on sewer and water services provided to a development's lot. Greater lot sizes may be required where septic tanks and drainfields (or comparable systems) and wells are employed and State Health Department officials determine that certain factors may cause health problems. All sewage and water systems in the district shall be approved by the Health Department prior to recordation.

	Water and Sewer	Water Only	Sewer Only	No Water or Sewer
Area	10,000 sq. ft.	20,000 sq. ft	40,000 sq. ft	2 to 2.99 acres
Width	80 ft.	100 ft.	125 ft.	200 ft. minimum
Area				3 to 14.99 acres
Width				300ft. minimum
Area				15 + acres
Width				400 ft. minimum

Amended - 6-26-06

Setback Requirements

The minimum distance from the nearest point of the structure to the edge of the specified right of way shall be fifty (50) feet. The minimum side setback and back setback, the distance from the side property line of a lot and the back property line of a lot to the nearest point on the