

Buckingham County Planning Commission Agenda Monday, August 28, 2023 6:00PM County Administration Building Peter Francisco Meeting Room www.buckinghamcountyva.org

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1. Call to Order by Chairman

Invocation
Pledge of Allegiance
Establishment of Quorums

- 2. Approval of Agenda
- 3. Approval of Minutes

A. July 24, 2023 Regular Meeting

- 4. Public Comment.
- 5. Old Business
  - 1. Public Hearing Case 23-SUP330 US Cellular Axtell Road
  - 2. Case 23-SUP329 RWE Energy Blue Rock Solar
- 6. New Business

No New Business at this time

- 7. Reports
  - A. Building Permits Report
  - B. Zoning Administrator Report
- 8. Commission Matters and Concerns
- 9. Adjournment

## Buckingham County Planning Commission July 24, 2023

At a meeting of the Buckingham County Planning Commission held on Monday July 24, 2023 at 6:00 p.m. in the Peter Francisco meeting room, located within the Buckingham County Administration Complex, the following members were present; John Bickford, James D. Crews III;; Joyce Gooden, , Pete Kapuscinski, Steve Dorrier, and Board of Supervisor Danny Allen. Also present were Nicci Edmondston, Zoning Administrator, and E.M. Wright, Jr., County Attorney. Stephen Taylor and Ashley Shumaker was absent.

Re: Call to Order, Quorum Present, Invocation, and Pledge of Allegiance

Chairman John Bickford called the meeting to order. Steve Dorrier gave the invocation, JD Crews led the Pledge of Allegiance and it was said by all who were in attendance. Chairman John Bickford certified there was a quorum- six of eight members were present. The meeting could continue.

**Bickford**: Approval of agenda. Nicci, is there any changes to the agenda?

**Edmondston**: No changes to the agenda, just a notation under the new business introduction of case 23 SUP 331. That should be new equity energy. Whispering Creek, not whispering springs, so didn't really impact the agenda. But I wanted to notate that correction.

**Bickford**: Okay. Duly noted. Seeing that do we have approval?

**Allen**: So moved to approve.

Crews: Second.

**Bickford**: Motion and a second. All in favor? Raise your right hand. Passes unanimously. We have minutes June 26 2023. The regular meeting, if there's no revisions do I have a motion to approve as presented?

<u>Supervisor Allen moved, Commissioner Crews seconded and was unanimously carried by the Commission to approve the agenda.</u>

Gooden: So moved.

Allen: Second.

**Bickford**: Motion and a second, any discussion? All in favor, raise your right hand. Accepted. Public comment period. Do we have anyone signed up?

## <u>Commissioner Gooden moved, Supervisor Allen seconded and was unanimously carried by the Commission to approve the minutes as presented.</u>

**Edmondston**: Yes, sir. Mr. Chairman, we have five signed up for public comment this evening. Okay, the first would be Heidi Berthoud and followed by Jeeva Abate.

Hedi Berthoud: Hello again, my name is Heidi Divya Berthoud and I'm I live in district five. It seems to me that you're feeling stuck with no options to the current Buckingham mining zoning code, Pete said is much less meeting, according to Mr. Bickford. EM has advised you that the status quo is all you can do without putting the county in legal Jeopardy yet you know that the SU P is in a one and m one. And by right mining zoning code and m two do not stop metallic mining from happening here. Once the SUP boxes are checked, the mine has its first required permit. As we know the next step is to go to the state which has no regulations to protect us against the extreme conditions of metallic mining. You have talked about improving the application form, but I think this is way over your heads taking up that level of detail. Who will you consult with? I do not consider our local miners experts on metallic mining nor on writing protective law. There is a major conflict of interest. Em tells us that he cannot make choices for you that He can advise you when you ask and you need to ask the right questions to get the right answers. It's not up to Em to sort out sort through all of the options. You still have pro bono expert help awaiting your call to help you out to have a decent discussion about this complex and critical matter. Em advise that Virginia code 2282 says zoning regs must be uniform across all districts. So here are some ideas that could be uniform, prohibit new metallic mining across all districts and grandmother an existing mining, restrict prohibit the process using cyanide in metallic mining, require an applying company to first show proof of another similar metallic mine, causing no harm to the community with them funding the independent study. Another option is to require all applicants to prove that Buckingham is not an environmental justice community. If you can't figure out how to get property law to protect us remember, we offered a civil rights law a community Bill of Rights. This was before we found out there is Virginia code that allows localities to prohibit, restrict and regulate mining. We know that property law protects the corporations and not the community. We are pushing back against law that was created by and for self serving profit motive corporations who have the money and the power to outspend and outlaw us. Our motivation is very different. We want to protect our communities, our health, happiness and welfare is worth way more than transient jobs and tax revenue. Is the weather hot enough? And is the air sick enough for you? To prove that we need substantial change? We do have opposite options. Thank you.

**Edmondston**: Next speaker will be Jeeva Abate, followed by Edie Slagle.

Jeeva Abate: Thank you, commissioners. Good to see you today. And I'm Jeeva Abate representing yoga Ville and district five. And I look forward to working with you and developing a new comp plan. So I'm here mostly to speak to the yoga Ville Village Center, which is well described in the past comp plan. And we're back operating now after serious closure for about two years. And we have people coming they've also had their pandemics in Washington and Richmond and Charlottesville and people are coming back going oh man, I need some of this Buckingham weather and, and country life. So we have people coming and then wanting to stay in work there. So they're falling in love with Buckingham, and just as we have and we're here raising our families and building our village center. So thank you for that opportunity to work with you. So we are a unique village center as noted in your past comp plan. And the private owners as well as yoga Ville were served by our private water our wells. We tap local underground aquifers that can be penetrated by mining or drilling or other industrial activity. And and we have our own private wastewater systems. Okay. Although primarily residential with single family and multifamily housing, we do have service oriented businesses and offices located in that village area. We would like to have a gas station convenience store closer so we don't have to go so far we use Glenmore and, and the highway 20 corner for shopping. But otherwise, we have to go farther. And so we were looking for interesting developments in terms of that where we could employ people as we have on our distribution center employed Buckingham residents outside of our own community. So our operations including staff, guests and resident students, is served by its own underground aquifer, providing clean potable water. And we know that any metallic mining in the area would threaten our vital water supply. And we also know that I haven't talked to anyone. I've only talked to one of you privately, but I understand no one of you want any cyanide in your water. None of the supervisors want cyanide. So my commitment to you is to work with you to find a way that makes sense and it's common sense and legal sense to prevent that from happening. Other than that, I just want to say we'd like to preserve the village center we plan to grow from about 250 residents and staff to probably 500 Over the next year. We have people coming in wanting to buy land we need more land but right now we'll take the village center and have and work with you for a safe place. So I will finish by saying we are supporting the planning commissioners and incorporating a prohibition. That's the legal term allowed in Virginia regulation 22 at a prohibition of any use of cyanide in the county for metallic mining are good neighbors of the Kyanite mine and the two quarries are engaged in minerals mining. So this would not impact their current business and would allow them to grow in minerals mining, so thank you. Appreciate your support for us and our community. Thank vou.

Eddie Slagle: Mr. Chairman, commissioners, supervisor Allen. My name is Eddie Slagle. 2331. Back mountain road Dillwyn Virginia. 23936. I'm here tonight, just with some concerns about what I understand as illegal slaughterhouse on CaIra Road, operating outside the limits of zoning and state regulations. Spoke just briefly at the Board of Supervisors meeting then Miss Edmondson sort of brought me up to date on what was going on out there. But understand there are several organizations involved. In regard to violations out there, the Virginia Department of Agriculture, the Virginia Department of Health and the DEQ, I have several concerns about what's going on out there. One of them happens to be the traffic situation. And back when Scott Shippy was the VDOT representative, he actually did a traffic study out there and they posted

their area, so then all the big trucks would have to run 45 miles an hour. And so the speed limit could be enforced. The concern is all the big trucks running out there now for the residents and also the safety with the influx of a lot of Amish buggies that we've got coming down back mountain and CAIRA pretty much all hours of the day and night. Excuse me, the other concern I have is environmental. I share a property land with a property that has the slaughterhouse on it, and several wet weather streams or ditches that come off of that onto my property, go across my property and then go into two creeks that I have on the property which goes down back mountain and goes into whispering Creek. So I have concerns because I have livestock on the property. And when it comes on, I have pastures back there from the horses. So I'm concerned about what might be leeching off of the property coming over there if they're DEQ questions already. And also, the idea of property values. I know they've got a large piece of land over there and people are supposed to be able to do with what they want to do with their land. But if one of the neighbors happened to be selling their property or and they found out there was an animal processing facility going on over there, I don't know what that would do to the property values in that area. So anyway, appreciate your time this evening. Thank you.

**Edmondston**: Our next speaker is Kenda Hunanman followed by Chad Oba. Chad Oba will be the last speaker signed up for public comment.

**Kenda Hunanman**: Good evening. Kenda Hunanman Commissioner Dorrier district five. I've been trying to get clarification on what Chairman Bickford meant when he said he would like to ask the board of supervisors to contact the state corporation about the issue with the mining. Do you plan to make some clarification on that? I've talked to different people who don't have any idea what you are meaning.

**Bickford**: I will speak to the commissioners at the end of the meeting.

Hunanman: Okay, it's fine. Thank you. I think the thing that Heidi Berthoud said about grandmother and grandfather in the three existing businesses and banning any new metallic mining is a real interesting concept. I don't know if it's been considered. But I think law any more about that might be useful. The community survey for the comp plan. I'm wondering where that stands, I went to the only public meeting. I haven't seen any more outreach about the comp plan for the public. I think there are a lot of people that would like to weigh in on these different issues, as you've heard already. And I've heard that there's a lot that the comp plan could do to help with this whole issue. So I'm looking forward to hearing more about this. Pete since his request about having the Board of Supervisors approve a rights based ordinance. I really liked that comment and didn't hear more conversation about it. I'd love to hear more about that. I think it's a human rights issue. You know, we're not talking about anything else there. Thank you very much.

**Chad Oba**: Good evening. I'm Chad Oba and I am a District Six Commissioner Gooden district. It's my sincere hope that you really do want to do something about keeping metallic mining from happening in Buckingham I believe you really can do that. But I don't think that you understand the gravity of the situation, as we who have been looking at this for a number of years do and

may not be motivated to really do something now about it. I mean, we've been waiting and waiting. And this threat is still very much here. And I forgot to pass these out. This is from the Aston Bay Holdings website. These folks, these Canadian folks want to come into our county and develop a mine. They really do. Oh, this is this is from slide 69 of your attorneys PowerPoint presentation to you. And I think you've been influenced by this. I'm not sure I don't know individually what you're all feeling. But given that no new gold mines are currently proposed in Virginia, and that several more years of exploration and development would be necessary before a mind could be proposed. There is ample time for the Virginia General Assembly and state agencies to consider the conclusions and recommendations reached by both the National academies committee and the state agency committee before the state would need to evaluate permit applications. Wrong, they're going to do this, if we don't keep them from doing it, they're going to do it. For the record. Mike Skiffington Chair of the state agency committee of the gold mining study put that statement in the final report without the committee's knowledge and therefore, without approval or consensus of the entire committee that he that was promised in the beginning that they would approve the final statement. This is really important because you're attorney seems to be very much colored by this statement. And you appear to me to have adopted this lack of urgency. We've watched the time go by have mentioned for three years now and there's still no protections in place. So take a look take a look at the latest from the Aston Bay site. And they have plans to resume exploration and we don't know where they're doing this work because they've been granted the right you know to do that by right what we don't know what they're doing out there. So it's when well within your purview to change that and I ask that you do that. Thank you.

**Bickford**: All the speakers Okay, close the close public comment and move to our old business.

**Edmondston**: First case, so the first matter of business under all business is going to be case 23 SUP 330. It is US Cellular landowners is M three properties and the applicant is US Cellular with the agent being Emily Lauer. She is present via zoom this evening to discuss this case is a bit more. The location of this request is tax map 14 parcel 59, just over 44 acres and it's located at 2462 Axtel road Scottsville slight river magisterial district and is currently zoned a one and the request from US Cellular is to obtain a special use permit for the purpose of constructing a 199 foot monopole communications tower and she, on behalf of US Cellular is asking the Planning Commission to schedule a public hearing for this request. This case came to you last month on June 26, with the conditions suggested and recommended by our consultant for the county, which is city scape. There was an issue with the v dot approval or entrance. I just wanted to give a little bit more background for everybody to maybe understand a better timeline. This application was submitted at the end of February 27. It then had an October 22. I believe it was October 22 2020. VDOT form with it. During the cityscape review for completeness, it was noted that that had expired, they asked for another one US Cellular was able to obtain one during that process within just a shorter period of time. That was an updated date of March of this year. Of course, it was deemed complete for the application process prior to its introduction here in June. Of course, if this were to be granted like any other special use permit once they once they come back to obtain a building permit, they would have to have an updated form at that time. However, you know, it is up to the planning commission to determine if you need more

information prior to making any action or taking any action on this particular case. I just wanted to give a little bit more of a background as to why there were certain dates within this process.

**Bickford**: SO there really wasn't confusion on that issue between the two applications for the two towers that they proposed?

**Edmondston**: There was and I believe that US Cellular probably in their bid to gather documentation started working it's a lengthy process for the development company to pull together a full application to be submitted to a county and then once we send it to City escape for completeness, so amount of time did go through I'm sure that it was notated in the strings of emails for the documents that Miss Lauer had to provide in an updated manner and more depth to cityscapes so it was provided prior to their completeness review, but it is of course July now. Okay, but I did want to give a bit of information to that

**Bickford**: is the is the applicant on zoom?

**Edmondston**: Emily Lauer is on.

**Bickford**: I'll turn it over to the commission. I know there was some questions in regards to that was also the propagation maps. I've noticed that it looks like they've got those covered. So I'll turn it over for questions if anybody has one for the applicant. I'll remind everyone that cityscape is recommended to go ahead with this site and on a propagation map this will notice to reference to it does not have the tower that we approved right at Howardsville. We talked about they're in the process of building that now correct?

Edmondston: Yes sir.

**Bickford**: But the propagation map doesn't show that because it's not complete so it's really giving even more coverage to the west no Northwest skews towards the James River. So anyway but so any questions from the commissioners? For the applicant or in general?

**Allen**: See it does have the one picture here about the how much area it takes care and I think it's a whole lot better than what we saw.

**Bickford**: Like I said it really doesn't reflect the Howardsville Tarot that will actually even increase the covers are because they overlap.

**Gooden**: Why is Farmville propagation map on here?

**Bickford**: That I cannot answer maybe Nicci can I assume it got figured in again.

**Gooden**: On page 9. Well, I see nine at the bottom of this page. And we're looking at Francisco road Farmville and Wilks Lake. It's page nine. It's figure three, a propagation map. I'm not sure. On the cityscape consultation, maybe it's cityscapes

**Edmondston**: On the cityscape if you look on page one this is for the Axtel roads gospel Virginia address so let me and that's what they've cityscape has notated on their approval right page one but let me go to Page nine.

Gooden: That propagation map all of those locations are d Buckingham Francisco road prospect.

**Edmondston**: That's showing an existing us cellular service area so I do not have cityscape available this evening. I know that they have multiple areas and this must be one that they chose in their propagation map. But this is this is all part of the Axtel tower review. they're showing you existing US Cellular areas and I do understand that it shows Dentons corner and Bell and Buckingham and Francisco road and prospect and Farmville and wilkes lake and it's showing you post construction, the levels of coverage, felt sure it's an example letter, we can go back and reference that in.

Gooden: Maybe it's just a reference that we're in these parts of the county also.

**Edmondston**: Or it's they're just showing an existing us cellular coverage area. If you were to show one from the location of Axtell it would be a Howardsville tower that's under construction and then I think the closest one is well over five aerial miles it would be on route 20 by Ali's though we don't and then you'd you could also pull in Mulberry Grove and possibly route 60 But there way out. I was trying to pull things that are closest in the northwest. So I'm guessing I'm only guessing that this is the best coverage of a US Cellular service area that could be provided in a propagation map. But this review itself is for Axtel road.

**Gooden**: Okay. I was confused why we were seeing Francisco. I expected something closer to axtel.

**Edmondston**: Miss Gooden now go back I did find the reference I knew that was in here. It talks about the evidence of need for the proposed facility in cityscape let you know that the applicant provided an engineering affidavit from US Cellular RF engineer from dated March 29 2023. With affidavit including the following it references that the propagation service maps for pre construction and post construction conditions three A and three B. It goes on to say that addressing possible colocation as an alternative the following statement is made there are no nearby existing tower facilities to consist, consider the closest is over eight miles away. So yes, they are showing that propagation map because that is the closest us cellular service area that can be provided in a propagation map.

**Bickford**: Any other questions or comments from the commissioners? Do we have a decision to move forward to public hearing?

Kapuscinski: So moved.

Dorrier: Second.

**Bickford**: I have a motion and a second. Any further discussion? All in favor? Raise your right hand. Okay, that moves on forward to public hearing for August?

# <u>Commissioner Kapuscinski moved, Commissioner Dorrier seconded and was unanimously</u> carried by the Commission to move 23-SUP330 on to Public Hearing.

**Edmondston**: Yes, sir. That would be August 24 2023 at 6pm.

**Bickford**: Now, the second thing is the CRC comp plan, community survey excuse me summary report. I see Mr. Fortune is here to come and tell us.

**Todd Fortune**: Good evening. What you have in front of you is a draft summary report from the community meeting that we held on June 15. I'm not going to read this word for word. I hope you've had a chance to look at it but I will go over some highlights and some things that we might want to consider when we go to the next step which is to draft the Community Survey or the citizen survey. On page one, just talking about going into the park exercise, what would you like about Buckingham and want to see preserved? As I look down this list, I see a few things that jump out the biodiversity, the democracy, citizen participation, the night sky reduced light pollution. Diversity of vegetation was it was an interesting one. Tar Anesti day and ethnic diversity are things that I hadn't really seen before. We've done a few comp plans. And those are things that I really hadn't heard when we've done other locales, I found those interesting. The other things you see there are pretty much common things in other localities we worked with in this planning district. The rural character especially that's one thing. It's big in this region. As far as things that people said they wanted to add just there's a lot listed here. Quite a few of these are common themes. Again, bandwidth is one first responder capability we and other localities hear quite a bit about how folks would like to see improved law enforcement and rescue squad fire response. Better shopping choices is also a common theme. Better more easier methods for public participation is one we don't hear very often so it's a that's a good one to bring up. Audit of the courthouse documents so sure people are not getting shortchanged on property. That's another one we had not heard before. So that's that was a very interesting one. Educate about diversity of logging, regulate timber harvesting, that's are some things that jumped out off the page at me again, a lot of these things, transportation for underserved populations, urgent care facilities expand the state parks those common things we see in this region. Rail cars uses Bridges was was interesting one I've never heard that before. So you're we are seeing some things jump out that have come out that we don't see in other localities as far as things to remove it's obvious mines are a big issue. In other localities it's more about the renewable energy the solar development but living in Buckingham I know mines are an issue and that's something we're going to have to address in the plan as we get into the plan itself. Voter intimidation was another one that then that's kind of a common theme it seems from the whole exercise about citizen participation being sure everyone's able to participate you know lack of you know don't discriminate and don't bully people that's a that's another common thing it's come out again metallic mining under keep out toxic industries, those are things that are obviously issues in here

and Buckingham. Sprawl is a common thing. Foreign countries buying property in the county for their own uses. That's actually when we hadn't heard before. But again, it's that's an important one. So those are some of the things that jumped out at us that we hadn't seen in other localities that we've worked with. Things we do need to keep in mind as we move forward with the next steps, not just the citizens surveyed also in developed in developing a plan itself. I want to bring your attention very quickly to the mapping exercise. I'll divert your attention first to number three, what activities or policies can a county adopt to encourage desired growth? Tiny homes was one we've heard a little bit about that not a lot of so that's one we want to dig into further as we go into the plan. A meals tax I mean, that's definitely something we can look into during the plan development depending on where you are in this region that gets kind of a mixed response. Closer grocery stores is a common thing. Increase access to broadband is a common thing. Affordable housing is a common thing and something we would do intend to address in a plan itself later on. Attracting more residents improving school systems, tax incentives, those are all common themes. And other than in the local paper for the county that's when we don't hear a lot of but the rest of those are pretty much common things that we hear throughout the region. Looking at the map, we basically took what was marked up and put it into to a just a map to put into Summary Report. You'll notice that we have three areas circled for future growth areas. You may recall that in the previous plan update, you actually had more growth areas you had, of course the one circle around encompasses a couple of growth areas plus the watershed. And of course, the growth corridors up 20, near Scottsville. And then the YogaVille area, which the gentleman mentioned earlier, no one's circled the Iranian new Canton growth area. So as you look at the map, and you'll look at the input from the committee, so first of all, let me ask if anyone has any questions about the infidels have seen it. I know you believe you were there at the community meeting. And you were there. And I believe Ashley may have been there as well. So first of all, anybody have any questions or comments from the input we received at the community meeting? Let me just stop there real quick. Okay, so the next step, and the lady who spoke earlier mentioned, community input, we are incented to do a citizen survey. Our plan is to bring a survey instrument to you next month for your review. But I did want to talk to you briefly about the survey instrument, because the point of having a community meeting first was to get some input, and some guidance for what we want to put in the survey. Obviously, mining is something we'll need to discuss in the survey. I think it goes without saying. Another one is citizen participation is another thing, another thing that will need to be addressed in the surveys. Of course, school facilities, that's that goes about saying economic development, preservation of the rural character things we're definitely going to address in the survey. I do have a question for the group, given what input we received on the mapping exercise? Do we need to have something in the survey a question or a couple of questions regarding the feelings of the citizenry regarding how many growth areas they want in the county?

**Bickford**: From the input from the group, I see the three growth areas but we had quarters. And I don't see, to me that's going to be a natural progression of development is along the main corridors, at least initially, as the county is built up in more and more, it will expand.

**Fortune**: The reason I bring that up, you're right, we actually have a second quarter down near Farmville, but that was, that wasn't the note no one. From what our input, no one in the group

actually had noted that for Arvonia or New Canton. And so that's kind of why I was asking the question, do we need to kind of get a feel from the public as to what they think as far as where the growth should occur?

Gooden: Mr. Chairman, Im looking at this and thinking that one session just represents those people that showed up to that meeting, and I'm looking at the new Canton area, and I'm thinking there's no place to eat. There's their stuff that is needed down in that area, because you and I ended up at pinos which is not down because there's nothing down in that area. So I think this is it's just those people that showed up. By but I'm still concerned that we're not getting a voice of enough people. That's my concern. And along those lines, have you seen the extension office survey? I don't know if I mentioned this before, the extension office is doing a very similar survey. And that group doesn't meet again till October. And they're asking very similar questions of what kind of things I needed in certain areas, what kind of development you'd want to see. That's one. And then I have some input from some youth. And I need to know how to incorporate that into this survey. We had scholarship applications and the question was, how to make Buckingham better simple as that what would you like to see? And I think some there was some very interesting comments. So I'd like to bring that to the board. And I don't know if there's a way that can also be incorporated into this.

Fortune: I'll defer to the planning commission on that.

**Bickford**: If they can provide that. I think it'd be useful. It just another what we're trying to do and what Todd is with these meetings and always try to gather as much information as you can from the citizens. So to me, it makes sense if you if you got another survey is to see what it provides.

**Gooden**: I didn't see, because at that session, I didn't see young people providing input. I saw me providing input. So I think we need different generations to provide input too.

**Bickford**: I can speak for Todd it might be difficult to achieve because of the low level of interest. I'm afraid it might happen.

**Fortune**: Well, I mean, I'll defer to the group again. But if you if you have some comments that you would like, incorporate it in if the planning commission would like those, we can put those in.

**Bickford**: If Joyce can provide that.

**Gooden**: I can provide that

**Bickford**: At least as a reference material, maybe not,

**Fortune**: We can make a note in the summary that we received some comments in just in Sticking put those in the summary report. And I can bring that back to you next month. Okay,

and while we're on those lines I was contacted by another individual who had received some comments, I believe she was on the YogaVille area. Just a few general comments from folks that weren't able to attend. Do we want to incorporate those into the summary report?

**Bickford**: If its from the citizens yes. The more information we get, hopefully, more complete are plan will be.

**Fortune**: We can do that. So what I'll do next month is I'll bring a revised summary report back with those comments incorporated, and a survey instrument for the group to review. And then in the month after that, we'll begin working on draft phases one and two. And just so the group knows phases one and two are really data intensive. They don't depend that much on actually very little on or not on public participation. So we can go ahead and start on those and get those to you. Section Phase three, the land use, that's where that's where the public participation and the public input starts to come into play. So just kind of keep that in mind as we move forward.

Bickford: Okay.

**Kapuscinski**: Mr. Chairman, this meeting is scheduled on I think this 21st that work session, August 21. Is that what it is the Monday, I believe? Is that for the plan?

**Bickford**: The 17<sup>th</sup>?

**Kapuscinski**: Alright, so that is the comprehensive plan to correct? That work session.

**Bickford**: Pete has it correct. It's the 21<sup>st</sup>.

**Kapuscinski**: And at that meeting, you intend to do what?

**Fortune**: So I'm going to bring a draft survey for the group to review and then we need to once the group depending on how many changes there are, we can go ahead and discuss distribution methods. We our intent is to make the survey available both hardcopy and electronically and also bring back the revised community meeting summary report with these extra comments added in that's the plan for August.

**Kapuscinski**: So if we have ideas from the Commission at that point in time with regard to things like zoning just on a on a what if basis? Is that a meeting to bring that up in or do we just wait?

**Bickford**: Well, you can bring them up at any time. Normally, any changes to zoning will be in the phases as you go through it. So as Todd indicated, you'll start with the first two

**Fortune**: I don't know how to get into zoning with the plan itself because you had zoning is where the ordinances come into play. We'll address them to some degree but if you if you have things you want to consider for the plan by all means.

**Kapuscinski**: That would be a good meeting to do it. Alright, thank you.

**Fortune**: Anybody else have anything?

Allen: I'm just looking at right behind right beside your house, other side of the railroad track, the wood yard is M1 all the way back up to Buffalo road and I think getting ready to change out the side of the road to m one so you know right now we get an orange as a high growth area. Might need to change it.

**Fortune**: Might need to change that when we get into the land use.

Allen: To an industrial area more or less. Not beyond your house, but you know where it's at.

**Fortune**: I know exactly where it is. Yep.

**Allen**: And then in Dillwyn where they're upgrading to a new doctor's office, so it might be some be nice to have written up in a the comp plan. Yeah, in my opinion.

Allen: We can address that.

**Kapuscinski**: Mr. Chairman, is there a document specific to within this planning operation? Is this Is there a document we can refer to that will specifically show us where the zones are now?

**Fortune**: That's going to be up to the group I can say with other comp plans we do include Well, it depends with one locality, we did include a current zoning map and the land use section with what the another county we did, and we just included what they had as our current land use, which the land use map doesn't really doesn't usually get as specific as your zoning. But if you want to include a current zoning map in the comp plan, that's up to the group that's really the group's call,

**Kapuscinski**: I would very much think that would be given our given our situation, particularly with mining, m two and M one or all these, I think a zoning map would absolutely behoove us while we're going through this comprehensive plan.

**Bickford**: Okay. I have no objection to that.

Allen: But what is it? What do you call it? IBM? What do you what do you want to get on it? GIS Yeah, that's already got that on it, you hit the button, and it tell you what every piece of land is zoned. But so you want something for the comp plan.

**Fortune**: Well we're gonna have a section specifically dedicated to land use and like I said, some localities will actually include the current zoning map in that section. It just depends on what the locality wants to do

**Bickford**: We will look at that as we proceed on with setting up and are going through and if we need it well, which I think is probably will be but we'll make a decision and as we see the information unfold anymore questions for Todd? Thanks Todd. See you in august. Thanks, Nicci, that brings us to our new business.

**Edmondston**: New business this evening. We have one case and it's the introduction of 23 SUP 331. Landowners Ivan P. Davis Jr. and Deborah Davis at 106 Whetstone Lane Dillwyn, the applicant is actually Buckingham solar one LLC out of 2670 Patton Road in Roseville, Minnesota. Tax map for this property request is 151 parcel 17 and is 166.62 acres and is currently zoned a one agricultural and the applicant this evening wishes to obtain a special use permit to allow for the construction and 35 year operation of a five megawatt AC photovoltaic community solar garden. The applicant is asking the Planning Commission to schedule a public hearing for this request. wanted to go a bit further and notate the Buckingham solar one LLC. The applicant requests a special use permit to allow for this construction of the project on approximately 24.08 acres of the 166.62 acre parcel of private land. The application is attached. I'm sure you've all reviewed that since last week. And all of the conditions have been updated to include this project. There are 28 of them the same conditions that have been applied to all solar projects since the approval of the Riverstone project, which has been the wishes of the Board of Supervisors. Would it be the pleasure of the planning commission to hold a public hearing for this request? August 28 2023 At 6pm our applicant Buckingham solar one LLC the representative is Jessie Diamond with new energy equity and our landowner. Mr. Ivan Davis is with us as well to address questions and concerns and I believe Mr. Diamond has a presentation as well.

Bickford: Mr. Diamond the floor is yours sir.

Jessie Diamond: Wonderful. Thank you so much for having me thank you Nicci. Again, my name is Jesse Diamond. I'm with new energy equity. The applicant Buckingham solar one LLC is part of our company. For shared solar we have to have an individual company that represents it. So that's why it's named that. Shared solar is a little bit unique. So I'll go over it just with a little bit more detail. But one thing to note about shared solar is that this power is intended to save money for the community. And so the intent brings it into its own kind of category. So it acts and looks like a small utility scale project, except for the power that's metered can then be utilized outside of that area and can be subscribed to by the citizens of the community. Generally, that's about 10% savings. And I'll go over a little bit more how that works. But I did want to point that out right off the bat that this is not utility scale, which is like a power plant. This is shared solar. And I think it's just really important just to notate that this does have benefits directly to the citizens. A little bit more about new energy equity. We are a coast to coast company. I've been doing, we're from Virginia, down to New Mexico up to Minnesota, we're looking to start doing work in California. So we are an experienced company. We've done over 330 megawatts of solar, we are an end to end developer. And so when you're working with us, I am a conduit for everything that happens on this project. So I'm working with the landowners at the conception level. And working with the landowners through a permit. I'm working with the

landowners all the way through construction. And so they have one to two points of contacts throughout the entire process. We are I think, I think that developers that do this aren't, they're doing everybody a favor by being the one point of contact that everybody knows who's responsible and who's going to own anything that happens on the project so Ivan, Nicci, yourselves, you're all going to be going through me for any questions, I'm not going to be handing this project off to the next person hands it off to the next person, I'm going to own it throughout the process. This is a five megawatt process project. We're capped at five megawatts for the for the shared solar facility, so we can't build really large facilities. So this would be the largest facility that shared solar does allow, but still at five megawatts for keeping at about 24.08 acres. So we are a much smaller impact than some of the larger projects. This one is a fixed tilt racking system that allows us to really work with the topography. One way I describe it is I'm going to fit my fixed tilt solar to the property instead of making the property fit to my solar, there is some tree cleaning that will have to happen. And there certainly will be things that we'll have to mitigate and work with DEQ to do a good job. But we are generally fitting our solar to the land with fixed tilt, we do estimate about \$5 million of economic impact, positive for the county, we do not expect any visual impact. And again, as I mentioned a little bit before, this is intended to bring savings directly to the subscribers. So that can be Buckingham or any adjacent counties. Here's a little bit about the facility in just a couple small little maps. It's a partially wooded property. It's an exists, you know there's some existing pasture land, some neighboring properties, there is a small home nearby. There is some other pasture land then business across the street. There are no floodplains within this area, we will confirm that through further studies. But just looking at the general topography and where the low lying areas are, we don't expect any. And so we'll study the areas down below just to see how they're impacted. But there are no none expected within the array area. Again, it's a 24.08 acres area that we're looking to have fenced in. The overall parcel itself is 166.62 acres. When you factor in clearing trees and everything else, the overall disturbance areas just over 30 acres. Some of the exhibits that we provided are listed down below the permit site plans, equipment specifications, we've reached out to the FAA just to make sure that there aren't any concerns from them. There was no hazard found. And then we also did do a glare analysis to backup saying that we didn't we do not believe to be any impact to any neighboring properties. How does shared solar work, so in 2020, the state of Virginia opened up the shared solar program, they allotted an initial 150 megawatts that 150 megawatts has been utilized. If the overall impact to low income subscribers equals 30%, or above, for the subscribers to the original 150, an additional 50 megawatts is opened. Right now, there's a waiting list for that. And so the program is expected to fill up within the next couple of months. And so the shared solar program, this initial round is coming to a close very shortly. And so if and when this fills up within the next couple of months, we're waiting for the state to open up more opportunities specific to shared solar, that's going to happen at the state level again, and just we're hearing great feedback from what they've seen from the initial couple of sites to how it's impacting the community, and just how people are saving money. And it's really bringing a lot of savings. What benefits, there's no cost to the subscribers, so they can save approximately 10% on the Subscribed amount. And so how that works is they if they use 10 units of power, and they subscribe to those 10 units, they would pay 10% less than that. So on average, megawatts about 173 properties or household sorry, each of those households is estimated to save about \$173 a year, that comes out to be about \$90,000 of savings for each

megawatt. So this project would save about \$450,000 annually over the life span of 35 years, that's \$15.7 million of savings back into the community. Because there's no upfront costs that can go to everybody, the program actually requires us because we will be participating towards that 30%. So we will be doing a minimum of 30%. towards low income, we will also be doing 40% to small households, at the minimum, we've been doing approximately 100% to low income and moderate income. And households, there's some incentives to do that. And so we've been keeping to that we've been trying to keep to right around 110. For the households, we're required to do 30% towards low income, we're required to do 40%, towards smaller power users. But we've been getting to around 100% With most of our facilities recently. And 10% savings, about 90,000 per megawatt, it's certainly good for the climate. When you talk about green energy. To build it, there certainly is some impact just like there's impact on any other uses of power, gasoline, coal, and all of these have some upfront costs. But once this is built, it is a green energy, you know, creating long lasting income for the house. For the host landowners. I hear stories all the time about how this is creating legacy. It's helping them legacy properties for the families. And so it's really fun to hear their stories, and then the county between additional revenue and contributing towards that green energy. Everybody's seeing the benefits. This just kind of goes over stuff that we've already covered. Here for questions. Thank you.

**Kapuscinski**: Where did the 5 million come from? Is that over 35 years?

**Diamond**: So the initial, the initial amount through construction per diem in spending money locally. That's where the majority of that 5 million comes from. And then the longevity of the project through maintenance of the property, you know, noxious weed control. Other things is where it finalized is that the 5 million?

**Kapuscinski**: So is there any cash benefit to the county?

**Diamond**: Absolutely. So generally a siting agreement is agreed upon, technically, shared solar projects are exempt from that. However, we are voluntarily agreeing to work with the county through those proportional to what you're generally seeing with utility scale. And so if utility scale is doing 1400 per megawatt, annually, which escalates we're generally following suit. And then if there's any one time payments or anything, that's that we've seen that pretty commonly also, but through a seating agreement. Sometimes there's material and tools tax, just additional revenue ways for the county.

**Kapuscinski**: So you really haven't signed that agreement with the county?

**Diamond**: No. So generally, that's a process that dependent on the county happens throughout the permitting process, often finalized before the Board of Supervisors approval. But we have not finalized that. But that that is generally provided at....

**Kapuscinski**: One other question. It's interesting. The name your company, it's an equity company, it sounds to me like a holding company. Having set that aside, do you have other specific businesses in this shared solar area that you've sold off?

**Diamond**: So we are, we are in the midst of working with four projects right now. We're working with a company called summit ridge energy. They are, they're a great company to work with. I'm actually working on one of them right now within the county. So one of the projects that we've been approved, we will be transitioning that that project from New Energy equity over to them Yes.

Kapuscinski: Thank you

**Bickford**: Any other commissioner have any question for the applicant?

Allen: I don't have a question, but just telling you stuff I'm just telling you things that we have talked about in the Board of Supervisors and that 4500 acres, is the total amount in the county that we're going to do for solar power. If I'm not mistaken, last month, it was like 3400 acres already done. And last month, we got 1127 acre. So that's going to put us right at 4500. So if this next one before you keeps going, were going to have get all these numbers together. And to me it might be it might stop you or you might be the last one. I don't know what I'm just letting you know, the 4500 Acres is what we were working on. And we're getting pretty doggone close to it right now.

**Diamond**: Absolutely. And we're seeing that throughout many communities in Virginia. So it's ultimately this board and the other board's decision. So if this isn't right for the community, then we will still always be there to you know, hopefully, come back and another time if you do increase that but I respect. You know, you guys have a cap and if we don't fall within it, so be it.

Allen: Well, I mean, right now, you are we just got to see what happens.

**Diamond**: Yeah, absolutely.

Allen: I just want to let you know, I don't want to be hiding nothing from you.

**Diamond**: And I appreciate that.

**Bickford**: Any other question for the applicant?

**Diamond**: I do believe that the landowner does want to speak Do you want him to speak now or afterwards?

**Bickford**: Now is fine.

**Dorrier**: I have a question. It would go to Mr. Davis. How is this is related to the other project you had?

Chip Davis: The other project is totally independent. It is on the other side of the property away from us. When we were approached by the two companies, originally, we decided to go with two companies rather than going with one, figuring that one might get it and one might not. And right now, we don't know what's going on apex. The other company is still proceeding with surveying, they've done testing, things like that. But it's a lot of this is laying up into the hands of Dominion Power right now. Dominion Power has what they call a queue. And it's a waiting list and a lot of jockeying around for positions and different things like that. So right now, we just don't know We hope we might be able to get one. We got two as a home run, but you know, just that's what we want because so like us there before when we did the other, we feel that this community solar is something that benefits our county benefits to citizens, the taxpayers, it will put money into the tax coffers. And it also will help us maintain and keep our farm in the family for another generation. And now we're working on the fifth generation, and we hope that maybe you can keep on going. So farming is not a extremely profitable business, then this is something that would help in total operation of our farm.

Allen: Is this right across the road from where the Amish got the new building?

**Davis**: Yes, sorry. It's back over there in the woods. itself back over in the back. It's all third cut chestnut oak in there.

**Bickford**: Mr. Diamond the hookup would be to the same line on 60? That same line that the other solar farms look into.

**Diamond**: Yeah, so the shared solar does stay at the distribution network. So it would go into the line, the three phase line on the road.

**Bickford**: Very good. Figured that was gonna be the case. All right, commissioners, any other?

**Dorrier**: Chip, I was wondering, does this involve 550 acres or so that we had before or?

**Davis**: No this, this is a different farm. Mrs. The Word farm.

**Dorrier**: So its not part of your farm?

**Davis**: Yeah, it's different. As years went by, we just bought our neighbor's. It's a totally different track property. It's on the other. It's on the western side of the farm.

**Dorrier**: Okay, that's what I was wondering, because if you know how you would incorporate what you we've already passed with you and then go into this.

Davis: Two different animals.

**Bickford**: Any other questions? Normally Mr. Diamond, and this was up to the Commission will be normally require that you have a community meeting, and will probably be sometime next

month to be scheduled. I assume that the commission would like to have that before we move to public hearing, and give time to study the information you get. So what we would do is a table it for now, you have your community meeting chip can help you arrange that I assume that at the community center there in Dillwyn, and then come back in September, and we go over, perhaps offer additional questions, but also the responses you get from the citizens around. And then decision would be made to either move forward on a public hearing or or whatever.

**Diamond**: So if I coordinated that with a couple of weeks' notice to landowners and got that report to you guys before the August meeting?

**Bickford**: If you think you can make that work. I think we'd be fine with that. Yeah. If it's possible, this might be a little difficult. But if you can, yes.

**Diamond**: Well, and so and this isn't on, it's just I I'm very open and just this open question for you guys. So if I get to work this week, coordinate it, give people a couple of weeks, finish up the meeting, get stuff over to Nicci to get in your hands, you know, we I have about four to five weeks? Is a couple of weeks ahead of time sufficient? Or should I wait till September?

**Bickford**: Well, Nicci, how? you would have to incorporate that into the book, or at least our notes or some stuff here. So would that give you time, and still have time for the public notice?

**Edmondston**: Probably not. And I wanted to point out the case that we introduced another solar case last month, and they were not moved forward to a public hearing because it was a request that they hold their public meeting. It was not held until July 19. I do have an update of that and that it was held was community meeting at the community center. I have to put this to the paper for two concurrent weeks prior I don't know that it was just a two week time period that just for logistics, you'd be able to schedule a meeting, make the community aware of the time location and the need to appear and still hold a public hearing August 28. I don't know that it's fair, if we're looking at fairness to the citizens for awareness.

**Bickford**: Yeah, two weeks would make it the 13th that doesn't give me a lot of time.

**Diamond**: Yeah. And that's why I bring it up. It's an honest question. So rather than trying to rush it through, why don't we just plan to have you back in September?

**Diamond**: Sounds good.

**Bickford**: We'll make a decision at that point, public hearing or whatever. It will put you back 30 days behind what you plan, but I think it would be a proper thing to do.

**Diamond**: Absolutely.

**Bickford**: Any other commissioners have anything?

**Kapuscinski**: Mr. Chairman, I got a couple of comments. The first is pretty basic. And I'll go back to what Mr. Allen said, Mr. Allen has said the supervisor Elon has said that the county has yet to come up with a specific policy, that concerns me. And what we're doing is we're piecemealing these things together, we, you know, we got a request for 1000 acres, a quest for 1100 acres. Another, we've got one that's set up for 2000 acres, there's a potential one out there. I mean, we're doing 500 acres already for Mr. Davis. And by the way, we're not even sure about the success of that, because as you mentioned, you don't know what dominion is going to do. So there's that's still up in the air. I really think we're doing the county, the people in the county and these people who want to provide the service, a disservice by moving forward without first having the board, tell us specifically what they want to do. I would really like to see a plan, a solar land use plan to tell us we actually have 4500 acres or 5000 acres, so that we know what we're working with, because right now, just talking to you and listening to what you have to say, I don't know, I don't know what I can improve here. I don't know what I should approve, because I don't know what the county plan is, other than, you know, a supervisor, Allen saying that we're tentatively looking at 4500 acres. I just think that's too loose. For us to move ahead. I would, I'm all in favor of having more information from you, I, I enjoyed the presentation. But honestly, it puts us in a real precarious position. If we don't have something from a county that says, This is our policy. And I just, I'm hoping maybe we can convince the board by them to give us something to work with. But right now we don't have anything to work with. And it falls back on our shoulder to either put this thing out for public hearing, and then on to the board. And we don't have any, there's no basis for it. We don't have a policy to work with. So I'm reticent to say we should move forward with it.

**Bickford**: Well, I understand your concerns. But this is a application and we have to proceed on with it. Now. It will, whatever we do, if it does go to the board of supervisors, they have the right to make a decision. but as a commission, this application has come before us and we have to proceed on it. Because we don't have a defined policy. I'm not disputing, I'm saying our responsibility is to continuing on with this application. And then a board of supervisors will have to you know, if it gets that far, they'll have to make it.

**Kapuscinski**: So he's got another 500 acre parcel. That apparently there's some issues with right now. We went ahead and prove that. All right, it went forward. Now there's another 163 acres on that same farm in a different parcel. And we're getting another proposal, we don't even know how successful the first proposal is going to be. And I we're doing is we're throwing this stuff up in the air. It just doesn't make any sense to me. I mean, it's a bit frustrating, not just because we don't have a specific policy to work with. But we don't even know how the first one is going to turn out. And we're already looking at a second one on the same large parcel of land.

**Bickford**: Understand that. Again, that's an application that's before us. And we need to address it. But I do understand your concern. Yes, Mr. Diamond?

**Diamond**: Do you want me to cover what the interconnection process is like for shared solar project? Would that be helpful?

**Kapuscinski**: The point I understand is the Dominions not moving ahead on the 500 acres and the other 20 acre, maybe you can tell me something about this. Mr. Davis,

**Davis**: What's going on is they're in the process of surveying the property, doing all the testing, boring things like that. And right now they're waiting on Dominion Power to give them to go ahead.

**Kapuscinski**: And is there some is there some concern over a licensing a fee? Or? I mean, you mentioned

**Davis**: Something about a queue is the only thing I know. And maybe you can explain that.

**Diamond**: I can explain that. Yeah, so Dominion, slow rolling, this is in their favor. The reality is, is that shared solar is unique in that it actually creates competition against them. And so without the state requiring this, you generally don't have the choice. So I think Dominion actually is quite decent to deal with. I'm not I'm not speaking down about them, but them taking their time on these to get it right to study the process. I don't think they're in any rush but the process does take approximately nine to 18 months' dependent on the site, the queue level, the amount of people they have working on it. So if you submit a project, and it goes through multiple phases of study, getting a permit, getting your studies done, all of those are working in somewhat concurrency. And so dominion, and I don't have the specifics of it, so I don't want to misspeak. But dominion is likely towards the end of their study process. And once that study process is done, that's going to define what upgrade costs, what upgrades are needed, how much it costs, and all of those pieces. But it is a very lengthy process. And so you start with a land use permit process? Well, before you have that completed, because it's just one of the many things that can hold it up. And when you get to a certain point in that study process, you're committing six figures to a project. And so you generally want to have a, b and c lined up before you go and spend that much money that is not necessarily refundable. And so there's a lot of there's a long timeline, and you start things in certain process, so that you mitigate the overall risk of spending money and not getting a project. But likely, if they're in the phases that he's talking about. Dominion is either very close to or finished up with the study process.

Kapuscinski: I guess I'd like to see where they are before we would even consider another one. Is my point, Mr. Chairman, I'm just I'm having difficulty can even my, my gut tells me we should put this on hold until we hear something about the already approved project that that Mr. Davis has indicated. There's some sort of a hiccup in right now. I mean, I'd like to know what the progress is on that, before we move ahead and even consider something different. I mean, it just doesn't make any sense to me to say we've got one up in the air, and yet we're ready to pass something on to the public. And then onto the board for another one. I mean, if I were sitting on the board, Mr. Allen, I'd say well, why in the world, would you pass it to me because you don't even know what's happening with the first one that you guys approved? And that's only the one concern. The other concern is how much land are we working with? And I think you're right, I think we're getting close to our capacity. If 4500 Acres is the capacity.

**Bickford**: Well, at this point to 4500 isnt an ordinance, it's more of a policy, that was something that the board favored. So it's working, am I correct on that Danny? its really more just a policy, not an ordinance.

**Kapuscinski**: So it's not within our purview?

**Bickford**: As far as a limitation, no, that's for the Board of Supervisors.

**Diamond**: I'm happy to provide more information on where we're at in the process of interconnection for our projects, how that equates to other projects, that you can have a good understanding of what our study process is like. But you're dealing with multiple substations, two totally separate projects. And my hope is that what I'm putting in front of you is a project that has a benefit to the community, has a path towards getting interconnection, and being positive for the community. I can work on getting you really good information on that. I'll get that over to Nicci and she can provide that. I will work on getting that to you.

Kapuscinski: No more questions.

**Bickford**: Anymore questions?

Gooden: Mr. Chairman, thank you. I'm concerned because when a person comes to us with an application, and the application is complete, it's up to us with the information we have now to make that decision. I'm thinking if we go well, they might change it to something else, or we're not sure what they're going to change it to. But we have to make the best decision with the information that we have as it is now. So if they increase it to 4501 or not, but for us not to make a decision based on something that might be changed. I can't, I don't know why we would put it on hold, because they might change it. So that's, that's what's puzzling me that we're waiting on someone else to make a decision. Whereas it's a correct use. And then the other thing is anything that comes before us, we don't know when they're going to be completed. So we can't say that he has to have the other one completed before they put it in another application. Suppose this was for an Airbnb? Do we say, Well, you already had an application for an Airbnb, we can't give you another one. Because we need to wait and see what you do with the other one first. That's what, that's why I'm having an issue with it. They're two separate applications, two separate processes, two separate queues. And for me to say, Well, you've been here before and asked for something else. I want to wait and see what you do with it. I, I can't follow it. They're both correct applications. Chip, I'm not following it.

**Davis**: Can I speak as the landowner? And I don't know anything about how the power companies work or anything, I'm leaving it to them. We went to a lot of trouble to find companies that were very environmentally conscious that we're going to get back to the county, we were going to gain from it, I'd be lying if it wasn't, I have my reasons for doing that. And we're just make an applications. Now. We've asked for this. And we with good intention, and no malice or anything like this not but not I'm being totally transparent. Is this a good application? And needs to go forward? Or is it not? You know, and that's just the way it is, you know, here it

is, we make an application. And like you say, you've approved one, we're bringing you another one, like you say, we hope the other one goes through, we don't know. We don't know whether this one will go through. They've got to complete their project; these companies have got to do it. And this is just one step that's in their way. They got to do this, then they got to go back and do test borings then they got to go back and do conduits under the ground looking for electrical magnetic stuff. They've just been doing all kinds of things, you know. So this is just one step. And that's kind of where we come from it. You know, it's either kind of up or down, move forward or you know.

**Bickford**: Any other comments from the commissioners?

**Edmondston**: Mr. Bickford I'll only add that in the conditions that are presented here this evening for this case, as they were for the the case prior and a few others that have been presented as well. The building permit application has to be submitted within two years of obtaining this special use permit. So maybe Mr. Kapuscinski, this may help you understand that the special use permit is not there forever. If a building permit is not obtained within two years, there is an ability for an extension, it's based upon Administrative Approval, which if the company was unable to obtain that building permit, it gives delays and state permits interconnection approval or other good cause demonstrated by the applicant, they could come back, I would present something to the Board of Supervisors asking the board of supervisors to approve an extension, but it could only be granted for 12 months, which would give a total of 30 months total. So they, if I'm reading this correctly, and maybe I'm not three years total to obtain their building permit. So after the three year process, the within the PJM interconnection process, it's quite lengthy. They have to do a number of years of research and documentation provided initially in order to pass through certain phases, the land use permit, and the locality must be a decision or presented for a decision. If they're not able to obtain an approval, then I would imagine that that could be the end of that particular project, or they would continue the application process with the locality, how they're processed. And that PJM interconnection, you're that is available for public consumption. You actually can Google PJM interconnection, you can see what the projects are in your locality, localities near you where they're ranked, what the megawatt is associated with it and the acreage so you could actually follow a potential project through the PJM interconnection, but this particular project as RWE in last month's prior there, have each passed certain phases within that interconnection, but Please remember when the companies come and any applicant comes, is it a proper use of land and if so, what as a special use permit, there are conditions attached. So if New Energy equity and Buckingham solar one LLC is unable to move through that interconnection pipeline within a three year period, they're not going to be able to obtain a special use permit the permit at that point is null and void. But there is a condition addressing time period for development.

**Bickford**: I appreciate that. We need to make a decision here. The consensus of this commission was I asked him to go ahead and do the public meeting, committee meeting and then we'll see them back for further discussion in September. Do we need that in a motion form?

**Edmondston**: I don't think so. We just ask them we'd place them back on the agenda in September and waiting on it would be a continuation of the introduction September awaiting the information from the community.

**Crews**: One thing on here on the introduction page, it says the applicant is Blue Rock solar and RWE clean energy.

**Edmondston**: Yeah, I addressed that at the beginning I apologize. But thank you for pointing it out again. That's a typo for me. So as I reiterated verbally, this is Buckingham solar one LLC with new energy equity.

**Bickford**: Okay, Mr. Diamond, we'll see you back in September. Thank you for the presentation. Nicci bring us to your reports and building permit report.

Edmondston: Buiding permit report is included for your review purposes. Since we referenced RWE clean energy and the Blue Rock solar project and their community meeting. There was an email received from Natalie Gerber representative of RWE. I did forward that to each of you today, once received, and it just as an update, letting you know that they have hosted their community meeting on July 19. And it was advertised in the Farmville Herald twice, approximately two weeks prior to the meeting and one week prior to the meeting. So concurrent advertisements, one registered attendant, Marie Flowers and RWE displayed poster boards of the site plan as well as the visualization showing various lines of sight. From stagecoach road and Mo Haley road we discussed the location of the project relative to Buckingham, as well as neighboring residences, site characteristics, topography proposed storm water basins, wildlife corridors, all setbacks, including distances for right of way property lines and residences. And that email was submitted by RWE Friday the 21st. I was not here, read that today and forwarded it to each of you this afternoon. So since we spoke about it,

**Bickford**: Okay, thank you. Any other commissioners have anything?

Crews: I mean, I do agree with Pete, that we do need some kind of what the Board of Supervisors wants on acreage wise capacity on the solar stuff, and is it 4500 acres? Well, is it you've approved 4500 acres and 2500 acres of the 4500 they hadn't even completed? So that's like 2500 Acres is tied up that, you know, do you have to wait until their two years is up? If they you know, failed? Before anyone else can apply?

**Bickford**: I just I don't know. We have several ways to look at it. And I think Danny and them have been doing that. Some maybe a better route to take us the number of acres that actually in panels versus the total acres because, well, a perfect example was the first one and Mr. Davis had it was on a 437 acre parcel. But he only had 20 I think it was 20 acres of panels. So there's ways to look at it. I know they said they've been working on that so we can get some clarification.

**Kapuscinski**: Chairman, what you said to us is that our job is land use. Okay. So if the county's already said and I'll address Miss Gooden's comment, if the county's allocated 4500 4500 acres

for land use for putting panels on those on that land, then anything outside that, that would that where an applicant would request the panel would not be appropriate land use. That's my point.

**Bickford**: True but what I was telling you. It's really not a ordinance. It's somewhat of a policy. So typically at this point is not really enforceable because it's, it's not a defined ordinance.

**Kapuscinski**: Because they haven't made it defended.

Bickford: Correct.

**Kapuscinski**: Okay. And that's, I guess my point until they do. We're just throwing arrows into the air.

**Bickford**: I understand but when an application comes before us, we have to hear it. I mean, that's our duty. So I understand what you're saying. I'm just saying our obligations are when a completed proper application come before us, we have to hear and make a decision. Now, if they were to move forward, you know, again to the board then that's when they can say, Well, look, it's exceeding, you know, we've hit this limit. We're closing it down. But I do understand both what you're saying the concerns. Any other? Before we adjourn...

Kapuscinski: One other quick question. Let's go back to I want to just bring it up here. I know we're going to have something to do with the Comprehensive Plan. The reason I asked for that zoning map is because I think an m two, the only the only m two. The only m two districts we have are occupied by mines, if I'm not mistaken, Am I right? Okay. And you know, when we start, it's such a, it's a subject that's so on fire right now. I really would like to see where those are located specifically, when we start talking about, you know, zoning as it relates to the comprehensive plan. I tell you, Mr. Chairman, my, my concern with this whole Goldmine thing is, I think if you think you're going to wait for the state, I think you may as well, what, you probably ought to watch a snail run a marathon. All right. I don't think the state's there to help us. And I really don't think federal government's going to help us. I think what we're going to end up with and I've talked to two legislators, I think we're going to have to do is we're going to have to resolve this in our own zoning, with our own zoning process. Having said that, you know, if we're going to do this through the Comprehensive Plan, which I think is a good idea, I'd like to know specifically where these areas are, so we can talk to them.

**Bickford**: I don't have any problem. And we got some general maps, but they're not as specific as what you're asking. And so I think it's a good idea to get those that dovetails into had several questions in regard to where we stand. After our due diligence on hearing everybody we chose this commission chose to keep with the special use permit on any new mining. Now that even falls in m two district because into district has some that's a one. So it's even going to happen in there. Where we ran into issue was the existing mining operations in m two, and we couldn't come up with. We had some ideas and all but they really fell short of what we thought we could do. Mr. Wright in his presentation has suggested that we take this letter from the board of supervisors to state agencies now I don't know which specific ones He was who He was referring

to. I think it might be more than one. And he's in the process of drafting that now. What he's hoping to get which Pete is probably correct, we won't get into rebuttal, or reply back. But we're trying to get the goldmine committees recommend recommendations to see if we can have any one of the agencies make a make a decision or give us some direction. If we got that it may make our job easy for the existing M 2. He brought up the Civil Rights Ordinance thing and I talked to Mr. Wright, actually earlier today. He is looking into that to see if it's applicable and what he might need to do to draft that up.

**Kapuscinski**: So again, it would probably fall to the board of supervisors?

**Bickford**: Both are for the Board of Supervisors; it will not be the planning commission. So he's going to have to draw those up and work with them. I know the first thing he wants to do is get the letter to see if he gets any response. So we had decided to table all of this as we worked on the comprehensive plan to see if we get any kind of reply until January, at that point will be far enough into the comprehensive plan that then we'll start looking at if we would have take it on our own do it more work with whatever legal thought we got to maybe reduce minimize them to whatever we need to check on that. So that's where we're at. It'll be tabled until January. Seeing if we get any reply response back from whatever state agencies when this letter is sent to them. Will it happen? You know, Pete's probably right? Probably not. So we'll probably be looking at this in January. But in the meantime, any changes, significant changes have to be put into the comprehensive plan anyway. So we work towards that goal, hoping that we get some kind of response. If we don't, and we take it on our own. Right after the first of the year.

**Kapuscinski**: It doesn't necessarily mean that we can't make recommendations on an interim basis. Am I correct?

**Bickford**: Oh, no, in a they way its set up we would do phase one, phase two. He's got it set up. And that's why all these comprehensive plans are working. You start with sections and you go through them, make whatever changes you want, is then kicked to the board of supervisors and back public hearing, and then you move on to the next sections.

Kapuscinski: Okay. Thank you.

**Bickford**: All right. If nothing else...

**Allen:** Do you want to ask EM to come out here and speak to you about that?

**Bickford**: About what?

Allen: The 4500 acers.

**Bickford**: Unless there's a decision to be made, I guess it really no need. I know you all are working on it.

Allen: No decision right now. Because you know, all these places, like you said, hadn't once they get passed and you got 4500, you put them on hold, in my opinion. And then if half of them don't get done, you need to do more acreage.

**Bickford**: That's, that's an avenue. I know, y'all we're also looking at, you know, what is actually in panels, and that that wouldn't make a big difference. For example, tonight he is was on 161 And it only had 24 acres of panels. So it makes big, it makes a significant difference. But that's going to have to come from y'all. And you all are working on it.

**Kapuscinski**: I thought we talked about that last time. And it was essentially the amount of land that was allocated, not necessarily how many panels were put up.

Allen: Right, exactly. Whole land.

**Bickford**: You put it on the contract. I mean, that's the easiest way for these companies to do it. Like Mr. Davis's initial application that was on a 439. So they just you had a plat, you had a tax map parcel. It just made sense to lock it all in. And even though he was only working on 50 acres.

**Kapuscinski**: Right. But the point being if that that 500 acres, not the 20 acres, or whatever it is, is going to come off the allotment, if there ever is a specified allotment. Same with this, it's 163 acres. Yeah, even though he's using 20 acres for panels.

Allen: Right. Exactly. Yeah, that's what's acreage been put down on paper being solar.

**Bickford**: But it is the purview of the board of supervisors to change that policy to, you know, either make it or just keep it at that level, increase that level or change the criteria for how they figured acreage.

**Kapuscinski**: Is there a commission on the board that's working on this? Is there is there something called a solar committee?

**Edmondston**: There is a solar committee.

**Kapuscinski**: Have they done any further work on this?

**Allen**: I mean, I hadn't heard no more lately.

**Bickford**: Do you have any more discussion? Seeing none do i have a motion to adjourn.

\*Inaudible Comment from Crowd\*

**Bickford**: Well, I just told you, I don't know exactly where Mr. Wright plans to direct the letter that the Board of Supervisors are gonna endorse. He just said state agencies. I don't know. I think

he's probably looking at more than one agency to try to see if you can get any kind of response. I don't know. Like I said, he's in the process of drafting out for the board of supervisors to send on to whatever committees.

\*Inaudible Comment from Crowd\*

**Bickford**: Right. I do think he's trying to represent the recommendations that Heidi was on a gold mining committee, because they made recommendations, but he's just never been apparently never been addressed. But as far as what exactly. I don't know yet.

\*Inaudible Comment from Crowd\*

**Bickford**: That's was my understanding, but I'm sure once he has it finalized the board has approved it. I'm sure he'll probably put it out there and you know exactly where it's plans to go. With agencies.

\*Inaudible Comment from Crowd\*

**Bickford**: I can't speak to the specifics because he's dragged himself. I know he wants to. He had mentioned trying to incorporate some of the recommendations of your committee you served on. And yes, if it would be very nice if we could get a better definition, metallic, non metallic, but right now they got it all grouped together and as what's best what's impeding all progress, so that yeah, it's a lofty goal, but we tried that. That's what I'll say. Anyway. Okay. I have a motion? All in favor raise rate that we are adjourned.

<u>Supervisor Allen moved, Commissioner Kapuscinski seconded, and was unanimously carried</u> by the Commission to adjourn the meeting.

There being no further business, Ch	nairman Bickford declared the meeting adjourned.
ATTEST:	
Nicci Edmondston	John Bickford
Zoning Administrator	Chairman

# Buckingham County Planning Commission June 26, 2023 Administration Building 6:00 PM Public Hearing Case 23-SUP330 US CELLULAR

Date: August 28, 2023

To: Buckingham County

**Board of Supervisors** 

From: Nicci Edmondston, Zoning Administrator

Re: Public Hearing Case 23-SUP330

Owner/Applicant: Landowner M3 Properties Inc

3294 Doctors Crossing Charlottesville VA 22911

Applicant US Cellular, Agent Emilee Lauer

5221 Valleypark Dr, Suite 1B

Roanoke VA 24019

**Property Information:** Tax Map 14, Parcel 59, containing approximately 44.98 acres, located at or near 2462 Axtell Road Scottsville VA 24590, 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.

Background/Zoning Information: This property is located at 2462 Axtell Road Scottsville VA 24590, Slate River Magisterial District, Tax Map 14-59, containing approximately 129.29 acres. The landowner is M3 Properties Inc, and the applicant is US Cellular, Agent Emilee Lauer. This property is zoned Agriculture (A-1). The Zoning Ordinance does not permit a Communications Tower as a Permitted Use. However, Within the A-I 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 there is a preponderance of evidence that

construction of a new personal wireless communications facility in the vicinity of the proposed site is technically justified and is essential for the Applicant to achieve its objective of seamless service in the County. Furthermore, given the rolling nature of the terrain in the County, which presents challenges to personal wireless transmission and reception, CityScape believes the location and height proposed are technically appropriate. The choice of the monopole's color is at the discretion of the County. Therefore, CityScape recommends approval of a new wireless facility with US Cellular as anchor tenant at the proposed location and tower height of one hundred ninety-nine (199) feet. Applicant US Cellular, Agent Emilee Lauer explains this project within the submitted narrative and all submitted application documents.

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

- 1) Prior to permitting, Applicant shall provide a determination of no hazard from the FAA indicating the proposed tower shall not require lighting/marking; 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.

### SPECIAL USE PERMIT APPLICATION CHECKLIST

BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINUMUM 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
Completed application for special use permit (page 3 attached). If not signed by the owner, a Power of Attorney must accompany the application:
Interest Disclosure Affidavit (page 7 attached). Must be signed by the owner: YES NO
<b>Power of Attorney</b> (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
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: VES NO
- B. Area of land proposed for consideration, in square feet or acres: (YES)
- C. Scale and north point: (ES) 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: VES/ 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
6.	Area of land proposed for consideration, in square feet or acres:  VES NO N/A  Scale and north point: (YES NO N/A
/.	Names of boundary roads or streets and widths of existing right-of-ways:  VES 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
	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
	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:
17.	Location of existing and proposed utilities, above or underground: YES NO N/A
	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
	Building architecture: YES NO N/A
22.	Site lighting proposed: YES NO N/A
	Area of land disturbance in square feet and acres: YES NO N/A
	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
	Show impact of development of historical or gravesite areas: YES NO N/A
	A copy of the current status of all real estate taxes of all property owned in Buckingham County.
21.	If real estate taxes are not current, an explanation in writing and signed by the average to "
	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: $2/24/2023$
Special Use Permit Request: <u>Reguesting approval</u> for the purposed
195' monopole with 4' lightening rod
Purpose of Special Use Permit: To build a new wireless telecommunications
facility
Zoning District: A-1 Number of Acres: 129.29
Tax Map Section: 14 Parcel: 59 Lot: Subdivision: Magisterial Dist.: Slate River
Street Address:Axtell Rd  Directions from the County Administration Building to the Proposed Site:
2462 Axtell Rd. Scottsville
Name of Applicant: US Cellular Mailing Address: 5221 Valley park Dr. Suite 1B, Roanohe, VA 24019
Daytime Phone: Cell Phone: Cell Phone:
Email: Emilee @ odps-inc. com Fax:
Name of Property Owner: M3 Properties Inc  Mailing Address:  3294 Doctors Crossing, Charlottesville, VA 22911
Daytime Phone: Cell Phone: <u>434 - 531 - 3031</u>
Email: Shane @ m3-inc. net Fax:
Signature of Owner: Date: 2-15-2023
Signature of Applicant: <u>Eurill Journ</u> Date: <u>2/24/2023</u>
Please indicate to whom correspondence should be sent: Owner of PropertyContractor Purchaser / LesseeAuthorized AgentEngineerApplicant

### 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: <u>Jeffrey Valley</u>
Mailing Address: PO Box 2528 Prince George, VA 23875
Physical Address:
Tax Map Section: Parcel: Lot: Subdivision:
2. Name: Travis + Spencer McCauly
Mailing Address: 302 Quail Ridge Dr. Forest, VA 24551
Physical Address:
Tax Map Section: Parcel: Lot: Subdivision:
3. Name: <u>Jeffery Braun</u>
Mailing Address: 6 Rockwood Ln. Palmyra, VA 22963
Physical Address:
Tax Map Section: 14 Parcel: 46 Lot: Subdivision:
4. Name: Vernetta Chesimord
Mailing Address: 444 Centra Park W, New York, NY 10025
Physical Address:
Tax Map Section: 14 Parcel: 48 Lot: Subdivision:

6. Name: Travis + Spencer Mc Cauley
Mailing Address: 302 Quail Ridge Dr. Forest, VA 24551
Physical Address: 2462 Axtell Rd, Scottsville, VA
Tax Map Section: Parcel: Lot: Subdivision:
7. Name: Edward Logan
Mailing Address: 39 Welkington Ave, Chester, PA 19013
Physical Address:
Tax Map Section: Parcel: _5O Lot: Subdivision:
8. Name: EM Jr + Betty Wright (Attn. Annie Parc)
Mailing Address: 473 Texas School Rd, Winging, VA 24599
Physical Address:
Tax Map Section: 14 Parcel: 57 Lot: Subdivision:
9. Name: Jeffrey Oahley
Mailing Address: PO Box 2528, Prince George, VA 23875
Physical Address:
Tax Map Section: 14 Parcel: 65 Lot: Subdivision:
<b>10.</b> Name:
Mailing Address:
Physical Address:
Tax Map Section: Parcel: Lot: Subdivision:
<b>11.</b> Name:
Mailing Address:
Physical Address:
Tax Map Section: Parcel: Lot: Subdivision:

#### ADJACENT PROPERTY OWNERS AFFIDAVIT

STATE OF VIRGINIA **COUNTY OF BUCKINGHAM** This \_\_\_\_\_\_ day of \_\_\_\_\_\_, year \_\_\_\_\_\_, (printed name of owner/contract purchaser/authorized agent) hereby make oath that 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 15th day of FEBRUARY, of the year 2023 R. Shave Maeshall (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 Subscribed and sworn to me on this \_\_\_\_\_\_\_15\*\*\* of the year 2023. My commission expires \_ Notary Public Signature: \_\_ Stamp: William Lyster Commonwealth of Virginia Notary Public Commission No. 7821369

# CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR PENDING DEVELOPMENT APPLICATIONS

## See next page.

## **APPLICATION FOR A TRAFFIC IMPACT DETERMINATION**

Please fill out the following information before presenting to VDOT:



## COMMONWEALTH of VIRGINIA

# DEPARTMENT OF TRANSPORTATION 4219 CAMPBELL AVENUE LYNCHBURG, VIRGINIA 24501-4801

Stephen C. Brich, P. E. COMMISSIONER

REV: 2/16/2018

	DATE ISSUED: 10-31-22
APPLICANT U.S. Cellular Corp. NAME	
5221 Valley pork Drive. Sur	4 13
Roanok VA 24019 CITY STATE ZIP CODE	
(S40)561- 2277 PHONE NUMBER	
LOCATION 627 ROUTE	COUNTY
A Low Volume Commercial Entrance exist Volume Commercial Entrance has been prestandard.	ts leading to the above noted property. The Low eviously permitted and/or is constructed to
WITNESS the following signatures and sea	als:
Owner Signed	(Seal)
VDOT Representative	(Seal)
Agent for County	Date_
Note: This may be presented to the County date issued.	only once and expires sixty (60) days after the

VirginiaDOLorg WE KEFP VIRGINIA MOVING

#### SPECIAL POWER OF ATTORNEY AFFIDAVIT

STATE OF VIRGINIA COUNTY OF BUCKINGHAM
On this 15th day of FEBRUARY in the year of 2023
(printed name of landowner) the owner of 14-59 (Tax Map Number)
Hereby make, constitute, and appoint
my true and lawful attorney-in-fact, and in my name, place, and stead give unto him/he 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 feet 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):  R Sel Malel
NOTARY PUBLIC County of Albertale State of Virginian  Subscribed and sworn before me on the 15th day of February
Subscribed and sworn before me on the day of February
in the year 2023 . My commission expires 9/23 (2023  Signature of Notary Public:  Stamp:  William Lyster  Commonwealth of Virginia  Notary Public  Commission No. 7821369
My Commission Expires 9/30/2023

## See next page.

#### 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 purposed wireless facility will work with all aspects of the County Comprehensive Plan to ensure the use of land is preserved. The facility will support residents' needs to provide better coverage to communicate. Given the strong agricultural use of the area measures have been taken to make the design fit in with the surroundings per ordinance requirements. This project will not negatively impact the current use of the land or the land surrounding it. Giving todays demand for the increase in technology, this is a crucial development for growth in all areas. This will allow future carriers to collocate on the tower helping to alleviate the chance for more towers in the area, helping to conserve the surrounding landscape. This project will not cause impact to the rural lands in Buckingham County, nor will it impact livestock, rivers, solid waste, water or sewage.

The project design is the least intrusive to help fit in with the surroundings in the area. The new structure will be a monopole style which is the most streamlined. Typically, poles are about 60 inches at the base and taper to around 20 inches at the top. Using original buffers and added landscape it helps reduce the visual impact, while preserving forest lands, parks and open spaces.

Environmental engineers have taken the steps necessary to make sure the new facility will have no negative impact on the historical significance in the area. The plan has met with the standards to preserve any historically significant properties. No rezoning is necessary for this project, all items have corresponded along with the Agricultural district located in the ordinance. This project is designed to be extremely safe for all citizens, houses, schools, etc. Monopoles are designed with breakpoint technology and to fall within their selves in roughly a 40-foot radius.

A wireless facility is a necessary infrastructure in the 21<sup>st</sup> century. Technology is growing daily and the need for new towers are becoming more and more. The increase in use of towers has caused the demand for more towers to be built, know as capacity sites, to offload the other towers. This also allows for more carriers to come into the area, giving residents more choices to cut down on prices.

Tower is designed to house 6 total carriers. This gives plenty of space to allow the County to collocate their Emergency Services antennas as well. With the increase in their antennas, it gives more coverage for emergencies located in the community. Law enforcement and Rescue need the best given coverage to be there for anyone in need at any given time. The biggest providers in the area will all benefit with the purposed tower to better expand their services for their customers.

Increase in service allows those who are traveling, in case they break down or just need a better signal to their GPS, to get the information they need or make calls. Majority of people use a GPS to travel and navigate. Telecommunications is an important role to making every day life function as it should. Residential or businesses revolve around these technologies in order to live, make money, and communicate.

#### 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: Zuile Sau

Date: 2/24/23



## COMMONWEALTH of VIRGINIA

#### DEPARTMENT OF TRANSPORTATION 4219 CAMPBELL AVENUE LYNCHBURG VIRGINIA 24501-4801

Stephen C. Brich, P. E. COMMISSIONER

COMMISSIONER	
	DATE ISSUED: 7-25-23
APPLICANT	
Cl. S. Cellalar Corp.	
5221 Valleypark Drive S	alte 13
Roanoke VA 24019 CITY STATE ZIP CODE	
640) 561-3277 PHONE NUMBER	
LOCATION 627 ROUTE	014-BUCKING HAM
A Low Volume Commercial Entrance exist Volume Commercial Entrance has been pr standard.	ts leading to the above noted property. The Low eviously permitted and/or is constructed to
WITNESS the following signatures and sea	ils:
Owner Signed	(Seal)
VDOT Representative	20
Agent for County	Date
Note: This may be presented to the County	only once and expires circus(CO)

Note: This may be presented to the County only once and expires sixty (60) days after the date issued.

REV: 2/16/2018



2423 S. Orange Avenue, #317 Orlando, FL 32806 Tel: 877.438.2851 Fax: 877.220.4593

June 20, 2023

Ms. Nicci Edmondston Zoning Administrator County of Buckingham 13380 W. James Anderson Highway Buckingham, VA 23921

Applicant/Provider: Old Dominion Professional Services, Inc. / US Cellular Corporation

**Provider Site Name/Site Number:** Axtell / 466372 **Site Location:** Axtell Road, Scottsville, VA 24590

**Latitude:** N 37° 43′ 43.949″ **Longitude:** W 78° 34′ 48.598″

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 Old Dominion Professional Services, Inc. on behalf of US Cellular Corporation (collectively "Applicant" or "US Cellular"), 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 US Cellular and five other future collocations. The subject property, which is zoned A-1 Agricultural and is 129.29 acres, is owned by M3 Properties. The proposed tower would be located about 0.36 mile north-northeast of the intersection of Axtell Road and County Highway 698, west of the community of Centenary in Buckingham County, *see Figure 2*. The Applicant's propagation maps indicate that the area west of the existing US Cellular facility in Centenary (4.53 miles east of the proposed facility) currently has no indoor coverage and little mobile coverage from US Cellular and that the proposed US Cellular tower would add robust indoor and mobile coverage to the area. 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,



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• Weather 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".

For a new wireless communications facility to be justified, its need, location and height must be addressed by the Applicants. 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 <u>and</u> 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

In addition to adding macro cell sites to resolve coverage gaps, as more wireless devices are deployed, capacity issues become the limiting factor. As the population grows and the number of wireless devices sharply rises, more *localized* wireless sites will be needed. This will involve the construction of additional wireless facilities that may overlap signal footprints with the provider's existing facilities. These 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. The US Cellular Radio Frequency (RF) Engineer's affidavit states only the need for more capacity in the area and does not specifically mention the need to fill a void in signal coverage. Although there may be a genuine need for more capacity, no supporting engineering documents such as "best sector" maps and capacity utilization charts are included in the application. Nevertheless, it is evident to CityScape that the primary purpose of the proposed facility is to bring new and improved macro-site US Cellular connection service to the area.

#### Evidence of Need for the Proposed Facility

The Applicant provided an engineering affidavit from a US Cellular RF Engineer, dated March 29, 2023. The affidavit includes the following:

- A statement that the proposed tower height of one hundred ninety five (195) feet "is the minimum height required to fulfill the design criteria." Given the service void depicted on the pre-construction propagation map, CityScape considers this assessment reasonable.
- Propagation service maps for pre-construction and post-construction conditions, (see **Figures** 3-A and 3-B).



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• Addressing possible collocation as an alternative, the following statement is made: "There are no nearby existing tower facilities to consider. The closest is over 8 miles away. At such a distance, [US Cellular] would be unable to properly fulfill our goals in the target area. The RF signals would not be able to propagate far enough to have any impact." CityScape believes this statement to be fundamentally true. Apparently US Cellular, in making this statement, did overlook the new Verizon tower in Howardsville that was recently approved and is either about to be built or has already been built. However, the Howardsville site is 2.87 miles west of the proposed site and CityScape believes this site is too far west for US Cellular to achieve its coverage needs. In addition, there are two existing towers less than eight miles from the proposed site; one is 4.53 miles east of the proposed site and the other is 5.37 miles southeast. US Cellular already operates facilities at these two towers ("Centenary" and "Maxey's Creek"), so adding equipment to either of them would be of no value.

US Cellular also provided its search ring map for this project, which appears to be the same document that was submitted to site acquisition staff. Due to many factors (engineering and otherwise) affecting the selection of a site for a new wireless facility, any search ring from a provider is more of a guideline than a hard boundary. In any case, the proposed site is verified by CityScape to be in the search ring area. CityScape does not require any additional supporting engineering information from US Cellular in order to make a determination of the necessity of the proposed facility.

#### 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. 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 US Cellular stating that the proposed facility will be designed "to comply with FCC requirements regarding interference and emissions" and "that if ... interference, however likely, were to occur [to other services], US Cellular recognizes its responsibility to under Section 22.352 of the FCC Regulations, to act promptly to remove the interference."

According to the Applicant's application documents, the proposed US Cellular antennas would be at an elevation of one hundred ninety (190) feet above ground; the remote radio units and over-voltage suppressors 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 would equate to a 219-foot spacing from the tower to the property line. The Code does allow for the use of "breakpoint technology" for a lesser setback and the Applicant is showing approximately 696-feet to the closest



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property line<sup>1</sup> Attached to the application is a letter from Sabre Industries, dated January 27, 2023, (see *Figure 4*), stating that in the event of catastrophic failure of the tower due to high winds, the tower will fall to the ground within "a fall radius less than or equal to 40 feet". This statement implies the breakpoint would be at the 155-foot elevation on the tower, but Sabre's letter does not provide a statement to that effect.

The equipment compound is proposed to be a fenced-in area of forty-by-forty (50 x 50) feet and would enclose the monopole and ground equipment, (see *Figure 5*). A six-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 layout drawing shows three (3) ten-by-fifteen (10 x 15) foot areas meant for equipment space for five future collocators.

The County has the right 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 environment. 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 5).

The Applicant submitted a letter from the US Cellular RF Engineer stating the following:

"[A] concealed monopole is not a feasible option for this location and scenario. Concealed monopoles make it difficult to mount radios in a manner that ensures optimal coverage and performance. Additionally, there is also the possibility of the radios overheating inside of the canister, which is a concern for reliability and longevity."

It is true that most wireless equipment designs require a certain amount of space between antennas that do not lends themselves to be confined to monopole "canisters". If there is a possibility of the remote radio heads (RRUs) overheating, a possible solution is to place them in the ground equipment compound instead of inside a concealed monopole. However, RRUs are best placed in the air as close to the antenna as possible because placing the RRUs on the ground reduces the distance the signal can travel from the antenna.

The Applicant apparently did not notify the Federal Aviation Administration (FAA) on an FCC 7460-1 form of the proposed tower, instead using the FAA's Notice Criteria Tool and FCC's TOWAIR on-line applications which indicated that notification to the FAA would not be required for the proposed location at 199 feet tower height. At any height equal to or above 200 feet, and in some cases at heights below that, structures are required to be equipped with aviation obstruction lights. According to an Opinion Letter from Wireless Applications Corporation dated September 13, 2022, the proposed tower would not have aviation impacts to the nearest aviation facilities. However, these favorable findings are not conclusive. The Applicant should obtain and submit an FAA Determination of No Hazard at 199 feet stating that no lighting and marking are required. If, as expected, the tower does not require such

<sup>1</sup> See Site Plan, Sheet C-1 of Zoning Drawings by Tower Engineering Professionals, Revision 3, Dated 3/29/23.



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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 February and June 2023. During that time, CityScape deemed the original submission and five subsequent re-submissions incomplete due to missing documentation as required by the County Code. The application was finally deemed complete on June 7, 2023.

#### **Summary**

CityScape concludes there is a preponderance of evidence that construction of a new personal wireless communications facility in the vicinity of the proposed site is technically justified and is essential for the Applicant to achieve its objective of seamless service in the County. Furthermore, given the rolling nature of the terrain in the County, which presents challenges to personal wireless transmission and reception, CityScape believes the location and height proposed are technically appropriate. The choice of the monopole's color is at the discretion of the County. Therefore, CityScape recommends approval of a new wireless facility with US Cellular as anchor tenant at the proposed location and tower height of one hundred ninety-nine (199) feet.

If the County elects to approve the new wireless facility, it should do so with the following conditions:

- 1. 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,
- 2. 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,
- 3. 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. 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.

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.



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Respectfully submitted,

B. Benjamin Evans

Senior Project Engineer

CityScape Consultants, Inc.

Susan Rabold

Project Manager

CityScape Consultants, Inc.



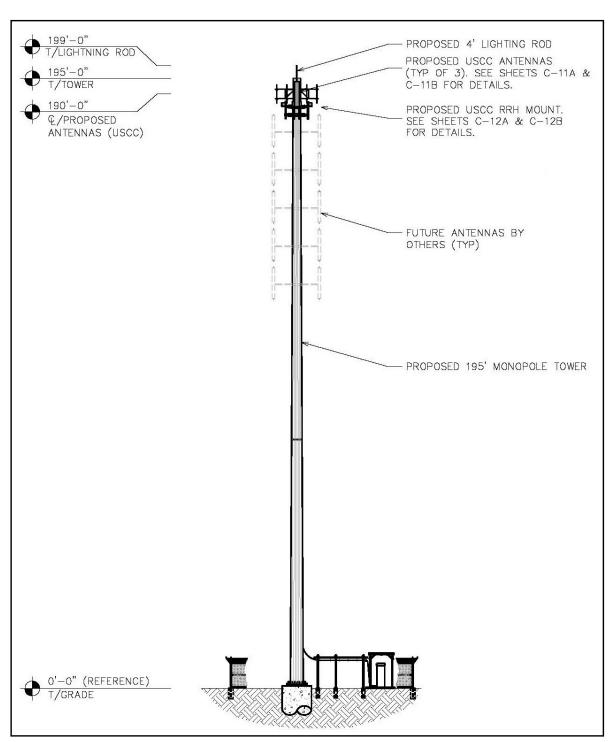


Figure 1. Tower Elevation Sketch





Figure 2. Vicinity Map of Proposed Facility Location (Google Map)



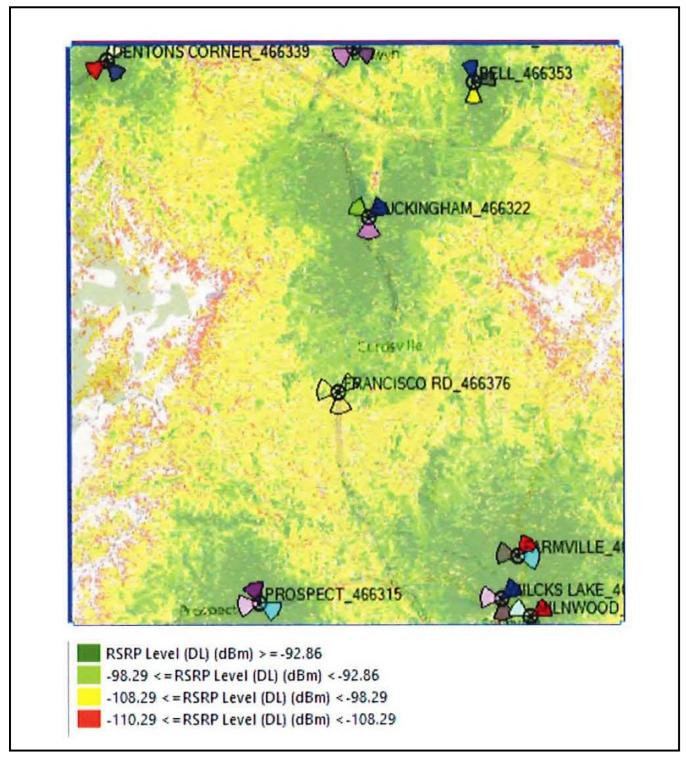


Figure 3-A. Propagation Map Showing Existing US Cellular Service Areas



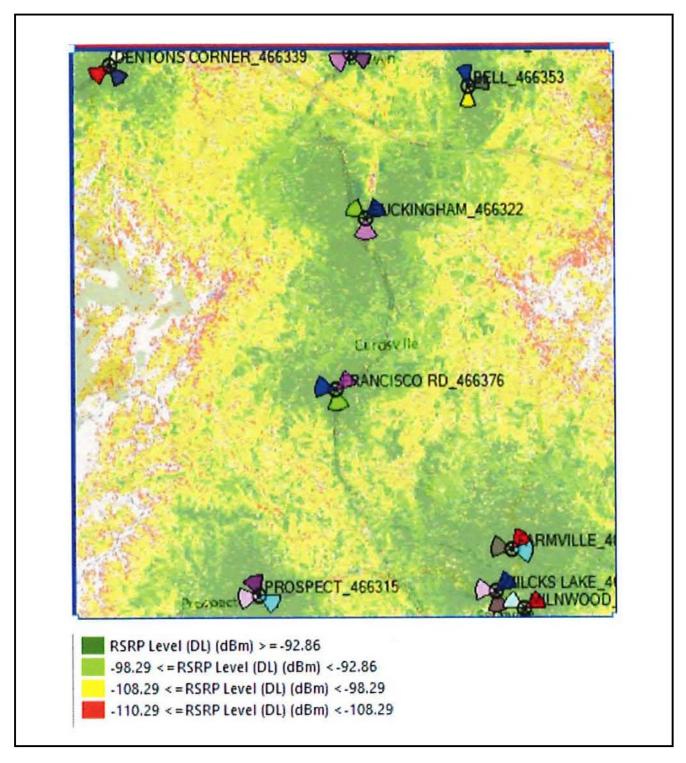


Figure 3-B. Propagation Map showing USC Service Areas Post-Construction



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January 26, 2023

Mr. Jon Scarborough US Cellular Corp 3806 Thirlane Road Northwest Roanoke, VA 24019

RE: 190' Monopole for #466376 Francisco Road, VA

Dear Mr. Scarborough,

Upon receipt of order, we propose to design and supply the above-referenced monopole for an Ultimate Wind Speed of 110 mph without ice and 30 mph with 1.5" ice, Risk Category II, Exposure Category C, and Topographic Category 1, in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-H, "Structural Standard for Antenna-Supporting Structures and Antennas and Small Wind Turbine Support Structures".

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors. Therefore, it is highly unlikely that the monopole will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within the monopole shaft, above the base plate. Assuming that the wind pressure profile is similar to that used to design the monopole, the monopole will buckle at the location of the highest combined stress ratio within the monopole shaft. This is likely to result in the portion of the monopole above leaning over and remaining in a permanently deformed condition. *Please note that this letter only applies to the above-referenced monopole designed and manufactured by Sabre Industries.* This would effectively result in a fall radius less than or equal to 40 feet.

ic. No. 42123

Sincerely,

Amy R. Herbst, P.E. Senior Design Engineer

Sabre Industries, Inc. • 7101 Southbridge Drive • Sioux City, IA 51111 P: 712-258-6690 F: 712-279-0814 W: www.SabreIndustries.com

Figure 4. Fall Zone Structural Letter



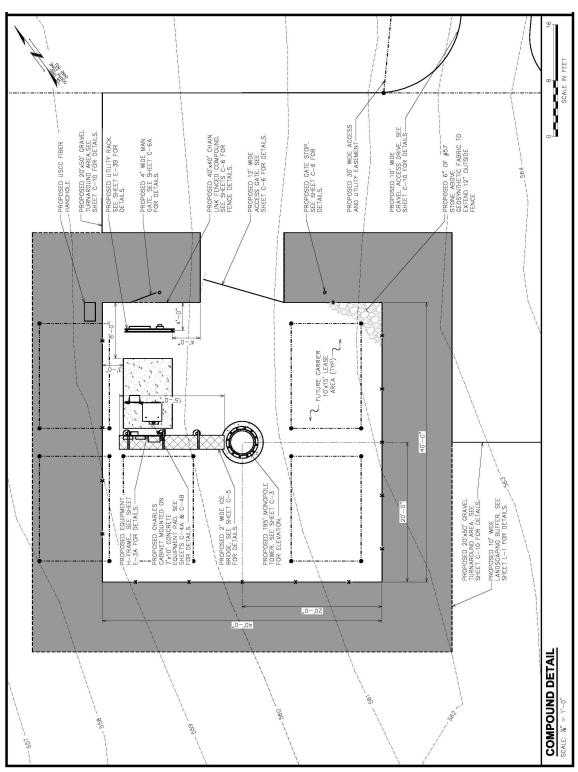


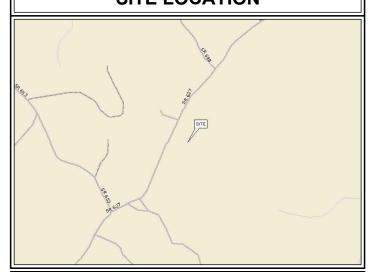
Figure 5. Ground Compound Detail

#### **STATE LOCATION**





#### SITE LOCATION



#### **DRIVING DIRECTIONS**

FROM RICHMOND, VA: TAKE PREFERRED ROUTE TO 1-64 W. KEEP FROM RICHMOND, VA: TAKE PREFERRED ROUTE TO 1-64 W. KEEP RIGHT AT THE FORK TO CONTINUE ONTO 1-64 W. TAKE EXIT 167 AND TURN LEFT ONTO STATE RTE 617. TURN RIGHT ONTO US-250 W. TURN LEFT ONTO STATE RTE 632. TURN LEFT ONTO VA-396 S. TURN RIGHT ONTO US-522 N THEN CONTINUE STRAIGHT ONTO VA-6 W. TURN RIGHT ONTO STATE RTE 652 THEN TURN LEFT ONTO VA-20 S. TURN RIGHT ONTO STATE RTE 678 THEN TURN LEFT ONTO STATE RTE 627. THE SITE WILL BE ON THE LEFT IN 1.6 MILES.

#### **PROJECT TEAM**

#### PROJECT CONTACT:

U.S. CELLULAR CORPORATION 5221 VALLEYPARK DRIVE, SUITE 1 B NAMF **ADDRESS** ROANOKE, VA 24019 JON SCARBOROUGH CITY, STATE, ZIP (540) 561-2277

#### **TOWER OWNER:**

NAME U.S. CELLULAR CORPORATION **ADDRESS** 5221 VALLEYPARK DRIVE, SUITE 1 B CITY, STATE, ZIP ROANOKE, VA 24019 CONTACT

JON SCARBOROUGH (540) 561-2277

#### **CIVIL ENGINEER:**

TOWER ENGINEERING PROFESSIONALS, INC. 326 TRYON ROAD RALEIGH, NC 27603–3530 TYLER D. SHENK, P.E. NAME ADDRESS CITY, STATE, ZIP CONTACT (919) 661-6351

#### **ELECTRICAL ENGINEER:**

TOWER ENGINEERING PROFESSIONALS, INC. 326 TRYON ROAD RALEIGH, NC 27603-3530 TYLER D. SHENK, P.E. (919) 661-6351 CITY, STATE, ZIP CONTACT PHONE

## PROPOSED 195-FT MONOPOLE (199-FT OVERALL HEIGHT)

## **AXTELL**

SITE NUMBER: 466372

## QUIET **ZONE SITE**

SITE ADDRESS (E911 ADDRESS T.B.D.):

## **AXTELL ROAD SCOTTSVILLE, VA 24590** (BUCKINGHAM COUNTY)

#### **INDEX OF SHEETS**

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C-2	COMPOUND DETAIL	2
C-3	TOWER ELEVATION	2
C-4AB	CABINET & FOUNDATION DETAILS	2
C-5	ICE BRIDGE DETAILS	2
C-6	FENCE DETAILS	2
C-6A	MAN GATE DETAILS	2
C-7	SIGNAGE DETAILS	2
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C-10	ACCESS ROAD DETAILS	2
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C-12AB	RRH MOUNTING DETAILS & SPECIFICATIONS	2
C-13	PLUMBING DIAGRAM	2
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E-3AB	EQUIPMENT H-FRAME & SERVICE RACK DETAILS	2
E-4,5	COMPOUND & EQUIPMENT GROUNDING PLAN	2
E-6,7,8	GROUNDING DETAILS I, II, III	2
N-1	PROJECT NOTES	2

#### **PROJECT INFORMATION**

N 37° 43' 43.949" (NAD '83)\* LATITUDE: W 78° 34' 48.598" (NAD '83)\* LONGITUDE: EXISTING GROUND ELEVATION: 503.1' ± (NAVD '88)

PROPOSED GROUND ELEVATION: 503.4' ± (NAVD '88) \* INFORMATION PER 1-A CERTIFICATION PROVIDED BY BLUE

RIDGE SURVEYING & MAPPING, INC. DATED MAY 9, 2022. 195' MONOPOLE (199' OVERALL) **TOWER TYPE:** 

LOADING TYPE: 4T4R **ACCESS ISSUES:** N/A **GATE COMBO:** 8722

#### STRUCTURAL NOTE

STRUCTURAL STATUS: MOUNT SA - N/A

TOWER SA - N/A

#### SCOPE OF WORK

#### **TOWER SCOPE:**

PROPOSED EQUIPMENT:

(3) DENGYO OCT8-2LX2HX-BW65 ANTENNAS

(3) SECTOR MOUNTS (SABRE P/N: C10857804-5278 OR APPROVED

(4) RRH DUAL MOUNTS (SABRE P/N: C10114260 OR APPROVED EQUIVALENT)

(1) 11/4" HYBRID LINE

(1) RAYCAP RUSDC-6267-PF-48 (ON RRH MOUNT)

(3) NOKIA AHCA RRHs

(3) GROUND BARS (TOWER TOP, TOWER MIDDLE, AND BASE OF TOWER)

(3) POWER JUMPERS FROM RAYCAP TO BAND 2/4 RRHS

(6) FIBER JUMPERS FROM RAYCAP TO BAND 2/4 RRHS

(12) PROPOSED 1/8" JUMPERS FROM BAND 2/4 RRHS TO ANTENNA (3) POWER JUMPERS FROM RAYCAP TO BAND 5 RRHS

(6) FIBER JUMPERS FROM RAYCAP TO BAND 5 RRHS

(12) PROPOSED 1/8" JUMPERS FROM BAND 5 RRHS TO ANTENNA

(3) RET JUMPERS FROM BAND 5 RRHS TO ANTENNA

#### **GROUND EQUIPMENT SCOPE:**

PROPOSED EQUIPMENT:

(1) 7'x10' CONCRETE PAD

(1) CHARLES EQUIPMENT CABINET

(1) ICE BRIDGE (15'-0" IN LENGTH REQUIRED)

(1) RAYCAP RUSDC-6267-PF-48 (MOUNTED ON H-FRAME)

(1) JUNCTION BOX

(1) GROUND BAR ON EQUIPMENT H-FRAME

(1) GROUND BAR ON EQUIPMENT PAD

(1) CAC EQUIPMENT CABINET

(1) MULTI-GANG METER SERVICE RACK WITH TELCO BOX (COORDINATE WITH LOCAL UTILITY COMPANY)

(1) 200A POWER METER & SERVICE ENTRANCE DISCONNECT

(8) 6' UNISTRUTS FOR H-FRAME AND U-BOLTS FOR MOUNTING

(8) 7' UNISTRUTS FOR SERVICE RACK & U-BOLTS FOR MOUNTING

#### SPECIAL REQUIREMENTS:

ANTENNA AZIMUTHS:

CONTRACTOR SHALL VERIFY AZIMUTHS PRIOR TO CONSTRUCTION. CONTRACTOR TO REQUEST RF SHEET FROM CM, DO NOT GO ONLY OFF

#### **UTILITIES:**

POWER COMPANY: CENTRAL VA ELECTRIC COOPERATIVE CONTACT: CUSTOMER SERVICE

PHONE: (800) 367-2832METER # ON SITE: ÙNKŃOWN

TELCO COMPANY: CONTACT: CUSTOMER SERVICE PHONE: (833) 467 - 3472PEDESTAL # NEAR SITE: UNKNOWN

5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

#### **AXTELL** SITE #: 466372

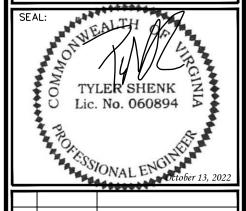
(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



#### TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



2	10-13-22	CONSTRUCTION
	08-19-22	PRELIMINARY
0	07-28-22	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: CHECKED BY:

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

**REVISION:** 

TEP#: 310969

#### NOTES:

- THIS PLAT IS THE RESULT OF A CURRENT FIELD SURVEY.
- 2. THIS IS NOT A BOUNDARY SURVEY.
- 3. LEASE PARCEL LOCATED ON TAX PARCEL #14-59, M3 PROPERTIES, LLC, DEED BOOK 395, PAGE 726.
- ALL TITLE REPORT EXCEPTION ITEMS, THAT CAN BE PLOTTED, HAVE BEEN REVIEWED, AND THEY DO NOT AFFECT THE TENANT LEASED RIGHTS.

#### PROPOSED LEASE AREA LEGAL DESC.

ALL THAT CERTAIN LEASE AREA LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE M3 PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8" ROD SET, SAID ROD HAVING VIRGINIA STATE PLANE, SOUTH ZONE COORDINATES NORTHING: 3788954.74, EASTING: 11459731.74; THENCE S 52°22'58" W 100.00' TO A 5/8" ROD SET; THENCE N 37'37'02" W 100.00' TO A 5/8" ROD SET; THENCE N 52°22'58" E 100.00' TO A 5/8" ROD SET; THENCE S 37°37'02" E 100.00' TO THE POINT OF BEGINNING, AND CONTAINING 10,000 SQUARE FEET MORE OR LESS.

#### PROPOSED 30' NON-EXCLUSIVE ACCESS/UTILITY EASEMENT

ALL THAT CERTAIN NON-EXCLUSIVE ACCESS/UTILITY EASEMENT LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE LANDS OF M3 PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND A PORTION OF THE LANDS OF TRAVIS BRENT McCAULEY AND SPENCER COLE McCAULEY, TAX ID# 14-51, WILL BOOK 155, PAGE 141, DEED BOOK 207, PAGE 710, AND DEED BOOK 199, PAGE 236, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

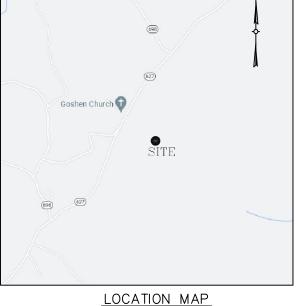
BEGINNING AT A 5/8" ROD SET, SAID ROD BEING S 37°37'02" E 50.00' FROM THE NORTHERN CORNER OF THE PROPOSED LEASE AREA: THENCE N 52°22'58" E 59.82' TO A 5/8" ROD SET IN AN EXISTING GRAVEL ROAD; THENCE WITH SAID ROAD N 50"15'56" W 79.26' TO A POINT; THENCE N 39'46'30" W 67.86' TO A POINT; THENCE N 58'57'40" W 126.27' TO A POINT; THENCE N 42'17'55" W 126.06' TO A POINT; THENCE N 66'46'27" W 57.21' TO A POINT; THENCE N 53'06'04" W 130.13' TO A POINT IN THE SOUTHEASTERN RIGHT OF WAY LINE OF "AXTELL ROAD".

I HEREBY CERTIFY TO US CELLULAR AND WFG NATIONAL TITLE INSURANCE COMPANY THAT THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT FROM WFG NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NUMBER 22110733VA-A. DATED 4-29-22.

5-09-22

#### SCHEDULE B - SECTION IL ITEMS

SCHEDULL D - SECTION II HEMS	3
Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attached, or disclosed between the Commitment Date and the date on which all of the Schedule B, Part I—Requirements are met.	DOES NOT APPLY TO SURVEY
2. Taxes are paid through 2021 Taxes for subsequent periods become a lien not yet due and payable on the first day of the tax period.	DOES NOT APPLY TO SURVEY
3. Rights or claims of parties in possession not shown by the public records.	DOES NOT APPLY TO SURVEY
4. Easements, or claims of easements, not shown by the public records.	DOES NOT APPLY TO SURVEY
5. Encroachments, overlaps, boundary line disputes, or other matters which would be disclosed by an accurate survey and inspection of the premises.	DOES NOT APPLY TO SURVEY
6. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.	DOES NOT APPLY TO SURVEY
7. Taxes or special assessments which are not shown as existing liens by the public records.	DOES NOT APPLY TO SURVEY
8. Matters set forth on Plat entitled Plat recorded October 13, 2009 in Book 375 at Page 194 as Instrument 09-1842.	DOES NOT AFFECT LEASE AREA OR ACCESS/UTIL. EASEMENT



NOT TO SCALE

WEALTH OF NINEALTH OR BRIAN L. SUTPHIN (LICENSE) No. 2679 AND SURV

LINE	BEARING	DISTANCE
L1	S 52°22'58" W	100.00'
L2	N 37°37'02" W	100.00'
L3	N 52°22'58" E	100.00'
L4	S 37°37'02" E	100.00'
L5	N 52°22'58" E	59.82'
L6	N 50°15'56" W	79.26'
L7	N 39°46'30" W	67.86'
L8	N 58*57'40" W	126.27
L9	N 42*17'55" W	126.06'
L10	N 66°46'27" W	57.21'
L11	N 53°06'04" W	130.13

#### FLOOD PLAIN CERTIFICATION

I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 51029C0105B DATED 06/17/2008 AND THE LEASE AREA LIES IN ZONE X (DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHÂNCE FLOODPLAIN)

BENCHMARK

SCALE: 1'' = 80

NORTH: 3788961.55 11459807.24 ELEVATION: 505.31' (NAVD 88) DESCRIPTION: 5/8" ROD

COORDINATE POINT LOCATION CENTERLINE OF TOWER (2C)

NAD 1983 LATITUDE: 37°43'43.949"N 78°34'48.598"W LONGITUDE ELEVATION: 503.1' SITE (NAVD 88) STATE PLANE COORDINATE NORTHING: 3788954.74 EASTING: 11459731.74

US CELLULAR

### **BLUE RIDGE**

SURVEYING & MAPPING, INC. 445 WEST STUART DRIVE HILLSVILLE, VIRGINIA 24343 PHONE 276.728.2022 EMAIL: brsurvey1@gmail.com

SITE NAME:

AXTELL

466372

SITE NUMBER:

S: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY SITE ADDRESS:

S: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY 911 ADDRESS:

AREA: LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:

M3 PROPERTIES, LLC

TAX MAP NUMBER:

PARCEL NUMBER:

SOURCE OF TITLE: DEED BOOK 395, PAGE 726

2C LATITUDE: 37°43'43.949"N 2C LONGITUDE: 78°34'48.598"W

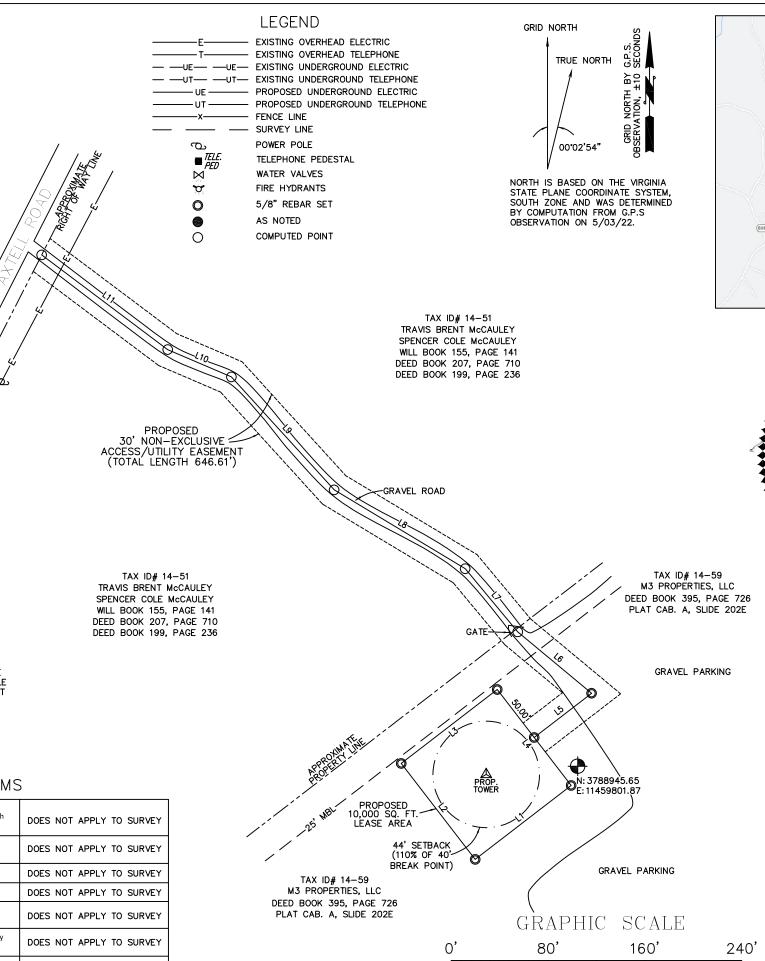
NO. REVISION/ISSUE DATE SURVEY 5/03/22

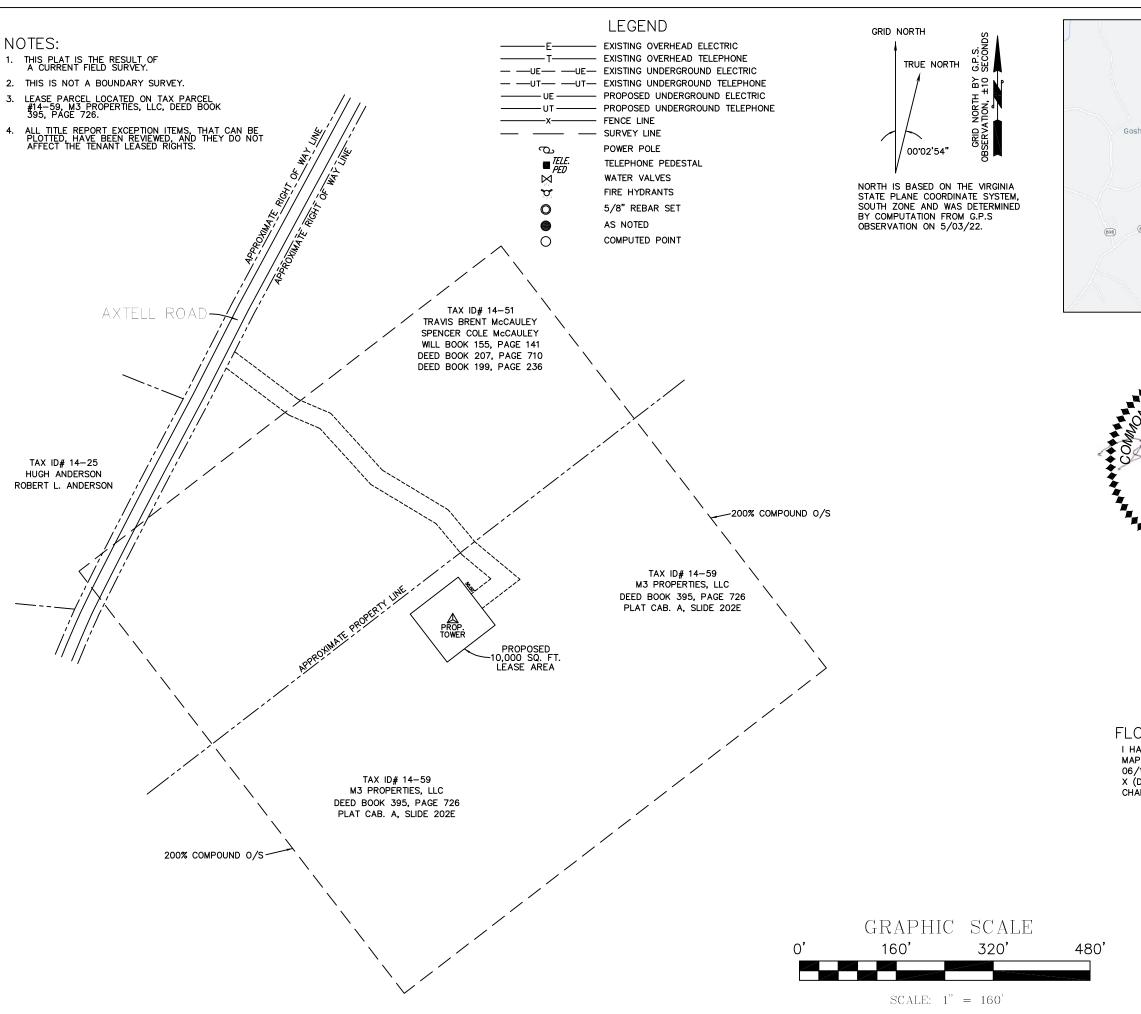
TITLE: SITE SURVEY

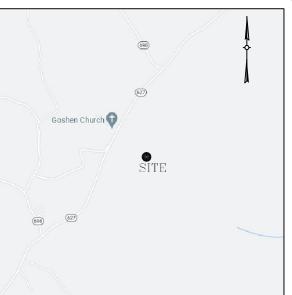
LOCATED OFF "AXTELL ROAD" SLATE RIVER MAGISTERIAL DISTRICT BUCKINGHAM COUNTY, VIRGINIA

SHEET:

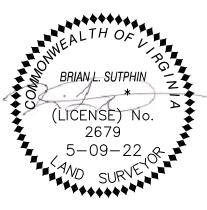
C-2







LOCATION MAP NOT TO SCALE



#### FLOOD PLAIN CERTIFICATION

I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 51029C0105B DATED 06/17/2008 AND THE LEASE AREA LIES IN ZONE X (DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

BENCHMARK

NORTH: 3788961.55 EAST: 11459807.24 ELEVATION: 505.31' (NAVD 88) DESCRIPTION: 5/8" ROD

COORDINATE POINT LOCATION
CENTERLINE OF TOWER (2C)
NAD 1983

LATITUDE: 37°43'43.949"N LONGITUDE 78'34'48.598"W ELEVATION: 503.1' SITE (NAVD 88) STATE PLANE COORDINATE NORTHING: 3788954.74 EASTING: 11459731.74

**US CELLULAR** 

**BLUE RIDGE** SURVEYING & MAPPING, INC.

445 WEST STUART DRIVE HILLSVILLE, VIRGINIA 24343 PHONE 276.728.2022 EMAIL: brsurvey1@gmail.com

SITE NAME:

AXTELL

466372

SITE NUMBER:

S: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY SITE ADDRESS:

911 ADDRESS: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY

AREA: LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:

M3 PROPERTIES, LLC

TAX MAP NUMBER:

PARCEL NUMBER:

SOURCE OF TITLE: DEED BOOK 395, PAGE 726

37°43'43.949"N 2C LATITUDE:

2C LONGITUDE: 78°34'48.598"W

NO.	REVISION/ISSUE	DATE
1	SURVEY	5/03/22

TITLE: SITE SURVEY

LOCATED OFF "AXTELL ROAD" SLATE RIVER MAGISTERIAL DISTRICT BUCKINGHAM COUNTY, VIRGINIA

SHEET:

C-2A

#### **NOTES:**

- 1. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE VIRGINIA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (VA STATE PLAIN, SOUTH ZONE NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON 05/03/2022.
- 2. VERTICAL INFORMATION SHOWN, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88) IN FEET.
- 3. ALL DISTANCES ARE GROUND UNLESS OTHERWISE NOTED.
- 4. THE TOWER IS LOCATED IN ZONE "X." AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #51029C0105B, DATED 06/17/2008.

#### **LEGEND**

EXIST. PROPERTY LINE

---- ADJ. PROPERTY LINE

മ EXIST. UTILITY POLE

→ EXIST. LIGHT POLE

---UGP--- UNDERGROUND PIPE

EXIST. TELCO PEDESTAL

PROPERTY CORNER

LEASE/EASE. CORNER

---200--- EXIST. CONTOUR LINE

EDGE OF PAVEMENT

---OHW--- OVERHEAD WIRE

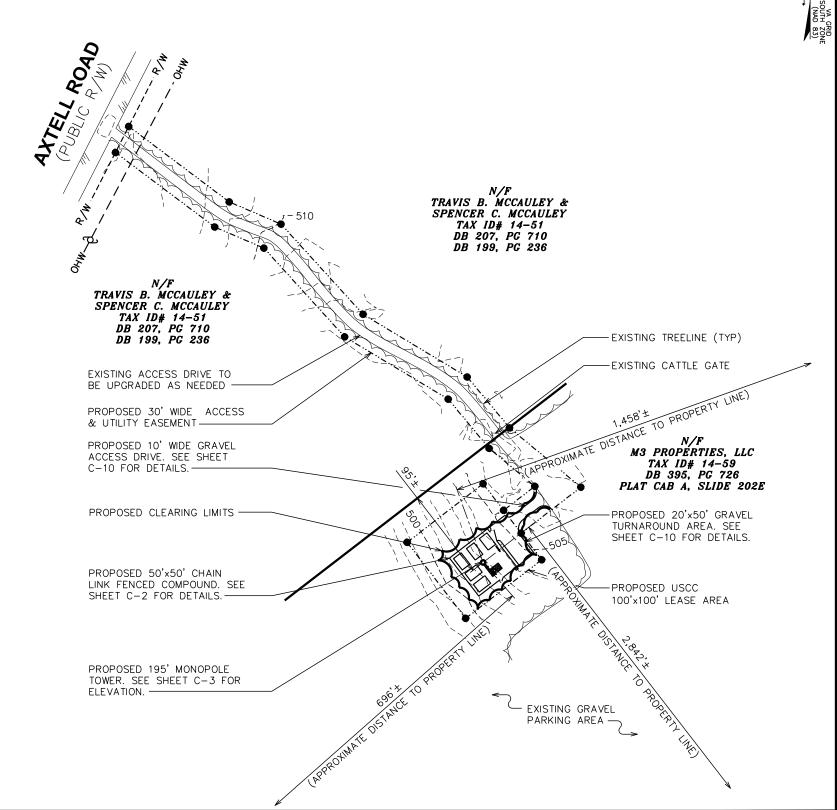
---R/W--- RIGHT-OF-WAY

— X — CHAIN LINK FENCE

EXISTING TREE LINE

SITE PLAN

SCALE: 1" = 100'



PLANS PREPARED FOR:

\*\*Suscellular.

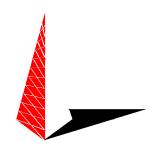
5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

## **AXTELL SITE #: 466372**

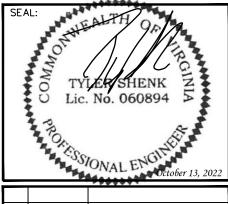
(E911 ADDRESS TBD)
AXTELL ROAD
SCOTTSVILLE, VA 24590
(BUCKINGHAM COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



2	10-13-22	CONSTRUCTION
- 1	08-19-22	PRELIMINARY
0	07-28-22	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

**SITE PLAN** 

SHEET NUMBER:

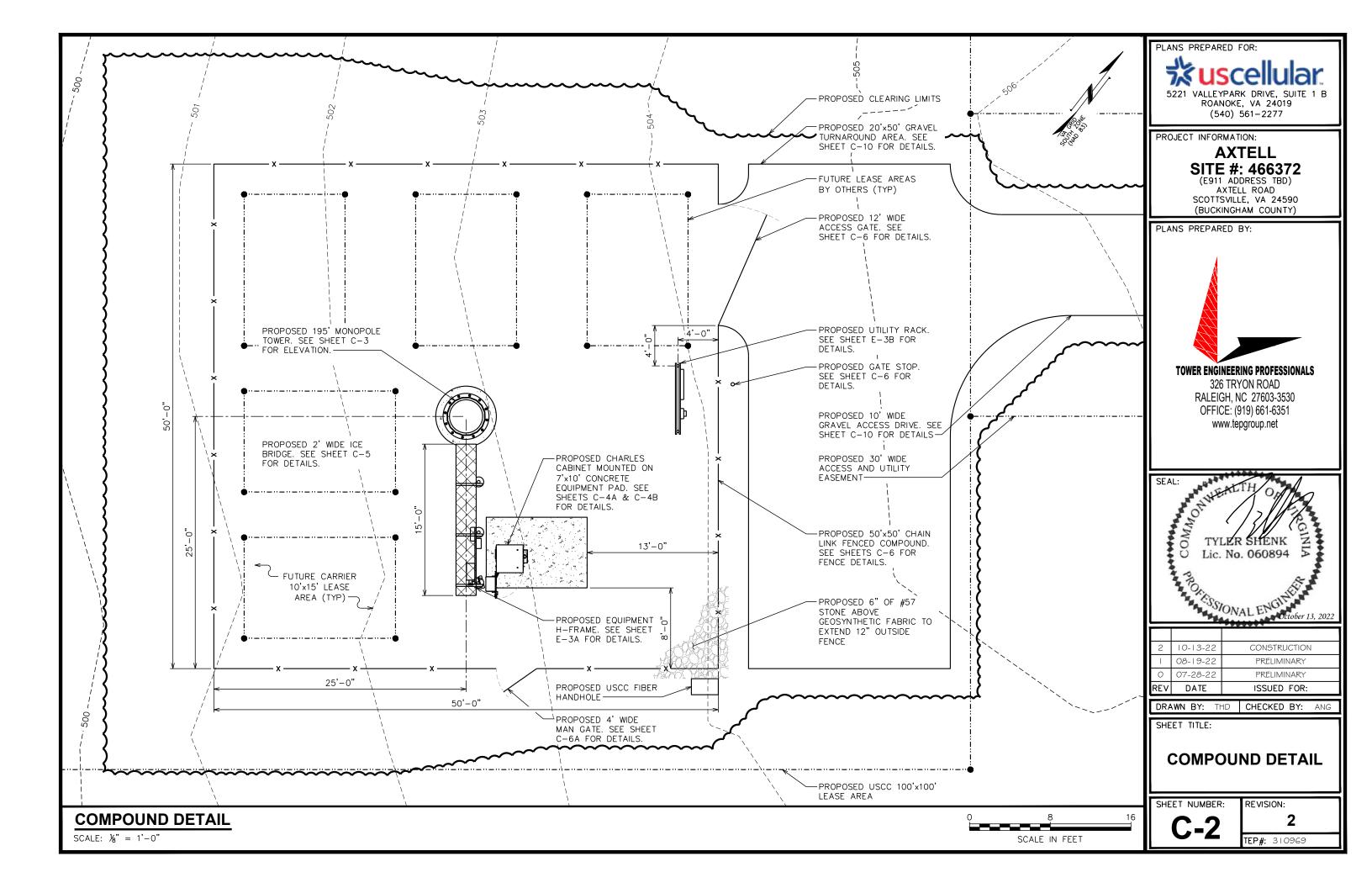
200

REVISION: 2

TEP#: 310969

SCALE IN FEET

100



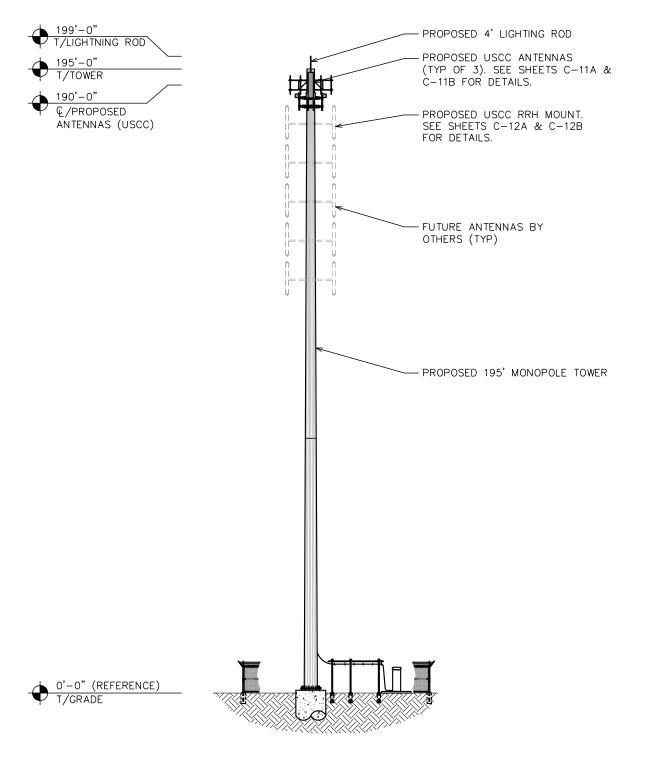
### **NOTES:**

- 1. PROPOSED CABLES TO BE RUN PER SPECIFICATIONS OF PASSING STRUCTURAL ANALYSIS.
- 2. TOWER SHALL BE CONSTRUCTED OF GALVANIZED STEEL OR PAINTED PER APPLICABLE STANDARDS OF THE FAA OR OTHER APPLICABLE FEDERAL OR STATE AGENCY
- 3. TOWER ELEVATION SHOWN FOR REFERENCE ONLY. VERIFY ACTUAL TOWER DESIGN & LOADING WITH TOWER DRAWINGS FROM MANUFACTURER AND/OR PASSING STRUCTURAL ANALYSIS PRIOR TO CONSTRUCTION.
- 4. MONOPOLE TOWER REQUIRED PER BUCKINGHAM COUNTY GIS.
- 5. MONOPOLE TOWER IS TO BE ORDERED USING BREAKPOINT TECHNOLOGY OF 40'.
- 6. EXISTING FOLAGE TO BE USED FOR LANDSCAPING.

EUPEN HYBRID CABLE LENGTH		
PROPOSED RAYCAP QUANTITY AT GROUND LEVEL:	1	
ICE BRIDGE LENGTH:	15-FT	
RAYCAP CENTERLINE + 20-FT BUFFER:	210-FT	
TOTAL ESTIMATED LENGTH OF HYBRID CABLE:	225-FT	
TOTAL EST. LENGTH OF HYBRID CABLE (ROUNDED UP):	250-FT	

JUMPER INFO						
FIBER/POWER JUMPER LENGTH FROM RAYCAP TO RRU						
	BAND 2/4	BAND 5				
ALPHA SECTOR:	10-M (32.8 FT)	10-M (32.8 FT)				
BETA SECTOR:	10-M (32.8 FT)	10-M (32.8 FT)				
GAMMA SECTOR:	10-M (32.8 FT)	10-M (32.8 FT)				
½" JUMPER	½" JUMPER FROM RRU TO ANTENNA					
BAND 2/4 BAND 5						
ALPHA SECTOR:	15-FT	15-FT				
BETA SECTOR:	15-FT	15-FT				
GAMMA SECTOR: 15-FT 15-FT						
RET JUMPER INFO						

KET JUNIFER INFO					
RRU TO ANTENNA					
	BAND 5				
ALPHA SECTOR:	10-M (32.8 FT)				
BETA SECTOR:	10-M (32.8 FT)				
GAMMA SECTOR:	10-M (32.8 FT)				





PROJECT INFORMATION:

#### **AXTELL** SITE #: 466372

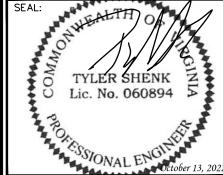
(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



=	7999957					
2	10-13-22	CONSTRUCTION				
- 1	08-19-22	PRELIMINARY				
0	07-28-22 PRELIMINARY					
REV	DATE	ISSUED FOR:				

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

**TOWER ELEVATION** 

SHEET NUMBER:

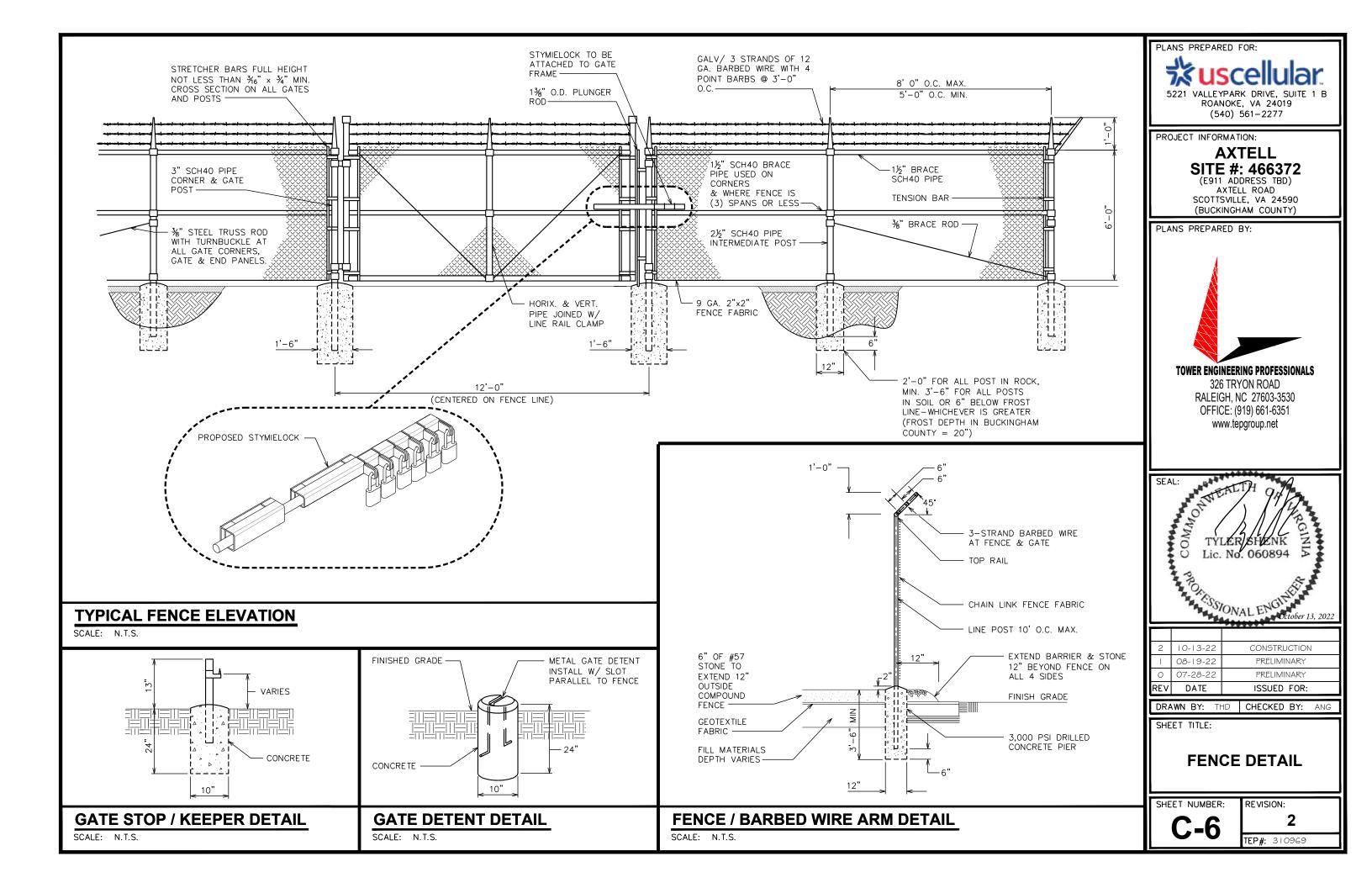
**REVISION:** 

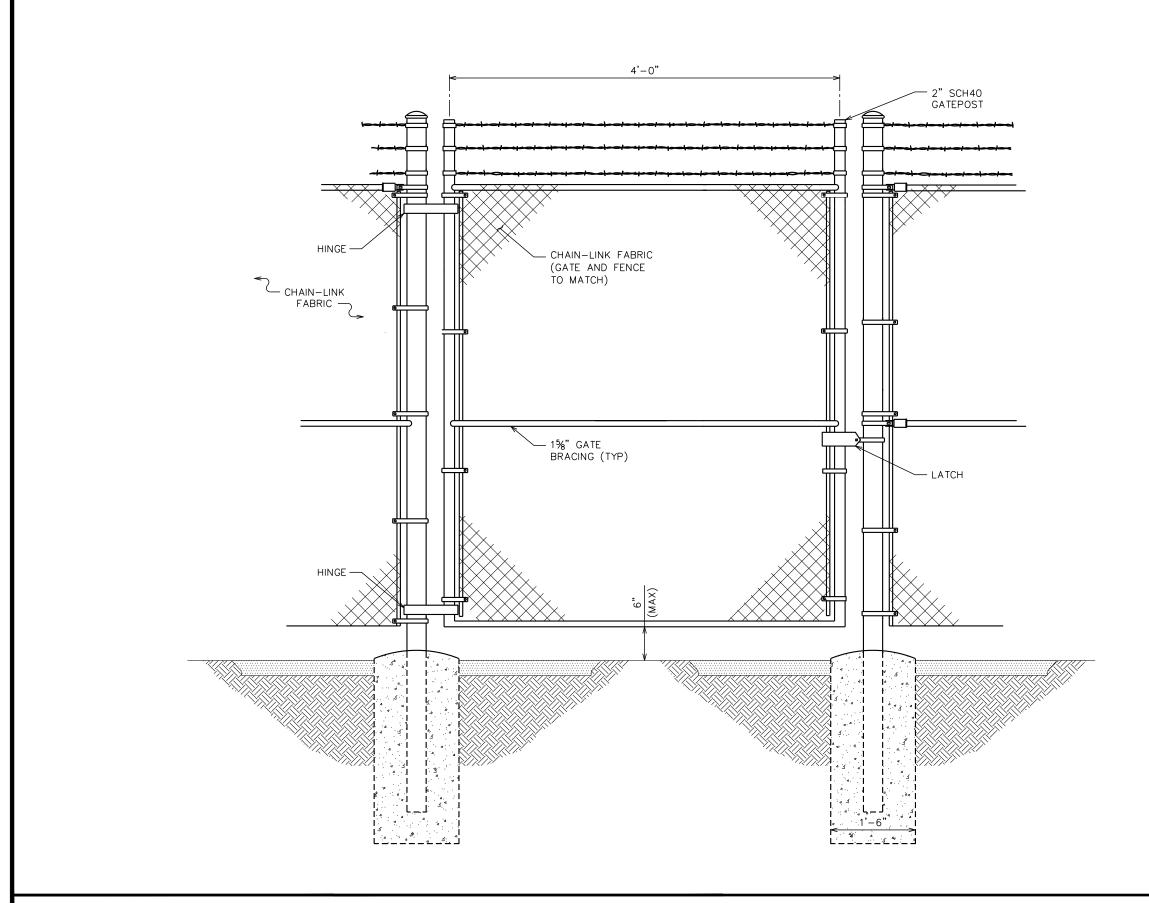
TEP#: 310969

30 60 SCALE IN FEET

**TOWER ELEVATION** 

SCALE: 1" = 30'





PLANS PREPARED FOR:

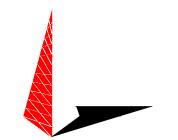
5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

#### **AXTELL** SITE #: 466372

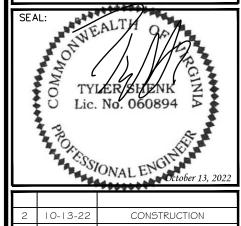
(E911 ADDRESS TBD)
AXTELL ROAD
SCOTTSVILLE, VA 24590
(BUCKINGHAM COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



779994					
2	10-13-22	CONSTRUCTION			
1	08-19-22	PRELIMINARY			
0	07-28-22	PRELIMINARY			
DE V	DATE	ISSUED EOD.			

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

**MAN GATE DETAIL** 

SHEET NUMBER: C-6A

REVISION:

TEP#: 310969

**MAN GATE DETAIL** 

### **NOTES:**

- 1. SIGNS SHALL BE MADE OF ALUMINUM WITH 1/4" HOLES 1/2" FROM EACH CORNER TO HANG SIGNS ON FENCE.
- 2. SIGNS SHALL BE INSTALLED AS FOLLOWS: GATE: NO TRESPASSING, RF GUIDELINES, RF WARNING, NFPA SULFURIC ACID, AUTHORIZED PERSONNEL ONLY INTERIOR OF FENCE GATE: EXIT SIGN
- 3. SIGNS SHALL BE INSTALLED WITH CENTER AT 5' ABOVE FINISHED GRADE.

## NO TRESPASSING OPERATIONS LICENSED BY THE FEDERAL GOVERNMENT

PERSONS VANDALIZING THIS FACILITY WILL BE PROSECUTED UNDER APPLICABLE FEDERAL, STATE AND LOCAL LAWS.

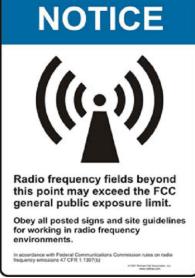
PRIOR TO ENTRY OR IN CASE OF EMERGENCY CONTACT U.S. CELLULAR: (888) 944 - 9400

SITE NUMBER 466372

(1) NO TRESSPASSING SIGN SIZE: 22"X 22" (0.063" ALUMINUM) (TO BE MOUNTED ON GATE)

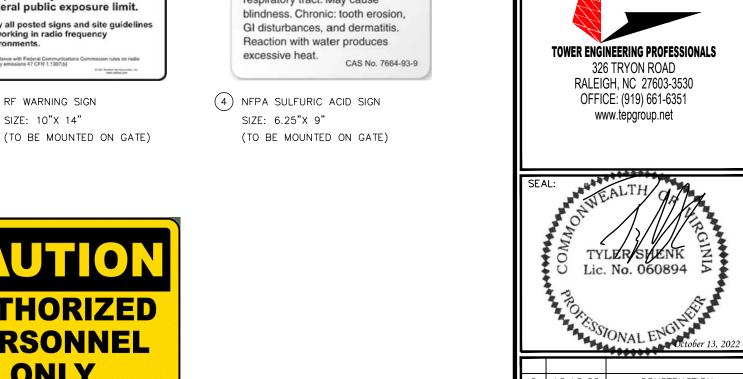
## **⚠** NOTICE **⚠**

- All personnel should have electromagnetic energy (EME)
- All personnel entering this site must be authorized.
- ⚠ Obey all posted signs.
- Assume all antennas are active.
- A Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum 3 feet clearance from all antennas.
- A Do not stop in front of antennas.
- ⚠ Use personal RF monitors while working near antennas. A Never operate transmitters without shields during normal operation
- A Do not operate base station antennas in equipment room.
- (2) RF GUIDELINES SIZE: 6"X 4" (TO BE MOUNTED ON GATE)



(3) RF WARNING SIGN SIZE: 10"X 14"





2 10-13-22 CONSTRUCTION PRELIMINARY 08-19-22 PRELIMINARY 07-28-22 REV DATE ISSUED FOR:

PLANS PREPARED FOR:

PROJECT INFORMATION:

PLANS PREPARED BY:

5221 VALLEYPARK DRIVE, SUITE 1 B

ROANOKE, VA 24019

(540) 561-2277

**AXTELL** 

SITE #: 466372 (E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590

(BUCKINGHAM COUNTY)

CHECKED BY: ANG DRAWN BY: THD

SHEET TITLE:

SIGNAGE DETAILS

SHEET NUMBER:

**REVISION:** 

(5) REFLECTIVE EXIT SIGN SIZE: 10"X 7" (TO BE MOUNTED TO INTERIOR GATE FENCE)

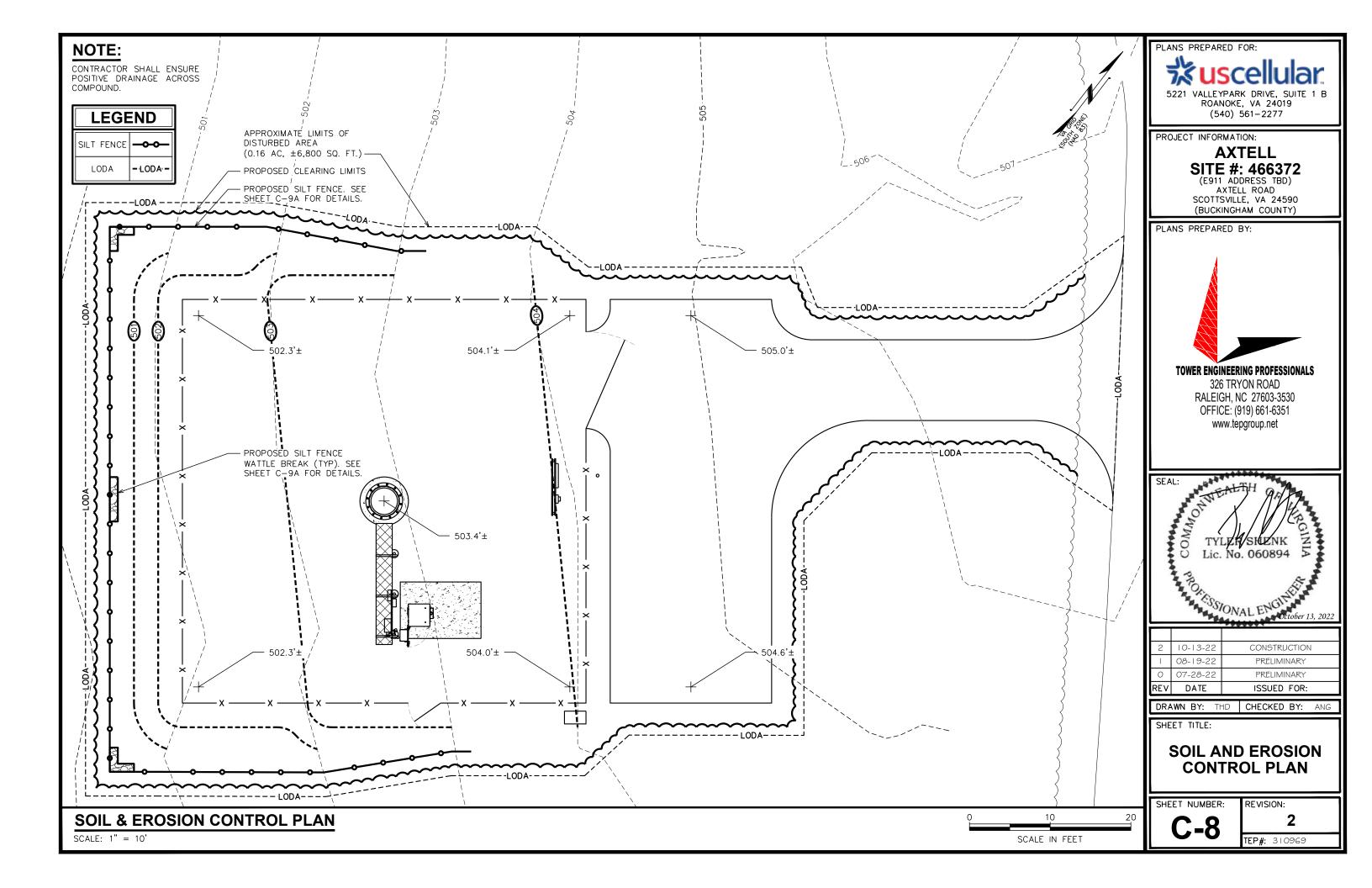


(6) AUTHORIZED PERSONNEL ONLY SIGN SIZE: 14"X 10" (TO BE MOUNTED ON GATE)

**TYPICAL SIGNS AND SPECIFICATIONS** 

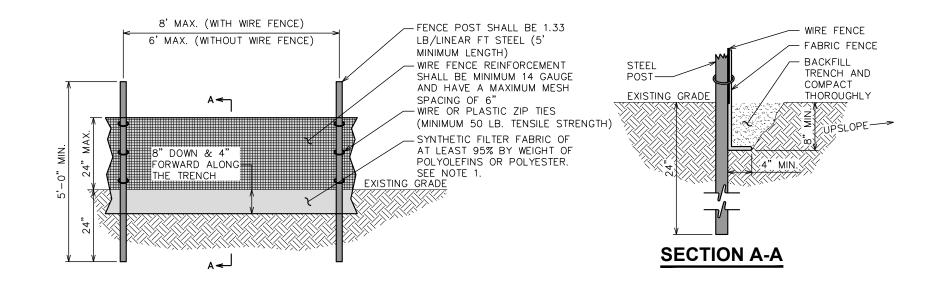
SCALE: N.T.S.

TEP#: 310969



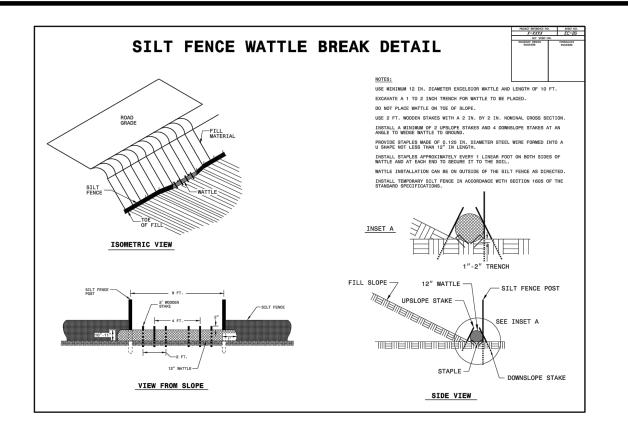
#### **NOTES:**

- 1. FILTER FABRIC SHALL CONFORM TO THE REQUIREMENTS LISTED IN ASTM D 6461.
- 2. ENDS OF INDIVIDUAL FILTER FABRIC SHALL BE SECURELY FASTENED AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST
- 3. PLACE 10 INCHES OF FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
- 4. INSPECT SEDIMENT FENCE(S) AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL.
- 5. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
- AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE AND PROPERLY STABILIZE THE SITE.



### **SILT FENCE DETAIL**

SCALE: N.T.S.



PLANS PREPARED FOR: 5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

#### **AXTELL** SITE #: 466372

(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



ı	799997						
ı							
ı	2	10-13-22	CONSTRUCTION				
ı	- 1	08-19-22	PRELIMINARY				
ı	0	07-28-22	PRELIMINARY				
ı	REV	DATE	ISSUED FOR:				

THD CHECKED BY: ANG DRAWN BY:

SHEET TITLE:

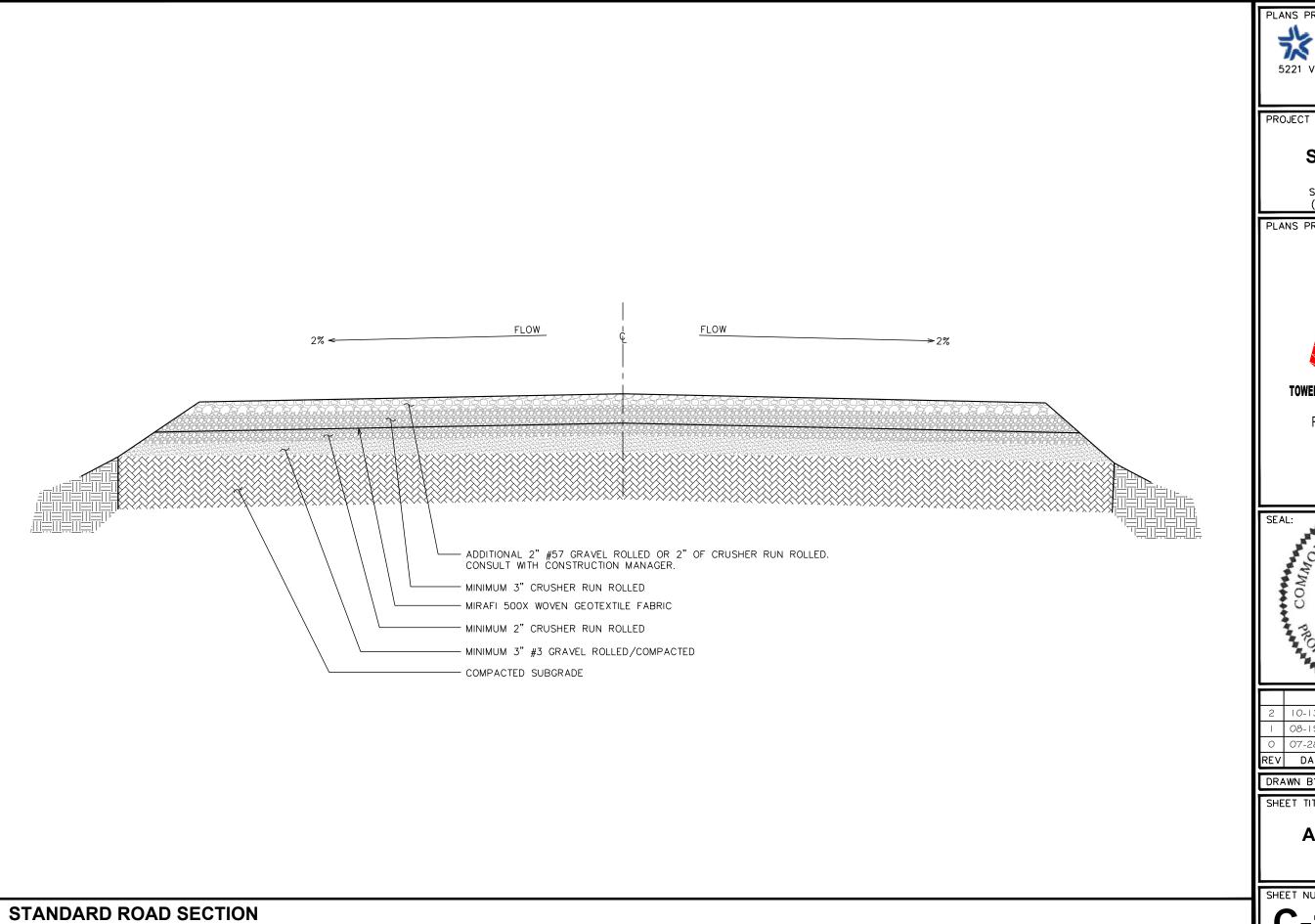
SILT FENCE **DETAILS** 

SHEET NUMBER:

REVISION:

TEP#: 310969

STANDARD SILT FENCE WATTLE BREAK DETAIL



PLANS PREPARED FOR:

5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

#### **AXTELL** SITE #: 466372

(E911 ADDRESS TBD) AXTELL ROAD
SCOTTSVILLE, VA 24590
(BUCKINGHAM COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



2	10-13-22	CONSTRUCTION			
- 1	08-19-22	PRELIMINARY			
0	07-28-22	PRELIMINARY			
REV	DATE	ISSUED FOR:			

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

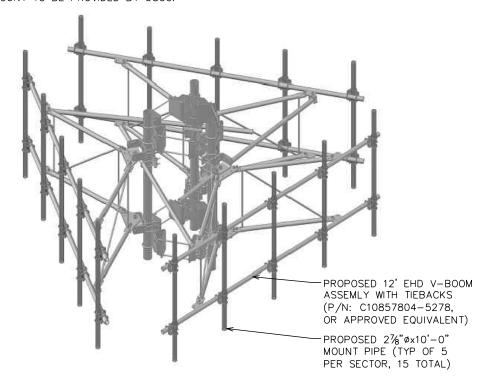
**ACCESS ROAD DETAILS** 

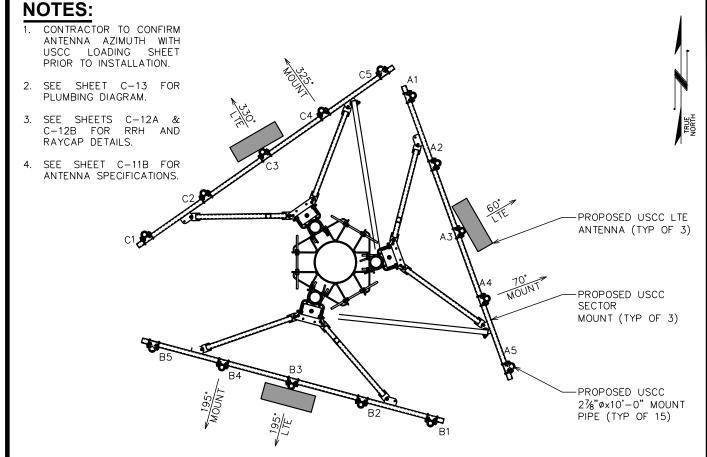
SHEET NUMBER:

TEP#: 310969

#### **NOTES:**

- MOUNT INCLUDES ATTACHMENT HARDWARE. MOUNT PIPES SOLD SEPARATELY.
- 2. ANTENNA MOUNT TO BE PROVIDED BY USCC.





PLANS PREPARED FOR: 5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019

PROJECT INFORMATION:

#### **AXTELL** SITE #: 466372

(540) 561-2277

(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net

## **ANTENNA MOUNT DETAILS**

**SECTOR** 

ALPHA

BETA

GAMMA

SCALE: N.T.S.

**MOUNT ORIENTATION** SCALE:  $\frac{1}{4}$ " = 1'-0"



ANTENNA/CABLE SCHEDULE									
AZIMUTH TRUE NORTH)	MOUNTING HEIGHT	LB RET TILT	MB RET TILT	MECH. D-TILT	EQUIPMENT	SURGE PROTECTION	COAX/CABLE	CABLE LENGTH*	COAX JUMPER*
60°	€ @ 190'-0"	2°	2*	0°	(3) NOKIA				25'±
195°	Ç ⊚ 190'-0"	2°	2°	0°	AHCA RRH	(1) RUSDC-6267-PF-48 RAYCAP	(1) 1¼"ø HYBRID CABLE	250'±	25'±
330°	© 0 190'−0"	2°	2°	0°					25'±

**ANTENNA** 

Α3

В3

С3

- NOTES:

  1. \*CONTRACTOR SHALL FIELD VERIFY HYBRID CABLE AND COAX JUMPER LENGTHS PRIOR TO ORDERING MATERIALS.
- 2. (1) ANTENNA PER SECTOR FOR A TOTAL OF (3) ANTENNAS.
- 3. CONTRACTOR TO VERIFY AZIMUTHS PRIOR TO CONSTRUCTION.

**TECH** 

LTE

LTE

LTE

4. CONTRACTOR TO REQUEST RF SHEET FROM CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.

MANUFACTURER

(MODEL #)

DENGYO

OCT8-2LX2HX-BW65 DENGYO

OCT8-2LX2HX-BW65 DENGYO

OCT8-2LX2HX-BW65



2	10-13-22	CONSTRUCTION			
- 1	08-19-22	PRELIMINARY			
0	07-28-22	PRELIMINARY			
REV	DATE	ISSUED FOR:			

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

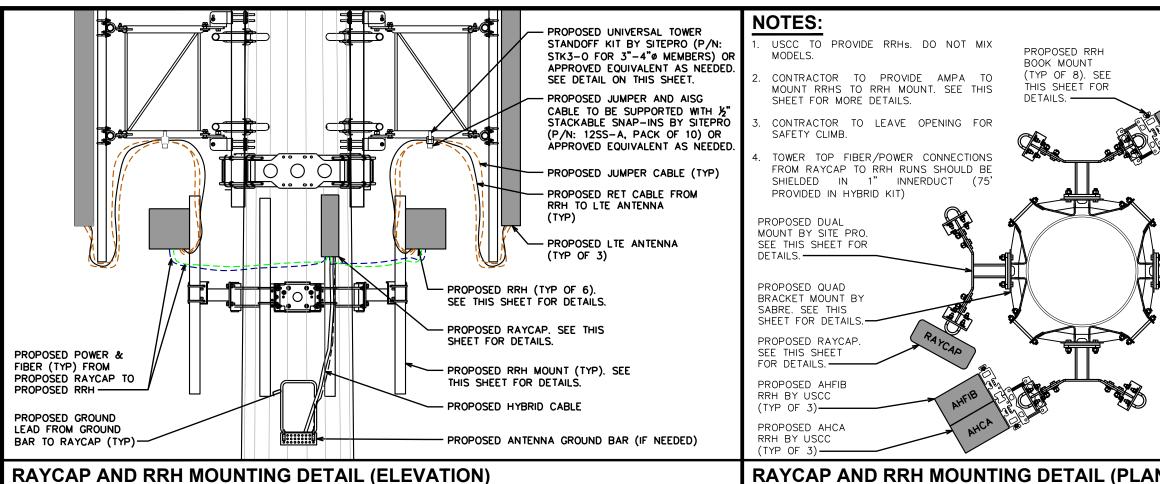
**ANTENNA MOUNTING DETAILS** 

SHEET NUMBER:

REVISION:

TEP#: 310969

**RF CONFIGURATION** 

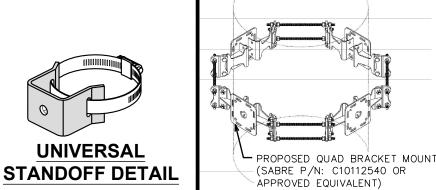


## **RAYCAP AND RRH MOUNTING DETAIL (PLAN)**

SCALE: N.T.S.

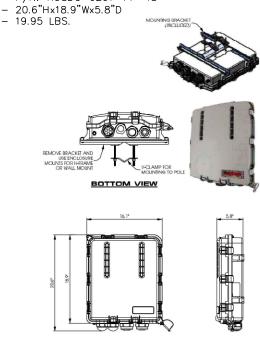


SCALE: N.T.S.



### NOTES:

- P/N: RUSDC-6267-PF-48



FRONT VIEW

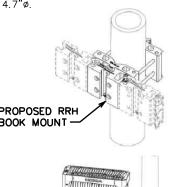
#### NOTE: USCC TO PROVIDE RRH MOUNTS

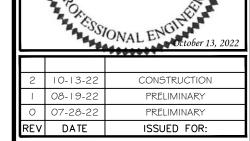
CAN BE USED WITH PROPOSED 21/2" øx6'-0" 4.7"ø. MOUNT PIPE (TYP OF 2 PER MOUNT). CONTRACTOR TO PROVIDE. PROPOSED RRH BOOK MOUNT PROPOSED DUAL TOWER MOUNT WITH 8" STANDOFF BY SABRE

### NOTE:

NOKIA POLE MOUNTING KIT (AMPA) 473879A.

PIPES FROM 1.2"Ø TO





OF STONAL ENGIN

PLANS PREPARED FOR:

PROJECT INFORMATION:

PLANS PREPARED BY:

5221 VALLEYPARK DRIVE, SUITE 1 B

ROANOKE, VA 24019

(540) 561-2277

**AXTELL** 

SITE #: 466372

(E911 ADDRESS TBD)

AXTELL ROAD

SCOTTSVILLE, VA 24590

(BUCKINGHAM COUNTY)

**TOWER ENGINEERING PROFESSIONALS** 

326 TRYON ROAD

RALEIGH, NC 27603-3530

OFFICE: (919) 661-6351

www.tepgroup.net

Lic. No. 060894

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

**RRH MOUNTING DIAGRAM** 

**MOUNTING DETAILS** 

SCALE: N.T.S.

**QUAD BRACKET MOUNT** SCALE: N.T.S.

SCALE: N.T.S.

#### RAYCAP SPEC SHEET **DUAL MOUNT**

SIDE VIEW

SCALE: N.T.S.

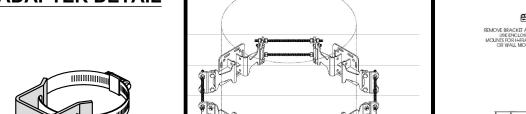
**RRH BOOK MOUNT** 

SCALE: N.T.S.

SHEET NUMBER:

REVISION:

TEP#: 310969



USCC TO PROVIDE RRH MOUNTS

2. MOUNT PIPES TO SUPPLIED SEPERATELY

NOTES:



## **GENERAL NOTES:**

- 1. ALL REFERENCES TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED U.S. CELLULAR OR ITS DESIGNATED REPRESENTATIVE.
- 2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF VIRGINIA.
- 3. STRUCTURE IS DESIGNED IN ACCORDANCE WITH ANSI/TIA/EIA-222-H, AND CONFORMS TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2018 EDITION WITH VIRGINIA AMENDMENTS.
- 4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2018 EDITION WITH VIRGINIA AMENDMENTS.
- 5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- 6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
- 7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE, TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- 8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
- 9. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS
  AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED
  AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH
  SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- 11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
- 12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR. CONTRACTOR SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
- 13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- 14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
- 15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFTER MATERIAL SHALL BE REWORKED OR REPLACED.
- 16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
- 17. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.
- 18. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ANY DESCREPANCEIES ARE DISCOVERED. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

## STRUCTURAL STEEL NOTES:

- 1. THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.
- 2. UNLESS OTHERWISE NOTED, ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
  - A. STRUCTURAL STEEL, ASTM DESIGNATION A36 OR A992-GR50.
  - B. ALL BOLTS, ASTM A325 TYPE I GALVANIZED HIGH STRENGTH BOLTS.
  - C. ALL NUTS, ASTM A563 CARBON AND ALLOY STEEL NUTS.
  - D. ALL WASHERS. ASTM F436 HARDENED STEEL WASHERS.
- 3. ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.
- 4. HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER.
- 5. HOT-DIP GALVANIZE ALL ITEMS UNLESS OTHERWISE NOTED, AFTER FABRICATION WHERE PRACTICABLE. GALVANIZING: ASTM A123, ASTM, A153/A153M OR ASTM A653/A653M, G90, AS APPLICABLE.
- 6. REPAIR DAMAGED SURFACES WITH GALVANIZING REPAIR METHOD AND PAINT CONFORMING TO ASTM A780 OR BY APPLICATION OF STICK OR THICK PASTED MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED AND REMOVE SLAG FROM WELDS. HEAT SURFACES TO WHICH STICK OR PASTE MATERIAL IS APPLIED, WITH A TORCH TO A TEMPERATURE SUFFICIENT TO MELT THE METALLICS IN STICK OR PASTE; SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF ANY EXCESS.
- 7. A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS.
- 8. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO EXCLUDE THE THREADS FROM THE SHEAR PLANE.
- 9. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- 10. ALL ASSEMBLY AND ANCHOR BOLTS ARE TO BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN SECTION 8.1 OF THE AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", DATED JUNE 30, 2004.
- 11. FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.
- 12. DO NOT OVER TORQUE ASSEMBLY BOLTS. GALVANIZING ON BOLTS, NUTS, AND STEEL PARTS MAY ACT AS A LUBRICANT, THUS OVER TIGHTENING MAY OCCUR AND MAY CAUSE BOLTS TO CRACK AND SNAP OFF.
- 13. PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT. PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS ARE PROVIDED.
- 14. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- 15. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-2010 STRUCTURAL WELDING CODE STEEL.



PROJECT INFORMATION:

# **AXTELL** SITE #: 466372

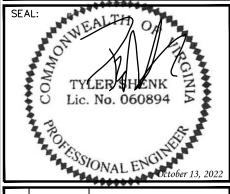
(E911 ADDRESS TBD)
AXTELL ROAD
SCOTTSVILLE, VA 24590
(BUCKINGHAM COUNTY)

PLANS PREPARED BY:



### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



2	10-13-22	CONSTRUCTION	
- 1	08-19-22	PRELIMINARY	
0	07-28-22	PRELIMINARY	
REV	DATE	ISSUED FOR:	

DRAWN BY: THD | CHECKED BY: ANG

SHEET TITLE:

PROJECT NOTES

SHEET NUMBER:

N-1

REVISION: 2

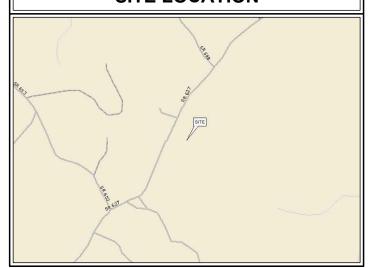
TEP#: 310969

## **STATE LOCATION**





## SITE LOCATION



## **DRIVING DIRECTIONS**

FROM RICHMOND, VA: TAKE PREFERRED ROUTE TO 1-64 W. KEEP FROM RICHMOND, VA: TAKE PREFERRED ROUTE TO 1-64 W. KEEP RIGHT AT THE FORK TO CONTINUE ONTO 1-64 W. TAKE EXIT 167 AND TURN LEFT ONTO STATE RTE 617. TURN RIGHT ONTO US-250 W. TURN LEFT ONTO STATE RTE 632. TURN LEFT ONTO VA-396 S. TURN RIGHT ONTO US-522 N THEN CONTINUE STRAIGHT ONTO VA-6 W. TURN RIGHT ONTO STATE RTE 652 THEN TURN LEFT ONTO VA-20 S. TURN RIGHT ONTO STATE RTE 678 THEN TURN LEFT ONTO STATE RTE 627. THE SITE WILL BE ON THE LEFT IN 1.6 MILES.

## **PROJECT TEAM**

## PROJECT CONTACT:

U.S. CELLULAR CORPORATION 5221 VALLEYPARK DRIVE, SUITE 1 B NAMF **ADDRESS** ROANOKE, VA 24019 JON SCARBOROUGH CITY, STATE, ZIP (540) 561-2277

## **TOWER OWNER:**

NAME U.S. CELLULAR CORPORATION **ADDRESS** 5221 VALLEYPARK DRIVE, SUITE 1 B CITY, STATE, ZIP ROANOKE, VA 24019 CONTACT

JON SCARBOROUGH (540) 561-2277

## **CIVIL ENGINEER:**

TOWER ENGINEERING PROFESSIONALS, INC. 326 TRYON ROAD RALEIGH, NC 27603–3530 TYLER D. SHENK, P.E. NAME ADDRESS CITY, STATE, ZIP CONTACT (919) 661-6351

### **ELECTRICAL ENGINEER:**

TOWER ENGINEERING PROFESSIONALS, INC. 326 TRYON ROAD RALEIGH, NC 27603-3530 TYLER D. SHENK, P.E. (919) 661-6351 CITY, STATE, ZIP CONTACT PHONE

# PROPOSED 195-FT MONOPOLE (199-FT OVERALL HEIGHT)

## **AXTELL**

SITE NUMBER: 466372

QUIET **ZONE SITE** 

DEV

SITE ADDRESS (E911 ADDRESS T.B.D.):

## **AXTELL ROAD SCOTTSVILLE, VA 24590** (BUCKINGHAM COUNTY)

## **INDEX OF SHEETS**

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C-3	TOWER ELEVATION	2
C-4AB	CABINET & FOUNDATION DETAILS	2
C-5	ICE BRIDGE DETAILS	2
C-6	FENCE DETAILS	2
C-6A	MAN GATE DETAILS	2
C-7	SIGNAGE DETAILS	2
C-8	SOIL & EROSION CONTROL PLAN	2
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E-2	ONE-LINE DIAGRAM & POWER PANEL SCHEDULE	2
E-3	POWER/TELCO PLAN	2
E-3AB	EQUIPMENT H-FRAME & SERVICE RACK DETAILS	2
E-4,5	COMPOUND & EQUIPMENT GROUNDING PLAN	2
E-6,7,8	GROUNDING DETAILS I, II, III	2
N-1	PROJECT NOTES	2

## **PROJECT INFORMATION**

N 37° 43' 43.949" (NAD '83)\* LATITUDE: W 78° 34' 48.598" (NAD '83)\* LONGITUDE: EXISTING GROUND ELEVATION: 503.1' ± (NAVD '88)

PROPOSED GROUND ELEVATION: 503.4' ± (NAVD '88) \* INFORMATION PER 1-A CERTIFICATION PROVIDED BY BLUE

RIDGE SURVEYING & MAPPING, INC. DATED MAY 9, 2022. 195' MONOPOLE (199' OVERALL) **TOWER TYPE:** 

LOADING TYPE: 4T4R **ACCESS ISSUES:** N/A **GATE COMBO:** 8722

## STRUCTURAL NOTE

STRUCTURAL STATUS: MOUNT SA - N/A TOWER SA - N/A

## SCOPE OF WORK

### **TOWER SCOPE:**

PROPOSED EQUIPMENT:

(3) DENGYO OCT8-2LX2HX-BW65 ANTENNAS

(3) SECTOR MOUNTS (SABRE P/N: C10857804-5278 OR APPROVED FOUIVALENT)

(4) RRH DUAL MOUNTS (SABRE P/N: C10114260 OR APPROVED EQUIVALENT)

(1) 11/4" HYBRID LINE

(1) RAYCAP RUSDC-6267-PF-48 (ON RRH MOUNT)

(3) NOKIA AHCA RRHs

(3) GROUND BARS (TOWER TOP, TOWER MIDDLE, AND BASE OF TOWER)

(3) POWER JUMPERS FROM RAYCAP TO BAND 2/4 RRHS

(6) FIBER JUMPERS FROM RAYCAP TO BAND 2/4 RRHS

(12) PROPOSED 1/8" JUMPERS FROM BAND 2/4 RRHS TO ANTENNA

(3) POWER JUMPERS FROM RAYCAP TO BAND 5 RRHS (6) FIBER JUMPERS FROM RAYCAP TO BAND 5 RRHS

(12) PROPOSED 1/8" JUMPERS FROM BAND 5 RRHS TO ANTENNA

(3) RET JUMPERS FROM BAND 5 RRHS TO ANTENNA

### **GROUND EQUIPMENT SCOPE:**

PROPOSED EQUIPMENT:

(1) 7'x10' CONCRETE PAD

(1) CHARLES EQUIPMENT CABINET

(1) ICE BRIDGE (15'-0" IN LENGTH REQUIRED)

(1) RAYCAP RUSDC-6267-PF-48 (MOUNTED ON H-FRAME)

(1) JUNCTION BOX

(1) GROUND BAR ON EQUIPMENT H-FRAME

(1) GROUND BAR ON EQUIPMENT PAD

(1) CAC EQUIPMENT CABINET

(1) MULTI-GANG METER SERVICE RACK WITH TELCO BOX (COORDINATE WITH LOCAL UTILITY COMPANY)

(1) 200A POWER METER & SERVICE ENTRANCE DISCONNECT (8) 6' UNISTRUTS FOR H-FRAME AND U-BOLTS FOR MOUNTING

(8) 7' UNISTRUTS FOR SERVICE RACK & U-BOLTS FOR MOUNTING

### SPECIAL REQUIREMENTS:

ANTENNA AZIMUTHS

CONTRACTOR SHALL VERIFY AZIMUTHS PRIOR TO CONSTRUCTION. CONTRACTOR TO REQUEST RF SHEET FROM CM, DO NOT GO ONLY OFF

## **UTILITIES:**

POWER COMPANY: CENTRAL VA ELECTRIC COOPERATIVE CONTACT: CUSTOMER SERVICE

PHONE: (800) 367-2832METER # ON SITE: ÙNKŃOWN

TELCO COMPANY: CONTACT: CUSTOMER SERVICE (833) 467 - 3472PEDESTAL # NEAR SITE: UNKNOWN

PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

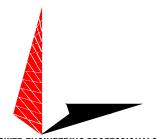
5221 VALLEYPARK DRIVE, SUITE 1 B

ROANOKE, VA 24019

(540) 561-2277

(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



### TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



. , , , , , , , , , , , , , , , , , , ,			
3	03-29-23	CONSTRUCTION	
2	10-13-22	CONSTRUCTION	
	08-19-22	PRELIMINARY	
0	07-28-22	PRELIMINARY	
REV	DATE	ISSUED FOR:	

DRAWN BY: THD CHECKED BY:

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

**REVISION:** 

TEP#: 310969

## NOTES:

- THIS PLAT IS THE RESULT OF A CURRENT FIELD SURVEY.
- 2. THIS IS NOT A BOUNDARY SURVEY.
- 3. LEASE PARCEL LOCATED ON TAX PARCEL #14-59, M3 PROPERTIES, LLC, DEED BOOK 395, PAGE 726.
- ALL TITLE REPORT EXCEPTION ITEMS, THAT CAN BE PLOTTED, HAVE BEEN REVIEWED, AND THEY DO NOT AFFECT THE TENANT LEASED RIGHTS.

### PROPOSED LEASE AREA LEGAL DESC.

ALL THAT CERTAIN LEASE AREA LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE M3 PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8" ROD SET, SAID ROD HAVING VIRGINIA STATE PLANE, SOUTH ZONE COORDINATES NORTHING: 3788954.74, EASTING: 11459731.74; THENCE S 52°22'58" W 100.00' TO A 5/8" ROD SET; THENCE N 37'37'02" W 100.00' TO A 5/8" ROD SET; THENCE N 52°22'58" E 100.00' TO A 5/8" ROD SET; THENCE S 37°37'02" E 100.00' TO THE POINT OF BEGINNING, AND CONTAINING 10,000 SQUARE FEET MORE OR LESS.

## PROPOSED 30' NON-EXCLUSIVE ACCESS/UTILITY EASEMENT

ALL THAT CERTAIN NON-EXCLUSIVE ACCESS/UTILITY EASEMENT LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE LANDS OF M3 PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND A PORTION OF THE LANDS OF TRAVIS BRENT McCAULEY AND SPENCER COLE McCAULEY, TAX ID# 14-51, WILL BOOK 155, PAGE 141, DEED BOOK 207, PAGE 710, AND DEED BOOK 199, PAGE 236, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

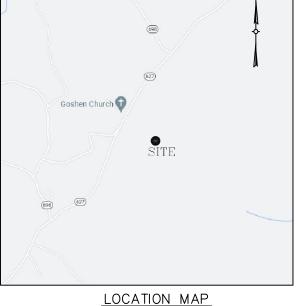
BEGINNING AT A 5/8" ROD SET, SAID ROD BEING S 37°37'02" E 50.00' FROM THE NORTHERN CORNER OF THE PROPOSED LEASE AREA: THENCE N 52°22'58" E 59.82' TO A 5/8" ROD SET IN AN EXISTING GRAVEL ROAD; THENCE WITH SAID ROAD N 50"15'56" W 79.26' TO A POINT; THENCE N 39'46'30" W 67.86' TO A POINT; THENCE N 58'57'40" W 126.27' TO A POINT; THENCE N 42'17'55" W 126.06' TO A POINT; THENCE N 66'46'27" W 57.21' TO A POINT; THENCE N 53'06'04" W 130.13' TO A POINT IN THE SOUTHEASTERN RIGHT OF WAY LINE OF "AXTELL ROAD".

I HEREBY CERTIFY TO US CELLULAR AND WFG NATIONAL TITLE INSURANCE COMPANY THAT THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT FROM WFG NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NUMBER 22110733VA-A. DATED 4-29-22.

5-09-22

### SCHEDULE B - SECTION IL ITEMS

SCHEDULL D - SECTION II HEMS	3
Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attached, or disclosed between the Commitment Date and the date on which all of the Schedule B, Part I—Requirements are met.	DOES NOT APPLY TO SURVEY
2. Taxes are paid through 2021 Taxes for subsequent periods become a lien not yet due and payable on the first day of the tax period.	DOES NOT APPLY TO SURVEY
3. Rights or claims of parties in possession not shown by the public records.	DOES NOT APPLY TO SURVEY
4. Easements, or claims of easements, not shown by the public records.	DOES NOT APPLY TO SURVEY
5. Encroachments, overlaps, boundary line disputes, or other matters which would be disclosed by an accurate survey and inspection of the premises.	DOES NOT APPLY TO SURVEY
6. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.	DOES NOT APPLY TO SURVEY
7. Taxes or special assessments which are not shown as existing liens by the public records.	DOES NOT APPLY TO SURVEY
8. Matters set forth on Plat entitled Plat recorded October 13, 2009 in Book 375 at Page 194 as Instrument 09-1842.	DOES NOT AFFECT LEASE AREA OR ACCESS/UTIL. EASEMENT



NOT TO SCALE

WEALTH OF INNEALTH OR BRIAN L. SUTPHIN (LICENSE) No. 2679 AND SURV

LINE	BEARING	DISTANCE
L1	S 52°22'58" W	100.00'
L2	N 37°37'02" W	100.00'
L3	N 52°22'58" E	100.00'
L4	S 37°37'02" E	100.00'
L5	N 52°22'58" E	59.82'
L6	N 50°15'56" W	79.26'
L7	N 39°46'30" W	67.86'
L8	N 58*57'40" W	126.27
L9	N 42*17'55" W	126.06'
L10	N 66°46'27" W	57.21'
L11	N 53°06'04" W	130.13

## FLOOD PLAIN CERTIFICATION

I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 51029C0105B DATED 06/17/2008 AND THE LEASE AREA LIES IN ZONE X (DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHÂNCE FLOODPLAIN)

BENCHMARK

SCALE: 1'' = 80

NORTH: 3788961.55 11459807.24 ELEVATION: 505.31' (NAVD 88) DESCRIPTION: 5/8" ROD

COORDINATE POINT LOCATION CENTERLINE OF TOWER (2C)

NAD 1983 LATITUDE: 37°43'43.949"N 78°34'48.598"W LONGITUDE ELEVATION: 503.1' SITE (NAVD 88) STATE PLANE COORDINATE NORTHING: 3788954.74 EASTING: 11459731.74

US CELLULAR

## **BLUE RIDGE**

SURVEYING & MAPPING, INC. 445 WEST STUART DRIVE HILLSVILLE, VIRGINIA 24343 PHONE 276.728.2022 EMAIL: brsurvey1@gmail.com

SITE NAME:

AXTELL

466372

SITE NUMBER:

S: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY SITE ADDRESS:

S: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY 911 ADDRESS:

AREA: LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:

M3 PROPERTIES, LLC

TAX MAP NUMBER:

PARCEL NUMBER:

SOURCE OF TITLE: DEED BOOK 395, PAGE 726

2C LATITUDE: 37°43'43.949"N 2C LONGITUDE: 78°34'48.598"W

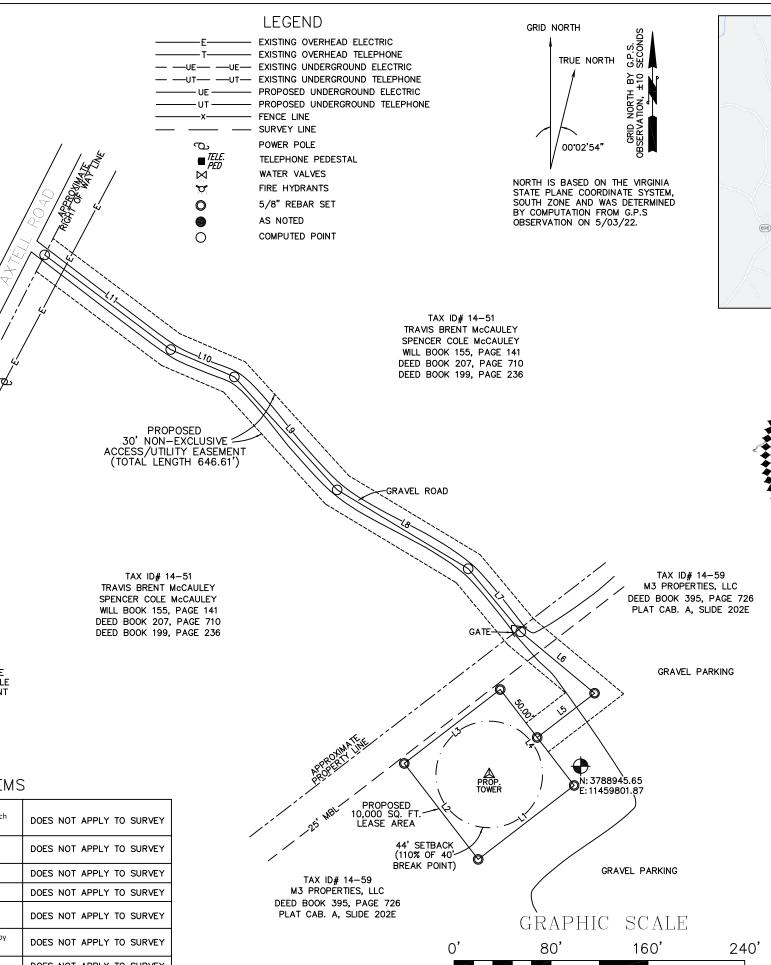
NO. REVISION/ISSUE DATE SURVEY 5/03/22

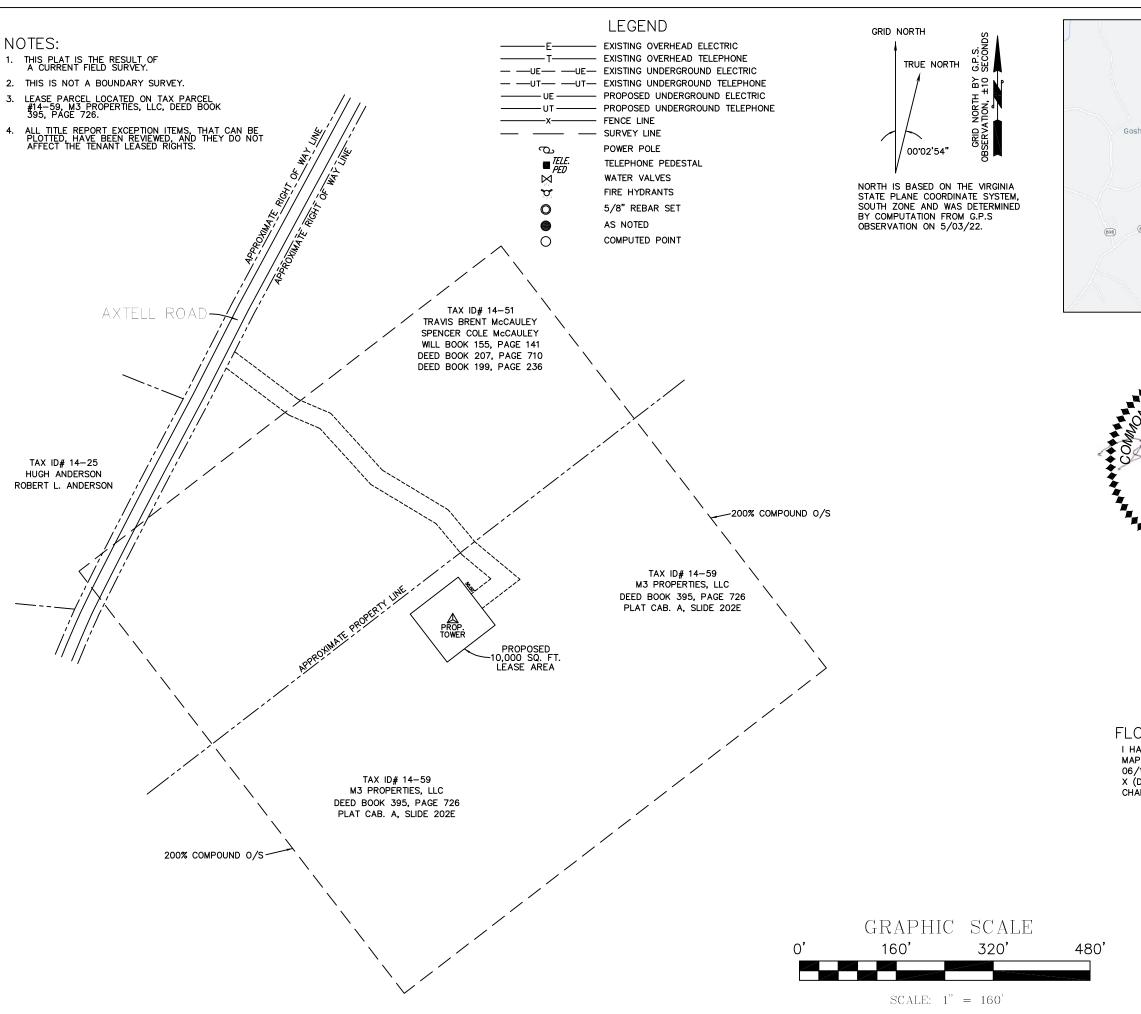
TITLE: SITE SURVEY

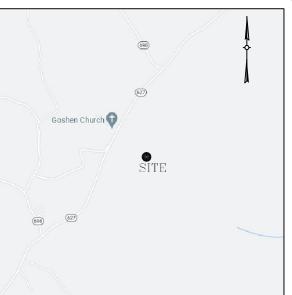
LOCATED OFF "AXTELL ROAD" SLATE RIVER MAGISTERIAL DISTRICT BUCKINGHAM COUNTY, VIRGINIA

SHEET:

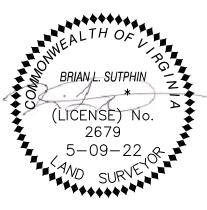
C-2







LOCATION MAP NOT TO SCALE



## FLOOD PLAIN CERTIFICATION

I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 51029C0105B DATED 06/17/2008 AND THE LEASE AREA LIES IN ZONE X (DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

BENCHMARK

NORTH: 3788961.55 EAST: 11459807.24 ELEVATION: 505.31' (NAVD 88) DESCRIPTION: 5/8" ROD

COORDINATE POINT LOCATION
CENTERLINE OF TOWER (2C)
NAD 1983

LATITUDE: 37°43'43.949"N LONGITUDE 78'34'48.598"W ELEVATION: 503.1' SITE (NAVD 88) STATE PLANE COORDINATE NORTHING: 3788954.74 EASTING: 11459731.74

**US CELLULAR** 

**BLUE RIDGE** SURVEYING & MAPPING, INC.

445 WEST STUART DRIVE HILLSVILLE, VIRGINIA 24343 PHONE 276.728.2022 EMAIL: brsurvey1@gmail.com

SITE NAME:

AXTELL

466372

SITE NUMBER:

S: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY SITE ADDRESS:

911 ADDRESS: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY

AREA: LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:

M3 PROPERTIES, LLC

TAX MAP NUMBER:

PARCEL NUMBER:

SOURCE OF TITLE: DEED BOOK 395, PAGE 726

37°43'43.949"N 2C LATITUDE:

2C LONGITUDE: 78°34'48.598"W

NO.	REVISION/ISSUE	DATE
1	SURVEY	5/03/22

TITLE: SITE SURVEY

LOCATED OFF "AXTELL ROAD" SLATE RIVER MAGISTERIAL DISTRICT BUCKINGHAM COUNTY, VIRGINIA

SHEET:

C-2A

## **NOTES:**

- 1. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE VIRGINIA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (VA STATE PLAIN, SOUTH ZONE NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON 05/03/2022.
- 2. VERTICAL INFORMATION SHOWN, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88) IN FEET.
- 3. ALL DISTANCES ARE GROUND UNLESS OTHERWISE NOTED.
- 4. THE TOWER IS LOCATED IN ZONE "X." AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #51029C0105B, DATED 06/17/2008.
- 5. EXISTING FOLIAGE IS TO BE LEFT IN PLACE IN LIEU OF ADDED LANDSCAPING.

## **LEGEND** EXIST. PROPERTY LINE ----- ADJ. PROPERTY LINE ρ EXIST. UTILITY POLE <del>\</del> EXIST. LIGHT POLE ---UGP---UNDERGROUND PIPE $\odot$ EXIST. TELCO PEDESTAL ( PROPERTY CORNER LEASE/EASE. CORNER ---200---EXIST. CONTOUR LINE EDGE OF PAVEMENT ---OHW--- OVERHEAD WIRE ---R/W--- RIGHT-OF-WAY — X — CHAIN LINK FENCE EXISTING TREE LINE

TRAVIS B. MCCAULEY & SPENCER C. MCCAULEY TAX ID# 14-51 DB 207. PG 710 DB 199, PG 236 N/F TRAVIS B. MCCAULEY & SPENCER C. MCCAULEY TAX ID# 14-51 DB 207, PG 710 DB 199, PG 236 - EXISTING TREELINE (TYP) -EXISTING CATTLE GATE EXISTING ACCESS DRIVE TO BE UPGRADED AS NEEDED PROPOSED 30' WIDE ACCESS & UTILITY EASEMENT -PROPOSED 10' WIDE GRAVEL ACCESS DRIVE. SEE SHEET C-10 FOR DETAILS. DB 395, PC 726 PLAT CAB A, SLIDE 202E PROPOSED CLEARING LIMITS -PROPOSED 20'x50' GRAVEL TURNAROUND AREA. SEE SHEET C-10 FOR DETAILS. PROPOSED 50'x50' CHAIN LINK FENCED COMPOUND. SEE -PROPOSED USCC SHEET C-2 FOR DETAILS. 100'x100' LEASE AREA PROPOSED 195' MONOPOLE TOWER. SEE SHEET C-3 FOR ELEVATION. EXISTING GRAVEL PARKING AREA

PLANS PREPARED FOR:

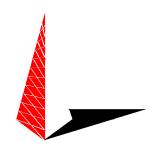
5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

# **AXTELL SITE #: 466372**

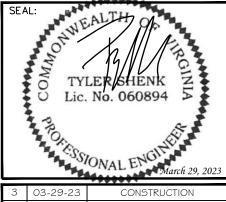
(E911 ADDRESS TBD)
AXTELL ROAD
SCOTTSVILLE, VA 24590
(BUCKINGHAM COUNTY)

PLANS PREPARED BY:



## TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



	77000		
3	03-29-23	CONSTRUCTION	
2	10-13-22	CONSTRUCTION	
- 1	08-19-22	PRELIMINARY	
0	07-28-22	PRELIMINARY	
REV	DATE	ISSUED FOR:	

DRAWN BY: THD | CHECKED BY: ANG

SHEET TITLE:

**SITE PLAN** 

SHEET NUMBER:

200

100

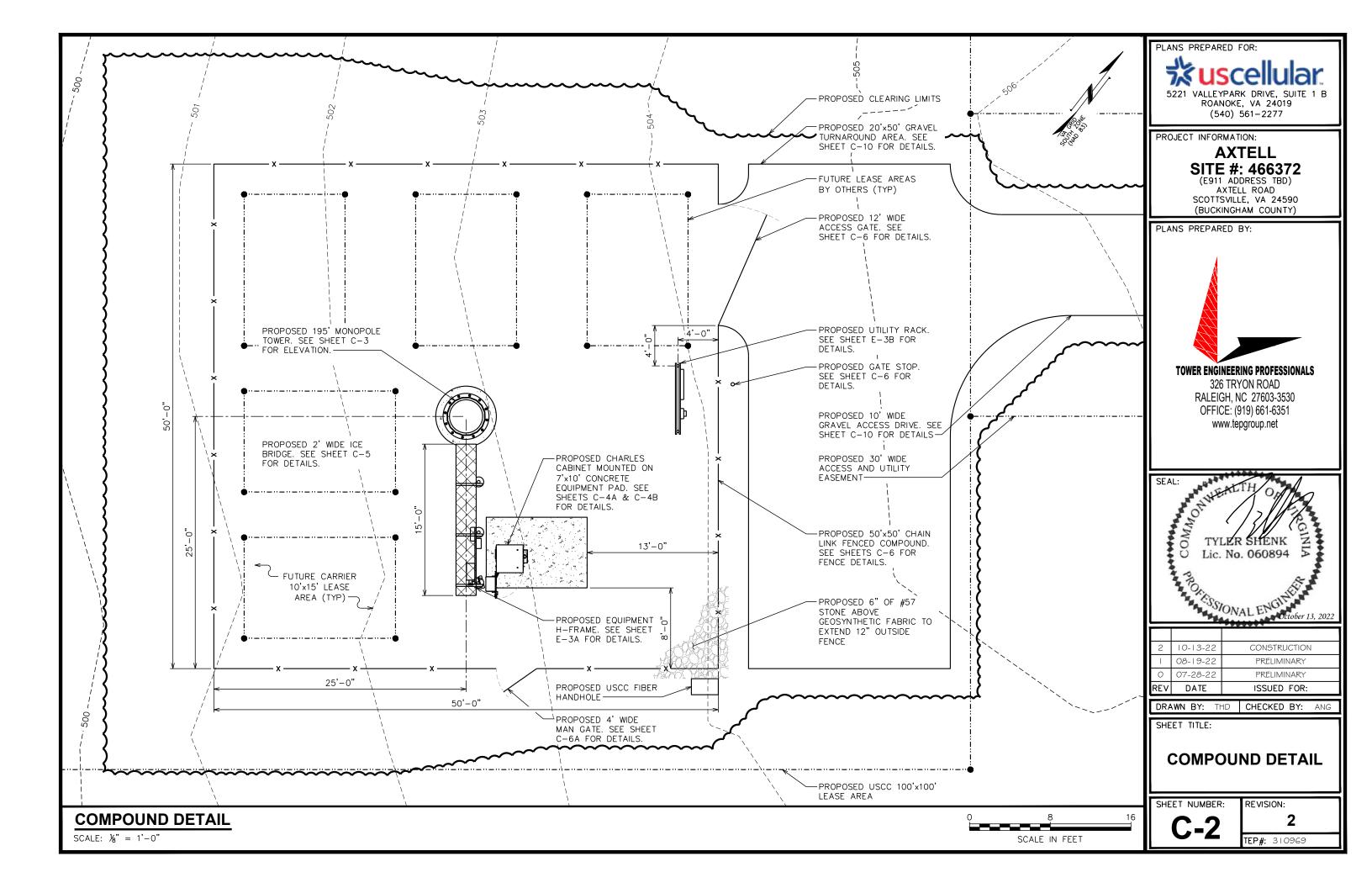
SCALE IN FEET

REVISION:

TEP#: 310969

SITE PLAN

SCALE: 1" = 100'



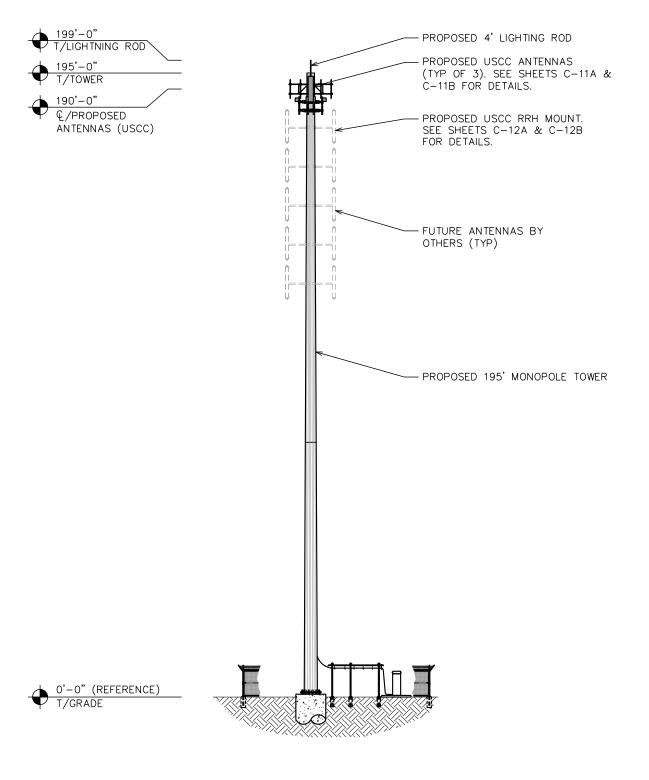
## **NOTES:**

- 1. PROPOSED CABLES TO BE RUN PER SPECIFICATIONS OF PASSING STRUCTURAL ANALYSIS.
- 2. TOWER SHALL BE CONSTRUCTED OF GALVANIZED STEEL OR PAINTED PER APPLICABLE STANDARDS OF THE FAA OR OTHER APPLICABLE FEDERAL OR STATE AGENCY
- 3. TOWER ELEVATION SHOWN FOR REFERENCE ONLY. VERIFY ACTUAL TOWER DESIGN & LOADING WITH TOWER DRAWINGS FROM MANUFACTURER AND/OR PASSING STRUCTURAL ANALYSIS PRIOR TO CONSTRUCTION.
- 4. MONOPOLE TOWER REQUIRED PER BUCKINGHAM COUNTY GIS.
- 5. MONOPOLE TOWER IS TO BE ORDERED USING BREAKPOINT TECHNOLOGY OF 40'.

EUPEN HYBRID CABLE LENGTH		
PROPOSED RAYCAP QUANTITY AT GROUND LEVEL:	1	
ICE BRIDGE LENGTH:	15-FT	
RAYCAP CENTERLINE + 20-FT BUFFER:	210-FT	
TOTAL ESTIMATED LENGTH OF HYBRID CABLE:	225-FT	
TOTAL EST. LENGTH OF HYBRID CABLE (ROUNDED UP):	250-FT	

JUMPER INFO			
FIBER/POWER JUMPER	LENGTH FROM R	AYCAP TO RRU	
	BAND 2/4	BAND 5	
ALPHA SECTOR:	10-M (32.8 FT)	10-M (32.8 FT)	
BETA SECTOR:	10-M (32.8 FT)	10-M (32.8 FT)	
GAMMA SECTOR:	10-M (32.8 FT)	10-M (32.8 FT)	
½" JUMPER	½" JUMPER FROM RRU TO ANTENNA		
BAND 2/4 BAND 5		BAND 5	
ALPHA SECTOR:	15-FT	15-FT	
BETA SECTOR:	15-FT	15-FT	
GAMMA SECTOR: 15-FT 15-FT		15-FT	
RET JUMPER INFO			

KLI JUWIPLK IIVI O			
RRU TO ANTENNA			
	BAND 5		
ALPHA SECTOR:	10-M (32.8 FT)		
BETA SECTOR:	10-M (32.8 FT)		
GAMMA SECTOR:	10-M (32.8 FT)		



PLANS PREPARED FOR: 5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

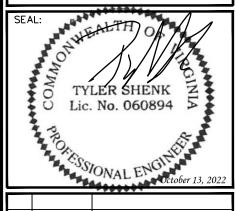
(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



**TOWER ENGINEERING PROFESSIONALS** 

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



2	10-13-22	CONSTRUCTION
- 1	08-19-22	PRELIMINARY
0	07-28-22	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: THD | CHECKED BY: ANG

SHEET TITLE:

**TOWER ELEVATION** 

SHEET NUMBER:

60

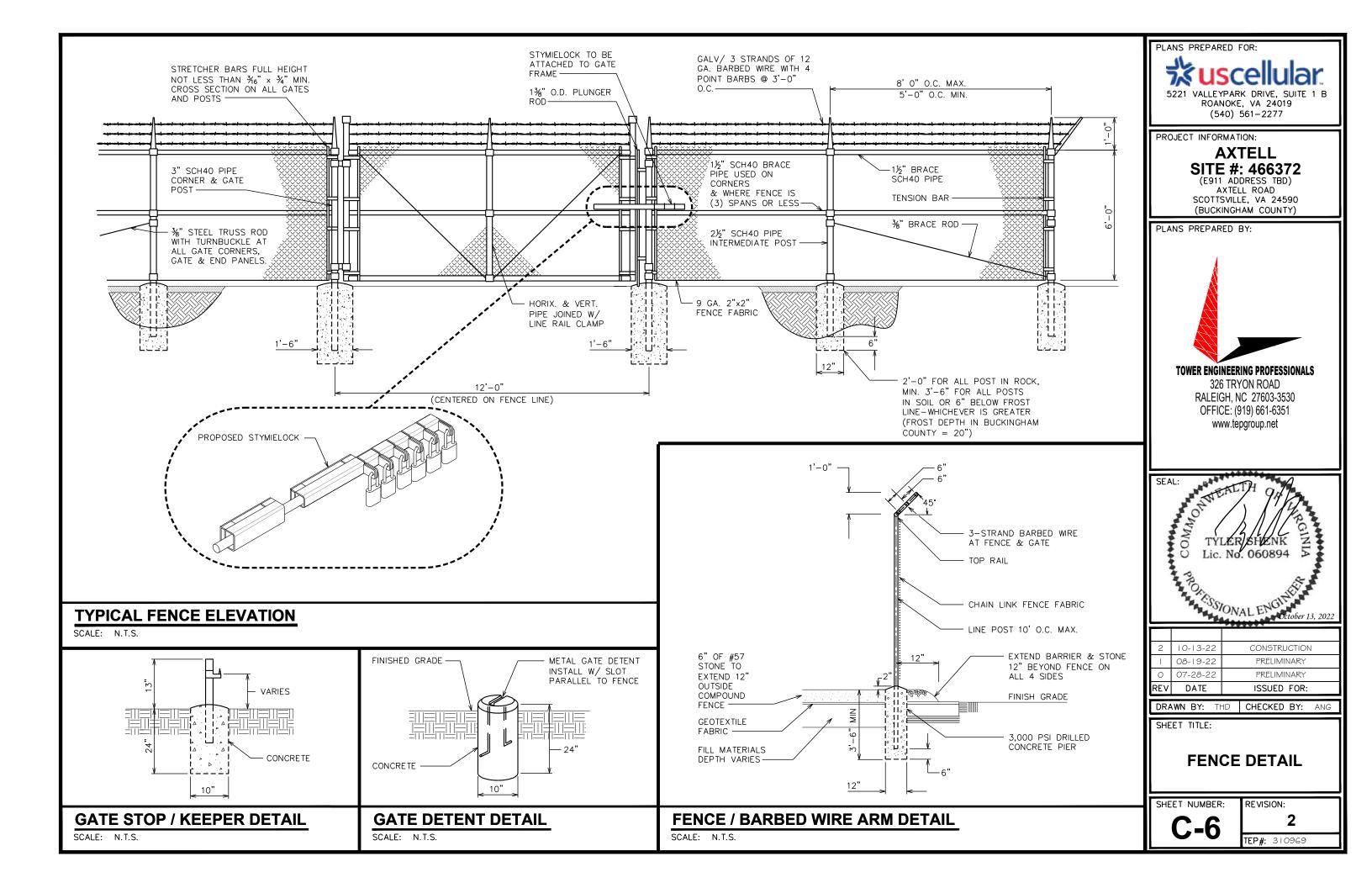
**REVISION:** TEP#: 310969

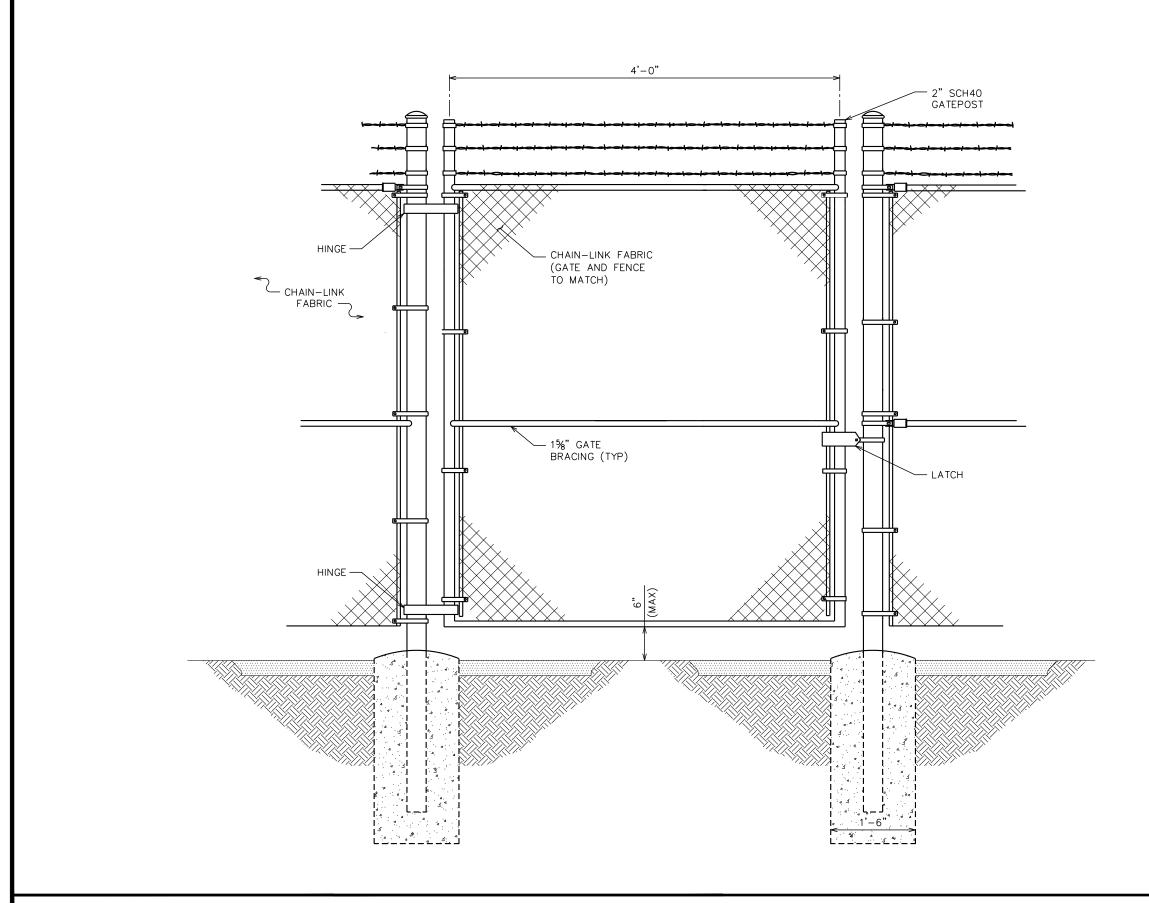
**TOWER ELEVATION** 

SCALE: 1" = 30'

SCALE IN FEET

30





PLANS PREPARED FOR:

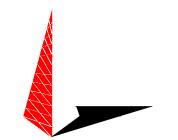
5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

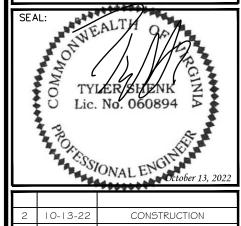
(E911 ADDRESS TBD)
AXTELL ROAD
SCOTTSVILLE, VA 24590
(BUCKINGHAM COUNTY)

PLANS PREPARED BY:



## **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



. , , , , , , , , , , , , , , , , , , ,		
2	10-13-22	CONSTRUCTION
1	08-19-22	PRELIMINARY
0	07-28-22	PRELIMINARY
DE V	DATE	ISSUED EOD.

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

**MAN GATE DETAIL** 

SHEET NUMBER: C-6A

REVISION:

TEP#: 310969

**MAN GATE DETAIL** 

## **NOTES:**

- 1. SIGNS SHALL BE MADE OF ALUMINUM WITH 1/4" HOLES 1/2" FROM EACH CORNER TO HANG SIGNS ON FENCE.
- 2. SIGNS SHALL BE INSTALLED AS FOLLOWS: GATE: NO TRESPASSING, RF GUIDELINES, RF WARNING, NFPA SULFURIC ACID, AUTHORIZED PERSONNEL ONLY INTERIOR OF FENCE GATE: EXIT SIGN
- 3. SIGNS SHALL BE INSTALLED WITH CENTER AT 5' ABOVE FINISHED GRADE.

## NO TRESPASSING OPERATIONS LICENSED BY THE FEDERAL GOVERNMENT

PERSONS VANDALIZING THIS FACILITY WILL BE PROSECUTED UNDER APPLICABLE FEDERAL, STATE AND LOCAL LAWS.

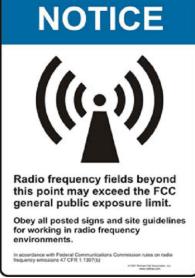
PRIOR TO ENTRY OR IN CASE OF EMERGENCY CONTACT U.S. CELLULAR: (888) 944 - 9400

SITE NUMBER 466372

(1) NO TRESSPASSING SIGN SIZE: 22"X 22" (0.063" ALUMINUM) (TO BE MOUNTED ON GATE)

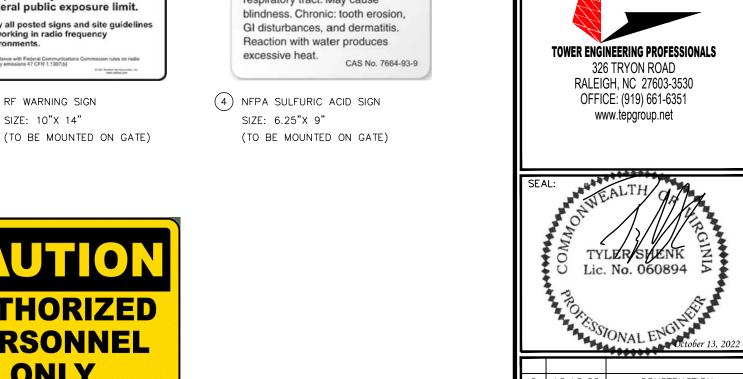
# **⚠** NOTICE **⚠**

- All personnel should have electromagnetic energy (EME)
- All personnel entering this site must be authorized.
- ⚠ Obey all posted signs.
- Assume all antennas are active.
- A Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum 3 feet clearance from all antennas.
- A Do not stop in front of antennas.
- ⚠ Use personal RF monitors while working near antennas. A Never operate transmitters without shields during normal operation
- A Do not operate base station antennas in equipment room.
- (2) RF GUIDELINES SIZE: 6"X 4" (TO BE MOUNTED ON GATE)



(3) RF WARNING SIGN SIZE: 10"X 14"





2 10-13-22 CONSTRUCTION PRELIMINARY 08-19-22 PRELIMINARY 07-28-22 REV DATE ISSUED FOR:

PLANS PREPARED FOR:

PROJECT INFORMATION:

PLANS PREPARED BY:

5221 VALLEYPARK DRIVE, SUITE 1 B

ROANOKE, VA 24019

(540) 561-2277

**AXTELL** 

SITE #: 466372 (E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590

(BUCKINGHAM COUNTY)

CHECKED BY: ANG DRAWN BY: THD

SHEET TITLE:

SIGNAGE DETAILS

SHEET NUMBER:

**REVISION:** 

(5) REFLECTIVE EXIT SIGN SIZE: 10"X 7" (TO BE MOUNTED TO INTERIOR GATE FENCE)

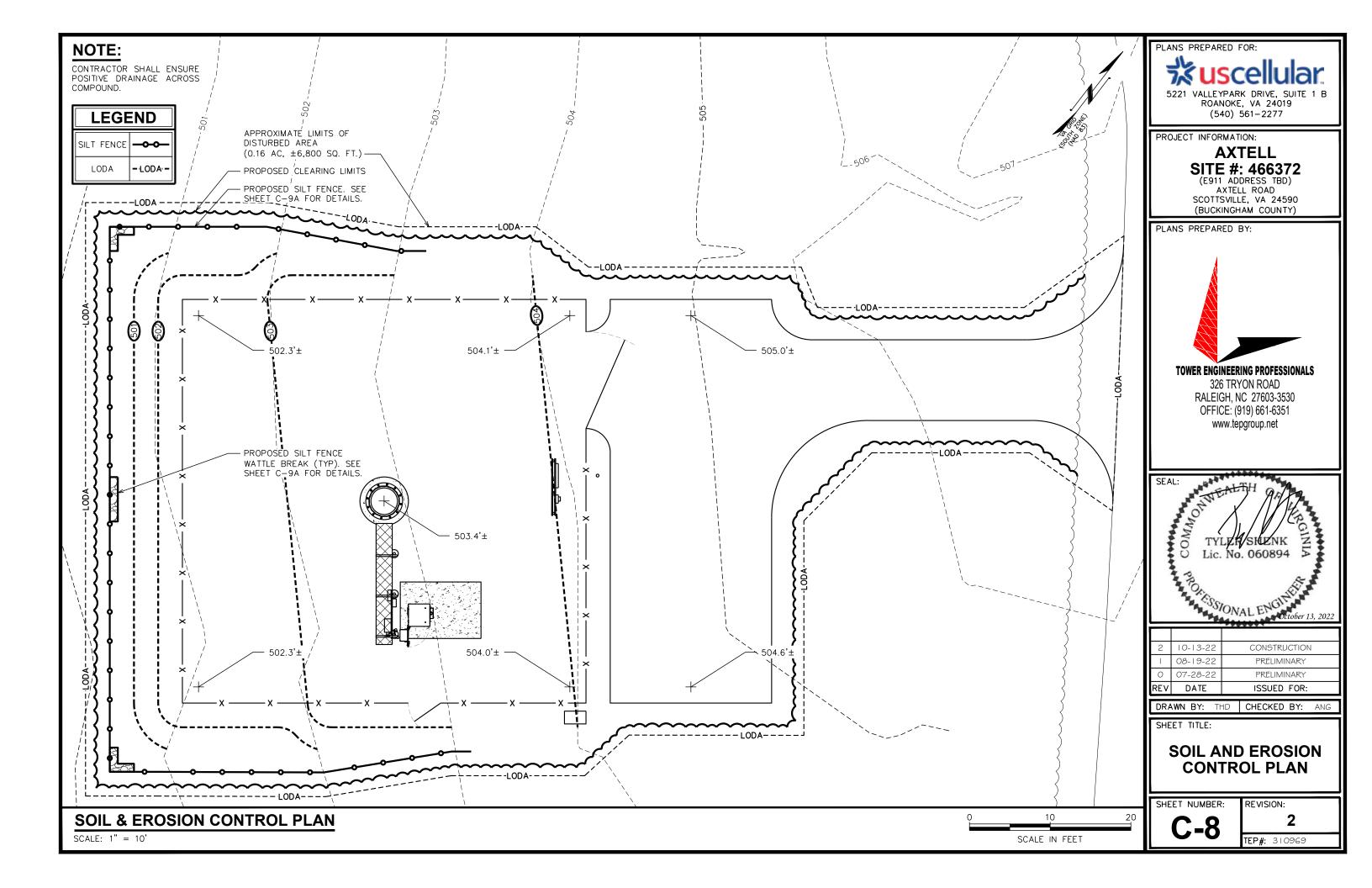


(6) AUTHORIZED PERSONNEL ONLY SIGN SIZE: 14"X 10" (TO BE MOUNTED ON GATE)

**TYPICAL SIGNS AND SPECIFICATIONS** 

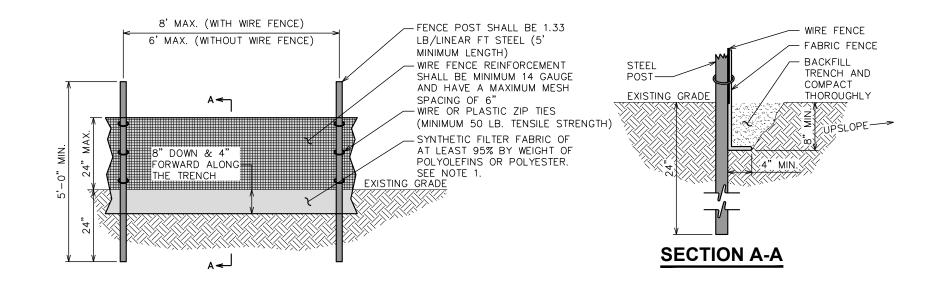
SCALE: N.T.S.

TEP#: 310969



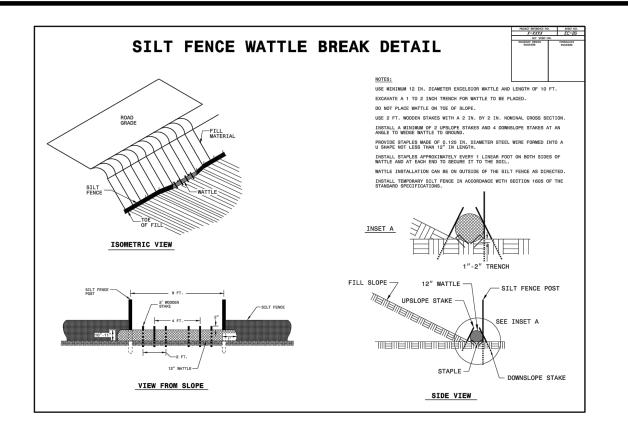
## **NOTES:**

- 1. FILTER FABRIC SHALL CONFORM TO THE REQUIREMENTS LISTED IN ASTM D 6461.
- 2. ENDS OF INDIVIDUAL FILTER FABRIC SHALL BE SECURELY FASTENED AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST
- 3. PLACE 10 INCHES OF FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
- 4. INSPECT SEDIMENT FENCE(S) AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL.
- 5. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
- AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE AND PROPERLY STABILIZE THE SITE.



## **SILT FENCE DETAIL**

SCALE: N.T.S.



PLANS PREPARED FOR: 5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



## **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



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ı			
ı	2	10-13-22	CONSTRUCTION
ı	- 1	08-19-22	PRELIMINARY
ı	0	07-28-22	PRELIMINARY
ı	REV	DATE	ISSUED FOR:

THD CHECKED BY: ANG DRAWN BY:

SHEET TITLE:

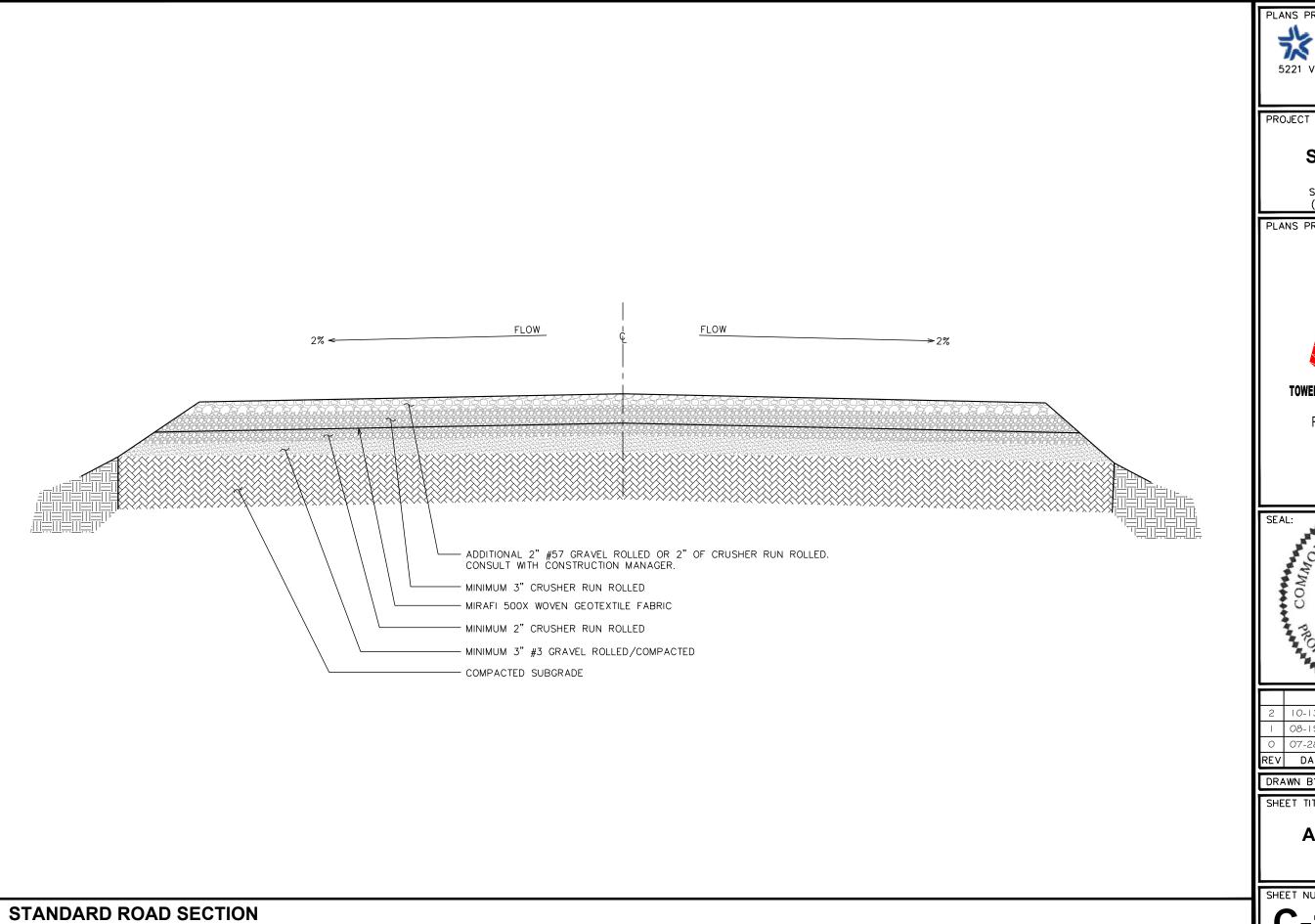
SILT FENCE **DETAILS** 

SHEET NUMBER:

REVISION:

TEP#: 310969

STANDARD SILT FENCE WATTLE BREAK DETAIL



PLANS PREPARED FOR:

5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019 (540) 561-2277

PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

(E911 ADDRESS TBD) AXTELL ROAD
SCOTTSVILLE, VA 24590
(BUCKINGHAM COUNTY)

PLANS PREPARED BY:



## **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



2	10-13-22	CONSTRUCTION
- 1	08-19-22	PRELIMINARY
0	07-28-22	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

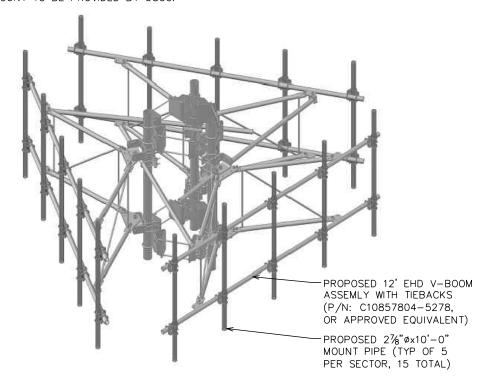
**ACCESS ROAD DETAILS** 

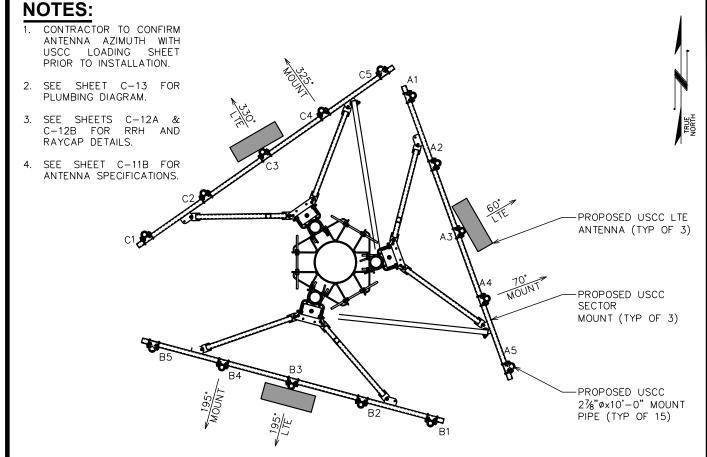
SHEET NUMBER:

TEP#: 310969

## **NOTES:**

- MOUNT INCLUDES ATTACHMENT HARDWARE. MOUNT PIPES SOLD SEPARATELY.
- 2. ANTENNA MOUNT TO BE PROVIDED BY USCC.





PLANS PREPARED FOR: 5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019

PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

(540) 561-2277

(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



## **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net

## **ANTENNA MOUNT DETAILS**

**SECTOR** 

ALPHA

BETA

GAMMA

SCALE: N.T.S.

**MOUNT ORIENTATION** SCALE:  $\frac{1}{4}$ " = 1'-0"



	ANTENI	NA/CAI	BLE SC	HEDUL	.E				
AZIMUTH TRUE NORTH)	MOUNTING HEIGHT	LB RET TILT	MB RET TILT	MECH. D-TILT	EQUIPMENT	SURGE PROTECTION	COAX/CABLE	CABLE LENGTH*	COAX JUMPER*
60°	€ @ 190'-0"	2°	2*	0°	(3) NOKIA				25'±
195°	Ç ⊚ 190'-0"	2°	2°	0°	AHCA RRH	(1) RUSDC-6267-PF-48 RAYCAP	(1) 1¼"ø HYBRID CABLE	250'±	25'±
330°	Ç ⊚ 190'-0"	2°	2°	0°	ÀHFIB RRH				25'±

**ANTENNA** 

Α3

В3

С3

- NOTES:

  1. \*CONTRACTOR SHALL FIELD VERIFY HYBRID CABLE AND COAX JUMPER LENGTHS PRIOR TO ORDERING MATERIALS.
- 2. (1) ANTENNA PER SECTOR FOR A TOTAL OF (3) ANTENNAS.
- 3. CONTRACTOR TO VERIFY AZIMUTHS PRIOR TO CONSTRUCTION.

**TECH** 

LTE

LTE

LTE

4. CONTRACTOR TO REQUEST RF SHEET FROM CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.

MANUFACTURER

(MODEL #)

DENGYO

OCT8-2LX2HX-BW65 DENGYO

OCT8-2LX2HX-BW65 DENGYO

OCT8-2LX2HX-BW65



		770000
2	10-13-22	CONSTRUCTION
- 1	08-19-22	PRELIMINARY
0	07-28-22	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

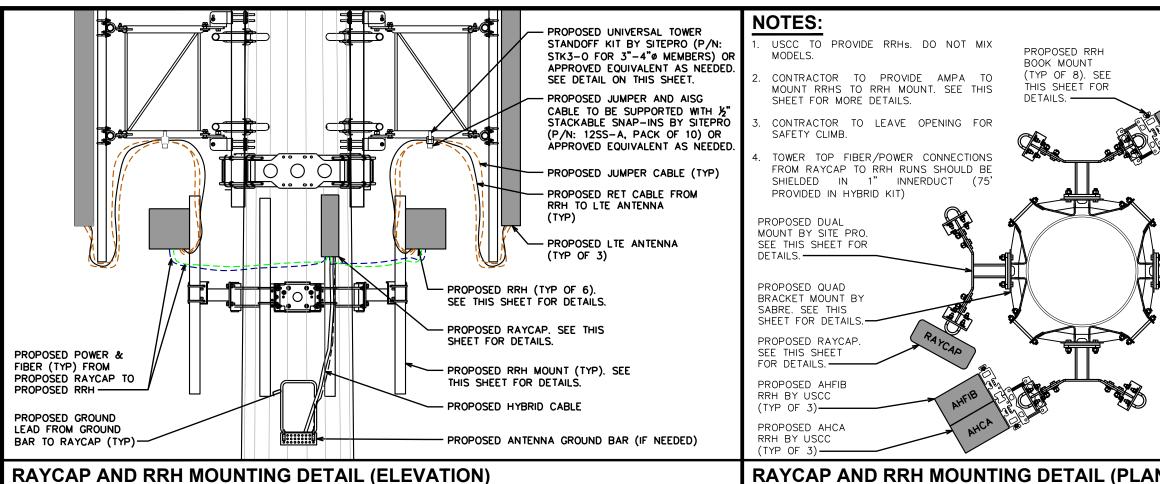
**ANTENNA MOUNTING DETAILS** 

SHEET NUMBER:

REVISION:

TEP#: 310969

**RF CONFIGURATION** 

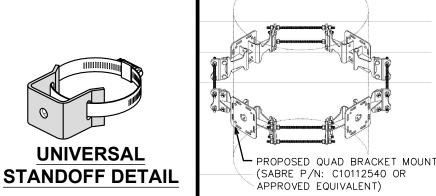


## **RAYCAP AND RRH MOUNTING DETAIL (PLAN)**

SCALE: N.T.S.



SCALE: N.T.S.



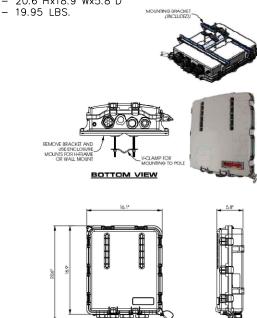
**NOTES:** 

USCC TO PROVIDE RRH MOUNTS

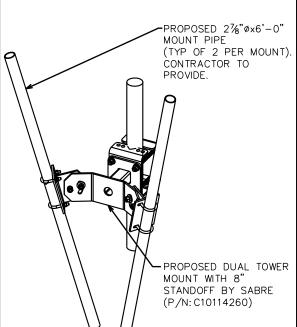
2. MOUNT PIPES TO SUPPLIED SEPERATELY

## NOTES:

- P/N: RUSDC-6267-PF-48
- 20.6"Hx18.9"Wx5.8"D

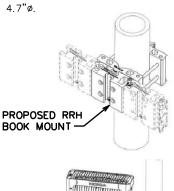


## NOTE: USCC TO PROVIDE RRH MOUNTS

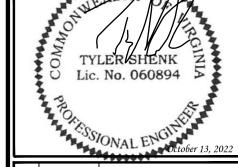


## NOTE:

- NOKIA POLE MOUNTING KIT (AMPA) 473879A.
- CAN BE USED WITH PIPES FROM 1.2"Ø TO







PLANS PREPARED FOR:

PROJECT INFORMATION:

PLANS PREPARED BY:

5221 VALLEYPARK DRIVE, SUITE 1 B

ROANOKE, VA 24019

(540) 561-2277

**AXTELL** 

SITE #: 466372

(E911 ADDRESS TBD)

AXTELL ROAD

SCOTTSVILLE, VA 24590

(BUCKINGHAM COUNTY)

**TOWER ENGINEERING PROFESSIONALS** 

326 TRYON ROAD

RALEIGH, NC 27603-3530

OFFICE: (919) 661-6351

www.tepgroup.net

2	10-13-22	CONSTRUCTION	
1	08-19-22	PRELIMINARY	
0	07-28-22	PRELIMINARY	
REV	DATE	ISSUED FOR:	

DRAWN BY: THD CHECKED BY: ANG

SHEET TITLE:

**RRH MOUNTING DIAGRAM** 

**MOUNTING DETAILS** 

SCALE: N.T.S. SCALE: N.T.S.

**QUAD BRACKET MOUNT** 

## RAYCAP SPEC SHEET

FRONT VIEW

SCALE: N.T.S.

## **DUAL MOUNT**

SCALE: N.T.S.

**RRH BOOK MOUNT** 

SCALE: N.T.S.

SHEET NUMBER:

REVISION:

TEP#: 310969

BOOK MOUNT

SIDE VIEW

#### SCOPE:

1. PROVIDE LABOR, MATERIALS, INSPECTION, AND TESTING TO PROVIDE CODE COMPLIANCE FOR ELECTRIC, TELEPHONE, AND GROUNDING/LIGHTNING SYSTEMS.

#### CODES

- 1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LAWS AND CODES. THESE INCLUDE BUT ARE NOT LIMITED TO THE LATEST ADOPTED EDITIONS OF:
  - A. THE NATIONAL ELECTRICAL SAFETY CODE B. THE NATIONAL ELECTRIC CODE - NFPA-70
- D. LOCAL AND STATE AMENDMENTS
- C. REGULATIONS OF THE SERVING UTILITY COMPANY
- E. THE INTERNATIONAL ELECTRIC CODE -IEC (WHERE APPLICABLE)
- 2. PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR.
- 3. AFTER COMPLETION AND FINAL INSPECTION OF THE WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF COMPLETION AND APPROVAL.

1. UPON COMPLETION OF THE INSTALLATION, OPERATE AND ADJUST THE EQUIPMENT AND SYSTEMS TO MEET SPECIFIED PERFORMANCE REQUIREMENTS. THE TESTING SHALL BE DONE BY QUALIFIED PERSONNEL.

- IN ADDITION TO THE GUARANTEE OF THE EQUIPMENT BY THE MANUFACTURER, EACH PIECE OF EQUIPMENT SPECIFIED HEREIN SHALL ALSO BE GUARANTEED FOR DEFECTS OF MATERIAL OR WORKMANSHIP OCCURRING DURING A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE WORK BY THE OWNER AND WITHOUT EXPENSE TO THE OWNER AND
- 2. THE WARRANTEE CERTIFICATES & GUARANTEES FURNISHED BY THE MANUFACTURERS SHALL BE TURNED OVER TO THE OWNER.

#### **UTILITY CO-ORDINATION:**

1. CONTRACTOR SHALL COORDINATE WORK WITH THE POWER AND TELEPHONE COMPANIES AND SHALL COMPLY WITH THE SERVICE REQUIREMENTS OF EACH UTILITY COMPANY.

#### **EXAMINATION OF SITE:**

PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE JOB AND SHALL FAMILIARIZE HIMSELF WITH THE CONDITIONS AFFECTING THE PROPOSED ELECTRICAL INSTALLATION AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. FAILURE TO COMPLY WITH THE INTENT OF THIS SECTION WILL IN NO WAY RELIEVE THE CONTRACTOR OF PERFORMING THE WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM OR SYSTEMS.

### **CUTTING, PATCHING AND EXCAVATION:**

- 1. COORDINATION OF SLEEVES, CHASES, ETC., BETWEEN SUBCONTRACTORS WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.
- 2. NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE ELECTRICAL WORK SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING.
- 3. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS, ETC., WITH APPROVED METHOD AS LISTED BY UL.

### **RACEWAYS / CONDUITS GENERAL:**

- CONDUCTORS SHALL BE INSTALLED IN LISTED RACEWAYS. CONDUIT SHALL BE RIGID STEEL, EMT, SCH40 PVC, OR SCH80PVC AS INDICATED ON THE DRAWINGS. THE RACEWAY SYSTEM SHALL BE COMPLETE COMPLETE BEFORE INSTALLING CONDUCTORS.
- 2. EXTERIOR RACEWAYS AND GROUNDING SLEEVES SHALL BE SEALED AT POINTS OF ENTRANCE AND EXIT. THE RACEWAY SYSTEM SHALL BE BONDED PER NEC.

### **EXTERIOR CONDUIT:**

- EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.
- 2. THE CONDUIT SHALL BE RIGID STEEL AT GRADE TRANSITIONS OR WHERE EXPOSED TO DAMAGE.
- 3. UNDERGROUND CONDUITS SHALL BE RIGID STEEL, SCH40 PVC, OR SCH80 PVC AS INDICATED ON THE DRAWINGS.
- 4. BURIAL DEPTH OF CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION, BUT SHALL NOT BE LESS THAN THE FROST DEPTH AT THE SITE.
- 5. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY ROUTES BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND/OR BUILDING OWNER.

### INTERIOR CONDUIT:

- 1. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT OR PVC.
- 2. CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHING FOR ALL CONDUIT TERMINATIONS. CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.
- 3. PROVIDE SUPPORTS FOR CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.

#### **EQUIPMENT:**

- 1. DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED, HEAVY DUTY TYPE.
- 2. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK. CONTRACTOR WILL VERIFY THAT EXISTING CIRCUIT BREAKERS ARE RATED FOR MORE THAN AVAILABLE FAULT CURRENT AND REPLACE AS NECESSARY.
- 3. NEW CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY.

### **CONDUCTORS:**

- 1. FURNISH AND INSTALL CONDUCTORS SPECIFIED IN THE DRAWINGS. CONDUCTORS SHALL BE COPPER AND SHALL HAVE TYPE THWN (MIN) (75° C) INSULATION, RATED FOR 600 VOLTS.
- 2. THE USE OF ALUMINUM CONDUCTORS SHALL BE LIMITED TO THE SERVICE FEEDERS INSTALLED BY THE UTILITY.
- 3. CONDUCTORS SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:
  - A. MINIMUM WIRE SIZE SHALL BE #12 AWG.
  - CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND #12 MAY BE SOLID OR STRANDED. В.
  - CONNECTION FOR #10 AWG #12 AWG SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
  - CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.
- 3. CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC STANDARDS.

#### **UL COMPLIANCE:**

1. ELECTRICAL MATERIALS, DEVICES, CONDUCTORS, APPLIANCES, AND EQUIPMENT SHALL BE LABELED/LISTED BY UL OR ACCEPTED BY JURISDICTION (I.E., LOCAL COUNTY OR STATE) APPROVED THIRD PARTY TESTING AGENCY.

#### **GROUNDING:**

- 1. ELECTRICAL NEUTRALS, RACEWAYS AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE NEUTRAL CONDUCTORS, CONDUITS, SUPPORTS, CABINETS, BOXES, GROUND BUSSES, ETC. THE NEUTRAL CONDUCTOR FOR EACH SYSTEM SHALL BE GROUNDED AT A SINGLE POINT.
- 2. PROVIDE GROUND CONDUCTOR IN RACEWAYS PER NEC.
- 3. PROVIDE BONDING AND GROUND TO MEET NFPA 780 "LIGHTNING PROTECTION" AS A MINIMUM
- 4. PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE, RADIO EQUIPMENT MANUFACTURERS, AND MOTOROLA R56 (AS APPLICABLE).

## ABBREVIATIONS AND LEGEND

ABOVE FINISHED GRADE

ATS - AUTOMATIC TRANSFER SWITCH AWG

AMERICAN WIRE GAUGE

BCW BARE COPPER WIRE BFG BELOW FINISHED GRADE

BKR BREAKER

CONDUIT

CKT CIRCUIT

DISCONNECT

EXTERNAL GROUND RING

- ELECTRIC METALLIC TUBING

FSC - FLEXIBLE STEEL CONDUIT

GEN GENERATOR

GPS - GLOBAL POSITIONING SYSTEM

GRD GROUND

IGB ISOLATED GROUND BAR

IGR INTERIOR GROUND RING (HALO)

KWKILOWATTS

NEC NATIONAL ELECTRIC CODE

PCS PERSONAL COMMUNICATION SYSTEM

РΗ PHASE

\_ PANEL PNI

PVC - RIGID NON-METALLIC CONDUIT

RGS - RIGID GALVANIZED STEEL CONDUIT

SW SWITCH

TGB TOWER GROUND BAR

UL UNDERWRITERS LABORATORIES

V VOLTAGE W WATTS

XFMR TRANSFORMER \_

XMTR TRANSMITTER

---E--- UNDERGROUND ELECTRICAL CONDUIT

----T--- UNDERGROUND TELEPHONE CONDUIT

KILOWATT-HOUR METER UNDERGROUND BONDING AND

GROUNDING CONDUCTOR. Ø GROUND ROD

CADWELD

 $\boxtimes$ GROUND ROD WITH INSPECTION WELL PLANS PREPARED FOR: 5221 VALLEYPARK DRIVE, SUITE 1 B ROANOKE, VA 24019

(540) 561-2277

PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

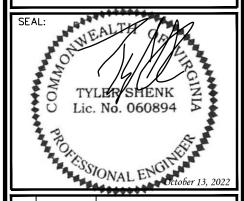
(E911 ADDRESS TBD) AXTELL ROAD SCOTTSVILLE, VA 24590 (BUCKINGHAM COUNTY)

PLANS PREPARED BY:



**TOWER ENGINEERING PROFESSIONALS** 

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net



2	10-13-22	CONSTRUCTION
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REV	DATE	ISSUED FOR:

THD | CHECKED BY:

DRAWN BY: SHEET TITLE:

> **ELECTRICAL** NOTES

SHEET NUMBER:

REVISION:

TEP#: 310969

## **GENERAL NOTES:**

- 1. ALL REFERENCES TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED U.S. CELLULAR OR ITS DESIGNATED REPRESENTATIVE.
- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF VIRGINIA
- 3. STRUCTURE IS DESIGNED IN ACCORDANCE WITH ANSI/TIA/EIA-222-H, AND CONFORMS TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2018 EDITION WITH VIRGINIA AMENDMENTS.
- WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2018 EDITION WITH VIRGINIA AMENDMENTS.
- UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
- 7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE, TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO. THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY, SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- 8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK, THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
- ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING
- 11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
- 12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR. CONTRACTOR SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
- 13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- 14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
- 15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFTER MATERIAL SHALL BE REWORKED OR REPLACED.
- 16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
- 17. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.
- 18. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ANY DESCREPANCEIES ARE DISCOVERED. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

## STRUCTURAL STEEL NOTES:

- THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.
- 2. UNLESS OTHERWISE NOTED, ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
  - A. STRUCTURAL STEEL, ASTM DESIGNATION A36 OR A992-GR50. B. ALL BOLTS, ASTM A325 TYPE I GALVANIZED HIGH STRENGTH BOLTS.

  - C. ALL NUTS, ASTM A563 CARBON AND ALLOY STEEL NUTS.
  - D. ALL WASHERS. ASTM F436 HARDENED STEEL WASHERS.
- 3. ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.
- 4. HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER.
- 5. HOT-DIP GALVANIZE ALL ITEMS UNLESS OTHERWISE NOTED, AFTER FABRICATION WHERE PRACTICABLE. GALVANIZING: ASTM A123, ASTM, A153/A153M OR ASTM A653/A653M, G90, AS APPLICABLE,
- 6. REPAIR DAMAGED SURFACES WITH GALVANIZING REPAIR METHOD AND PAINT CONFORMING TO ASTM A780 OR BY APPLICATION OF STICK OR THICK PASTED MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED AND REMOVE SLAG FROM WELDS. HEAT SURFACES TO WHICH STICK OR PASTE MATERIAL IS APPLIED, WITH A TORCH TO A TEMPERATURE SUFFICIENT TO MELT THE METALLICS IN STICK OR PASTE; SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF ANY EXCESS.
- 7. A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS.
- 8. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO EXCLUDE THE THREADS FROM THE SHEAR PLANE.
- 9. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- 10. ALL ASSEMBLY AND ANCHOR BOLTS ARE TO BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN SECTION 8.1 OF THE AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", DATED JUNE 30, 2004
- 11. FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.
- 12. DO NOT OVER TOROUF ASSEMBLY BOLTS, GALVANIZING ON BOLTS, NUTS, AND STEEL PARTS MAY ACT AS A LUBRICANT, THUS OVER TIGHTENING MAY OCCUR AND MAY CAUSE BOLTS TO CRACK AND SNAP OFF.
- 13. PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT. PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS ARE PROVIDED.
- 14. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- 15. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-2010 STRUCTURAL WELDING CODE - STEEL.



PROJECT INFORMATION:

## **AXTELL** SITE #: 466372

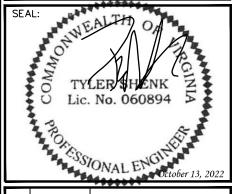
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PLANS PREPARED BY:



### **TOWER ENGINEERING PROFESSIONALS**

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SHEET TITLE:

**PROJECT** NOTES

SHEET NUMBER:

**N**-

REVISION:

TEP#: 310969

Site Name: Axtell Site Number: 466372

## **DEED OF GROUND LEASE**

This Deed of Ground Lease ("Lease") is made and entered into by and between M3 Properties, LLC, a Virginia limited liability company, having an address at 3294 Doctors Crossing, Charlottesville, Virginia 22911, hereinafter referred to as "Landlord," and USCOC of Virginia RSA #3, Inc., a Virginia corporation, having an address at Attention: Real Estate Lease Administration, 8410 West Bryn Mawr Avenue, Chicago, Illinois 60631, hereinafter referred to as "Tenant."

WHEREAS, Landlord is the fee owner of property with a Parcel Identification Number of 14-59, on Axtell Road located in the Town of Scottsville, County of Buckingham, Comonwealth of Virginia legally described in Exhibit A attached hereto and incorporated by reference (the "Landlord's Parcel").

WHEREAS, Tenant desires to occupy, and Landlord is willing to provide Tenant such Premises (as hereinafter defined) on the Landlord's Parcel for Tenant's use, as set forth in this Lease.

NOW THEREFORE, in consideration of the mutual promises, conditions, and other good and valuable consideration of the parties hereto, it is covenanted and agreed as follows:

## 1. Option to Lease.

a. Landlord hereby grants to Tenant an option (the "Option") to lease from Landlord the following described parcel (the "Leasehold Parcel"):

Approximate dimensions: 100' x 100'

Approximate square footage: 10,000

Legal descriptions of the Landlord's Parcel and the Tenant's Premises are attached hereto as Exhibit A and a Site Plan of the Leasehold Parcel is attached to the lease as Exhibit B.

b. During the Initial Option Term (as hereinafter defined) and any Extended Option Term (as hereinafter defined), and during the Initial Term (as hereinafter defined) and any Renewal Term (as hereinafter defined) of this Lease, Tenant and its agents, engineers, surveyors and other representatives will have the right to enter upon the Leasehold Parcel to inspect, examine, conduct soil borings, drainage testing, material sampling, and other geological or engineering tests or studies of the Leasehold Parcel (collectively the "Tests"), to apply for and obtain licenses, permits, approvals, or other relief required of or deemed necessary or appropriate at Tenant's sole discretion for its use of the Premises (as hereinafter defined) and include without limitation applications for zoning variances, zoning ordinances, amendments, special use permits, and construction permits (collectively referred to as "Governmental Approvals"), and otherwise to do those things on or off the Leasehold Parcel that, in the opinion of Tenant, are necessary in Tenant's sole discretion to determine the physical condition of the Leasehold Parcel, the environmental history of the Leasehold Parcel, Landlord's title to the Leasehold Parcel, and the feasibility or suitability of the Leasehold Parcel



Site Name: Axtell Site Number: 466372

for Tenant's Permitted Use (as hereinafter defined), all at Tenant's expense. Tenant will not be liable to Landlord or any third party on account of any pre-existing defect or condition on or with respect to the Leasehold Parcel, whether or not such defect or condition is disclosed by Tenant's inspection.

- c. In consideration of Landlord granting Tenant the Option, Tenant hereby agrees to pay Landlord the sum of

  Within fifteen (15) days of full execution of this Lease by Landlord and Tenant. The Option will be for an initial term of eighteen (18) months (the "Initial Option Term") and may be renewed by Tenant, at the election of Tenant, for an additional six (6) months ("Extended Option Term") upon written notification to Landlord and the payment of an additional

  no later than fifteen (15) days prior to the expiration date of the Initial Option Term. Landlord shall provide a complete and accurate IRS form W9 to Tenant for the Payee of the Option sum prior to payment thereof.
- d. During the Initial Option Term and during the Extended Option Term, if any, as the case may be, Tenant may exercise the Option by notifying Landlord in writing at any time prior to the expiration of the Initial Option Term and the Extended Option Term, if any, as the case may be. The date stated on such notice will be the Commencement Date of the Lease. If Tenant exercises the Option, then Landlord shall lease the Premises (as hereinafter defined) to the Tenant on, and subject to, the terms and conditions of this Lease.
- 2. Grant of Easements. Landlord hereby grants to Tenant an access and utility easement thirty (30) feet in width from the Leasehold Parcel to the nearest accessible public right-of-way and to the nearest suitable utility company-approved service connection points (the "Access and Utility Easement"); the Access and Utility Easement is referred to herein as the "Easement"; the lands underlying the Easement is referred to herein as the "Easement Parcel," which Easement Parcel is further described in Exhibits "A" & "B" attached hereto and incorporated herein). The Easement granted herein shall include, but not be limited to,
  - a. The right to clear vegetation, cut timber, and move earthen materials upon the Easement Parcel,
  - b. The right to improve an access road within the Easement Parcel,
  - c. The right to place use, repair, replace, modify and upgrade utility lines and related infrastructure and equipment within the Easement Parcel,
  - d. The right to enter and temporarily rest upon Landlord's adjacent lands for the purposes of
    - (i) Installing, repairing, replacing and removing the Improvements (as defined below) and any other personal property of Tenant from the Leasehold Parcel and
    - (ii) Improving the Easement Parcel, including the right to bring in and use all necessary tools and machinery, and
  - e. The right of pedestrian and vehicular ingress and egress to and from the Leasehold Parcel at any time over and upon the Easement Parcel. The Leasehold Parcel and the



Site Name: Axtell

Site Number: 466372

### SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto bind themselves to this Deed of Ground Lease as of the date of full execution of this Deed of Ground Lease.

LANDLORD: M3 Properties, LLC

Date: 7/14/2022

COMMONWEALTH OF VIRGINIA

COUNTY OF \_Albertale\_

I, the undersigned, a notary public in and for the State and County aforesaid, do hereby certify that State Marshall, known to me to be the same person whose name is subscribed to the foregoing Deed of Ground Lease, appeared before me this day in person and acknowledged that he/she signed the said Lease as his/her free and voluntary act for the uses and purposes therein stated.

Given under my hand and seal this 14 day of \_

2022.

William Lyster Commonwealth of Virginia Notary Public Commission No. 7821369 My Commission Expires 9/30/2023

Notary Public

My commission expires\_

9/30/2023

TENANT: USCOC of Virginia RSA #3, Inc.
Ву:
Maril Trians
Printed: Mike Inzary
Title: Vice President
Date: 8-1-2023
STATE OF ILLINOIS
COUNTY OF COOK

I, the undersigned, a notary public in and for the State and County aforesaid, do hereby certify that Mile Inc., Vice President, for USCOC of Virginia RSA #3, Inc., known to me to be the same person whose name is subscribed to the foregoing Ground Lease, appeared before me this day in person and acknowledged that, pursuant to his/her authority, he/she signed the said Lease as his/her free and voluntary act on behalf of the named Tenant, for the uses and purposes therein stated.

Site Name: Axtell Site Number: 466372

### Exhibit A

## Legal Descriptions

### Landlord's Parcel

All that certain tract or parcel of land lying and being In the Slate River District of Buckingham County, Virginia, containing 129.29 acres, more or less as more particularly shown on that certain plat of survey dated September 29, 2009 prepared by William W, Dickerson, Jr., LS., said plat being recorded lo the Circuit Court Clerk's Office of Buckingham County, Virginia in Plat Cabinet A, Slide 202E, Reference is hereby made to said plat for a more complete and accurate description of the property hereby conveyed. This being Parcel# 66 in Deed and Assignment dated July 29, 2009 and recorded In the Circuit Court Clerk's Office of Buckingham County, Virginia in Deed Book 373, at page 719

## Tenant's Premises

ALL THAT CERTAIN LEASE AREA LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE M3 PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8" ROD SET, SAID ROD HAVING VIRGINIA STATE PLANE, SOUTH ZONE COORDINATES NORTHING: 3788954.74, EASTING: 11459731.74; THENCE S  $52^{\circ}22'58$ " W 100.00' TO A 5/8" ROD SET; THENCE N  $37^{\circ}37'02$ " W 100.00' TO A 5/8" ROD SET; THENCE N  $52^{\circ}22'58$ " E 100.00' TO A 5/8" ROD SET; THENCE S  $37^{\circ}37'02$ " E 100.00' TO THE POINT OF BEGINNING, AND CONTAINING 10,000 SQUARE FEET MORE OR LESS.

### Access and Utility Easement

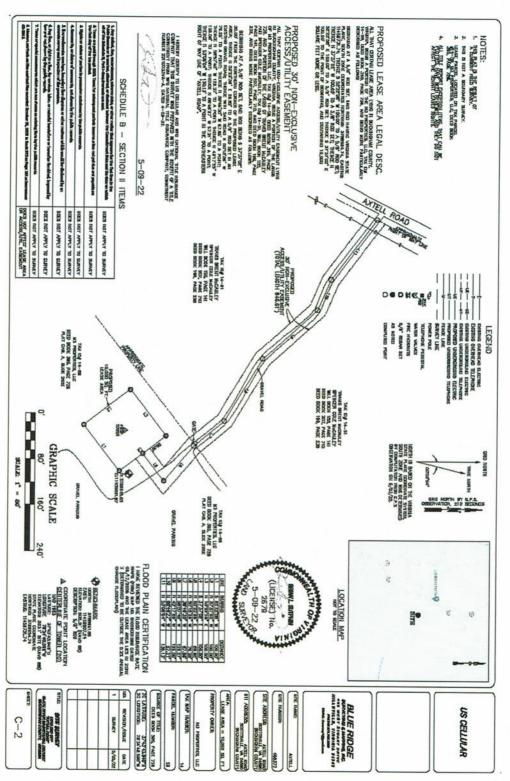
ALL THAT CERTAIN NON-EXCLUSIVE ACCESS/UTILITY EASEMENT LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE LANDS OF M3 PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND A PORTION OF THE LANDS OF TRAVIS BRENT McCAULEY AND SPENCER COLE McCAULEY, TAX ID# 14-51, WILL BOOK 155, PAGE 141, DEED BOOK 207, PAGE 710, AND DEED BOOK 199, PAGE 236, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8" ROD SET, SAID ROD BEING S 37°37'02" E 50.00' FROM THE NORTHERN CORNER OF THE PROPOSED LEASE AREA; THENCE N 52°22'58" E 59.82' TO A 5/8" ROD SET IN AN EXISTING GRAVEL ROAD; THENCE WITH SAID ROAD N 50°15'56" W 79.26' TO A POINT; THENCE N 39°46'30" W 67.86' TO A POINT; THENCE N 58°57'40" W 126.27' TO A POINT; THENCE N 42°17'55" W 126.06' TO A POINT; THENCE N 66°46'27" W 57.21' TO A POINT; THENCE N 53°06'04" W 130.13' TO A POINT IN THE SOUTHEASTERN RIGHT OF WAY LINE OF "AXTELL ROAD".



Site Name: Axtell Site Number: 466372

## Exhibit B



Site Plan





### **OPINION LETTER**

September 13, 2022

### FAA and FCC Not Required

Kathy Mayhew US Cellular Corporation 3806 Thirlane Road, NW Roanoke, VA 24019

RE: 466372 - Axtell, VA Airspace Analysis

Latitude (NAD-83): 37° 43′ 43.95″ N
Longitude (NAD-83): 78° 34′ 48.60″ W
Ground Elevation: 503.0 ft. GE
Tower tip height: 199.0 ft. AGL
Overall height: 702.0 ft. AMSL



Dear Ms. Mayhew,

Our airspace analysis results for the 466372 - Axtell, VA site are as follows:

- 1. Per AIRSPACE, filing an FAA Form 7460-1 is not required for the proposed height of 199.0 ft. AGL (702.0 ft. AMSL). The maximum allowable height for not filing an FAA Form 7460-1 is 200 ft. AGL.
- 2. FCC's TOWAIR Determination indicates that this structure does not require registration as it would PASS SLOPE (100:1) NO FAA REQ 5613.0 Meters (18415.1 Feet) away & below slope by 9.0 Meters (29.5300 Feet). The maximum allowable height for not filling an ASR is 200 ft AGL.
- 3. The proposed site is 12.479 nm NW from the nearest public landing facility VA97: Buckingham County Rescue Squad and it is 23.27 nm NNW from FVX: Farmville Regional. At an overall height of 702.0 ft. AMSL, it does not exceed FAR 77.9 (a) or FAR 77.9 (b) Notice Criteria for FVX airport. This airport has both Circling and Straight-In Instrument approach procedures. It does not exceed any glide slopes of FVX airport. VA97: Buckingham County Rescue Squad is a heliport type landing facility associated with the city of Dillwyn, VA. FVX: Farmville Regional is an airport type landing facility associated with the city of Farmville, VA.
- 4. The proposed site is not within any of the instrument approach procedures of FVX airport.
- 5. The nearest private landing facility is 8VA4: Lotus Intl, which is an airport type landing facility not eligible for study under FAR Part 77 sub-Part C. It is 6.76 nm SW from the proposed site.
- 6. The proposed 199.0 ft. AGL height would not adversely affect low altitude en route airways and/ or VFR routes in the area.
- 7. No records were found for AM stations within 10 km of the proposed site location. As noted per the FCC AM Tower Locator and per FCC regulation 13-115, Section 1.30002, the structure will not require a 'Proof of Performance' measurement study before and after construction.
- 8. Marking and lighting are not required for the proposed height of 199.0 ft. AGL.
- 9. All Wireless Applications Corp. analyses are based on the latest AIRSPACE, FAA Notice Criteria Tool and FCC TOWAIR programs.

If you have any questions, please do not hesitate to call.

Thank you.

Ronald W. Lageson, Jr. 425-643-5000 (office) 425-649-5675 (fax)















Design

Regulatory

Dashboara

## EASEMENT AGREEMENT

This Easement Agreement is made this 15 day of 10, 2022 by and between Travis Brent McCauley and Spencer Cole McCauley, heirs of Steven S. McCauley (deceased) ("Grantor") and USCOC of Virginia RSA #3, Inc., a Virginia corporation ("Grantee").

WHEREAS, Grantor owns property in Buckingham County, Virginia identified as Parcel ID # 14-51, and being the same property conveyed to Grantor by Will dated March 14, 2016, in the Clerk's Office for the County of Buckingham County Circuit Court, Will Book 155, Page 141. (the "Property").

WHEREAS, Grantee has a leasehold interest in a telecommunications facility ("the Tower Site") on property owned by M3 Properties LLC, which adjoins the Property.

WHEREAS, Grantee wishes to establish an easement for ingress and egress and utilities to the Tower Site over a portion of the Property and Grantor wishes to grant such an easement to Grantee for the consideration outlined below.

### NOW, THEREFORE, IT IS AGREED as follows:

- In consideration of Grantor granting to Grantee an easement (the "Easement"), Grantee hereby agrees to pay Grantor the sum of within fifteen (15) days of full execution of this Easement Agreement by Grantor and Grantee, and subject to, the following terms and conditions.
- 1. This Easement Agreement shall commence and become effective on the last date of signature by the parties (the "Commencement Date").



2. The Grantor's land across which this Easement traverses will remain the property of the

Grantor. The Grantor reserves for itself and for any subsequent fee simple owners the right to

make any use of the Property provided that such use does not interfere with the Grantee's use of

this Easement. The Grantee's equipment shall remain the property of the Grantee. The Grantee

shall be responsible for any damages to the surface within the Easement boundaries, to others'

property within the Easement and outside of the Easement if any such damages result from the

Grantee's and/or its subcontractor's work within the Easement.

3. This Easement Agreement does not create a partnership or joint venture of any kind

between Grantor and Grantee.

4. All notices hereunder shall be in writing and delivered as follows:

If to Grantor,

Travis McCauley and Spencer McCauley

302 Quail Ridge Dr Forest, Virginia 24551

(540) 230-2077

If to Grantee.

USCOC of Virginia RSA #3, Inc.

Attn: Real Estate Lease Administration

8410 West Bryn Mawr Avenue

Chicago, Illinois 60631

or to such other addresses as the parties may provide notice to the other of

in writing prior to the time such notice is given.

5. The Grantor, and its successors and assigns, shall be responsible for the real estate taxes

on the real property within the Easement. The Grantee, and its successors and assigns, will be

responsible for any personal property taxes on personal property owned by the Grantee within

the Easement.

6. This Easement Agreement shall be governed by the laws of the State of Virginia. This

Easement Agreement contains the entire agreement between the parties hereto and shall be

ポ uscellular

amended only in a written instrument duly signed by the parties hereto. This Easement Agreement shall be binding upon the Grantor, Grantee, their heirs, devisees, successors, assigns, tenants, subtenants, invitees, contractors, subcontractors, agents, employees and representatives for as long as Grantee operates the Tower Site.

- 7. The Grantee may terminate this Easement Agreement at any time during the life of this Easement Agreement if Grantee no longer needs to use the Easement or should conditions arise and Grantee feels this Easement Agreement is not in the best interest of the Grantee.
- 8. The parties shall execute a Deed of Easement as attached hereto as Exhibit A which shall be recorded in the appropriate office which maintains land records for the locality in which the Property is located. A release of the Deed of Easement shall be recorded at such time as the Tower Site is removed or abandoned or this Easement Agreement is terminated.

[Signature pages to follow]



WITNESS the following signatures: Grantor



## WITNESS the following signatures: Grantor

	Spencer Cole McCauley	
COMMONWEALTH OF VIRGINIA COUNTY OF ALBEMARLE	:	
The foregoing Easement Agreeme this May of July 2020-	ont was signed, sworn to and a by Spencer Cole McCauley.  13034 BAN Notary Public	Vn
My Commission Expires: 7/31/2	2024	NOTARY PUBLIC REG. #7697511 MY COMMISSION EXPIRES 07/31/2024
		07/31/2024 G



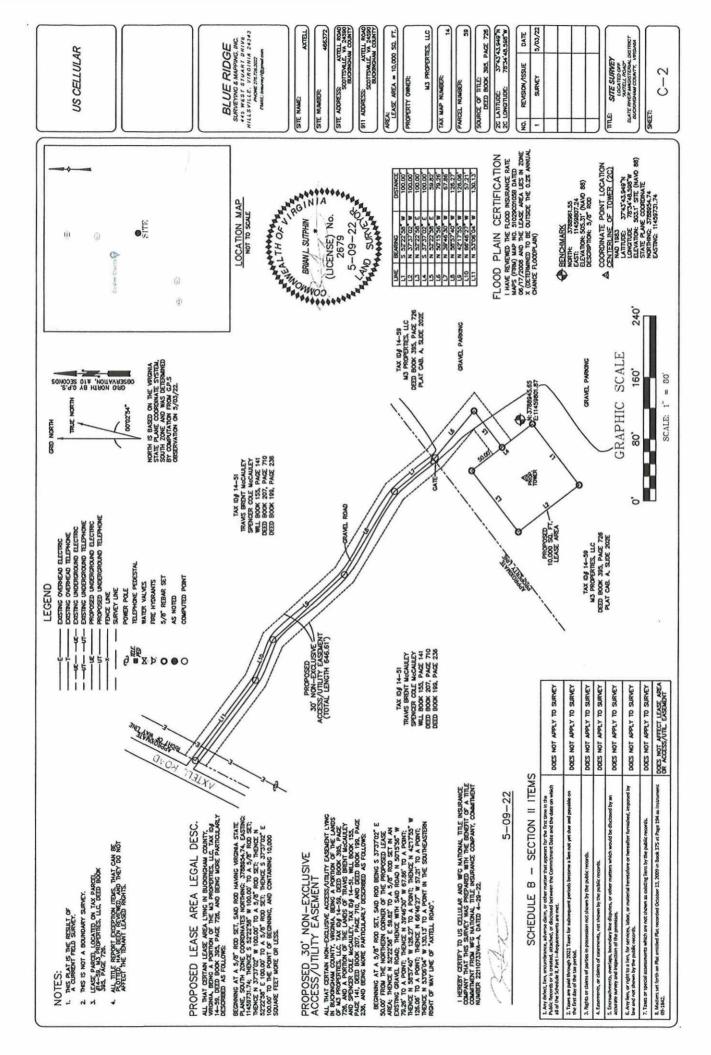
Grantee
USCOC of Virginia RSA #3, Inc.
By: Denvi Lus
Title: Vice President
STATE OF ILLINOIS COUNTY OF COOK:
The foregoing Easement Agreement was signed, sworn to and acknowledged before me his 15th day of 120 22 by 100 Denice Line as Vice President of USCOC of Virginia RSA #3, Inc.
Notary Public  ELLEN M GROH Official Seal Notary Public - State of Illinois My Commission Expires Jan 22, 2025
My Commission Expires: // 22/2025

## EXHIBIT A

Plat showing Easement across Property of Travis Brent McCauley and Spencer Cole McCauley

## SEE ATTACHED





# EXHIBIT A



This Deed of Easement prepared by and please return to: USCOC of Virginia RSA #3, Inc. REAL ESTATE LEGAL 8410 W BRYN MAWR AVE CHICAGO, IL 60631

Tax ID No. 14-59

## DEED OF EASEMENT

This Deed of Easement made this \_\_\_\_\_ day of \_\_\_\_\_\_, 2022 by and between Travis Brent McCauley and Spencer Cole McCauley, heirs of Steven S. McCauley (deceased) (the "Grantor") and USCOC of Virginia RSA #3, Inc., a Virginia corporation ("Grantee"), whose address is Attention: Real Estate Lease Administration, 8410 West Bryn Mawr Avenue, Chicago, Illinois 60631.

### WITNESSETH:

For and in consideration of One Dollar, (\$1.00), cash in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, the Grantor does hereby GRANT and CONVEY with SPECIAL WARRANTY OF TITLE unto the Grantee, its successors and assigns, a thirty foot (30') wide easement for ingress and egress and utilities; (the "Easement") across a portion of certain property owned by the Grantors located in the County of Buckingham, Virginia, being identified as Tax ID # 14-59, and being the same property conveyed to Grantors by deed dated July 30, 1969, in the Clerk's Office for the County of Buckingham Circuit Court at Deed Book 81, Page 104 and in the Clerk's Office for the County of Buckingham Circuit Court by deed dated January 4, 1995, in Deed Book 199, Page 236 (the "Property"). The location of the Easement is shown on the survey made by Blue Ridge Surveying & Mapping, Inc., dated May 3<sup>rd</sup>, 2022, attached hereto as Exhibit A and incorporated herein, said survey to be recorded herewith (the "Survey").



As part of this Easement, Grantee shall have the right to enter upon the above-described property within the Easement provided for the purpose of ingress and egress 24 hours a day, seven days a week, to and from the telecommunications tower site on the adjacent property owned by M3 Properties, LLC. If the Grantee is unable to reasonably exercise the right of ingress and egress to the Easement, the Grantee shall have the right of ingress and egress over the property of the Grantor adjacent to the Easement.

The Easement rights granted in this Deed of Easement are subject to the terms of an Easement Agreement between the parties executed concurrently with this Deed of Easement.

This Easement shall remain in effect so long as the Easement Agreement remains in effect.

[Signature pages to follow]



WITNESS the following signatures: Grantor

Travis Brent McCauley

COMMONWEALTH OF VIRGINIA:
COUNTY OF BEDFORD:

The foregoing Deed of Easement was signed, sworn to and acknowledged before me this day of June 2022 by Grantory Junily Jo dawn Notary Public

My Commission Expires: 12/31/2024

EMILEE JO LAUER Notary Public Commonwealth of Virginia Registration No. 7656280 My Commission Expires Oct 31, 2024

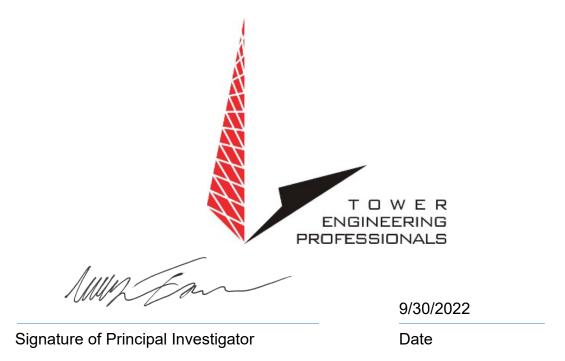


# WITNESS the following signatures: Grantor

Spencer Cole McCauley
COMMONWEALTH OF VIRGINIA: COUNTY OF ALBEMARLE:
The foregoing Deed of Easement was signed, sworn to and acknowledged before me this day of July 2022 by Grantor.  Notary Public
My Commission Expires: 7 31 2024  Notary Public Reg. #7697511 MY COMMISSION SERVICE PROMISSION SERVICE PROMI



# AXTELL (466372) TOWER SITE SCOTTSVILLE COUNTY, VIRGINIA CULTURAL RESOURCES ASSESSMENT REPORT



Prepared by: William Turner, MA, RPA
Tower Engineering Professionals, Inc.
326 Tryon Road
Raleigh, NC 27603-3530
919-661-6351
wturner@tepgroup.net

Prepared for: U.S. Cellular 5221 Valleypark Drive, Suite 1B Roanoke, VA 24019

Lead Agency: FCC TCNS # 256729

September 30, 2022

Final Report

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## MANAGEMENT SUMMARY

Tower Engineering Professionals, Inc. (TEP) is assisting U.S Cellular Corporation (USCC) with the construction of a proposed 195-ft (199-ft overall with appurtenances) AGL monopole communications tower. The proposed tower will be located on a section of Axtell, south of the Town of Scottsville, in Buckingham County, Virginia. Installation of the tower and telecommunication facility is regulated by the Federal Communications Commission (FCC).

TEP conducted a cultural resources assessment of the project's direct and visual effects to meet the requirements of Section 106 of the National Historic Preservation Act (NHPA) and the Federal Communications Commission (FCC) Nationwide Programmatic Agreement (NPA) of October 4, 2004. This letter report summarizes the results of TEP's cultural resource assessment.

Based on background research conducted on September 29, 2022, the search resulted in the identification of no (0) historic properties within the Area of Potential Effect (APE). An archaeological investigation was conducted on September 29, 2022. No (0) cultural resources were discovered within the direct APE. No avoidance or further work is recommended for the proposed project.

## INTRODUCTION TO THE PROJECT

Tower Engineering Professionals, Inc. (TEP) is assisting U.S Cellular Corporation (USCC) with the construction of a proposed 195-ft (199-ft overall with appurtenances) AGL monopole communications tower. The proposed tower will be located on a section of Axtell, south of the Town of Scottsville, in Buckingham County, Virginia (Buckingham County Parcel #14-59 and #14-51). Installation of the tower and telecommunication facility is regulated by the Federal Communications Commission (FCC).

The proposed undertaking (**Figure 3**) consists of the aforementioned tower that will be located within a proposed 100-ft x 100-ft lease area containing a 50-ft x 50-ft fenced tower compound and a 20-ft x 50-ft gravel turnaround area, and a proposed 10-ft wide x 30-ft access and utility easement, and a proposed 30-ft x  $\sim$ 568-ft access and utility easement. The proposed access & utility easement will proceed southeast from Axtell Road for 568-ft before terminating at the tower compound. These areas are herein referred to as the direct area of potential effect (APE) and approximately  $\sim$ 28,340-ft² (0.65- acres).

TEP's William Turner, an SOI Qualified Archaeologist, conducted a file search on September 29, 2022, of the Virginia Office of State Archaeology online database V-CRIS GIS Service to determine if any historic properties are located within a 0.50-mi radius. No (0) National Register of Historic Places (NRHP) eligible or listed properties were identified within the visual or direct APEs.

An archaeological assessment of the project's direct effects was conducted on September 30, 2022, to meet the requirements of Section 106 of the National Historic Preservation Act (NHPA) and the Federal Communications Commission (FCC) Nationwide Programmatic Agreement (NPA) of October 4, 2004. This document is being submitted in compliance with the Federal Communications Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission (FCC 2004).

Also pursuant to the Nationwide PA (FCC 2004), the APE for visual effects is the geographic area in which the undertaking has the potential to introduce visual elements that diminish or alter the setting, including the landscape, where the setting is a character-defining feature of a historic property that makes it eligible for listing in the NRHP. For towers under 200-ft AGL, the visual APE is a 0.5-mile radius from the proposed tower centerline. No (0) historic properties were identified within the direct or visual APEs.

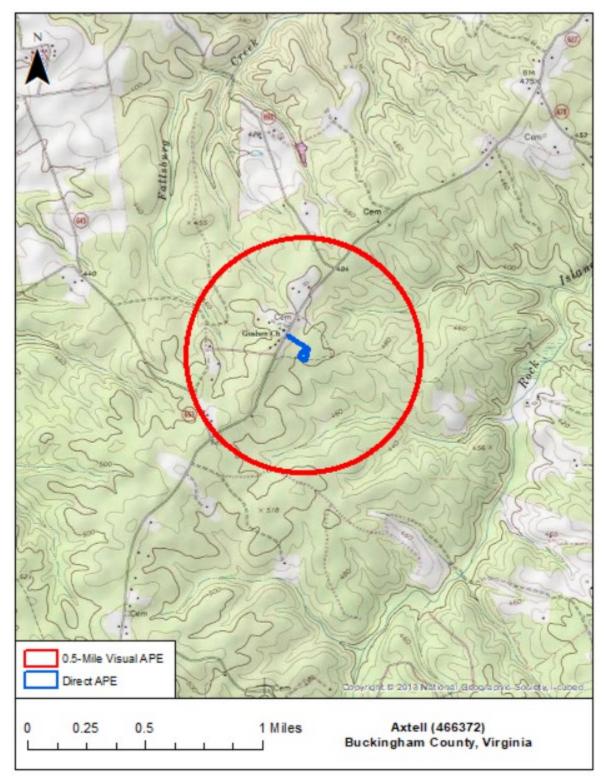


Figure 1: Project Location (Glenmore, VA USGS 7.5-Minute Topographic Quadrangles).

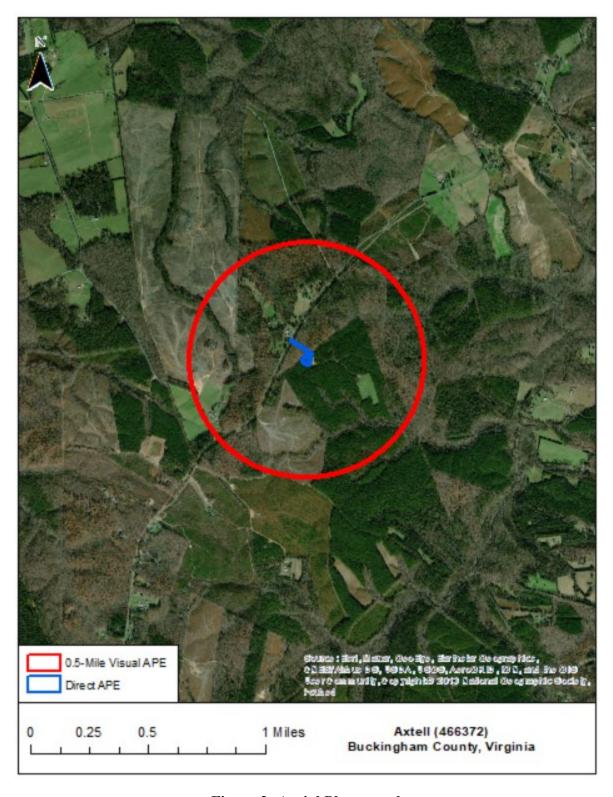


Figure 2: Aerial Photograph

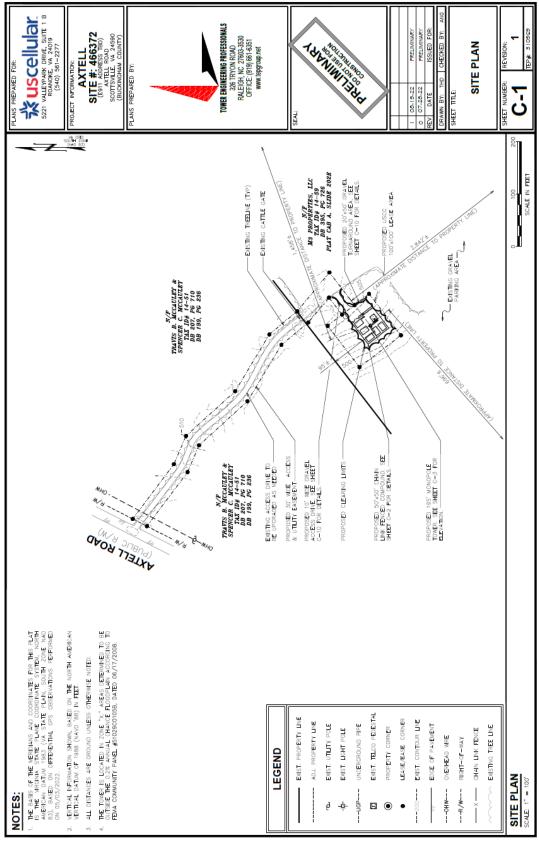


Figure 3: Overall Site Plan

## **ENVIRONMENTAL SETTING**

According to the U.S. EPA Level III and IV Ecoregions Map, the proposed project is located within the Northern Inner Piedmont. (45e) The Northern Inner Piedmont is a dissected upland composed of hills, irregular plains, and isolated ridges and mountains; monadnocks are far more common in Ecoregion 45e than in the Northern Outer Piedmont (45f). General elevations become higher towards the western boundary and to the south the Roanoke River where the land rises to become a broad, hilly upland. Elevations typically range from 200 to 1,000 feet (61-304 m) but higher elevations of up to 2,000 feet occur on scattered monadnocks. Local relief is typically 100 to 400 feet (30-121 m) but, on monadnocks, can be as much as 1,100 feet; in general, relief is markedly greater than in the Northern Outer Piedmont (45f) but less than in the Blue Ridge Mountains (66) to the west. Potential natural vegetation is mapped as Oak-Hickory-Pine Forest by Kuchler (1964). Dominants include hickory (*Carya* spp.), shortleaf pine (*Pinus echinata*), loblolly pine (*Pinus taeda*), white oak (*Quercus alba*) and post oak (*Quercus stellata*). The potential natural vegetation is distinct from the Appalachian Oak Forest of the adjacent Triassic Lowlands (64a), Northern Igneous Ridges (66a), and the Northern Sedimentary and Metasedimentary Ridges (66b) (Griffith et al. 2002).

The Piedmont (45) is largely wooded and consists of irregular plains, low rounded hills and ridges, shallow valleys, and scattered monadnocks. It is a transitional area between the mostly mountainous ecoregions of the Appalachians to the west and the lower, more level ecoregions of the coastal plain to the east. Ultisols occur widely and have developed from residuum; they are commonly clay-rich, acid, and relatively low in base saturation. These soils and the region's humid, warm temperate climate originally supported Oak-Hickory-Pine Forest that was dominated by hickory (*Carya spp.*), shortleaf pine (*Pinus echinata*), loblolly pine (*Pinus taeda*), white oak (*Quercus alba*) and post oak (*Quercus stellata*)) (Kuchler, 1964). Following settlement, much of the area was cultivated causing significant soil loss (Trimble, 1974). Today, many fields have reverted to pine and hardwoods or are in the process of doing so (Griffith et al. 2002).

The proposed project area is located in a forested area. (**Figures 4-14**). The project area generally slopes to the southeast. The parent property is surrounded by low-density residential, agricultural, and forested land. According to the USFWS NWI, the closest water source is the Fallsburg Creek, approximately 0.30-mi west of the proposed project area.

According to the USDA Web Soil Survey of Bedford County, VA, the soil of the proposed action area is Littlejoe silt loam, 2-7% slopes (23B) (**Table 1**) Littlejoe silt loam, 2-7% slopes is described as well-drained, found on hillslopes, and formed from residuum weathered from phyllite and/or sericite schist. A typical profile consists of silty loam from 0 to 5-inches, clay from 5 to 38-inches, silt loam from 38 to 56-inches, and bedrock from 56 to 66-inches. Penhook loam, 2-7% slopes (31B) is described as well-drained, found on hillslopes, and formed from residuum from phyllite and schist. A typical profile consists of loam from 0 to 6-inches, clay from 6 to 43-inches, and loam from 43 to 63-inches.

 Table 1: Project Area Soil

Soil Name	Code	Slope	Drainage	Location
Littlejoe silt loam	23B	2-7%	Well-drained	Hillslopes
Penhook loam	31B	2-7%	Well-drained	Hillslopes



Figure 4: View north towards proposed tower centerline.



Figure 5: View east towards proposed tower centerline.



Figure 6: View south towards proposed tower centerline.



Figure 7: View west towards proposed tower centerline.



Figure 8: View northeast along proposed access & utility easement.



Figure 9: View northwest along proposed access & utility easement.



Figure 10: View northwest along proposed access & utility easement.



Figure 11: View northwest along proposed access & utility easement.



Figure 12: View northwest along proposed access & utility easement.

## ARCHAEOLOGICAL AND CULTURAL BACKGROUND

#### V-CRIS GIS Search Results/Previous Research

TEP's William Turner, an SOI Qualified Archaeologist, conducted a file search on August 1, 2022, of the Virginia Office of State Archaeology online database V-CRIS GIS Service to determine if any historic properties are located within a 0.50-mi radius. No (0) National Register of Historic Places (NRHP) eligible or listed properties were identified within the visual APE. (**Figure 13, Table 2**).

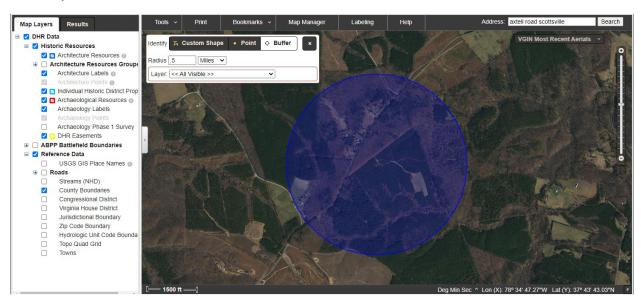


Figure 13: Previously Recorded Cultural Resources (V-CRIS GIS Map)

#### **Cultural Context**

The region's prehistory is divided into four cultural periods: Pre-Clovis, Paleoindian, Archaic, and Woodland. Little is known about the Pre-Clovis Southeast. One well known site, Cactus Hill, is located in southeast Virginia and has documented evidence of Pre-Clovis occupation (McAvoy 1997). The Paleoindian period is characterized by high range mobility, low population density, and focal hunting economy. The transition to Archaic is reflected in the changes of technology and settlement organization. Groups during the Archaic period had more regional specific habitats and resource procurement (Smith 1986; Steponaitis 1986). The beginning of the Woodland period is typically marked by the introduction of ceramic technology (Gardner 1982). Steatite-tempered Marcey Creek is the earliest ceramic type in the state. A more sedentary lifestyle occurs during this time, with an increase in villages and more commitment to horticulture (Smith 1986).

A number of Indian tribes that spoke dialects of the Siouan language lived in the Piedmont of Virginia. The Manahoac settled on the waters of the Rappahannock River above Fredericksburg. Little is known about these people because few early traders and travelers kept records. These sketchy pieces of information from written records survive: Captain John Smith in 1608 met a group of Manahoac, who lived in at least seven villages to the west, above the falls of the

Rappahannock River. The Manahoac were friends of the Monacans and enemies of the Powhatan (Egloff, 2006).

The first mention about the Monacan tribe also comes from Captain Smith. In 1608, he learned from a Powhatan informant about five Monacan towns west of the James River falls at present-day Richmond. In 1670, German traveler John Lederer was commissioned by the governor of Virginia to explore the territory. Approaching one of the villages along the James, he was welcomed with friendly volleys of firearms (Egloff, 2006).

After leaving Monacan Town, Lederer proceeded to Sapon, a town of the Saponi people located in Charlotte County along the Roanoke River. Lederer wrote, "This nation is governed by an absolute monarch; the people of a high stature, warlike and rich. I saw great store of pearl unbored in their little temples, or oratories, which they had won amongst other spoils from the Indians of Florida and hold in as great esteem as we do" (Egloff, 2006).

Lederer advised traders to carry with them cloth, axes, hoes, knives, and scissors to trade with the Indians. Though the Indians were eager to purchase arms and ammunition, such trade was outlawed by the colonial government. For remote tribes, he wrote, the best articles to carry were small trinkets, copper, toys, beads, and bracelets. A year after Lederer's expedition, Robert Fallam and Captain Thomas Batts, under the commission of General Abraham Wood, left the James River near Petersburg and traveled west. The men arrived at Saponi Town, welcomed by the firing of guns and plenty of supplies. Continuing beyond the Piedmont, they met with yet another warm greeting from the Totero people living in either the Roanoke or New River Valleys. The closely allied Saponi and Totero eventually left their villages, and many moved south, joining their friends the Occaneechi. According to John Lederer's report, the Occaneechi people lived on an island in the Roanoke River near Clarksville. From 500 miles away, other tribes came to the village to trade, making the island a great regional center (Egloff, 2006).

# FIELD METHODS/SURVEY RESULTS

#### **Evaluation of Direct Effects**

On September 29, 2022, William Turner of TEP, who meet the Secretary of the Interior's Standards for archaeology, conducted a Phase I survey of the APE for direct effects, spending two hours in the field. Conditions were good for fieldwork, with clear skies and temperatures in the mid 70's. Ground surface visibility was ~0-15% within the proposed lease area. A pedestrian survey was conducted throughout the project area. A total of five (5) shovel tests were conducted within the project area.

No (0) artifacts, features, or other signs of historic or prehistoric cultural activities were observed during the pedestrian inspection or shovel testing.

#### **Evaluation of Visual Effects**

The APE for visual effects is limited to 0.50-mile radius from the tower center point. Based on photo reconnaissance completed by TEP personnel, the proposed tower will not be visible from any historic properties. Therefore, it is the opinion of TEP that the proposed tower will have no effect on historic properties due to **no historic properties** in the APE.

**Table 4: Shovel Test Results** 

ST#	Location	Depth	Color	Texture	Comments
		(cmbs)			
1	Tower Center	0-3	7.5YR3/1 – Very Dark Gray	Loam	Negative
		3-18	7.5YR8/6 – Reddish Yellow	Sandy clay	
2	East Corner	0-10	7.5YR3/1 – Very Dark Gray	Loam	Negative
		10-30	7.5YR8/6 – Reddish Yellow	Sandy clay	
3	South Corner	0-15	7.5YR3/1 – Very Dark Gray	Loam	Negative
		15-30	7.5YR8/6 – Reddish Yellow	Sandy clay	
4	West Corner	0-13	7.5YR3/1 – Very Dark Gray	Loam	Negative
		13-28	7.5YR8/6 – Reddish Yellow	Sandy clay	
5	North Corner	0-15	7.5YR3/1 – Very Dark Gray	Loam	Negative
		15-32	7.5YR8/6 – Reddish Yellow	Sandy clay	

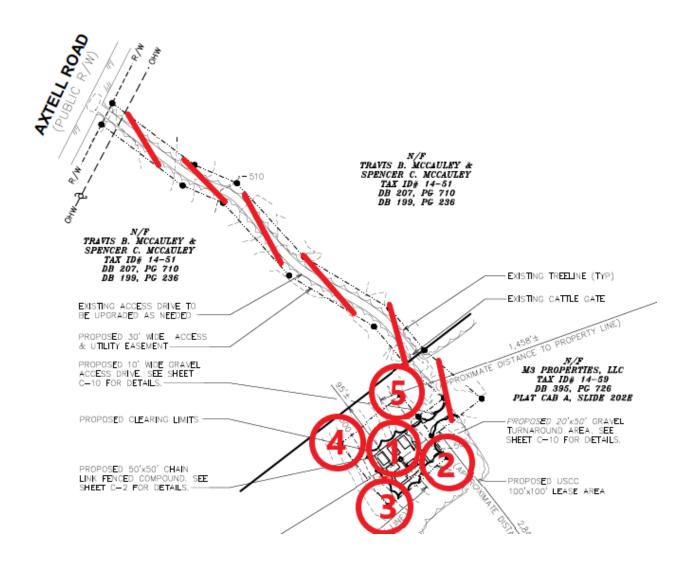




Figure 14: Shovel Test Plan

Figure 15: Soil Profile (ST1)

#### SUMMARY AND RECOMMENDATIONS

On September 30, 2022, TEP conducted a cultural resources investigation in accordance with Section 106 of the NHPA for a proposed 195-ft (199-ft overall with appurtenances) AGL monopole communications tower. The proposed tower will be located on a section of Axtell, south of the Town of Scottsville, in Buckingham County, Virginia (Buckingham County Parcel #14-59 and #14-51). It is the opinion of TEP that there are **no historic properties present** in the direct or visual APE. If the boundary or location of the proposed tower site change, additional archaeological investigations may be necessary, as determined in consultation with the SHPO per the FCC Nationwide Programmatic Agreement. All field notes and documentation will be stored at the Raleigh office of Tower Engineering Professionals, Inc.

#### **SOI Qualified Archaeologist**

William Turner, MA, RPA Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603

## **REFERENCES**

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Trudeau, Noah A.

1991 The Last Citadel: Petersburg, Virginia, June 1864-April 1865. Baton Rouge: Louisiana State University Press.

Virginia Division of Mineral Resources

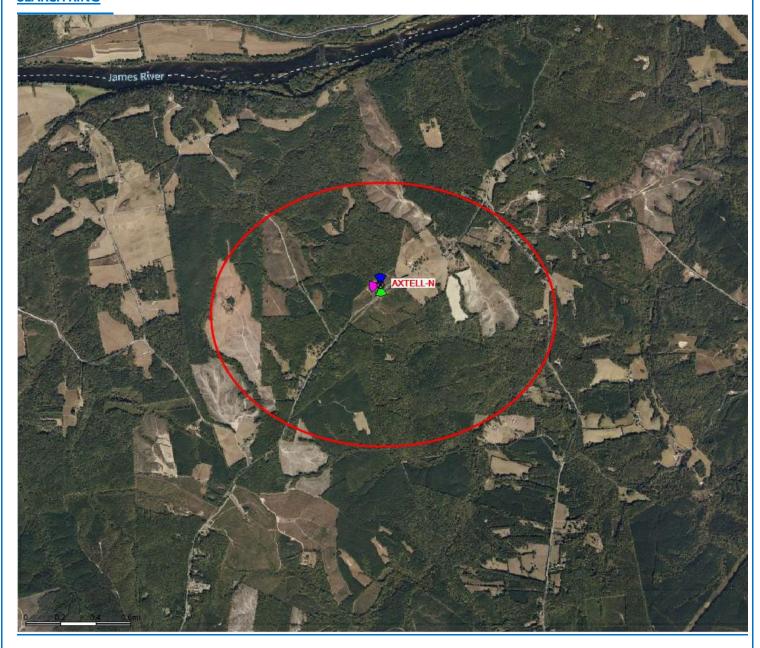
1993 Geologic map of Virginia: Commonwealth of Virginia, Department of Mines, Minerals,

and Energy, Virginia Division of Mineral Resources, scale 1:500,000



# **Site Acquisition Request Form** (Revision 7.3)

#### **SEARCH RING**



TMobile Regulatory Team 601 Pennsylvania Avenue NW North Building, Suite 800 Washington DC, 20004

AT&T Mobility 4801 Cox Road Suite 300 Glen Allen, VA 23060

Verizon Wireless 1831 Rady Court Richmond, VA 23222

Dish Network Lorna Kennedy Suite 210 10571 Telegraph Road Glen Allen, VA 23059



# 3700 Magnolia Road Gordonsville, VA 22942

Site Acquisition Construction Management

To Whom It May Concern,

You are receiving this letter Pursuant to the Buckingham County Zoning Ordinance requirements, Article 9: Radio, Television and Wireless Communication Tower Amendment to The Zoning Ordinance of Buckingham County, Section Eight: Additional development standards, Subsection (b.). Upon application of a newly purposed wireless communications tower, all property owners within 2600' of the subject property shall be notified of the upcoming application prior to hearings.

US Cellular is purposing a 195' monopole tower with a 4' lightning rod totaling at 199', to be located on Parcel 14-59, off of Axtell Road. This tower will be set within a 100' x 100' leased area on landowner's parcel. The compound around the tower will be 40' x 40' within that lease area, which will house the tower and all ground equipment. This tower has been designed using breakpoint technology of 40' per the Buckingham County Ordinance, making sure if an issue was to happen this tower would fall within 40' of the base of the tower. There is purposed landscaping included to provide coverage of the compound fence and equipment, upon maturity of planted landscaping.

If you have any questions or concerns, please feel free to contact me via email. Upon County Review and County Consultant Approval, they County will set up scheduled public hearings.

Thank you,

Emilee Lauer, US Cellular Agent emilee@odps-inc.com
540-580-5139

# Letters Sent to Following Parcels

- 14-57
- 14-49
- 14-45
- 14-44
- 14-47
- 14-58
- 14-39
- 14-48
- 14-51
- 14-60
- 14-42
- 14-61
- 14-40
- 14-50
- 14-33
- 14-30
- 14-27
- 14-26
- 14-24
- 14-25
- 14-13
- 14-22
- 14-23
- 14-14
- 14-14A
- 14-21
- 14-43
- 14-19
- 14-20
- 14-15 14-16
- 14-17 14-18

# US Cellular - Francisco Rd/466376

Site Name	L	_at	Long
Axtell (Proposed)		37.7288747	-78.5801661
Constitution (Proposed)		37.7428759	-78.4916153
Centenary		37.72167417	-78.49778
Maxeys Creek		37.67862944	-78.50541333
Scottsville		37.78348528	-78.49223333
Sprouses Corner		37.55043222	-78.46389444
Dentons Corner		37.54256583	-78.60538278

Antenna Make & Model	Power level of antenna by band	Number of antennas per sector
OCT8-2LX2HX-BW65 (Dengyo)	B5: 2489.89W; B4:2524W	1
OCT8-2LX2HX-BW65 (Dengyo)	B5: 2489.89W; B4:2524W	1
QUAD457CW000G	B5: 984.35W	1
OCT8-2LX2HX-BW65 (Dengyo)	B5: 1244.95W; B4:1262W	1
OCT8-2LX2HX-BW65 (Dengyo)	B5: 2489.89W; B4:2524W	1
OCT8-2LX2HX-BW65 (Dengyo)	B5: 2489.89W; B4:2524W	1
OCT8-2LX2HX-BW65 (Dengyo)	B5: 1244.95W; B4:1262W	1

Number of sectors
3
3
3
3
3
3
3



Buckingham County Zoning Department 13380 W. James Anderson Hwy Buckingham, VA 23921

RE: Concealed Monopole Statement for Axtell, Buckingham County, VA,

To Whom It May Concern

Nathan Canavan

I am writing to inform you that a concealed monopole is not a feasible option for this location and scenario. Concealed monopoles make it difficult to mount radios in a manner that ensures optimal coverage and performance. Additionally, there is also the possibility of the radios overheating inside of the canister, which is a concern for reliability and longevity.

US Cellular is committed to providing the community with state of the art wireless services. Please contact us with any questions.

Sincerely,

Nathan Canavan – Associate RF Engineer – US Cellular

\*12-199

Prepared by and for: Catlett Land Company, a Virginia limited liability company Tax Map Number 14-59

THIS QUITCLAIM DEED, made this 4th day of January, 2012, by and between CATLETT LAND COMPANY, a Virginia limited liability company, Grantor and hereinafter referred to as party of the first part; and M3 PROPERTIES, LLC., a Virginia limited liability company, Grantee, whose address is 3294 Doctors Crossing, Charlottesville, Virginia 22911, and hereinafter referred to as party of the second part;

#### WITNESSETH

That for and in consideration of the sum of Twenty-five U.S. Dollars (\$25.00) and other good and valuable consideration paid by the party of the second part to the party of the first part, the receipt of all of which is hereby acknowledged, Grantor does hereby quitclaim, grant and convey all of their right, title and interest, if any there be, in and to the following described real estate, to-wit:

All that certain tract or parcel of land lying and being in the Slate River District of Buckingham County, Virginia, containing 129.29 acres, more or less as more particularly shown on that certain plat of survey dated September 29, 2009 prepared by William W. Dickerson, Jr., L.S., said plat being recorded in the Circuit Court Clerk's Office of Buckingham County, Virginia <a href="in Plat Cabinet A">in Plat Cabinet A</a>, Slide 202E . Reference is hereby made to said plat for a more complete and accurate description of the property hereby conveyed.

This being Parcel # 66 in Deed and Assignment dated July 29,. 2009 and recorded in the Circuit Court Clerk's Office of Buckingham County, Virginia in Deed Book 373, at page 719.

Page I of 2

# BOOK 395 PAGE 727

WITNESS the following signature and seal:

Catlett Land Company, LLC, a Virginia limited liability company

By Jefferson M. Catlett (SEAL)
Jefferson W Catlett
Managing Member

STATE OF VIRGINIA

CHTT/COUNTY OF Appoint How to-wit:

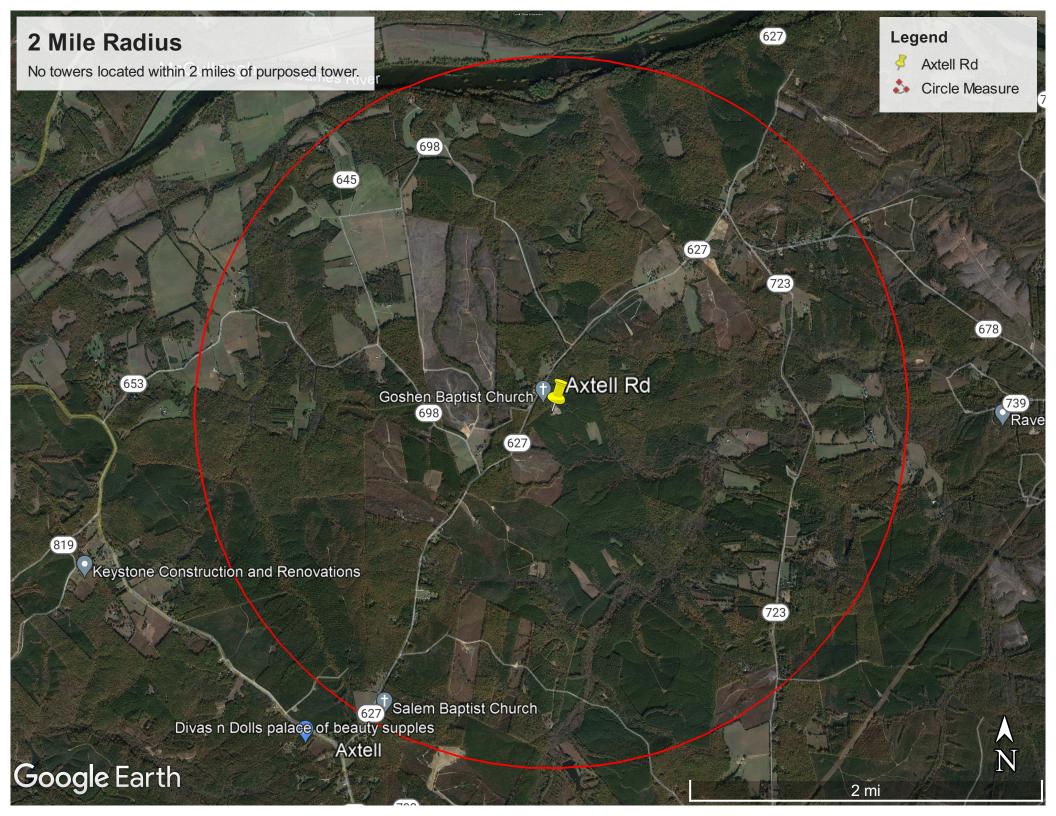
The foregoing instrument was sworn and acknowledged before me this 544 day of January, 2012 by Jefferson M. Catlett, Managing Member, Catlett Land Company, LLC, a Virginia limited liability company

My commission expires: Defoler 31,	MODE Margaret Moore Scruggs NOTARY PUBLIC Commonwealth of Virginia Reg. #103212 My Commission Expires October 31, 2013
Marg	NOTARY PUBLIC Services

Notary Registration # 1032/2

035 Rec Fee St. R. Tax	<u>ipo</u>	VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY
Co. R. Tax Transfer		The foregoing instrument with acknowledgement was admitted to record on 2-7 20 6
Clerk Lib.(145) T.T.F.		at 11:45 A. M. in D.B. 315 Page(s) 1726-721
Grantor Tax 036 Proc. Fee	90 00 20 00	Teste MALCOLM BOOKER, JR., CLERK
Total \$	18000	BY: A few force. DEPUTY CLERK

Page 2 of 2



#### BEGINNING AT A 5/8" ROD SET, SAID ROD BEING S 37'37'02" E 50.00' FROM THE NORTHERN CORNER OF THE PROPOSED LEASE AREA; THENCE N 52'25'8" E 59.82' TO A 5/8" ROD SET IN AN EXISTING GRAVEL ROAD; THENCE WITH SAID ROAD N 50'15'56" W 79.26' TO A POINT; THENCE N 39'46'30" W 67.86' TO A POINT; THENCE N 58'57'40" W 126.27' TO A POINT; THENCE N 42'17'55" W 126.06' TO A POINT; THENCE N 66'46'27" W 57.21' TO A POINT; THENCE N 53'06'04" W 130.13' TO A POINT IN THE SOUTHEASTERN RIGHT OF WAY LINE OF "AXTELL ROAD". PROPOSED 30' NON-EXCLUSIVE ACCESS/UTILITY EASEMENT BEGINNING AT A 5/8" ROD SET, SAID ROD HAVING VIRGINIA STATE PLANE, SOUTH ZONE COORDINATES NORTHING: 3788954.74, EASTING: 11459731.74; THENCE S 52"22"58" W 100.00" TO A 5/8" ROD SET; THENCE N 37"37"02" W 100.00" TO A 5/8" ROD SET; THENCE N 52"22"58" E 100.00" TO A 5/8" ROD SET; THENCE S 37"37"02" E 100.00" TO THE POINT OF BEGINNING, AND CONTAINING 10,000 SQUARE FEET MORE OR LESS. ALL THAT CERTAIN LEASE AREA LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE M3 PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: PROPOSED LEASE AREA LEGAL DESC. 8. Matters set forth on Plat entitled Plat recorded October 13, 2009 in Book 375 at Page 194 as Instrument 09-1842. ALL THAT CERTAIN NON-EXCLUSIVE ACCESS/UTILITY EASEMENT LYING IN BUCKINGHAM COUNTY, VIRGINIA, BEING A PORTION OF THE LANDS OF MAS PROPERTIES, LLC, TAX ID# 14-59, DEED BOOK 395, PAGE 726, AND A PORTION OF THE LANDS OF TRAVIS BRENT McCAULEY AND SPENCER COLE MCCAULEY, TAX ID# 14-51, WILL BOOK 155, PAGE 141, DEED BOOK 207, PAGE 710, AND DEED BOOK 199, PAGE 236, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: 6. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records. Encroachments, overlaps, boundary line disputes, or other matters which would be disclosed by an accurate survey and inspection of the premises. Taxes are paid through 2021 Taxes for subsequent periods become a lien not yet due and payable on the first day of the tax period. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attached, or disclosed between the Commitment Date and the date on which all of the Schedule B, Part I—Requirements are met. 7. Taxes or special assessments which are not shown as existing liens by the public records. 4. Easements, or claims of easements, not shown by the public records. Rights or claims of parties in possession not shown by the public records. I HEREBY CERTIFY TO US CELLULAR AND WFG NATIONAL TITLE INSURANCE COMPANY THAT THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT FROM WFG NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NUMBER 22110733VA-A. DATED 4-29-22. NOTES: THIS IS NOT A BOUNDARY SURVEY. THIS PLAT IS THE RESULT OF A CURRENT FIELD SURVEY. ALL TITLE REPORT EXCEPTION ITEMS, THAT CAN BE PLOTTED, HAVE BEEN REVIEWED, AND THEY DO NOT AFFECT THE TENANT LEASED RIGHTS. LEASE PARCEL LOCATED ON TAX PARCEL #14-59, M3 PROPERTIES, LLC, DEED BOOK \$95, PAGE 726. SCHEDULE $\varpi$ SECTION II ITEMS DOES NOT AFFECT LEASE AREA OR ACCESS/UTIL. EASEMENT DOES NOT APPLY TO SURVEY RICHT PROXIMATE VINE TAX ID# 14-51 TRAVIS BRENT McCAULEY SPENCER COLE McCAULEY WILL BOOK 155, PAGE 141 DEED BOOK 207, PAGE 710 DEED BOOK 199, PAGE 236 30' NON-EXCLUSIVE / ACCESS/UTILITY EASEMENT (TOTAL LENGTH 646.61') | |-|-| |-| L OE -.θ - UT -PROPOSED UNDERGROUND ELECTRIC PROPOSED UNDERGROUND TELEPHONE FENCE LINE EXISTING UNDERGROUND TELEPHONE EXISTING OVERHEAD TELEPHONE 5/8" REBAR SET FIRE HYDRANTS SURVEY LINE EXISTING UNDERGROUND ELECTRIC COMPUTED POINT POWER POLE TELEPHONE PEDESTAL AS NOTED WATER VALVES LEGEND TAX ID# 14-59 M3 PROPERTIES, LLC DEED BOOK 395, PAGE 726 PLAT CAB. A, SLIDE 202E PROPOSED 10,000 SQ. FT LEASE AREA 44' SETBACK (110% OF 40'-BREAK POINT) GRAVEL ROAD TAX ID# 14-51 TRAVIS BRENT McCAULEY SPENCER COLE McCAULEY WILL BOOK 155, PAGE 141 DEED BOOK 207, PAGE 710 DEED BOOK 199, PAGE 236 Q NORTH IS BASED ON THE VIRGINIA STATE PLANE COORDINATE SYSTEM. SOUTH ZONE AND WAS DETERMINED BY COMPUTATION FROM G.P.S OBSERVATION ON 5/03/22. GRAPHIC GRID 80, NORTH SCALE: TRUE NORTH N: 3788945.65 E: 11459801.87 • GRAVEL PARKING TAX ID# 14-59 M3 PROPERTIES, LLC DEED BOOK 395, PAGE 726 PLAT CAB. A, SLIDE 202E GRID NORTH BY G.P.S. OBSERVATION, ±10 SECONDS SCALE 160' 80, GRAVEL PARKING 240' COMMO, FLOOD PLAIN CERTIFICATION I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 51029C0105B DATED 06/17/2008 AND THE LEASE AREA LIES IN ZONE X (DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) 5-09-22 & LINE BEARING DISTANCE L1 S 52'22'58" W 100.00' L2 N 37'37'02" W 100.00' L3 N 52'22'58" E 100.00' L4 S 37'37'02" E 100.00' L5 N 52'22'58" E 59.82' L6 N 50'15'56" W 79.26' L7 N 39'46'30" W 67.86' L8 N 58'57'40" W 126.27' L9 N 42'17'55" W 126.06' L10 N 66'46'27" W 57.21' L11 N 53'06'04" W 130.13' OWNEALTH OF L COORDINATE POINT LOCATION CENTERLINE OF TOWER (2C) NAD 1983 LATITUDE: 37.43.43.949"N LONGITUDE 78.34.48.598"W ELEVATION: 503.1' SITE (NAVD 88) STATE PLANE COORDINATE NORTHING: 3788954.74 EASTING: 11459731.74 BENCHMARK NORTH: 3788961.55 EAST: 11459807.24 ELEVATION: 505.31' (NAVD 88) DESCRIPTION: 5/8" ROD hen Church 🗘 (LICENSE) No. BRIAN L. SUTPHIN LOCATION MAP (827) SITE 698 ANIOH 2C LATITUDE: 2C LONGITUDE: NO. SHEET: SOURCE OF TITLE: DEED BOOK 395, PAGE 726 PARCEL NUMBER: AREA: LEASE AREA = 10,000 SQ. FT. SITE ADDRESS: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY SITE NAME: SURVEYING & MAPPING, INC. 445 WEST STUART DRIVE HILLSVILLE, VIRGINIA 24343 PHONE 276 728 2022 PROPERTY OWNER: TAX MAP NUMBER: "AXTELL ROAD" SLATE RIVER MAGISTERIAL DISTRICT BUCKINGHAM COUNTY, VIRGINIA ADDRESS: AXTELL ROAD SCOTTSVILLE, VA 24590 BUCKINGHAM COUNTY) BLUE RIDGE EMAIL: brsurvey1@gmail.com REVISION/ISSUE SITE SURVEY SURVEY M3 PROPERTIES, LLC

466372

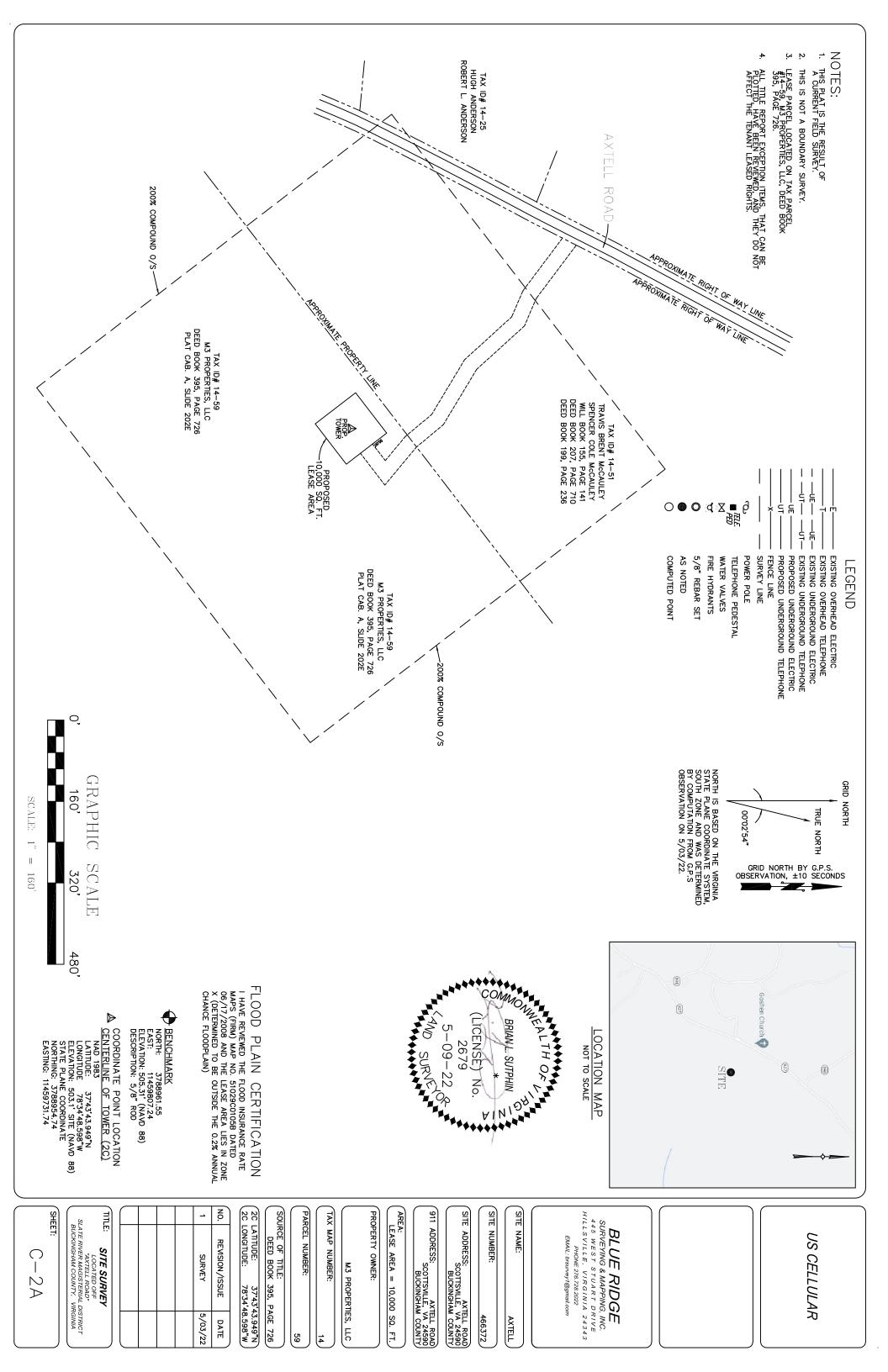
AXTELL

1

37°43'43.949"N 78°34'48.598"W

59

5/03/22 DATE US CELLULAR





# 3700 Magnolia Road Gordonsville, VA 22942

Site Acquisition Construction Management

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 off Axtell Road, Scottsville, Virginia 24590 at a Latitude and Longitude of 37°43′43.949″ N and 78°34′48.598″ W (NAD 83). In general, we plan to construct a support structure of 195′ in height with a 4′ lightening rod totaling at 199′ for the purpose of providing LTE service for US Cellular. 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,

Emilee Lauer, US Cellular Agent
Site Acquisition Specialist, Old Dominion Professional Services Inc.
<a href="mailto:emilee@odps-inc.com">emilee@odps-inc.com</a>
540-580-5139

County Contact:

Buckingham County Zoning Administrator/Economic Development Nicci Edmondston
13380 W. James Anderson Hwy
Buckingham, VA 23921
nedmondston@buckinghamcounty.virginia.gov
434-969-4242



Buckingham County Zoning Department 13380 W. James Anderson Hwy Buckingham, VA 23921

RE: Non-Interference Statement for Axtell, Buckingham County, VA,

To Whom It May Concern

Article 9, Section 7, 2. k. and Section 8 g. and h. of the Buckingham County, Wireless Communication Tower (the "Ordinance") requires "certification that the NIER levels at the proposed site are within the threshold levels adopted by the FCC."

US Cellular, proposes to construct a wireless telecommunication tower in Buckingham County upon which US Cellular will be the anchor tenant. US Cellular operates a wireless network authorized by the Federal Communications Commission (FCC) to provide wireless communication throughout the nation, including Buckingham County, Virginia. US Cellulars' operation and network are licensed and regulated by the FCC. The FCC rules governing the operation of wireless telecommunications facilities are designed to protect co-channel and adjacent licenses against harmful interference. The FCC has exclusive jurisdiction over these requirements.

The proposed "Axtell" US Cellular facility is in the compliance with all applicable FCC requirements. US Cellular engages in the following good engineering practices pertinent to complying with FCC requirements regarding interference and emissions:

- US Cellular locates its transmitting antenna(s) in order to maximize vertical and horizontal separation from other operator's systems to minimize interference potential;
- All operating hardware at the site is type-accepted by the FCC as far as emission levels within US Cellulars' licensed frequency band in addition to spurious emissions outside of US Cellulars' frequency band;
- 3. The power levels by the base station hardware and corresponding effective radiated power (ERP) from the transmit antenna(s) are within the limitations specified by Part 22 of the Commission's Rules;



- 4. Intermodulation studies are prepared an analyzed considering all carries on the tower to ensure no mixing of frequencies will create harmful interference to/from US Cellulars' wireless system.
- This site complies with FCC regulations concerning interference to radio, television, or communications interference, including CFR, Part 27 requirements regarding TV reception on Channel 51.

#### Statement of Compliance with FCC Rules 47 CFR Sec. 1.1307 & Sec. 1.1310

The Federal Communications Commission ("FCC") regulates the maximum permissible exposure ("MPE") of persons to RF radiation, and wireless carriers must comply with the requirements of the FCC. The relevant requirements which deal with wireless antenna towers and other structures are found in Sections 1.1307 and 1.1310 of the FCC's Rules. U.S. Cellular is aware of those requirements and engineers its facilities in compliance with the applicable ruleparts

That the technical equipment to be installed by US Cellular represents the state of the art and that it has been carefully designed to limit the possibility of interference to other services, including the transmission and reception of broadcast AM, FM, and Television and other communications services, such as police, fire and other public safety facilities as well as private communications installations, such as cordless telephones, and Citizen's Band and Amateur Radio stations; and that if such interference (however unlikely) were to occur, US Cellular recognizes its responsibility under section 22.352 of the FCC Regulations, to act promptly to remove the interference.

US Cellular fully complies with items 1 through 4 of the following supplemental. document:

#### Supplemental Document to Article 9

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:

- Compliance with "good engineering practices" as defined by the FCC in its rules and regulations.
- Compliance with all FCC rules and regulations relating to radio frequency interference (RFI).
- 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.
- 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.

US Cellular is committed to providing the community with state of the art wirele	SS
services. Please contact us with any questions.	

Sincerely,

Nathan Canavan

Nathan Canavan – Associate RF Engineer – US Cellular

**Buckingham County Zoning Department** 13380 W. James Anderson Hwy Buckingham, VA 23921

To Whom It May Concern,

Section 2, 1.(2)(b) Affidavit of Compliance with Site Alternative Hierarchy

Section 5 of Ordinance

Per the GIS there are no publicly owned properties in the original search area provided by the US Cellular RF Engineer. Almost all of the property owners in the search area are included on the list of property owners within 2600' of purposed tower. When reviewed the other few outside of this area already covered are also private property owners.

Thank You,

**Emilee Lauer Site Acquisition** Cell: (540) 580-5139 emilee@odps-inc.com



Notary:

COMMONWEALTH OF VIRGINIA

**COUNTY OF** 

STATE OF

**Commission Expires on** 

**Notary Public Signature:** 

NOTARY
PUBLIC
REG. #7697511

WY COMMISSION
EXPIRES
07/31/2024

CALTH OF

Subscribed and sworn to me on the

maintain the zoning index which shall provide ready access to the ordinance creating such conditions.

# **ARTICLE 8 - ADMINISTRATION AND INTERPRETATION**

This ordinance shall be enforced by the Administrator who shall be appointed by the governing body. The Administrator shall serve at the pleasure of that body. Compensation for such shall be filed by resolution of the governing body.

Nothing contained herein shall require any change in the plans or construction of any building or structure for which a permit was granted prior to the effective date of this ordinance. However, such construction must commence within thirty (30) days after this ordinance becomes effective. If construction is discontinued for a period of six (6) months or more, further construction shall be in conformity with the provisions of this ordinance for the district in which the operation is located.

# **Effective Date**

The effective date of the ordinance shall be from and after its passage and legal application and its provisions shall be in force thereafter until repealed

#### **Severability**

Should any section of provision of this ordinance be decided by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole or any part thereof other than the part so held to be unconstitutional or invalid..

#### **Conflicting Ordinances**

Where there exists a conflict between any of the regulations or limitations prescribed in this ordinance and any other regulations applicable to the same subject, where the conflict is with respect to the height of structures or vegetation, and the use of land, or any other matter, the more stringent limitation or requirement shall govern.

# **ARTICLE 9**

# RADIO, TELEVISION AND WIRELESS COMMUNICATION TOWER AMENDMENT TO THE ZONING ORDINANCE OF BUCKINGHAM COUNTY

# **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 by establishing, in accordance with the County's zoning regulatory authority, standards for location, structural integrity compatibility and protect the character of the county while meeting the needs of its citizens to enjoy the benefits of wireless communications services; to

encourage the use of public lands, buildings, and structures as locations for wireless communications infrastructure demonstrating concealed technologies and revenue generating methodologies and to ensure that surrounding property owners are notified when towers are proposed. 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. Understood

# **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

**Understood** 

# **Section Three: Exempt Installations**

Notwithstanding any other provisions contained in land development regulations for the County, the following items are exempt from the provisions of this article;

- (1) Non-commercial, FCC licensed amateur radio antennas as provided for in the definition section.
- (2) Satellite earth stations that are one meter (39.37 inches) or less in diameter in all designated growth areas as identified in the Comprehensive Plan and three meters or less in all other zoning districts.
- (3) A government wireless communications facility, whether owned or leased, that is exclusively reserved for non-commercial public safety communications services, and which will not be utilized for any commercial wireless services, upon a written determination of public necessity by the county board of supervisors or designee; except that such facility must comply with all federal and state building and structural requirements. Such noncommercial public safety facility may be constructed using any available technology and may be constructed to accommodate future anticipated public safety wireless communications needs.
- (4) A temporary, commercial wireless communications facility, upon the declaration of a state of emergency by federal, state, or local government, or determination of public necessity by the county board of supervisors or

- designee and approved by the county board of supervisors or designee; except that such facility must comply with all federal and state requirements. The wireless communications facility may be exempt from the provisions of this article up to three months after the duration of the state of emergency.
- (5) A temporary, commercial wireless communications facility, for the purposes of providing coverage of a special event such as news coverage or sporting event, subject to approval by the county board of supervisors or designee, except that such facility must comply with all federal and state requirements. Said wireless communications facility may be exempt from the provisions of this article for up to one week after the duration of the special event.
- (6) Antenna support structures, antennas, and/or antenna arrays for AM/FM/LPTV/DTV broadcast transmission facilities that are licensed by the Federal Communications Commission shall be regulated in accordance with federal and other applicable local regulations.

# Section Four: Permitted Uses by Zoning District and Siting Alternatives Hierarchy

		Attached	Modificati					
		Antenna,	on to	Non-				
	Conceale	Collocated or	existing	conceale	Replaceme		Non-	Antenna
	d	Combined on	collocation	d	nt of	Concealed	Concealed	Element
	Attached	Existing	or antenna			Freestandi	Freestandin	Replaceme
Zone	WCF	WCF	array	$WCF^1$	$WCF^2$	ng WCF	g WCF	nt
A-1	P	P	P	P	$P^3/S^4$	P	S	P
RSA	P	P	P	P	$P^3/S^4$	P	S	P
R-1	S	P	P	S	$P^3/S^4$	P	S	P
B-1	P	P	P	S	$P^3/S^4$	P	S	P
M-1	P	P	P	P	$P^3/S^4$	P	P	P
M-2	P	P	P	P	$P^3/S^4$	P	P	P
PUD	S	P	P	S	$P^3/S^4$	P	S	P
VC	S	P	P	S	$P^3/S^4$	P	S	P
R-2	S	P	P	S	$P^3/S^4$	P	S	P

P – Permitted By Right

**SUP – Special Use Permit** 

**Understood** 

**Section Five:** Siting alternatives hierarchy

<sup>&</sup>lt;sup>1</sup> Non-concealed attached WCFs are only allowed on transmission towers and light stanchions.

<sup>&</sup>lt;sup>2</sup> A second replacement for a tower previously replaced required approval of a Special Use Permit <sup>3</sup>Replacement WCFs are permitted By Right (P) unless the replacement of an existing non-illuminated WCF is required to become illuminated. In this instance the replacement will require a Special Use Permit (SUP).

<sup>&</sup>lt;sup>4</sup> Replacement WCFs over 125' in a high in growth areas require Special Use Permit (SUP) approval.

Siting of a new antenna array or free standing WCFs shall be in accordance with following siting alternatives hierarchy.

- (1) Collocated or combined antenna, or modification of an existing antenna(s) on an existing antenna array on existing WCF
  - a. On publicly-owned property

N/A

- b. On non publicly-owned property
- (2) Replacement of existing WCF.
  - a. On publicly-owned property

N/A

- b. On non publicly-owned property
- (3) Concealed attached WCF.
  - a. On publicly-owned property

N/A

- b. On non publicly-owned property
- (4) Non-concealed attached WCF (only on transmission distribution poles).
  - a. On publicly-owned property

N/A

- b. On non publicly-owned property
- (5) Concealed freestanding WCF
  - a. On publicly-owned property

N/A

- b. On non publicly-owned property
- (6) 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
  - (iii). Guyed tower 6.b.i Being purposed as no publicly owned property in search area provided by engineer.

For attached, collocated, or combined WCFs, the order of ranking preference, highest to lowest, shall be from 1 to 3. Where a lower ranked alternative is proposed, the applicant must file relevant information including, but not limited to, an affidavit by a radio frequency engineer demonstrating that despite diligent efforts to adhere to the established hierarchy within the geographic search area, higher ranked options are not technically feasible, practical or justified given the location of the proposed wireless communications facility. N/A

Where a replacement or freestanding WCF is permitted the order of ranking preference from highest to lowest shall be from 4 to 6. Where a lower ranked alternative is proposed, the applicant must file relevant information to demonstrate higher ranked

options are not technically feasible, practical, or justified given the location of the proposed wireless communications facility, and the existing land uses of the subject and surrounding properties within 300 feet of the subject property.

Understood, Please see attached statement from the radio frequency engineer located under Tab 1 - Affidavit of Compliance with Siting Alternative Hiearchy

# **Section 6: Uses of County-owned lands**

Undeveloped

Land

Parcel 89

The following Buckingham County-owned properties are available for new wireless telecommunication infrastructure subject to all the zoning requirements of this 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		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'
	Robertson 99-25,			

30

Concealed

125'

Water Tank		32	Concealed Antenna Attachments	n/a
Animal Shelter	9659 Andersonville Road	34	Monopole	199'
Old landfill	Off Andersonville Road	35	Monopole	199'
Household Waste & Recycling Center		38	Concealed Monopole	199'

- (a) If an applicant requests a permit to develop a site on County-owned property, the permit granted hereunder shall not become effective until the applicant and the County have executed a written agreement or lease setting forth the particular terms and provisions under which the permit to occupy and use the public lands of the jurisdiction will be granted. Understood
- (b) No permit granted under this section shall convey any exclusive right, privilege, permit, or franchise to occupy or use the publicly-owned sites of the jurisdiction for delivery of telecommunications services or any other purpose. Understood
- (c) No permit granted under this section shall convey any right, title or interest in the public lands, but shall be deemed a permit only to use and occupy the public lands for the limited purposes and term stated in the agreement between the lessor and lessee. Further, no permit shall be construed as a conveyance of a title interest in the property. Understood

No County properties are close enough to meet engineer needs, therefore they will not meet engineer requirements.

# <u>Section Seven: Required Statements, Reports, Notices and General submittal requirements.</u>

#### **#1** For All New WCFs

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. **Understood**
  - (b) Balloon Test for all new freestanding WCFs
    - 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. Completed, please see Tab 5.

- 2. The applicant shall inform in writing the zoning administrator, abutting property owners, elected County Supervisor, and appointed Planning Board Commissioner of the district of the date and times of the test at least 14 days in advance. Completed
- 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. Completed
- 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. Completed
- 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. Completed
- 6. The balloon shall be flown for at least four consecutive hours during daylight hours on the date chosen. Completed
- 7. The applicant shall record the weather during the balloon test. Completed
- 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

Understood, completed.

# (2) Provided with application:

(a) 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 (NAD-83)). In general, we plan to construct
a support structure offeet 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)"

- (a) Completed and mailed 2/22/2023, see Tab 2.
- (b) An affidavit by a radio frequency engineer demonstrating compliance with siting alternatives hierarchy. If a lower ranking alternative is proposed the affidavit must address why higher ranked options are not technically feasible, practical or justified given the location of the proposed wireless communications facility. NOTE: These documents are needed to justify a facility and to determine if the proposed location is the only or best one in the designated geographic area of the proposed facility. Reasons may include:
  - (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. See Tab 1 for all above b. items.
- (c) Twelve 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 1/2½"× 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. See Tab 8.
- (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. See Tab 2.
- (e) Proof that a property and/or WCF owner's agent has appropriate authorization to act upon the owner's behalf (if applicable). See Tab 2 (Redacted Lease)
- (f) For monopoles using breakpoint technology a written statement by a registered professional engineer licensed by the State of Virginia See Tab 6. specifying the design structural failure modes of the proposed facility.
- (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. See Tab 4.
- (h) A map showing the designated search ring. See Tab 3.
- (i) Identification of the intended service providers of the WCF. See Tab 8, page C-3.
- (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. See Tab 7.
- (k) The applicant shall supply a statement on applicant letterhead of compliance with all FCC rules regarding interference to other radio services. See Tab 4.
- (l) The applicant shall supply a statement on applicant letterhead of compliance with all FCC rules regarding human exposure to radio frequency energy. See Tab 4.
- (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. See Tab 3.
- (n) A landscape plan in accordance with the provisions of Section 8 (d) of this Article, to include without limitation, any required buffer.

  See Tab 8, C-3.
- (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. N/A
- (p) All other documentation, evidence, or materials necessary to demonstrate compliance with the applicable approval criteria set forth in this chapter. Understood

# (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. See Tab 7.
- (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. See Tab 6.
- (c) Prior to issuance of a building permit, proof of Virginia Department of Historic Resources (VDHR) approval and State Historic Protection and Preservation Office (SHPPO) approval, if required. See Tab 5.

- #2 Attached, collocated, collocation modifications of existing arrays, or combined antenna on an existing WCF. N/A this is a non-concealed freestanding WCF The following shall be provided in addition to the requirements listed application. above.
  - (a) If antennas are proposed to be added to an existing structure, all existing antennas and other equipment on the structure, as well as all ground equipment, shall be identified by owner, type and size. The method(s) by which the antennas will be attached to the mounting structure shall be depicted.
  - (b) The top of the attached antenna shall not be more than twenty (20) feet above the existing or proposed building or structure.
  - (c) When required, 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.
  - (d) Buffers: At the time of installation, the WCF equipment compound shall be brought into compliance with any applicable buffer requirements (see section 8(d)
  - (e) Setbacks.
    - (1) A collocated or combined antenna or antenna array and associated equipment compound 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.
  - (f) When an attached antenna is to be located on a nonconforming building or structure, then the existing permitted nonconforming setback shall prevail.
  - (g) Concealed Attached WCFs: Feed lines and antennas shall be designed to architecturally match the façade, roof, wall, or structure on which they are affixed so that they blend with the existing structural design, color, and texture.
  - (h) Equipment cabinets shall be located within the existing building or behind an opaque enclosure matching the architectural designs and colors of the principal building or structure. If the existing equipment compound is not sized adequately to accommodate the new proposed ground equipment, then a revised site plan of the original WCF site shall be submitted addressing the overall ground space for the WCF.
  - (i) New equipment cabinets are subject to the underlying zoning setbacks.

(j) Non-concealed attachments shall only be allowed on electrical transmission towers and existing light stanchions subject to approval by the utility company, the development standards for attached WCFs, and compliance with existing legal restrictions contained in any easement granted for said transmission towers and/or light stanchions.

# #3 Replacement of WCFs. N/A this is a non-concealed freestanding WCF application.

The following shall also be provided in addition to the requirements listed i.

Replacement of WCFs shall accomplish a minimum of one of the following: 1) reduce the number of towers; or 2) reduce the number of nonconforming towers; or 3) replace an existing tower with a new tower to improve network functionality resulting in compliance with this ordinance. Replacement is subject to the following:

- (a) Height: The height of a tower approved for a first time replacement shall not exceed one hundred and fifteen (115) percent of the original height of the tallest tower or the maximum height permitted in district whichever is greater. (For example a 250' existing tower could be rebuilt at 287.5')
- (b) A second replacement for a tower previously replaced requires approval of a Special Use Permit.
- (c) Breakpoint technology: Replacement monopole towers shall use breakpoint technology in the design of the replacement facility.
- (d) Setbacks: A new tower approved for replacement of an existing tower 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. (For example, if a new tower is replacing an old one, the new one is allowed to have the same setbacks as the tower being removed, even if the old one had nonconforming setbacks.) The intent is to encourage the replacement process, not penalize the WCF owner for the change out of the old facility.
- (e) 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.
- (f) At the time of replacement, the tower equipment compound shall be brought into compliance with any applicable buffer requirements as provided in this Article.
- (g) Replacement WCFs shall be configured and located in a manner that minimizes adverse effects on the landscape and adjacent properties, with specific design considerations as to height, scale, color, texture, and architectural design of the buildings on the same and adjacent zoned lots.
- (h) The existing tower being replaced, including tower base but

excluding the tower foundation, must be removed within ninety (90) days of the initial operation of the new tower.

# **Freestanding concealed WCFs.** N/A this is a non-concealed freestanding WCF application. The following shall be provided in addition to the requirements listed in Section 5(#1):

- (a) A vicinity map delineating the location and classification of all major public or private streets and rights-of-way, driveways, public parking areas, pedestrian ways, trails and bikeways within 1,000 feet of the subject property's boundary, including zoning district boundaries, on a 11"× 17" sheet, together with a list of property owners within 2,600 feet of the subject property's boundaries and keyed to the map. The list must be from the most current ownership information supplied by the Office of the Commissioner of the Revenue for the County. Applicant will also provide a notarized certification letter stating the ownership list referenced herein is accurate to the best of the applicant's ability.
- (b) Height
  - 1. Height calculations shall include above ground foundations, but exclude lightning rods or lights required by the FAA that do not provide any support for antennas.
  - 2. New concealed towers shall be limited to 199' or less in height.
  - 3. In designated growth areas as identified in the Comprehensive Plan the maximum height shall be one hundred and twenty-five (125) feet.
  - 4. For replacements of existing towers see Article 9, Section 5, #3, entitled, "Replacement of WCF's".
- (c) Setbacks: New freestanding towers and equipment compounds 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.
  - 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.

- (d) New concealed freestanding towers shall be designed to match adjacent structures and landscapes with specific design considerations such as architectural designs, height, scale, color, and texture.
- (e) 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, exterior building material and roof samples.

In addition to the requirements of Section Four, Subsection I, the applicant shall provide simulated photographic evidence of the proposed WCFs appearance from any and all designated growth areas as identified in the Comprehensive Plan that are within 1,500 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.
- Materials and color.
- 6. Illumination.
- 7. Architectural design.
- (f) The tower equipment compound shall be brought into compliance with any applicable buffer requirements as provided in this Article.

#### **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. See Tab 4.
  - 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. N/A tower will be 199', with carrier locating at top rad center of 195', Tab

- (b) If the antenna support facility 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 that zoning district.. 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 and rear yard setback requirements for that zoning district. See Tab 3.
- (c) 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. See Tab 5.
- (d) The applicant shall provide simulated photographic evidence of the proposed WCFs appearance from any and all designated growth areas (as identified in the Comprehensive Plan) within 1,500 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. See Tab 5.
- (e) If the antenna support facility has not been constructed using breakpoint design technology, the minimum setback distance shall be equal to the height of the proposed antenna support structure. See Tab 3.
- (f) In agricultural districts, new non-broadcast facilities shall be setback a minimum 110 percent of the distance from the top of the structure to the ground from any single-family dwelling unit on same zone lot and adjacent lots of record; and shall also meet the setback requirements described in (e) above See Tab 3.
- (g) 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.

See Tab 8, page C-3.

(h) The tower equipment compound shall be brought into compliance with any applicable buffer requirements as provided in this Article.

See Tab 8, C-3.

# **#6 Antenna Element Replacement**

For any replacement of an existing antenna element on a WCF, prior to making such replacement, the applicant, in lieu of the requirements provided in Section Seven #1 shall submit and provide:

- (a) A written statement setting forth the reasons for the replacement.
- (b) A description of the proposed antenna replacement including the antenna element design, type and manufactures model number of the existing and proposed antenna. N/A

# Section Eight: Additional development standards

- (a) As part of the site plan submittal, the applicant must provide detailed information regarding the proposed facility's location, latitude and longitude and service area. Site plan shall include the proposed maximum height of the proposed WCF, including individual measurement of the base, the measurement from at ground level to the lightning rod. Tab 8, page C-3.
- (b) The applicant shall provide evidence that all adjoining property owners and all other property owners within 2600 feet of the subject property's boundaries have been contacted to discuss specific proposals prior to public hearings before the Planning Commission and the Board of Supervisors. See Tab 2.
- (c) Commercial messages shall not be displayed on any tower. Noncommercial signage shall be subject to the following:
  - 1. Identification is required on the security fencing around all antenna support structures identifying the tower ownership and ownership of any antenna attachments. The following information shall be provided on a four square foot sign: ASR registration number (if applicable); party responsible for the operation and maintenance of the facility; i.e. the address and telephone number of emergency contact; site address; and property manager name and contact number (if applicable). Understood
  - 2. If more than two hundred twenty (220) volts are necessary for the operation of the facility, signs located every twenty (20) feet and attached to the fence or wall shall display in large, bold, high contrast letters (minimum height of each letter four (4) inches) the following: "HIGH VOLTAGE DANGER." Understood
- (d) 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. See Tab 8, C-3.
  - 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.

See Tab 8, C-3.

- 3. All plants and trees shall be indigenous to this part of Virginia. Understood
- 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. See Tab 8, C-3.
- 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. Understood
- (e) 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. See Tab 8, page C-6.
- (f) 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. See Tab 5.
  - 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: See Tab 8.
    - i. 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 that are within this area the location and dimensions of all existing and proposed improvements on the parcel including access roads and structures, the location and dimensions of significant natural features, and the maximum height above ground of the facility (also identified in height above sea level) shall be shown. See Tab 3.
    - ii. 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. See Tab 3.
  - iii. 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. See Tab 8.

- iv. Identification of each paint color on the facility, by manufacturer color name and color number. A paint chip or sample shall be provided for each color. Tower to remain galvanized per
- v. Except where the facility would be attached to an existing ordinance structure, 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. See Tab 3.
- vi. 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. 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. See Tab 8, pages C-3.
- vii. All existing and proposed setbacks, parking, fencing and landscaping. See Tab 8, pages C-1 and C-3.
- viii. The location of all existing access ways and the location and design of all proposed access ways. See Tab 8.
- (g) 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 Tab 4.
- (h) 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).
  - 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.
  - 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. Understood
- 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. Understood
- (i) All towers and other structures shall meet all safety requirements of all applicable building codes. **Understood**
- (j) An engineering report, certifying that the proposed tower meets the design criteria for the required number of prescribed collocations. See Tab 8, page C-2.
- (k) All non-concealed WCFs structures (excluding antenna and cables) shall be galvanized steel.. **Understood, see Tab 8, page C-3.**
- (l) No advertising of any type may be placed on the tower or accompanying facility. **Understood**

#### (m) Abandonment.

- 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. Understood
- 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. **Understood**
- 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. **Understood**
- 4. The Board of Supervisors may require the posting of surety by the applicant in an amount sufficient to cover the costs of dismantling, and the surety shall be submitted to the County prior to the issuance of the conditional use permit. **Understood**
- (n) Where the County deems it appropriate because of the complexity of the methodology or analysis required to review an application for a wireless communication facility, the county may require the applicant to pay for a technical review by a third party expert, selected by the County, the costs of which \$4,000.00 shall be borne by the applicant and be in addition to other applicable fees. Site plan review for antenna element replacements only maybe reduced to \$1,800 provided the applicant meets all the requirements for an antenna element replacement. If however, during the antenna element replacement site review it is determined the request does not meet the definition of an antenna element replacement then review of the application will cease until the correct fee and correct plans are submitted. Further, if additional information is needed to evaluate the applicant's request, the applicant, shall make such additional information available as the County might reasonably request. Understood

# **Section Nine: Approval Process**

- (1) The approving bodies, in exercise of the County's zoning regulatory authority, may consider an application for approval and determine: whether a WCF is in harmony with the area; the effects and general compatibility of a WCF with adjacent properties; or the aesthetic effects of the WCF as well as mitigating factors concerning aesthetics. Understood
- (2) The approving bodies, in exercise of the County's zoning regulatory authority, may disapprove an application on the grounds that the WCF's aesthetic effects are unacceptable, or may condition approval on changes in WCF height, design, style, buffers, or other features of the WCF or its surrounding area. Such changes need not result in performance identical to that of the original application. **Understood**
- (3) Factors relevant to aesthetic effects are: the protection of the view in sensitive or particularly scenic areas, and areas containing unique natural features, scenic roadways or historic areas; the concentration of WCFs in the proposed area; and, whether the height, design, placement or other

- characteristics of the proposed WCF could be modified to have a less intrusive visual impact. **Understood**
- (4) If the approving bodies determine that the proposed additional service, coverage, or capacity to be achieved by the location of the proposed new WCF can be achieved by use of one or more alternative existing wireless communications facilities, it may disapprove the proposed WCF application. Understood
- (5) Public Notices required shall be in accordance with the General Provisions of Article Four of this Zoning Ordinance. **Understood**
- (6) A collocation application shall be reviewed by the County within ninety days of a completed submission, and an application for a new facility shall be reviewed by the County within one hundred fifty days of a completed submission (or within some other mutually agreed upon timeframe). The County shall notify an applicant within 20 business days of initial submission if there are any deficiencies relating to the application materials, otherwise the initial submission shall be deemed complete. Understood
- (7) Approval or denial of the application shall be in writing and shall be postmarked to the applicant by the ninetieth day from the date of final complete submission (in the case of collocation) or one hundred fiftieth day (in the case of new facilities). Denials shall identify the deficiencies in the application which, if cured, would take the application complete. Upon resubmitting of the revised site plan and paperwork the County shall follow the process identified in subsection (6) above until all deficiencies identified are deemed cured. Understood
- (8) If the County does not respond in writing to the applicant within the specified timeframe detailed above, then the application shall be deemed approved. **Understood**

# **Section Ten: RESERVED**

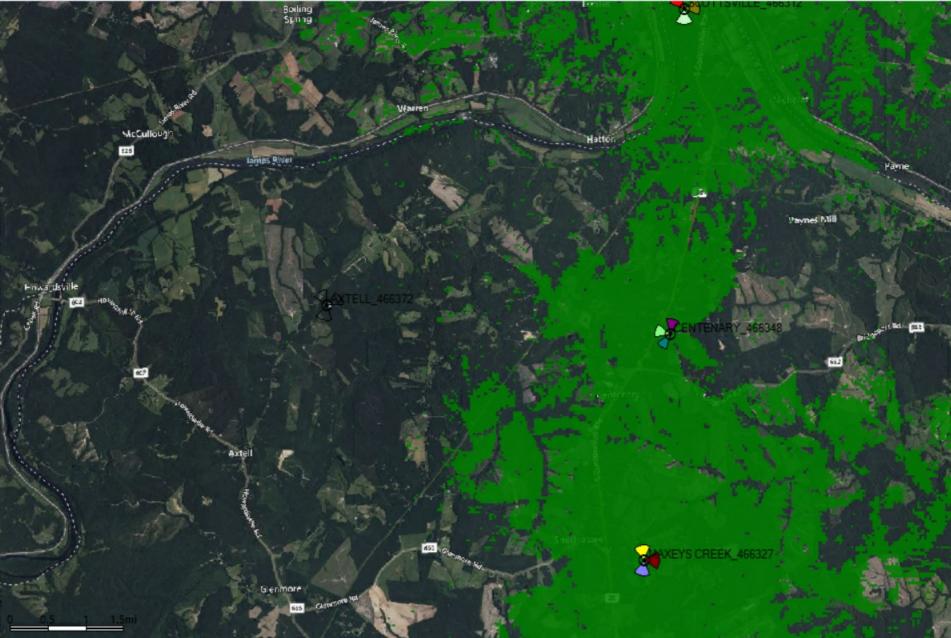
# **Section Eleven: Definitions**

The following words, terms and phrases, when used in this Article, shall have the meanings ascribed to them in this Article, except where the context clearly indicates a different meaning. Where terms are not defined, they shall have their ordinarily accepted meaning, or such as the context may imply.

Generally, the words "used for" include "designed for," and vice versa; the word "building" includes the word "structure"; the word "dwelling" includes the word "residence"; and the word "lot" includes the word "plot." Any words pertaining to gender shall be interchangeable. The word "he" shall mean "she," and "she" shall mean "he." The word "shall" is mandatory; the word "may" or "should" is permissive.

**Administrator.** Also referred to as the zoning administrator. The official charged with the enforcement of the subdivision and zoning





# US Cellular - Axtell/466372

Site Name	Lat/Long	Antenna Make & Model	Power level of antenna
Axtell (proposed)	37° 43' 43.949"N / 78° 34' 48.598"	OCT8-2LX2HX-BW65 (Dengyo)	2489.89W and 2524W

Number of antennas per secto	Number of sectors
1	3

Number of antennas per sector	Number of sectors
1	3

Section 2, 1.(2)(b) Affidavit of Compliance with Site Alternative Hierarchy

Section 5 of Ordinance

Per the GIS there are no publicly owned properties in the original search area provided by the US Cellular RF Engineer. Almost all of the property owners in the search area are included on the list of property owners within 2600' of purposed tower. When reviewed the other few outside of this area already covered are also private property owners.



March 29, 2023

Buckingham County Zoning Department 13380 W. James Anderson Hwy Buckingham, VA 23921

RE: Affidavit of Compliance with Siting Alternative Hierarchy

Site #466372 Axtell

To Whom It May Concern,

# **OVERVIEW**

US Cellular is proposing a new wireless communication facility (WCF), #466372 Axtell, located at approximately the following coordinates: 37.7288747 -78.5801661. The proposed facility meets US Cellular's coverage objectives (providing excellent outdoor, in-vehicle, and in-building wireless coverage) to complement and improve our existing wireless network infrastructure. This facility is intended to improve the capacity of the existing US Cellular wireless communication network, such that we will continue to ensure the communities we serve can maintain high speeds and excellent service. Specifically, the goal is to target the area directly west of Centenary\_466348, an existing US Cellular WCFs shown in the propagation maps attached below.

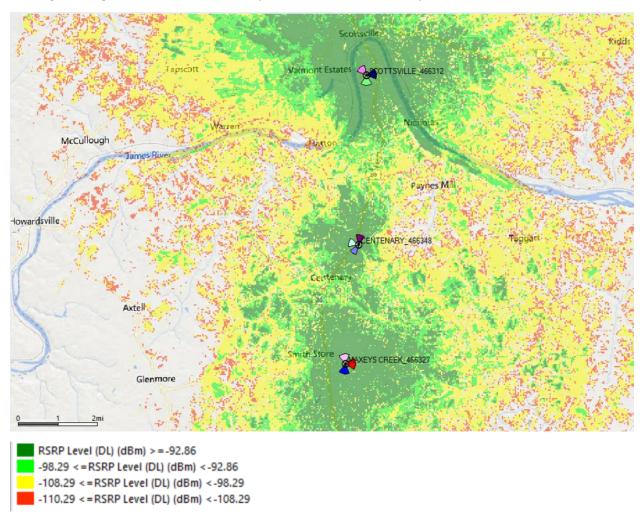
#### **ANTENNAS AND EQUIPMENT**

To meet the above coverage objectives, the proposed site will include a 195' tower facility with tower mounted antennas and radio equipment together with ground-based equipment. This tower height is the minimum height required to fulfill the design criteria. Any lower height would impact our services to the end user and would translate into not being able to get our exceptional services to important areas within Buckingham County. This is as a result the post site optimization that will be done, as adjusting the current sector azimuths will be necessary. The proposed Axtell site will be required to serve comparatively to our existing "On Air" wireless facilities, which stand at comparable heights.



# FIGURE A - Existing US Cellular Coverage

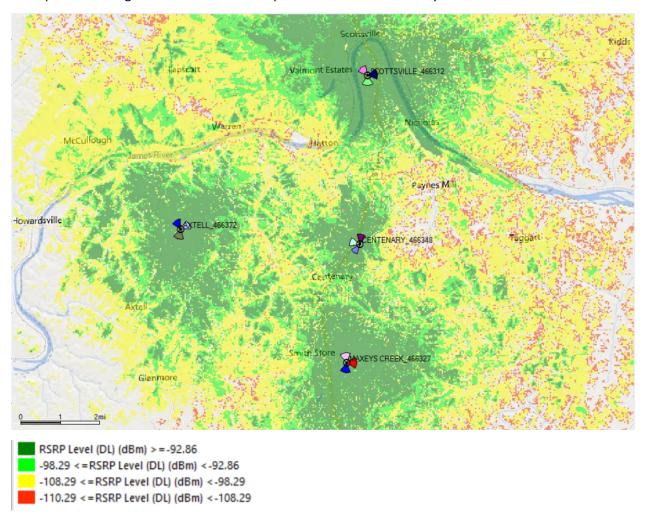
Existing Coverage BEFORE Addition of Proposed New Wireless Facility





# FIGURE B - Projected New US Cellular Coverage

Anticipated Coverage AFTER Addition of Proposed New Wireless Facility "On Air"



# **COLOCATION SITE ANALYSIS**

There are no nearby existing tower facilities to consider. The closest is over 8 miles away. At such a distance, we would be unable to properly fulfill our goals in the target area. The RF Signals would not be able to propagate far enough to have any impact. The current existing US Cellular facilities would still be acting as the best servers for the community there, and capacity would still need to be improved.



# **CONCLUSION**

In summary, I conclude that there are no sitting alternative locations. There are no existing alternative facilities within an 8 mile radius, and therefore no alternatives to consider. To consider any existing facility at such distance would compromise our goals of providing excellent indoor and in-vehicle coverage, capacity, and high speeds to our customers and communities.

Should you have any questions, please do not hesitate to contact me. US Cellular looks forward to working with you on this proposed project.

Sincerely,

Nathan Canavan

Associate RF Engineer, US Cellular

Nathan Canavan



February 1st, 2023

Buckingham County 13380 W. James Anderson Hwy Buckingham, VA 23921

Re: Affidavit of Compliance with Siting Alternative Hierarchy For proposed tower in Scottsville, VA

To Whom It May Concern:

The purpose of this letter is to confirm there are no siting alternative locations. There are no other Wireless Communications Facilities or structures within the coverage objective area. Any utility structures in the vicinity were not adequate collocation candidates nor achieved the required height and therefore were deemed unacceptable. After search of the area it is determined there are not any alternative existing facilities that meet US Cellular's needs. The provided propagation maps show the service gap at the location of the proposed tower to be constructed by US Cellular.

Should you have any questions, please do not hesitate to contact me. US Cellular looks forward to working with you on this proposed project.

Sincerely,

Emilee Lauer

Old Dominion Professional Services LLC

(540) 580-5139

Nathan Canavan

Associate RF Engineer

Nathan Canavan

**US Cellular** 



March 29, 2023

Buckingham County Zoning Department 13380 W. James Anderson Hwy Buckingham, VA 23921

RE:

Affidavit of Compliance with Siting Alternative Hierarchy

Site #466372 Axtell

To Whom It May Concern,

# **OVERVIEW**

US Cellular is proposing a new wireless communication facility (WCF), #466372 Axtell, located at approximately the following coordinates: 37.7288747 -78.5801661. The proposed facility meets US Cellular's coverage objectives (providing excellent outdoor, in-vehicle, and in-building wireless coverage) to complement and improve our existing wireless network infrastructure. This facility is intended to improve the capacity of the existing US Cellular wireless communication network, such that we will continue to ensure the communities we serve can maintain high speeds and excellent service. Specifically, the goal is to target the area directly west of Centenary\_466348, an existing US Cellular WCFs shown in the propagation maps attached below.

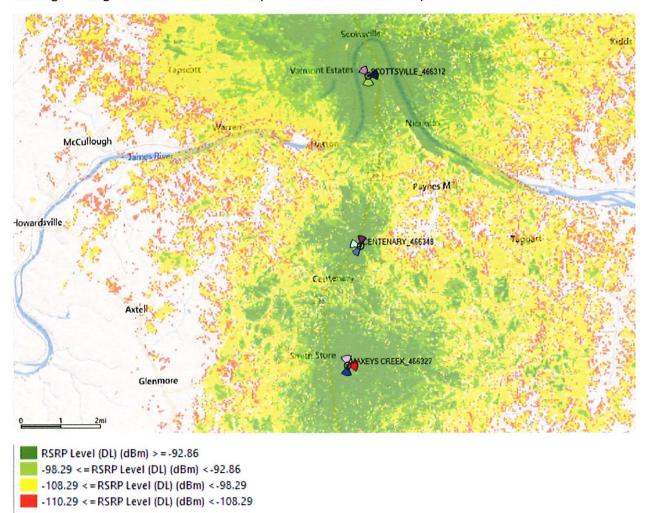
#### **ANTENNAS AND EQUIPMENT**

To meet the above coverage objectives, the proposed site will include a 195' tower facility with tower mounted antennas and radio equipment together with ground-based equipment. This tower height is the minimum height required to fulfill the design criteria. Any lower height would impact our services to the end user and would translate into not being able to get our exceptional services to important areas within Buckingham County. This is as a result the post site optimization that will be done, as adjusting the current sector azimuths will be necessary. The proposed Axtell site will be required to serve comparatively to our existing "On Air" wireless facilities, which stand at comparable heights.



# FIGURE A - Existing US Cellular Coverage

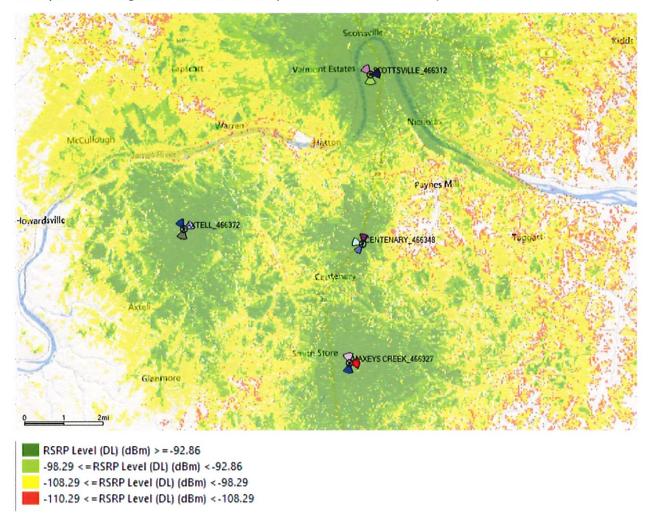
Existing Coverage BEFORE Addition of Proposed New Wireless Facility





### FIGURE B - Projected New US Cellular Coverage

Anticipated Coverage AFTER Addition of Proposed New Wireless Facility "On Air"



### **COLOCATION SITE ANALYSIS**

There are no nearby existing tower facilities to consider. The closest is over 8 miles away. At such a distance, we would be unable to properly fulfill our goals in the target area. The RF Signals would not be able to propagate far enough to have any impact. The current existing US Cellular facilities would still be acting as the best servers for the community there, and capacity would still need to be improved.



### **CONCLUSION**

In summary, I conclude that there are no sitting alternative locations. There are no existing alternative facilities within an 8 mile radius, and therefore no alternatives to consider. To consider any existing facility at such distance would compromise our goals of providing excellent indoor and in-vehicle coverage, capacity, and high speeds to our customers and communities.

Should you have any questions, please do not hesitate to contact me. US Cellular looks forward to working with you on this proposed project.

Sincerely,

Nathan Canavan

Associate RF Engineer, US Cellular

Nathan Canavan

State of Illinois

County of \_\_\_\_\_// This instrument was acknowledged

before me on 30 March 9023 By Nathan I Canavan

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OFFICIAL SEAL MANMINDER SINGH HEER NOTARY PUBLIC - STATE OF ILLINOIS MY COMMISSION EXPIRES:08/15/23

3/30/2023



January 30, 2023

Emilee Lauer Site Acquisition Old Dominion Professional Services, Inc. (ODPS)

Subject: Axtell (466372) Tower Balloon Test

Dear Mrs. Lauer,

On January 26, 2023, Tower Engineering Professionals, Inc. (TEP), on behalf of U.S. Cellular Corporation and ODPS, completed a Balloon Test pursuant to the Buckingham County, Virginia Zoning Ordinance for a proposed 195-ft AGL (199-ft overall with appurtenances) monopole communications tower to be located southeast of a portion of Axtell Road, southwest of the Town of Scottsville, VA at latitude: N 37° 43' 43.949", longitude: W 78° 34' 48.598" (NAD 83).

Pursuant to the Buckingham County Zoning Ordinance, TEP informed the zoning administrator, abutting property owners, elected County Supervisor, and appointed Planning Board Commissioner of the district of the date and time of the proposed balloon test at least 14 days in advance. Additionally, TEP placed a legal public notice in the Farmville Herald on 1/11/2023 informing the public of the location, date, and time of the proposed balloon test. TEP also installed a 4-ft x 4-ft sign along the public right-of-way at the proposed tower entrance location on Tuesday, January 17, 2023 with the location, date, and time of the proposed balloon test. Lastly, TEP sent letters to all abutting property owners requesting permission to access their property during the balloon test to take photographs and assess the visual impact of the proposed tower on their property. The initial balloon test date was Wednesday, January 25, 2023 from 8 a.m. to 12 p.m. EST with an inclement weather backup date of Thursday, January 26, 2023 from 8 a.m. to 12 p.m. Due to rainy and foggy conditions on January 25<sup>th</sup>, the balloon test occurred on January 26<sup>th</sup>.

On Thursday, January 26, 2022, TEP deployed an orange, approximately 5-ft diameter, Cloudbuster<sup>TM</sup> balloon at 199-ft above ground level (to top of balloon) from approximately 8:00 a.m. to 12 p.m. EST. The weather at the time of the balloon flight was mostly sunny with some cloud coverage to the west, with good visibility, and approximately 40 to 48 degrees Fahrenheit with steady approximately 5 to 10 mph westerly wind and intermittent 15 mph gusts. Due to breezy conditions and the extent of trees at the proposed tower location, the balloon was anchored approximately 115-ft northeast of the proposed tower location to avoid entanglement in branches. Photographs were taken by Ryan Malek of TEP with a Nikon D3200 digital camera from the parent property and all abutting properties along the public right-of-way. TEP received permission to access the following properties to ascertain the visual impact of the proposed tower on the property: Parcel ID 14-59 and Parcel ID 14-57. Additionally, TEP personnel drove all public rights-of-way within the FCC-designated ½-mile visual effect area of potential effect (APE) and noted on an aerial photograph where the balloon was visible, partially visible (through winter deciduous trees), and not visible.

The visual impact assessment indicated that the balloon was only partially visible along an approximately 0.4-mile span of Axtell Road, along the frontage of Parcel ID 14-51. The balloon was partially visible through mature deciduous vegetation due to "leaf-off" conditions and the tower is not anticipated to be visible during "leaf-on" conditions. The balloon was also visible above the treeline from an approximately 400-ft span of Logan Road (SR 698). Due to mature roadside vegetation, the balloon was not visible from any other span of public right-of-way within the ½-mile APE. Please see the attached Zone of Visibility Map for a decision of the balloon's



visibility within the APE. TEP personnel were unable to access Parcel ID 14-57 to assess the visual impact of the proposed tower due to a locked access gate.

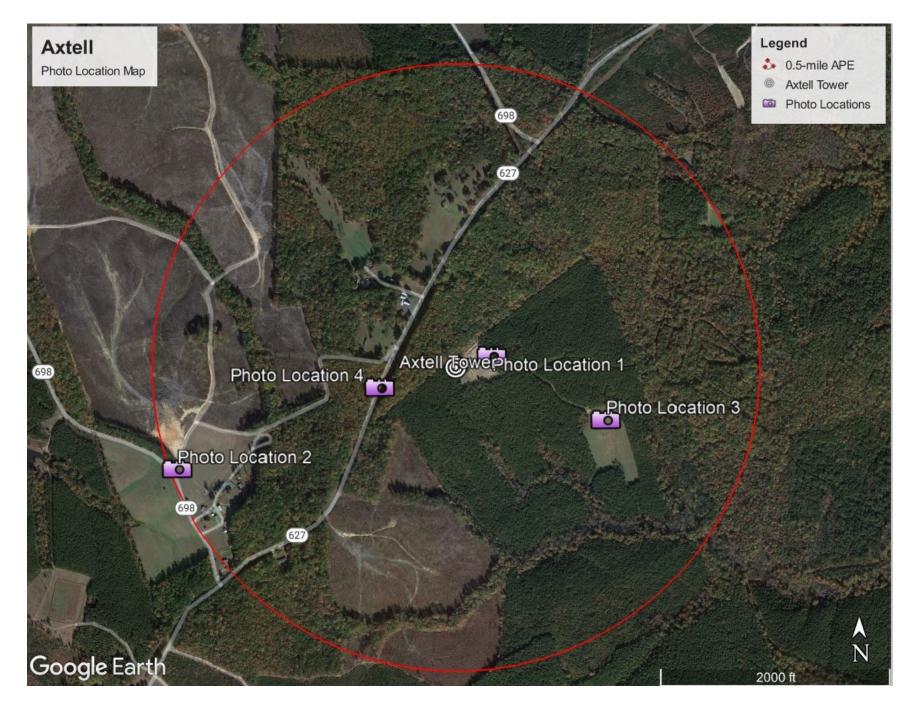
TEP utilized four (4) photographs to create computer-generated photo simulations to depict how the proposed communications facility will appear once constructed. Two photo simulations are from the parent parcel (Parcel ID 14-59), one adjacent to the proposed facility and one southeast of the proposed facility; one photo simulation is from along Axtell Road and Parcel ID 14-51; and one photo simulation is from Logan Road (SR 698) adjacent to Parcel ID 14-15. Due to the presence of mature evergreen vegetation surrounding the proposed tower site and the presence of mature vegetation along the public rights-of-way and throughout the abutting properties, it is the opinion of TEP that the proposed tower will no significant visual impact on the abutting or surrounding properties.

Attached are the computer-generated photo simulations from four (4) locations surrounding the proposed tower site, the Zone of Visibility map, legal public notice proof, photograph of the installed signage, photographs from the abutting properties, and examples of the letters sent informing county personnel and abutting property owners of the proposed balloon test. Please don't hesitate to contact me with any questions or concerns regarding this report.

Sincerely,

Environmental Division Manager

Tower Engineering Professionals, Inc.













Monopole Tower Simulation 199-ft AGL Overall Photo #1 - approx. 315' E of site





Monopole Tower Simulation 199-ft AGL Overall Photo #2 - approx. 2,630' WSW of site



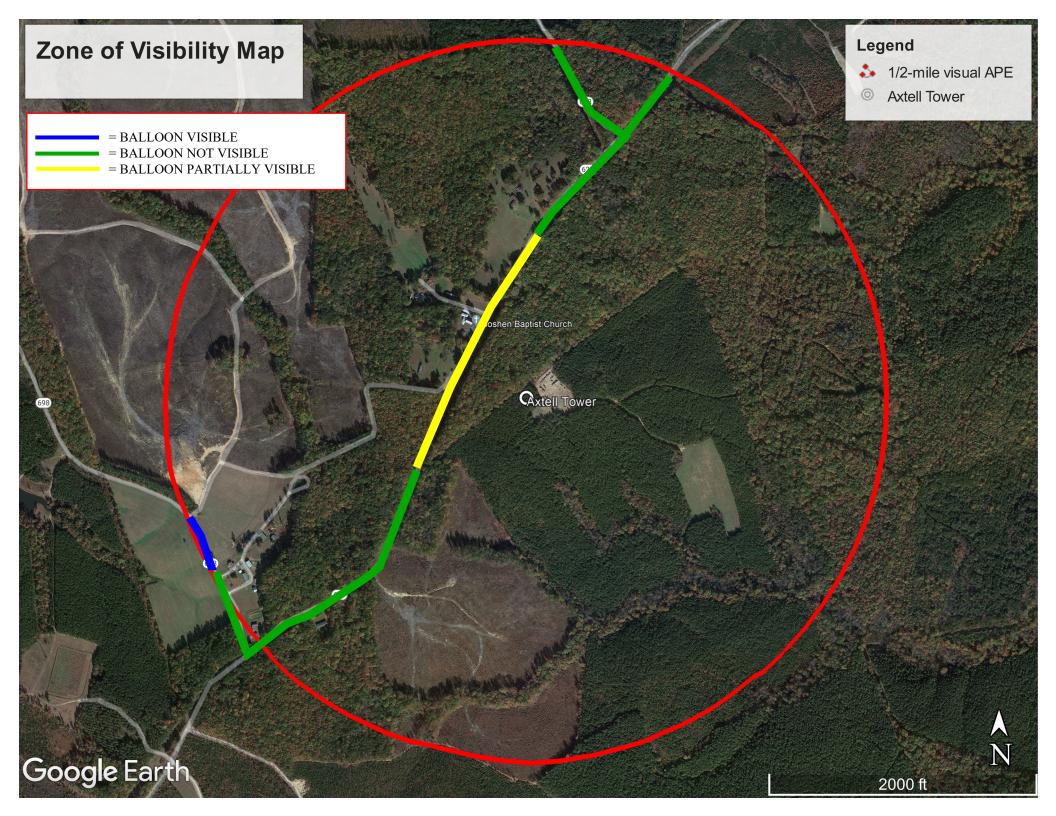


Monopole Tower Simulation 199-ft AGL Overall Photo #3 - approx. 1,410' SE of site





Monopole Tower Simulation 199-ft AGL Overall Photo #4 - approx. 715' WSW of site

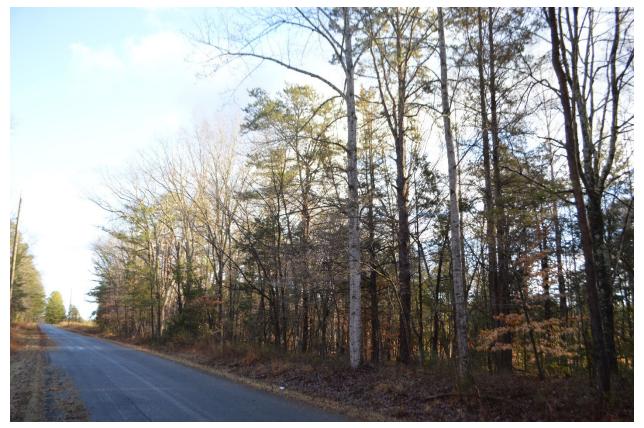




1) Photograph from Parcel ID 14-39 (balloon not visible)



2) Photograph near junction of Parcel IDs 14-42, 14-46, and 14-60 (balloon not visible)



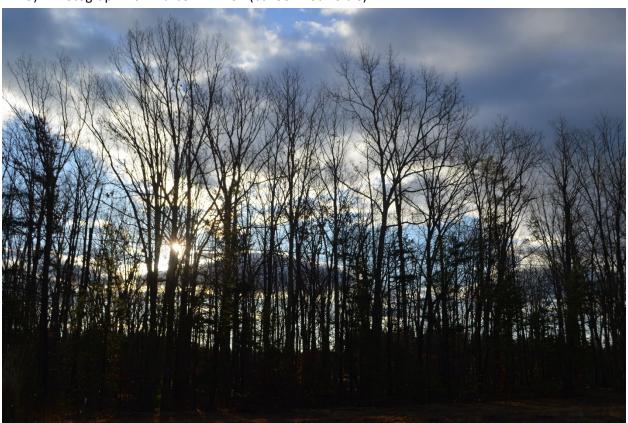
3) Photograph from Parcel ID 14-48 (balloon not visible)



4) Photograph from Parcel ID 14-50 (balloon not visible)



5) Photograph from Parcel ID 14-51 (balloon not visible)



6) Photograph from Parcel ID 14-51, Goshen Baptist Church (balloon partially visible through trees)



7) Photograph from near Parcel ID 14-57 (inaccessible due to locked gate, balloon not visible)



8) Photograph from Parcel ID 14-59 (parent parcel) (balloon visible over treeline)



9) Photograph of installed signage

### Proof

Client	TOWER ENGINEERING PROFES- SIONALS	Phone	(919) 661-6351
Address	FARMVILLE 326 TRYON ROAD	EMail	gswearingen@tepgroup.net
		Fax	
	_		
AD # Account Class Start Date End Date Run Dates Pubs Order #	2610 01/11/23 01/11/23	Requested By PO # Created By Creation Date Dimensions Price	TOWER ENGINEERING PROFESSIONALS FARMVILLE  MADISON.KING 01/05/2023 1 X 3.778 \$84.40
Sales Rep	Madison King	Phone EMail Fax	madison.king@shelbycountyre- porter.com

# **NOT AN INVOICE**

### **PUBLIC NOTICE**

U.S. Cellular Corporation is proposing to construct a 199' AGL overall height monopole comoverall height monopole communications tower east of a portion of VA SR 627 (Axtell Road), north of Axtell, VA on a property identified as Buckingham Co., VA Tax ID#14-59 (latitude: 37° 43' 43.949" N, longitude: 78° 34' 48.598" W) to support equipment for wireless communications services. A balloon test showing the height and location tions services. A balloon test showing the height and location of the proposed monopole shall occur at this site, on Wednesday, January 25, 2023, between the hours of 8:00 a.m. to 12:00 p.m., weather permitting. In the event inclement weather, windy or otherwise poor weather conditions, it will be held during the same hours January 26, 2023, weather permitting.

For additional information contact:

Ryan Malek, Tower
Engineering Professionals

(919) 661-6351

Farmville Herald: Jan. 11, 2023 **14-59** 

### Client Information Company: Tower Engineering Contact: Graham Johnson Address 1: 201 Glenwood Ave Address 2: City: Raleigh State: NC Zip: 27603 Email: **Project Information** Project Name: Proof Sheet Proof Date: 1/9/2023 Lavout #: 1 Page: File Location: **Specifications** Final Size: 48x48 Material: corrugated plastic with 8 grommets

Finishing Details:

**X** Single Sided Double Sided

### Deliver/Ship/Install

Ship/Delivery Address:

### **Client Approval**

☐ Approved ☐ Approved With Changes (specify):

Request New Proof

Approval Signature

Date

Duncan-Parnell Raleigh 201 Glenwood Avenue Raleigh, NC 27603 919.833.4677 raleighorders@duncan-parnell.com



### **PROJECT PROOF**

PRINTED SINGLE SIDED ON 4MM CORRUGATED PLASTIC 3 GROMMETS / SIDE (8 TOTAL)



U.S. Cellular Corporation is proposing to construct a 199' AGL overall height monopole communications tower east of a portion of VA SR 627 (Axtell Road), north of Axtell, VA on a property identified as Buckingham Co., VA Tax ID#14-59 (latitude: 37° 43' 43.949" N, longitude: 78° 34' 48.598" W) to support equipment for wireless communications services.

A balloon test showing the height and location of the proposed monopole shall occur at this site, on Wednesday, January 25, 2023, between the hours of 8:00 a.m. to 12:00 p.m., weather permitting. In the event inclement weather, windy or otherwise poor weather conditions, it will be held during the same hours January 26, 2023, weather permiting.

For additional information contact: Ryan Malek, Tower Engineering Professionals, Inc. (919) 661-6351

### **PUBLIC NOTICE**

U.S. Cellular Corporation is proposing to construct a 199' AGL overall height monopole communications tower west of a portion US Hwy 15 (S James Madison Highway) and south of VA SR 709 (Holland Road), north of Sheppards, VA on a property identified as Buckingham Co., VA Tax ID#196-13 (latitude: 37° 23' 47.180" N, longitude: 78° 29' 04.038" W) to support equipment for wireless communications services.

A balloon test showing the height and location of the proposed monopole shall occur at this site, on Wednesday, January 25, 2023, between the hours of 8:00 a.m. to 12:00 p.m., weather permitting. In the event inclement weather, windy or otherwise poor weather conditions, it will be held during the same hours January 26, 2023, weather permiting.

For additional information contact: Ryan Malek, Tower Engineering Professionals, Inc. (919) 661-6351

Disclaimer: Production will not begin until written approval is received. Please carefully review the proof for any errors including spelling, grammar, trademarks, punctuation, etc. Color may appear differently on computer screen. If you require a color-match proof, please contact us. Client is fully responsible for final approval of proofs. copyright 2016 Duncan-Parnell, Inc.



January 6, 2023

Mrs. Cheryl "Nicci" Edmonston
Buckingham County Zoning Administrator
nedmondston@buckinghamcounty.virginia.gov
13380 West James Anderson Highway
Buckingham, VA 23921

Mr. Harry W. Bryant
District 5 Elected County Supervisor
<a href="https://doi.org/10.1007/hbryant@buckinghamcounty.virginia.gov">hbryant@buckinghamcounty.virginia.gov</a>
726 Firehouse Road
Buckingham, VA 23921

Mr. Steven Dorrier
District 5 Planning Board Commissioner
sdorrier@buckinghamcounty.virginia.gov
615 White Rock Road
Scottsville, VA 24590

Subject: Notification of Balloon Test

U.S. Cellular Wireless Communications Facility (WCF) Site: Axtell (466372)

Axtell Road (E911 Address TBD)

Scottsville, VA 24590 (Buckingham County)

### To Whom It May Concern:

Tower Engineering Professionals, Inc. (TEP) has been contracted by U.S. Cellular to complete a Balloon Test pursuant to the Buckingham County Zoning Ordinance for a proposed 195-ft AGL (199-ft overall with appurtenances/lightning rod) monopole communications tower to be located southeast of a portion of Axtell Road, southwest of the Town of Scottsville, Virginia (Buckingham County). Pursuant to aforementioned Ordinance, the applicant shall conduct a balloon test at the proposed tower location to simulate the maximum height of the proposed WCF and notify the zoning administrator, abutting property owners, elected County supervisor, and appointed Planning Board Commissioner of the district of the date and times of the test at least fourteen (14) days in advance.

TEP will be deploying an approximately 5.5-ft diameter brightly colored balloon from **8 a.m. to 12 p.m. EST on Wednesday, January 25, 2023** at the site of the proposed tower. In the event of inclement weather, windy, or otherwise poor weather conditions, the balloon test will be held the same hours on Thursday, January 26, 2023, weather permitting. The top of the balloon will reach a height of 199-ft above ground level (AGL) to simulate the overall height of the proposed WCF.



The approximate coordinates of the proposed tower location and balloon test are as follows:

### Axtell Road, Scottsville, VA 24590 (E911 Address TBD)

Latitude: N 37° 43′ 43.949″ (NAD 83) Longitude: W 78° 34′ 48.598″ (NAD 83)

Please feel free to contact me if you have any questions or concerns regarding the balloon test.

Sincerely,

Ryan A. Malek

Tower Engineering Professionals, Inc.



January 6, 2023

Subject: Notification of Balloon Test

U.S. Cellular Wireless Communications Facility (WCF) Site: Axtell (466372)

Axtell Road (E911 Address TBD)

Scottsville, VA 24590 (Buckingham County)

To Whom It May Concern:

Tower Engineering Professionals, Inc. (TEP) has been contracted by U.S. Cellular to complete a Balloon Test pursuant to the Buckingham County Zoning Ordinance for a proposed 195-ft AGL (199-ft overall with appurtenances/lightning rod) monopole communications tower to be located southeast of a portion of Axtell Road, southwest of the Town of Scottsville, Virginia (Buckingham County). Pursuant to aforementioned Ordinance, the applicant shall conduct a balloon test at the proposed tower location to simulate the maximum height of the proposed WCF and notify abutting property owners at least fourteen (14) days in advance. Additionally, 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.

TEP will be deploying an approximately 5.5-ft diameter brightly colored balloon from **8 a.m. to 12 p.m. EST on Wednesday, January 25, 2023** at the site of the proposed tower (see coordinates below). In the event of inclement weather, windy, or otherwise poor weather conditions, the balloon test will be held the same hours on Thursday, January 26, 2023, weather permitting. The top of the balloon will reach a height of 199-ft above ground level (AGL) to simulate the overall height of the proposed WCF.

Therefore, on behalf of U.S. Cellular, we are requesting permission to access your property during the balloon test to take pictures of the balloon and to evaluate the visual impact of the proposed tower on your property. Please email me at <a href="mailto:rmalek@tepgroup.net">rmalek@tepgroup.net</a>, write me at 326 Tryon Road, Raleigh, NC 27603-3530 Attn: Ryan Malek, or call me at (919) 332-1917 no later than Monday January 23, 2023 to grant permission to access your property. Otherwise, we will assume that we do not have permission to access your property, photographs will be taken from the public right-of-way, and the visual impact of the proposed tower will not be able to be evaluated on your property.

The approximate coordinates of the proposed tower location and balloon test are as follows:

Axtell Road, Scottsville, VA 24590 (E911 Address TBD) Buckingham County Tax ID# 14-59

Latitude: N 37° 43′ 43.949″ (NAD 83) Longitude: W 78° 34′ 48.598″ (NAD 83)

Please feel free to contact me if you have any questions or concerns regarding the balloon test.

Sincerely,

Ryan A. Malek

Tower Engineering Professionals, Inc.

### Written Narrative

The purposed wireless facility will work with all aspects of the County Comprehensive Plan to ensure the use of land is preserved. The facility will support residents' needs to provide better coverage to communicate. Given the strong agricultural use of the area measures have been taken to make the design fit in with the surroundings per ordinance requirements. This project will not negatively impact the current use of the land or the land surrounding it. Giving todays demand for the increase in technology, this is a crucial development for growth in all areas. This will allow future carriers to collocate on the tower helping to alleviate the chance for more towers in the area, helping to conserve the surrounding landscape. This project will not cause impact to the rural lands in Buckingham County, nor will it impact livestock, rivers, solid waste, water or sewage.

The project design is the least intrusive to help fit in with the surroundings in the area. The new structure will be a monopole style which is the most streamlined. Typically, poles are about 60 inches at the base and taper to around 20 inches at the top. Using original buffers and added landscape it helps reduce the visual impact, while preserving forest lands, parks and open spaces.

Environmental engineers have taken the steps necessary to make sure the new facility will have no negative impact on the historical significance in the area. The plan has met with the standards to preserve any historically significant properties. No rezoning is necessary for this project, all items have corresponded along with the Agricultural district located in the ordinance. This project is designed to be extremely safe for all citizens, houses, schools, etc. Monopoles are designed with breakpoint technology and to fall within their selves in roughly a 40-foot radius.

A wireless facility is a necessary infrastructure in the 21<sup>st</sup> century. Technology is growing daily and the need for new towers are becoming more and more. The increase in use of towers has caused the demand for more towers to be built, know as capacity sites, to offload the other towers. This also allows for more carriers to come into the area, giving residents more choices to cut down on prices.

Tower is designed to house 6 total carriers. This gives plenty of space to allow the County to collocate their Emergency Services antennas as well. With the increase in their antennas, it gives more coverage for emergencies located in the community. Law enforcement and Rescue need the best given coverage to be there for anyone in need at any given time. The biggest providers in the area will all benefit with the purposed tower to better expand their services for their customers.

Increase in service allows those who are traveling, in case they break down or just need a better signal to their GPS, to get the information they need or make calls. Majority of people use a GPS to travel and navigate. Telecommunications is an important role to making every day life function as it should. Residential or businesses revolve around these technologies in order to live, make money, and communicate.

# ARTICLE 9 RADIO, TELEVISION AND WIRELESS COMMUNICATION TOWER AMENDMENT TO THE ZONING ORDINANCE OF BUCKINGHAM COUNTY

### **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

Understood

### **Section Three: Exempt Installations**

Notwithstanding any other provisions contained in land development regulations for the County, the following items are exempt from the provisions of this article;

- (1) Non-commercial, FCC licensed amateur radio antennas as provided for in the definition section.
- (2) Satellite earth stations that are three meters or less.
- (3) A government wireless communications facility, whether owned or leased, that is exclusively reserved for non-commercial public safety communications services, and which will not be utilized for any commercial wireless services, upon a written determination of public necessity by the county board of supervisors or designee; except that such facility must comply with all federal and state building and structural requirements. Such noncommercial public safety facility may be constructed using any available technology and may be constructed to

- accommodate future anticipated public safety wireless communications needs.
- (4) A temporary, commercial wireless communications facility, upon the declaration of a state of emergency by federal, state, or local government, or determination of public necessity by the county board of supervisors or designee.
- (5) A temporary, commercial wireless communications facility, for the purposes of providing coverage of a special event such as news coverage or sporting event, subject to approval by the county board of supervisors or designee.
- (6) Antenna support structures, antennas, and/or antenna arrays for AM/FM/LPTV/DTV broadcast transmission facilities.
- (7) Micro-wireless facilities that are suspended on cables or lines that are strung between existing utility poles in compliance with national safety codes.

Understood

### **Section Four: Permitted Uses (By Right with certification)**

- (1) Concealed Attached WCF
- (2) Attached, Antenna, Collocated or Combined on Existing WCF
- (3) Modification on to existing collocation or antenna array
- (4) Antenna Element Replacement
- (5) Replacement of WCF unless the replacement of an existing non-illuminated WCF is required to become illuminated
- (6) Eligible Small Cell Facilities

Understood

<u>Section Five:</u> 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 N/A
- (2) Replacement of existing WCF where the replacement will require an existing non-illuminated WCF to become illuminated. N/A
- (3) Non-concealed attached WCF (only on transmission distribution poles). N/A
- (4) Concealed freestanding WCF N/A
- (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

### (iii). Guyed tower 5.b.i. Being purposed, this was best option per the RF engineer for US Cellular.

### Section Six: Submittal Requirements for Permitted and Special Uses

All submittal requirements are listed in Supplemental document

Understood

### **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) See Construction Drawings.
- (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.
  - When a collocated or combined WCF is to be located on a (2) nonconforming building or structure, then the existing permitted nonconforming setback shall prevail. N/A
- (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. N/A
- N/A (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.
  - 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.

### See construction drawings, C-2 and C-2A.

- (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. See construction drawings, C-7.
- (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.
- (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. See construction drawings, C-1, existing foliage to be used.
- (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) Understood, see NIER Letter from
- (11) All towers and other structures shall meet all safety requirements of all applicable building codes All items included in drawings and are up to code and standards required by US Cellular.
- (12) All non-concealed WCFs structures (excluding antenna and cables) greater than 50' shall be galvanized steel. See construction drawings, C-3.
- (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.

See construction drawings, C-3.

(14) Abandonment.

- 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.

US Cellular is to provide notification of abandonment and follow these guidelines provided by the County.

### Section Eight: Approval Factors and Process

- (1) The approving bodies, in exercise of the County's zoning regulatory authority, may consider an application for approval and determine: whether a WCF is in harmony with the area; the effects and general compatibility of a WCF with adjacent properties; or the aesthetic effects of the WCF as well as mitigating factors concerning aesthetics.
- (2) The approving bodies, in exercise of the County's zoning regulatory authority, may disapprove an application on the grounds that the WCF's aesthetic effects are unacceptable, or may condition approval on changes in WCF height, design, style, buffers, or other features of the WCF or its surrounding area. Such changes need not result in performance identical to that of the original application.
- (3) Factors relevant to aesthetic effects are: the protection of the view in sensitive or particularly scenic areas, and areas containing unique natural features, scenic roadways or historic areas; the concentration of WCFs in the proposed area; and, whether the height, design, placement or other

- characteristics of the proposed WCF could be modified to have a less intrusive visual impact.
- (4) If the approving bodies determine that the proposed additional service, coverage, or capacity to be achieved by the location of the proposed new WCF can be achieved by use of one or more alternative existing wireless communications facilities, it may disapprove the proposed WCF application.
- (5) A collocation application shall be reviewed by the County within ninety days of a completed submission, and an application for a new facility shall be reviewed by the County within one hundred fifty days of a completed submission (or within some other mutually agreed upon timeframe). The County shall notify an applicant within 20 business days of initial submission if there are any deficiencies relating to the application materials, otherwise the initial submission shall be deemed complete.
- (6) Approval or denial of the application shall be in writing and shall be postmarked to the applicant by the ninetieth day from the date of final complete submission (in the case of collocation) or one hundred fiftieth day (in the case of new facilities). Denials shall identify the deficiencies in the application which, if cured, would make the application complete. Upon resubmitting of the revised site plan and paperwork the County shall follow the process identified in subsection (6) above until all deficiencies identified are deemed cured.
- (7) If the County does not respond in writing to the applicant within the specified timeframe detailed above, then the application shall be deemed approved.
- (8) Where the County deems it appropriate because of the complexity of the methodology or analysis required to review an application for a new wireless communication facility, the county may require the applicant to pay for a technical review by a third party expert, selected by the County, the costs of which \$4,000.00 shall be borne by the applicant and be in addition to other applicable fees. Further, if additional information is needed to evaluate the applicant's request, the applicant, shall make such additional information available as the County might reasonably request.
  - a. Permitted uses #1 #5 may be technically reviewed by a third party expert, the costs of which \$1,800.00 shall be borne by the applicant and be in addition to other applicable fees. Permitted use #6 (Small Cell Facilities) will be reviewed and charged as allowed by Code of Virginia Section 15.2-2316.4

Understood.

### Section Nine: RESERVED

### **Section Ten: Definitions**

The following words, terms and phrases, when used in this Article, shall have the meanings ascribed to them in this Article, except where the context clearly indicates a

Any manned or unmanned location for the transmission and/or reception of radio frequency signals, or other wireless communications, and usually consisting of an antenna or group of antennas, transmission cables, and equipment cabinets, and may include an antenna support structure. The following developments shall be considered as a WCF: developments containing new, mitigated, or existing antenna support structures, public antenna support structures, replacement antenna support structures, collocation on existing antenna support structures, attached wireless communications facilities, concealed wireless communication facilities, and non-concealed wireless communication facilities. Excluded from the definition are: non-commercial amateur radio, amateur ham radio and citizen band antennas, satellite earth stations and antenna support structures, and antennas and/or antenna arrays for AM/FM/LPTV/DTV broadcasting transmission facilities.

### Specific types of WCFs includes:

Attached wireless communication facility means an antenna or antenna array that is secured to an existing building or structure with any accompanying pole or device which attaches it to the building or structure, together with transmission cables, and an equipment cabinet, which may be located either on the roof or inside/outside of the building or structure. An attached wireless communications facility is considered to be an accessory use to the existing principal use on a site.

Concealed wireless communications facility, sometimes referred to as a stealth or camouflaged facility, means a wireless communications facility, ancillary structure, or WCF equipment compound that is not readily identifiable as such, and is designed to be aesthetically compatible with existing and proposed building(s) and uses on a site. There are two types of concealed WCFs: 1) attached and 2) freestanding. 1) Examples of concealed attached facility include, but are not limited to the following: painted antenna and feed lines to match the color of a building or structure, faux windows, dormers or other architectural features that blend with an existing or proposed building or structure.

2) Freestanding concealed WCFs usually have a secondary, obvious function which may be, but is

# BUCKINGHAM COUNTY Z.O. ARTICLE 9 TELECOMMUNICATIONS SUPPLEMENTAL DOCUMENT

### Supplemental Document to Article 9

## **INDEX**

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Section 2	Submittal requirements for each type of facility All New WCFs Attached, Collocated, Modifications on existing WCF Replacement of WCFs Freestanding concealed WCF Non-concealed WCFs Antenna Element Replacement Small Cell	Page 4 Page 7 Page 8 Page 9 Page 9 Page 10
Section 3	Other Submittal requirements for WCFs	Page 11

### Supplemental Document to Article 9 of the Zoning Ordinance

### **Purpose**

In accordance with the County's zoning authority this document serves all county staff and potential applicants with a list of publicly owned properties and detailed submittal requirements for all applications

### 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	Infrastructure	Infrastructure
YY 1 11 YYY	2042037.4	ID	Туре	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'

- (a) If an applicant requests a permit to develop a site on County-owned property, the permit granted hereunder shall not become effective until the applicant and the County have executed a written agreement or lease setting forth the particular terms and provisions under which the permit to occupy and use the public lands of the jurisdiction will be granted.
- (b) No permit granted under this section shall convey any exclusive right, privilege, permit, or franchise to occupy or use the publicly-owned sites of the jurisdiction for delivery of telecommunications services or any other purpose.
- (c) No permit granted under this section shall convey any right, title or interest in the public lands, but shall be deemed a permit only to use and occupy the public lands for the limited purposes and term stated in the agreement between the lessor and lessee. Further, no permit shall be construed as a conveyance of a title interest in the property.

Understood. See letter from RF Engineer. Tight search area with limited options.
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.
  - (b) Balloon Test for all new freestanding macro cell WCFs outside the right-ofway 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

- 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

Completed, see Balloon Test and Visibility Map provided.

### (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 (NAD-
83)). In general, we plan to construct a support structure of fee
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)"
I attara mailed

(b) An affidavit by a radio frequency engineer demonstrating: (NOTE: These documents are needed to justify a facility and to determine if the proposed

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. See affidavit from RF Engineer.
- (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 1/2½"× 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. Mailed to County.
- (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. Submitted with package.
- (e) Proof that a property and/or WCF owner's agent has appropriate authorization to act upon the owner's behalf (if applicable). See SUP Application, owner signed.
- (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. See Fall Zone Letter.
- (g) Materials detailing the locations of existing wireless communications facilities to which the proposed antenna will be a handoff candidate; including latitude, C-2 & longitude, and power levels of the proposed and existing antenna is required. C-2A.
- (h) A map showing the designated search ring. Search ring submitted from RF Engineer.
- (i) Identification of the intended service providers of the WCF. See Construction drawings.
- (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. C-2 &C-2A in construction drawings.
- (k) The applicant shall supply a statement on applicant letterhead of compliance with all FCC rules regarding interference to other radio services. See NIER Letter.
- (l) The applicant shall supply a statement on applicant letterhead of compliance with all FCC rules regarding human exposure to radio frequency energy. See NIER (m)One original and two copies of a survey of the property delineating an area Letter.

- 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. C-2 and C-2A in construction drawings.
- (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.

  C-1 in construction drawings.
- (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. See SHPO items.
- (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. Understood.
- (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 (SHPPO) approval, if required.

See FAA Letter and SHPO information.

#2 Attached, collocated, collocation modifications of existing arrays, or combined antenna on an existing WCF.

The following shall be provided in addition to the requirements listed above.

- (a) If antennas are proposed to be added to an existing structure, all existing antennas and other equipment on the structure, as well as all ground equipment, shall be identified by owner, type and size. The method(s) by which the antennas will be attached to the mounting structure shall be depicted.

  N/A
- (b) The top of the attached antenna shall not be more than twenty (20) feet above the existing or proposed building or structure. N/A
- (c) When required, 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. N/A
- (d) Concealed Attached WCFs: Feed lines and antennas shall be designed to architecturally match the façade, roof, wall, or structure on which they are affixed so that they blend with the existing structural design, color, and texture. N/A
- (e) Equipment cabinets shall be located within the existing building or behind an opaque enclosure matching the architectural designs and colors of the principal building or structure. If the existing equipment compound is not sized adequately to accommodate the new proposed ground equipment, then a revised site plan of the original WCF site shall be submitted addressing the overall ground space for the WCF. N/A
  - (f) Non-concealed attachments shall only be allowed on electrical transmission towers and existing light stanchions subject to approval by the utility company, the development standards for attached WCFs, and compliance with existing legal restrictions contained in any easement granted for said transmission towers and/or light stanchions. N/A
  - (g) Provide with Building Permit: Prior to issuance of a building permit a stamped or sealed structural analysis by a registered professional engineer licensed in the State of Virginia indicating the antenna support structure and/or building or structure to which the antenna will be attached has sufficient structural integrity to support the proposed antenna and feed lines in addition to all other equipment located or mounted on the structure. N/A

#### #3 Replacement of WCFs.

The following shall also be provided in addition to the requirements listed in #1. Replacement of WCFs shall accomplish a minimum of one of the following: 1) reduce the number of towers; or 2) reduce the number of nonconforming towers; or 3) replace an existing tower with a new tower to improve network functionality resulting in compliance with this ordinance. Replacement is subject to the following:

- (a) Height: The height of a tower approved for a first time replacement shall not exceed one hundred and fifteen (115) percent of the original height of the tallest tower or the maximum height permitted in district whichever is greater. (For example a 250' existing tower could be rebuilt at 287.5') N/A
- (b) A second replacement for a tower previously replaced requires approval of a Special Use Permit. N/A
- (c) Breakpoint technology: Replacement monopole towers shall use breakpoint technology in the design of the replacement facility. N/A
- (d) Replacement WCFs shall be configured and located in a manner that minimizes adverse effects on the landscape and adjacent properties, with specific design considerations as to height, scale, color, texture, and N/A architectural design of the buildings on the same and adjacent zoned lots.
- (e) The existing tower being replaced, including tower base but excluding the

tower foundation, must be removed within ninety (90) days of the initial operation of the new tower. N/A

#### #4 Freestanding concealed WCFs.

The following shall be provided in addition to the requirements listed in Section #1:

- (a) Height:
  - 1. Height calculations shall include above ground foundations, but exclude lightning rods or lights required by the FAA that do not provide any support for antennas.
  - 2. New concealed towers shall be limited to 199' or less in height.
  - 3. For replacements of existing towers #3, entitled, "Replacement of WCF's". N/A
- (b) New concealed freestanding towers shall be designed to match adjacent structures and landscapes with specific design considerations such as architectural designs, height, scale, color, and texture. N/A
- (c) 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, exterior building material and roof samples.

In addition to the requirements of Section Two, #1, 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.

N/A

#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

#### Supplemental Document to Article 9

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 See propagation maps. 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. C-3, construction drawings.
- (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.

See Balloon Test Package.

- (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.

See Balloon Test Package.

#### #6 Antenna Element Replacement

For any replacement of an existing antenna element on a WCF, prior to making such replacement, the applicant, in lieu of the requirements provided in Section Two #1 shall submit and provide:

- (a) A written statement setting forth the reasons for the replacement.
- (b) A description of the proposed antenna replacement including the antenna element design, type and manufactures model number of the existing and proposed antenna. N/A

#### #7 Small Cell Facility

For any small cell facility, in lieu of the aforementioned items a certification is required and includes an application and sketch plan with the following items:

- (a) Location of proposed structure by GPS coordinates
- (b) Location and size of existing or proposed buildings and structures
- (c) Setbacks from property lines, right-of-ways, and existing structures
- (d) Entrance/Access and parking layout

#### Supplemental Document to Article 9

- (e) Exterior lighting if any. All illumination shall be full cutoff and pointed in a down direction.
- (f) Tax map and parcel number
- (g) Zoning district
- (h) North Point
- (i) Date of drawing and name of individual who prepared the plan
- (i) Minimum setback lines
- (k) Approximate boundary dimensions
- (l) A certification of structural integrity from a professional engineer licensed to practice in the Commonwealth of Virginia, or a certification of testing and design from a manufacturer of the pole structure
- (m) Certification that the antennas meet or exceed FCC emission and interference requirements.

#### N/A

#### 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.
  - 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. C-2 & C-2A
    - 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. C-1, C-3, C-11A
  - 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. C-2 & C-2A
  - 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. 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. C-2, C-2A, C-1, C-2, C-8
- v. All existing and proposed setbacks, parking, fencing and landscaping. C-1 & C-6 (b) The location of all existing and proposed access ways 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).
- 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.
- 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.

See FAA/FCC submission responses and NIER Letter.

# Buckingham County Planning Commission August 28, 2023 Administration Building 6:00 PM Case 23-SUP329

Owner/Applicant: Landowners Blue Rock Resources LLC

P O Box 256

Dillwyn VA 23936

JAMN Limited Partnership LLP

814 E Main St

Richmond VA 23219

Applicant Blue Rock Solar LLC

**RWE Clean Energy** 

701 Brazos Street, Suite 1400

Austin TX 78701

**Property Information:** Tax Map 202 Parcel 70 containing approximately 796.67 acres, Tax Map 207 Parcel 41 containing approximately 108 acres, and Tax Map 207 Parcel 40 containing approximately 192.91 acres. The parcels are located near the intersection of State Route 683 Mohele Road and State Route 636 Stage Coach Road, Curdsville 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 a solar photovoltaic PV modules to produce up to 100 MW utility scale solar facility on approximately 1,127 acres in Buckingham County. The power generated will be linked to the electrical transmission grid via the existing overhead 115 KV high voltage on-site transmission line. The Applicant is asking the Planning Commission to schedule a Public Hearing for this request.

Background/Zoning Information: The parcels are located near the intersection of State Route 683 Mohele Road and State Route 636 Stage Coach Road, Curdsville Magisterial District. Tax Map 202 Parcel 70 containing approximately 796.67 acres, Tax Map 207 Parcel 41 containing approximately 108 acres, and Tax Map 207 Parcel 40 containing approximately 192.91 acres. The landowners are Blue Rock Resources LLC and JAMN Limited Partnership LLP, and the applicant is Blue Rock Solar LLC, RWE Clean 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-I 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. Blue Rock Solar, LLC (the "Applicant" or "Blue Rock Solar") requests a Special Use Permit ("SUP") to allow for the construction and operation of a 100 MW utility-scale solar facility (the "Project") on approximately 1,127 acres of private land in southern Buckingham County, Virginia (the "Property"). The Project is being developed by RWE Clean Energy, a subsidiary of RWE Group, is the 3rd largest renewable energy company in the United States and the country's 2nd largest solar owner and operator. With more than 15 years in the U.S. renewables business, RWE has a proven track record in developing, constructing, and operating renewable energy facilities. RWE Clean Energy's strong position in renewable energy is a result of combining RWE Renewables Americas with Con Edison Clean Energy Businesses, acquired by RWE in March 2023. RWE Clean Energy operates a renewable energy portfolio of about eight (8) gigawatts (GW)installed capacity of onshore wind, solar, and battery storage. The 1500person RWE team in the U.S. is fully committed to being a leader in the clean energy transition in North America. As part of the RWE Group's Growing Green strategy to expand its green portfolio globally to more than 50 GW of installed capacity and to invest globally more than \$55 billion gross by2030, RWE Clean Energy is determined to significantly increase its operating asset base in the U.S. This is backed by a project pipeline of more than 24 GW in onshore wind, solar and battery storage which provides for one of the largest development platforms in the United States.

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

- 1. 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. The Applicant shall sign the list of the adopted conditions for this SUP signifying acceptance and intent to comply with these conditions.
- 3. 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.
- 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. 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. A Stormwater Management Plan must be submitted to the Virginia Department of Environmental Quality (VDEQ) and approved by VDEQ prior to any land disturbance.
- e. 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. That 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 18 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. 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.
- 6. This SUP shall be binding on the Applicant or any successors, assignees, current of future lessee, sub-lessee, or owner of the solar energy facility.
- 7. 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 May 17, 2023 (the "General Plan"). The Solar Equipment and accompanying storm water features shall be limited to no more than the 718 acres of the 1, 127 acres of the Property. The total Project area is approximately 1,127acres, which are currently being managed for timber production and agriculture. The Project development area, which includes panels, fencing, and access roads, will cover approximately 718 acres of the Project site and will be accessed via site entrances located along Route 686 andRoute 683. Of the 718 acres, 686 of the acres will fall within Buckingham County. Approximately 475 acres of the 718 acres will be directly under solar panels, with ~456 of those acres under panels in Buckingham County. 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. 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 permitted Monday through Sunday in accordance with the provisions of the County's Noise Ordinance.
- 9. 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. a. A minimum three hundred (300) 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. This requirement is intended to be in addition to the fifty (50) foot setback established from Solar Equipment to the property line such that all Solar Equipment will be no less than 350 feet from any adjoining or adjacent residential dwelling that exists at the time of the approval by the Board of Supervisors. Within the 350-foot buffer, the Applicant shall retain at least a three hundred fifty (350) 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.
- 11. a. A minimum of a fifty (50) foot setback from Solar Equipment to the property line and any public rights of way 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. Within the fifty (50) foot 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. Transmission Lines and poles, security fence, and project roads may be located within the setbacks only where necessary.
- b. 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 from view 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 Forrester.
- 12. a. 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. b. 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.

- c. 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.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. 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 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.
- 17. 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.

- 18. 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.
- 19. 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.
- 20. 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. 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.
- 21. Parking of vehicles or staging of equipment or materials related construction or decommissioning of the Project shall be limited to the Project Area.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. 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.
- 27. 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.

28. 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 hold a Public Hearing for this request?

July 24, 2023 6pm?

# SPECIAL USE PERMIT APPLICATION CHECKLIST

BUCKINGHAM COUNTY OFFICE OF ZONING AND PLANNING MINUMUM 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
<b>Power of Attorney</b> (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): (FS) 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  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.

Specia	l Use General Site Plan (15 copies) The General Site Plan must co	ntain the	e follow	ing:
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 u	se of all a	butting	or
	adjoining parcels: YES/ NO N/A	JC 01 411 4	outting.	O1
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:	(VEQ	NO	N/A
6.	Scale and north point: YES NO N/A		110	14/ /
7.	Names of boundary roads or streets and widths of existing right-of-way	vs ·		
(	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	140	N/A	
10.	Areas having slopes of 15% to 25% and areas having slopes of 25% or g	reater cle	arly ind	icated
	by separate shading devices (or written indication of "no areas having	slones of	15% to 1	25% or
	greater"): (YES NO N/A	siopes of	13/0 (0 2	23/0 01
11.	Water Courses to include the approximate location of the 100 year floor	ndnlain (if	annlica	hle)
	based on FEMA maps (or written indication of "not in floodplain"):	Japiaiii (ii	аррпса	DIC)
/	YES) NO N/A			
12.	Delineation of existing mature tree lines or written indication of "no m	ature tree	lines"	
	YES) NO N/A	araic tict	inies .	
13.	Proposed roads with right-of-way width that will connect with or pass	through t	he subie	ct
	property: (YES) NO N/A	an ough t	ne subje	
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 intensi	ty of each		sidential
	use: YES NO ( N/A			
16.	Location of any open space and buffer areas, woodland conservation a	reas, stor	m watei	r
	management facilities, and community and public facilities:	(YES	NO	N/A
17.	Location of existing and proposed utilities, above or underground:	YE\$	NO	N/A
18.	Vehicular and pedestrian circulation plan, including traffic counts and t	ypical stre	eet secti	
	right-of-way improvements, access points, travel ways, parking, loading	g, stacking	g, sidew	alks, and
	trails: (YES NO N/A			
19.	Layouts and orientation of buildings and improvements, building use, h	neight, set	backs fr	om
	property lines and restriction lines: YES NO WA			
	Location and design of screening and landscaping: (YES NO	N/A		
	Building architecture: YES NO (N/A)			
	Site lighting proposed: YES NO (N/A)			
	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 m YES (NO) N/A TO BE SUBMITTED FIND TO CAN STUD	ore)		
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 (	NIA	
	Show impact of development of historical or gravesite areas: YES	INO X	IVA	
۷1.			ingham	County.
21.	A copy of the current status of all real estate taxes of all property owner	ed in Buck	ingham wner sh	County. all
21.		ed in Buck by the o	wner sh	County. all

#### **APPLICATION FOR A SPECIAL USE PERMIT**

CASE NUMBER:
(Case Number Assigned by Zoning Administrator)
DATE OF APPLICATION: June 2, 2023
Special Use Permit Request: Blue Rock Solar, LLC (the "Applicant" or "Blue Rock"), requests a Special Use Permit ("SUP") to
allow the construction and operation of a 100 MWac utility scale solar facility (the "Project") on approximately 1,127 acres of private land in Buckingham County (the "Property").
The Applicant requests a SUP to allow the construction and operation of the Project Purpose of Special Use Permit: on the Property. The applicant proposes to install solar photovoltaic (PV) modules to
produce up to 100 MWac. The power generated will be linked to the electrical transmission grid via the existing overhead 115 kV high voltage on-site transmission line.
Zoning District: District 1 - Agricultural (A-1)  Number of Acres: 1,127 +/-
202-70, Tax Map Section: Parcel: 207-41 Lot: Subdivision: Magisterial Dist.: Francisco
Street Address: 37.375980, -78.451625, near the intersection of Route 683 and Stage Coach Road Directions from the County Administration Building to the Proposed Site: Head east on US-60 E for 3.7 miles.
Turn right onto US-15 S for 11.1 miles, then turn left onto State Rte 636 for 1.8 miles. Destination will be on the right
Name of Applicant: Blue Rock Solar, LLC  Mailing Address: Attn: Natalie Gerber, RWE Clean Energy, 701 Brazos Street, Suite 1400, Austin, TX 78701  Daytime Phone: 724-840-8043  Cell Phone:
Email: natalie.gerber@rwe.com Fax:
Name of Property Owner: Blue Rock Resources LLC  Mailing Address: PO Box 256, Dillwyn, VA 23936  Daytime Phone: 434-983-4347 Cell Phone:  Email: bgormus@kyanite.com  Fax:
10/6 -la.la.sa
Signature of Owner: Date:
Signature of Applicant: John You Submitty Date: 05/30/23
Please indicate to whom correspondence should be sent:  Owner of PropertyContractor Purchaser / LesseeAuthorized AgentEngineer  Applicant

#### **APPLICATION FOR A SPECIAL USE PERMIT**

CASE NUMBER: (Case Number Assigned by Zoning Administrator) DATE OF APPLICATION: June 2, 2023 Special Use Permit Request: Blue Rock Solar, LLC (the "Applicant" or "Blue Rock"), requests a Special Use Permit ("SUP") to allow the construction and operation of a 100 MWac utility scale solar facility (the "Project") on approximately 1,127 acres of private land in Buckingham County (the "Property"). Purpose of Special Use Permit: The Applicant requests a 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 100 MWac. The power generated will be linked to the electrical transmission grid via the existing overhead 115 kV high voltage on-site transmission line. Zoning District: District 1 - Agricultural (A-1) Number of Acres: 1,127 +/-Tax Map Section: \_\_\_\_\_ Parcel: 207-40 Lot: \_\_\_\_ Subdivision: \_\_\_\_\_ Magisterial Dist.: Francisco Street Address: 37.375980, -78.451625, near the intersection of Route 683 and Stage Coach Road Directions from the County Administration Building to the Proposed Site: Head east on US-60 E for 3.7 miles. Turn right onto US-15 S for 11.1 miles, then turn left onto State Rte 636 for 1.8 miles. Destination will be on the right Name of Applicant: Blue Rock Solar, LLC Mailing Address: Attn: Natalie Gerber, RWE Clean Energy, 701 Brazos Street, Suite 1400, Austin, TX 78701 Daytime Phone: 724-840-8043 \_\_\_\_\_ Cell Phone: Email: natalie.gerber@rwe.com Fax: \_\_\_\_\_ Name of Property Owner: JAMN Limited Partnership, LLP Mailing Address: 814 E Main Street, Richmond, VA 23219 Daytime Phone: 804-727-1093 Cell Phone: Email: wmontaigne@applereit.com Signature of Owner: Signature of Applicant: Date: 05/30/23 Please indicate to whom correspondence should be sent: Owner of Property \_\_\_Contractor Purchaser / Lessee \_\_\_Authorized Agent \_\_\_Engineer X Applicant

		Buckingham County Project Pa	arcels	
Map Identifier	Parcel Identifier	Owner		Zoning District
1	202-70	BLUE ROCK RESOURCES LLC	PO BOX 256, DILLWYN VA 23936	A1 - AGRICULTURAL
2	207-40	JAMN LIMITED PARTNERSHIP LLP	814 E MAIN ST, RICHMOND VA 23219	A1 - AGRICULTURAL
3	207-41	BLUE ROCK RESOURCES LLC	PO BOX 256, DILLWYN VA 23936	A1 - AGRICULTURAL
		Cumberland County Project Pa	arcels	
Map Identifier	Parcel Identifier	0		
4	95-A-1	Owner  BLUE ROCK RESOURCES, LLC	PO BOX 256, DILLWYN, VA, 23936	A2 - AGRICULTURAL
		Buckingham County Adjacent F	Section of the sectio	
Map Identifier	Parcel Identifier	Owner		Zoning District
5	202-48	WILHOIT DUSTIN & CRYSTAL W	851 COUNTRY CLUB RD, APPOMATTOX VA 24522	A1 - AGRICULTURAL
6	202-63	ATKINS KENNETH ESTATE FOR THE	2343 STAGE COACH RD, FARMVILLE VA 23901	A1 - AGRICULTURAL
7	202-67	ATKINS DENNIS W & DAWN M ATKINS	683 ASHANTI FARM RD, GORDONSVIL LE VA 22942	A1 - AGRICULTURAL
8	202-68	CARWILE ROBERT C JR	PO BOX 729, FARMVILLE VA 23901	A1 - AGRICULTURAL
9	202-69	SUDESBERRY ROGER DALE	1522 SCOTT DR, FARMVILLE VA 23901	A1 - AGRICULTURAL
10	202-71A	R E DOWDY #11 LLC	7209 INTERNATION AL DR, ORLANDO FL 32819	A1 - AGRICULTURAL
11	207-39	RICHARDS RICKIE L & SANDRA W	1521 SELDEN ST, VIRGINIA BEACH VA 23454	A1 - AGRICULTURAL
12	196-68	R E DOWDY #11 LLC	7209 INTERNATION AL DR,	A1 - AGRICULTURAL

			ORLANDO FL 32819	
13	207-42	LEE ELIZABETH D	270 CHURCH POINT LN OAK GROVE VA 22443	A1 - AGRICULTURAL
		Cumberland County Adjacent P	arcels	
Map Identifier	Parcel Identifier	Owner		Zoning District
14	88-A-40	COLVIN, NAN H.	801 HIGH STREET, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
15	87-A-1	BOBKO, STEPHEN E. & GENEVIEVE J.	599 RAINES TAVERN ROAD, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
16	95-A-3	WHITE, CLIFTON C. & KIMBERLY N.	1 ANDERSON HWY, POWHATAN, VA, 23139	A2 - AGRICULTURAL
17	95-A-2-A	SPRY, THOMAS A. & SARAH A.	180 CEDAR LANE, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
18	95-A-4	BTG PACTUAL OEF PROPERTY 2, LP	PROPERTY TAX ADMINISTRAT ION P.O.BOX 3349	A2 - AGRICULTURAL
19	95-A-5	BLUE ROCK RESOURCES, LLC	PO BOX 256, DILLWYN, VA, 23936	A2 - AGRICULTURAL
20	102-A-1	LEE, ELIZABETH D.	270 CHURCH POINT LANE, OAK GROVE, VA, 22443	A2 - AGRICULTURAL

# ADJACENT PROPERTY OWNERS AFFIDAVIT

COUNTY OF BUCKINGHAM
This 30th day of May, year 2023
I Blue Rock Solar, LLC 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)
80.81
( owner / contract purchaser / authorized agent – please circle one )
NOTARY: COMMONWEALTH OF VIRGINIA
COUNTY OF COOK
STATE OF ILLINOIS
Subscribed and sworn to me on the 31st day of May
of the year $2023$ . My Commission expires on $3/2/27$
Notary Public Signature: <u>Jammey Susan Roed</u> Stamp:
Official Seal Tammy Susan Reed Notary Public State of Illinois My Commission Expires 3/2/2027

# **INTEREST DISCLOSURE AFFIDAVIT**

STATE OF VIRGINIA COUNTY OF BUCKINGHAM, VIRGINIA						
On this 30 <sup>th</sup> day of MAY , of the year 2023						
Blue Rock Solar, LLC (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 COOK STATE OF FL						
Subscribed and sworn to me on this						
of the year <u>2023</u> . My commission expires <u>3/2/27</u> Notary Public Signature: <u>Jammy Jusan</u> Reed  Stamp:						
Official Seal Tammy Susan Reed Notary Public State of Illinois My Commission Expires 3/2/2027						

# CULTURAL RESOURCE ASSESSMENT AND RECORD CHECK FOR PENDING DEVELOPMENT APPLICATIONS

Case Number / File Name:
Visual Inspection Findings (describe what is on the property now):
No known cultural resources exist on the Property as of the date this form as been signed. As required
by the DEQ Permit by Rule Process, the Project will be required to perform a Cultural Phase 1 Analysis
on the proposed project area. Any significant cultural resources will be avoided.
County Records Check (describe the history of this property):
The Applicant has performed a cultural desktop screening using the VA Dept of Historical Resources
State database. The Applicant will coordinate a county records check for significant cultural and historic
resources with Buckingham Historical Society. To date, no known cultural resources exist on 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:
Will this proposal have any impact on the historical site or gravesite? Yes No If yes, please explain any impact:
Owner/Applicant Signature: 59 St Date: 5/31/23  Printed Name: Scott Schwaltz Title: Vice President

# **APPLICATION FOR A TRAFFIC IMPACT DETERMINATION**

Please fill out the following information before presenting to VDOT:

Case Number / File Name:	
Applicant: Blue Rock Solar, LLC	
Location: The Project is situated near the intersection of Route 683 and Route 636	
Proposed Use: Utility Scale Solar 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:	
LOUKING AT THE MAP OF THE PROJECT AREA	
THE ENTRANCE ON STAGE COACH ROAD	
LOULD HAVE BETTER SIGHT DISTANCE IF IT	
WAS MOVED WEST 100-200' THE ENTRANCE	
ON MOHELE IS IN THE BEST COCATION POLSIBLE  AS SHOWN. A SITE PLAN FOR THE DRIVEWAYS IS  Signature of VDOT Resident Engineer: Note D	1010
Printed Name: SCOTT D. FREDERICK, P.E. Date: 6-1-2023	PERMITTING

#### **SPECIAL POWER OF ATTORNEY AFFIDAVIT**

STATE OF VIRGINIA COUNTY OF BUCKINGHAM
On this 31 <sup>Sl</sup> day of May , in the year of 2023,
(printed name of landowner)  (printed name of landowner)  (Tax Map Number)
Hereby make, constitute, and appoint
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.
NOTARY PUBLIC County of State of Virginia  Subscribed and sworn before me on the 31st day of May
Subscribed and sworn before me on the 31st day of May
Signature of Notary Public: Stamp:  NOTARY PUBLIC REG # 7516932 MY COMMISSION EXPIRES 12/31/2024  SALTH O
EALTH OY WILLIAM

# **SPECIAL POWER OF ATTORNEY AFFIDAVIT**

STATE OF VIRGINIA COUNTY OF BUCKINGHAM	
ia.	
On this 31 day of May	, in the year of 2023
(printed name of landowner)	the owner of 207 - 40 (Tax Map Number)
,	ROCK SOLOW, LLC
(printe	ed name)
my true and lawful attorney-in-fact, and in my name said full power and authority to do and perform all necessary, without limitation whatsoever, to make right, powers, and authority of said attorney-in-fact be in full force and effect on the day of	acts and make all representation application for said zoning. The therein granted shall commence and the month
in the year of and shall remain in f actual notice by certified mail with return receipt r Planning Office of Buckingham County stating that revoked or modified.	equested is received by the Zoning /
Signature of Landowner (to be signed in front of N	otary Public):
NOTARY PUBLIC County of Richmond Subscribed and sworn before me on the 31	State of Virginia
Subscribed and sworn before me on the 31	day of May, 2023
in the year 2023 . My commission	expires $\frac{ 2-3 -2026}{ 2-3 }$
Signature of Notary Public:  Stamp:  NOTARY PUBLIC REG. # 707/4939 COMMISSION EXPIRES 12/31/2026	

#### 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-ofway 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:  $\sqrt{5}$  Date:  $\sqrt{5/31/23}$ 

#### 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.

TAX RECEIPT Ticket #:00001640001 a a BUCKINGHAM COUNTY CHRISTY L CHRISTIAN (434) 969-4744 POST OFFICE BOX 106 6/02/2023 Register: TC4/TC1 Trans. #: 29144 Dept # : SPUSE Acct# : Date BUCKINGHAM VA 23921 SPECIAL USE PERMIT - ZONING 202 70 207 41 Previous Balance \$ .00 Principal Being Paid \$
Penalty \$
Interest \$
Convenience Fee \$
Amount Paid \$ 200.00 .00 BLUE ROCK SOLAR 200.00 \*Balance Due \$ .00 Cr Cd 200.00 # 8497\*\*\*\*\*\*\*\*

Pd by Gerber Natalie
BALANCE DUE INCLUDES PENALTY/INTEREST THRU THE MONTH 6/2023



# Blue Rock Solar, LLC Buckingham County, VA

# **Special Use Permit Application**

June 2, 2023

Prepared for Submission to:

County of Buckingham, Virginia Department of Zoning/Planning PO Box 242, Buckingham, VA 23921

Prepared for Submission by:

RWE Clean Energy, LLC 701 Brazos Street, Ste 1400 Austin, TX 78791

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#### **1** EXECUTIVE SUMMARY

The Blue Rock Solar Project (the "Project") is a proposed 100 megawatt (MWac) (or less) photovoltaic solar facility located in Buckingham County, with a portion in Cumberland County, Virginia, being developed by RWE Clean Energy ("RWE" or "Applicant"). The Project is situated near the intersection of Route 683 and Route 636. The Project will span three (3) parcels of land (the "Property"), which are owned by two different owners. The total Project area is approximately 1,127 acres, which are currently being managed for timber production and agriculture. The Project development area, which includes panels, fencing and access roads, will cover approximately 718 acres of the Project site and will be accessed via site entrances located along Route 686 and Route 683. Of the 718 acres, 686 of the acres will fall within Buckingham County. Approximately 475 acres of the 718 acres will be directly under solar panels, with ~456 of those acres under panels in Buckingham County.

The Applicant is requesting a Special Use Permit (SUP) for the solar facility. The Property is located in the Agricultural District (A-1). Within the A-1 Agricultural District, public utility generating plants, transformer stations, meters and other facilities are permitted by the Buckingham County Board of Supervisors by a Special Use Permit in accordance with the County's Zoning Ordinance. The Board may impose conditions associated with the Special Use Permit to ensure protection of the district.

#### 1.1 SITE CHARACTERISTICS

The location of the Project was selected due to several factors.

- Location: the project is remote from homes, schools, and areas of historic or cultural significance and is over one mile away from the closest town of Sheppards.
- Interconnection: a 115kV high-voltage line runs through the site, allowing for onsite Point of Interconnection. All equipment, including the project substation and Dominion substation, will be located on site.
- Topography: the site is very flat, which minimizes the impact of water runoff and means that very little grading will be needed.
- Natural buffers: the site is currently being used for commercial timber, and the trees left along the perimeter will provide a natural buffer from neighbors and from the road.

Once operational, the Blue Rock Solar project will generate 219,467 MWh of clean energy, which is the equivalent of energy needed to power over 20,000 homes.

#### 1.2 ECONOMIC BENEFITS

The Project will provide millions of dollars in additional tax revenue to Buckingham County and local taxing districts. Please see the economic and fiscal contribution report enclosed with the SUP application at Tab 13 (the "Economic Report"). This new source of public funding can reduce the tax burden on local residents and be used to support essential services including but not limited to schools, roads, fire departments and first responders.

Hundreds of jobs will be created during construction, offering opportunities for residents to enter the rapidly expanding clean energy workforce. Local businesses will see an economic boom as demand for lodging, restaurants, supplies, vehicle maintenance, and fuel increases throughout the 9-12 months of construction. During operations, 2-4 permanent positions will be created to operate the Project, and the project will continue to source supplies from local businesses.

Based on the Economic Report, the Project will contribute approximately \$3.2 million in associated local wages and benefits and \$15 million in local economic output during its construction phase, and an additional ~\$1.2 million in combined local wages, benefits and local economic output during operations. The Project would generate approximately \$9.6 million in cumulative county revenue during its lifetime, not including any additional Siting Agreement payments to be negotiated.

#### 2 THE COMPANY

#### 2.1 ABOUT RWE CLEAN ENERGY

RWE Clean Energy, a subsidiary of RWE Group, is the 3<sup>rd</sup> largest renewable energy company in the United States and the country's 2<sup>nd</sup> largest solar owner and operator. With more than 15 years in the U.S. renewables business, RWE has a proven track record in developing, constructing and operating renewable energy facilities. RWE Clean Energy's strong position in renewable energy is a result of combining RWE Renewables Americas with Con Edison Clean Energy Businesses, acquired by RWE in March 2023.

RWE Clean Energy operates a renewable energy portfolio of about eight (8) gigawatts (GW) installed capacity of onshore wind, solar, and battery storage. The 1500-person RWE team in the U.S. is fully committed to being a leader in the clean energy transition in North America.

As part of the RWE Group's Growing Green strategy to expand its green portfolio globally to more than 50 GW of installed capacity and to invest globally more than \$55 billion gross by 2030, RWE Clean Energy is determined to significantly increase its operating asset base in the U.S. This is backed by a project pipeline of more than 24 GW in onshore wind, solar and battery storage which provides for one of the largest development platforms in the United States.

#### 2.2 PROJECT HISTORY IN VIRGINIA

RWE has several utility scale projects located in central and southern Virginia either in operations or currently in construction.

Water Strider Solar: an 80-MW solar project located in northwest Halifax County, CUP issued May 7, 2018, operating and in production on approximately 1,152 acres (solar project area: 900 acres).



Figure 1: Water Strider Solar

Watlington Solar: a 20 MW solar project located in south central Halifax County, with the CUP issued on June 17, 2020, operating and in production on approximately 242 acres (solar project area: 138 acres). The power is being sold to Dominion Energy under a power purchase agreement.



Figure 2: Watlington Solar

Pleasant Hill Solar: a 20-MW solar project located in Suffolk County, with the CUP issued on August 29, 2017, on approximately 180 acres. Dominion work in final stages of production; power will be sold to Dominion Energy under a power purchase agreement. Target Commercial Operation Date: 6/30/2023



Figure 3: Pleasant Hill Solar

Wythe Solar: a 75 MW solar project located in Wythe County, approved that project was "in substantial accord with the Wythe County Comprehensive Plan" on August 11, 2020 on 844 acres. The power will be sold to Dominion Energy under a power purchase agreement. Currently in construction with target COD of May 2024.

# 3 PROJECT PROPOSAL

#### Tentative schedule for a Special Use Permit:

June 2	SUP application submitted to County
June 26	Case is introduced to Planning Commission. Planning Commission sets Public Hearing for next regularly scheduled meeting on July 24.
July 12	RWE to host community meeting for public to hear about the project, have any questions answered as needed.

July 24 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.

August 14 Case is introduced to Board of Supervisors.

September 11 Board of Supervisors may approve / deny / table for more information.

# **Proposed Project Schedule:**

Upon issuance of the SUP, the project will kick off major site studies as required by the Virginia Department of Environmental Quality Permit by Rule (PBR) process. We anticipate our PBR application to be submitted in Q1 2024 with PBR issuance by mid-Q2 2024. Concurrently we will begin work on our Stormwater Pollution Prevention Plan (SWPPP), which includes Erosion & Sediment Control and Stormwater Management Plan. We expect the SWPPP process to take approximately one year, with permit issued in Q1 2025. Construction will take approximately 9-12 months with anticipated construction start date in Q3 2025. Target COD is summer 2026.

### 3.1 Facility Considerations

# 3.1.1 Project Equipment

The Project will employ single axis tracking technology, meaning it will use solar panels mounted on a rotating bar that tracks the movement of the sun during the day. This technology has a simple modular design that is repeated often. The Project comprises rows of solar panels mounted on vertical posts and horizontal support axes. It will consist of the tracker mounted panels and inverters that are necessary to convert DC to AC power. The Project substation will be interconnected with a new switchyard to be owned and operated by Dominion Energy and which will remain following decommissioning of the remainder of the Project following the end of its useful life. The switchyard will interconnect with the existing transmission line and serve as the connection point between the Project and Dominion's power grid.

The solar panel technology for the Project will be crystalline modules, which are siliconbased. Although the specific model of solar panel has not been selected, only "Tier 1" equipment will be used throughout the project. "Tier 1" is classified by Bloomberg New Energy Finance Corporation qualifies Tier 1 suppliers as companies that have a minimum of 5 years' experience in the industry, are publicly traded or have a solid balance sheet, and have strong vertical integration. Tier 1 firms are expected to provide solar electricity over the entire 25 year warranty period of the panels. At a capacity of 100 MWac, the Project will use approximately 236,547 panels. The Project's year one net capacity factor when using industry-leading Tier 1 modules mounted on a single axis tracker is projected to be between

approximately 23 to 25%, which is the total amount of energy produced divided by the amount of energy that could have been produced at full capacity.

### 3.1.2 Interconnection

The Project's point of interconnection is a line tap on the on-site 115kV line between Curdsville and Willis Mountain substations. The Applicant's project substation will abut Dominion's Interconnect Station, and the land for the Dominion substation will be subdivided. Dominion will have a separate access road for its substation, and the access road will be from a public right of way off State Route 636.

# 3.1.3 Site Access and Signage

There will be two entrances for project site access, as shown on the enclosed Site Plan (defined below). One entrance will be off Route 636, with the other site entrance located off Route 683. Access roads will be marked by Applicant with identifying signage. The manufacturers' or installers' identification and appropriate warning signage will be posted on or near the panels in a clearly visible manner. The signage will identify the owner and provide a 24-hour emergency contact phone number. Each access gate will also have the signage that identifies the owner and provides a 24-hour emergency contact phone number.

# 3.1.4 Fencing and Security

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

Prior to operation, Applicant proposes engaging with the County in HSSE (Health, Safety, Security & Environment) training for first responders, including working with fire & police departments to ensure safety measures are in place between the project and the County.

### 3.1.5 Noise

Solar arrays and tracking systems noise level is approximately 78 decibels. Maximum noise emitted from inverters is approximately 91 decibels at ~30 feet from the source, which is a similar noise level to a household air conditioner. The minimum distance between inverters is approximately 429 feet. The closest inverter to Route 636 is approximately 250 feet, and the closest inverter to the nearest residence is approximately 1,150 feet.

# 3.1.6 Traffic

The Project will have limited impacts to traffic in the County. Any construction traffic will likely access the site entrances on both Route 636 and Route 683 via Route 15. There will be limited impacts to school bus traffic due to the Project's close proximity to the Buckingham – Cumberland County line. Prior to issuance of a building permit, the Applicant will work with the County and the Virginia Department of Transportation (VDOT) to develop a construction traffic management plan, including any necessary mitigation measures.

# 3.2 FACILITY CONSTRUCTION

Construction activities will take approximately 9 - 12 months to complete the project using a crew that ranges from 200 to 250 workers. Work would generally occur six days a week and average ten-hour workdays, during daylight hours as is stated in the Buckingham County conditions.

The method that will be used to construct the Project will be similar to that generally used in the US to construct similar, large-scale, ground-mounted solar facilities generating wholesale power. The primary steps include: (1) securing of the perimeter of each of the areas in which construction will occur; (2) installation of stormwater and erosion management controls; (3) clearing vegetation, aside from the perimeter of the project where existing vegetation will remain as a buffer; (4) minor grading, if any. The Project would use the existing landscape, such as slope, drainages and roadways where feasible, minimizing grading work where possible. The site is flat so it would not be expected that much grading is required; (5) construction of roads; and (6) installation of equipment (racking, solar panels, collection lines, inverters, substation and fencing.

Other than the Substation, and because the solar panels will be affixed to racking largely using hand tools, the major equipment used to construct the Project will include bulldozers and dump trucks (primarily to build roads), pile drivers (primarily to install piles), and trenchers (primarily to lay the buried portions of collection lines).

A significant portion of the commercial timber on the property has already been harvested or will be harvested prior to construction, which will limit the tree clearing work that will be required during construction.

All pile driving activity will 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. RWE may request permission from the Zoning Administrator to conduct pile driving activity on Saturday, but understands that such permission will be granted or denied at the sole discretion of the Zoning Administrator. 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 provision 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.

### 3.3 FACILITY OPERATIONS AND MAINTENANCE

Once operational, the project will employ 2-4 full time employees. Personnel will perform tasks including inspection, maintenance, repair and replacement of equipment, occasional cleaning of soiling and/or removal of snow from solar panels, regular mowing and associated maintenance of vegetative ground cover, periodic security checks, emergency response and community relations.

Inspections would include identifying any physical damage of panels, wiring, central inverters, transformers, and interconnection equipment, and drawing transformer oil samples. Vegetation on developed portions of the Project would be maintained to control

growth and prevent overshadowing or shading of the PV panels. Depending on the growth rate, trimming, and mowing would likely be performed several times per year to maintain an appropriate ground cover height of no more than approximately 12 to 18 inches. During the operation of the solar facility, selective use of U.S. Environmental Protection Agency (USEPA)-approved spot herbicides may also be employed around structures to control invasive vegetation. The application of herbicides would be by persons certified and licensed by the VA Department of Agriculture and must meet their general permits and regulations. Such requirements would avoid herbicide application prior to predicted rainfall events or high winds to minimize any possibility of runoff or drift.

The solar facility would be monitored remotely from Blue Rock Solar Control Center in Austin, Texas, 24 hours a day, seven days a week, to identify security or operational issues. In the event a problem is discovered during non-working hours, a repair crew or law enforcement personnel would be contacted if an immediate response were warranted.

Moving parts of the solar facility would be restricted to the east-to-west tracking motion of the single-axis solar modules, which amounts to a movement of less than a one-degree angle every few minutes. This movement is barely perceptible. In the late afternoon, module rotation would move from west to east in a similar slow-motion to minimize row-to-row shading. The modules would track to a flat or angled stow position at sunset. Otherwise, the PV modules would simply collect solar energy and transmit it to the Dominion power grid. Operations staff would be reporting to the site each workday in their personal vehicles. Except for fence repair, vegetation control, periodic array inspection, repairs, and maintenance, the solar facility would have relatively little human activity during operation except for operations staff arrivals and departures. No significant physical disturbances would occur during the operation. Permanent lighting is anticipated as a potential onsite need during facility operations, independent of the potential operations and maintenance structure. Permanent lighting would be downward-facing and timer- and/or motion-activated to minimize impacts to surrounding areas.

Rainfall in the region should be adequate to remove dust and other debris from the PV panels while maintaining acceptable energy production; therefore, manual panel washing is not anticipated unless a site-specific issue is identified. If later identified, module washing would occur no more than twice a year and comply with appropriate BMPs to minimize soil erosion and/or stream and wetland sedimentation. Module wash water would be trucked in from a municipal source.

### 3.4 FACILITY DECOMMISSIONING

The Project will be decommissioned within twelve (12) months of the discontinuance of the use of the Project for generation of electricity. The decommissioning will include removal of any Project facilities installed or constructed thereupon, the filling in and compacting of all trenches or other borings or excavations made in association with the Project and the removal of all debris caused by the Project from the surface and 36" below the surface of the Property.

The costs of decommissioning will 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 Applicant. If requested, the decommissioning bond will name the County as a payee.

The components of PV panels include glass, aluminum, copper, silver and semiconductor materials that can all be recycled. By weight, more than 80% of PV panels are made up of glass and aluminum, both of which can easily be recycled. No PV panel components or other Project equipment will be placed in local landfills.

# 4 SPECIAL USE PERMIT GENERAL SITE PLAN

### 4.1 SETBACKS

The Project is set back from existing residential dwellings by a minimum of 828 feet from the closest residence to panels. See the enclosed conceptual Special Use Permit General Site Plan ("Site Plan") for distances from closest residences to the panels or equipment. Setbacks from property lines are a minimum of 50 feet from all solar equipment. Solar equipment is a minimum of 75 feet from any adjoining public right of way. The fence line is set back a minimum of 50 feet from all wetlands and streams, including Perkins Creek in the northwest corner of the project. The two nearest churches in Buckingham are the Gold Mine Church and the Oak Hill Baptist Church, both of which are about 9 miles northwest of the Project.

### 4.2 VEGETATIVE BUFFERS AND LANDSCAPING

The Project will use all available existing vegetation around the project perimeter as a vegetative buffer, consisting of a 50 foot-wide landscape buffer consisting of a staggered row of evergreen and deciduous trees along public right of way to obscure views of the solar farm. In areas where existing timber is at maturity, Owner will plant an additional buffer behind existing timber that will be harvested. In the Tract map acquired from the landowner, the timber along Route 636 where the project entrance will be located is between five to nine years old. At time of project operations in summer 2026, the timber will be roughly eight to twelve years old. Roughly five years before maturity at roughly 20 to 30 years, Owner would plant new rows of vegetative buffering to ensure consistent buffers along the road are in place at the time existing buffer trees are harvested. The final design of the Project will include native plantings and will make best attempt to include pollinator friendly plants for ground cover.

# 5 CONSISTENCY WITH BUCKINGHAM COUNTY COMPREHENSIVE PLAN (2015-2020)

The Blue Rock Solar Project site was selected by considering numerous factors, including the Buckingham County Comprehensive Plan. Described below is how the Project will address a selection of the Comprehensive Plan components.

# 5.1 LAND USE

The Buckingham County Land Use Plan states that the purpose of land use planning is to guide both the development and conservation of land, both of which can be achieved through solar development. Additionally, there are two major themes for Buckingham County's land use: to preserve the County's rural character/nature, natural beauty, and historic setting, and to keep out businesses that pollute or damage the environment. The Blue Rock Solar project can successfully support both of those themes. The Project Property is designated as Rural, Agricultural, and Forestry Areas and is not located in a High Growth area, near a Village Center or within a Growth Corridor.

# 5.1.1 Preserve the rural character/nature, natural beauty and historic setting

The County's primary goal for the Rural/Agricultural/Forestry Areas is to protect and preserve farmland, forest use, wildlife habitats, water resources, and other environmental resources. "The Rural/Agricultural/Forestry Areas are intended to preserve and enhance the essential character and resources of rural portions of the County where agricultural and forestry uses exist ...." (Chapter V-Land Use Plan, p. 187). Solar facilities prevent permanent residential, commercial, and industrial development in these areas, serving as an interim or temporary use that preserves land for future agricultural or forestry uses following decommissioning of the facilities. Because of the low height of structures and equipment on site and the existing and new perimeter buffering, the Project will have no visual impact on any surrounding properties.

Further, the Project is not located within the viewshed of any scenic, cultural or recreational resources. The current land use of the Property is for commercial timber. A significant portion of the timber has already been cut, with the vegetation and timber along the perimeter of the project boundary to remain in place. This vegetative buffer combined with setbacks will minimize any viewshed impacts of the solar panels and equipment. Comprehensive studies are required as part of the planning and permitting process to protect public safety and the environment. The Project will be virtually silent outside the fence line.

The Project will implement the use of ground cover of native grasses and pollinators. Native vegetation will add organic matter and structure the soil and can actually lead to improved soil quality by the time of decommissioning. Vegetation and ground cover will aid in increasing pollinators on-site. Additionally, the Project has incorporated wildlife corridors into the site plan to minimize impacts to wildlife movements, and a map of wildlife corridors is included in the enclosed Site Plan.

# 5.1.2 Keep out business that pollute or damage the environment

Solar projects make great neighbors. Solar farms produce electricity without generating any pollution, resulting in cleaner air and water when compared to traditional power plants. Blue Rock Solar Farm will use silicon-based PV panels, which are made of safe, well-tested materials commonly used in building and household products. The panels are fully sealed and extremely durable, preventing trace metals from escaping into the surrounding soil. PV solar panels are so safe that millions of families across the U.S. have put solar panels on their homes and literally sleep beneath them. Many local governments have contracted with solar energy companies to install solar panels on schools and other public buildings. RWE's advanced remote operations center will monitor the panels 24/7, 365 days a year while the onsite operations team will be available to respond in the unlikely event of an emergency.

Renewable energy reduces pollution and waste production over time and allows other energy sources to be conserved. Solar and other renewable energy sources allow fossil fuel facilities to be conserved as it reduces their strain on the grid. Local approval of solar land use permits supports the goals of Virginia's 2020 Clean Economy Act, specifically including the mandate that all Dominion Energy power production must be from renewable sources by 2050.

# 5.2 COMMUNITY DESIGN

The Buckingham County Community Facilities and Services introduction states that "community facilities and services are made possible by individuals, families, business 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." As shown by the Economic Report, the Blue Rock Solar Project will contribute millions of dollars in tax revenues to Buckingham County over the lifetime of the facility. These tax revenues can support any number of local services in the County, including but not limited to schools, roads, fire departments, first responders and recreational facilities. The Project will not take away any land that could be used for residential development or community facilities as the Comprehensive Plan encourages such development in designated growth areas and Village Centers.

"Rural/Agricultural/Forestry Areas are the lowest priority for new residential development. 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" (Chapter V-Land Use Plan, p. 187).

# 5.3 CULTURAL RESOURCES

The Project is not expected to have any impacts to cultural and historical resources due to its location and the amount of cultural work required at the state permitting level. In-depth cultural surveys conducted by qualified professionals will be submitted for approval and concurrence by the Virginia Department of Historic Resources (VDHR). Based on a preliminary "desktop" analysis of the Virginia Cultural Resources Information System

(VCRIS) database, there are no previously recorded resources present within the Site. Four architectural and no archaeological resources intersect with the one-half mile buffer around the Site, which is the designated Area of Potential Effect (APE) that must be screened. These identified resources have been evaluated and determined not eligible for placement on the National Register of Historic Places (NRHP) and the Virginia Landmarks Register (VLR), which means that, under applicable state and federal law, they do not need to be included in VDHR's review of the Project for adverse impacts and potential mitigation measures.

# 5.4 ECONOMIC DEVELOPMENT

The Project will contribute to both construction and full-time jobs, generate employment for local companies and increase spending during construction. Between 200-250 jobs will be created during construction, will create 2-4 full-time jobs, and will generate employment for local companies in areas including but not limited to site work, fencing, landscaping, timbering, and other trades. Increased spending during construction from the labor force will directly increase spending at local businesses like gas stations, hotels, restaurants, and stores.

Following the change in use from forestry to solar facility, we can expect the Property to be assessed for industrial use rather than agricultural, which will generate significantly more tax revenue for the County over the life of the Project. Further, upon removal from land use taxation, deferred taxation will be paid in the form of rollback taxes. The Project will also contribute additional revenues through the solar revenue share, currently set by state law at \$1,400 / MW annually, and siting agreement.

Solar facilities support the County's goal of attracting businesses that can help grow the County's economy through socially and environmentally responsible development without strain on public services and infrastructure and while preserving natural resources that benefit the County and its residents. Solar also meets the County's objective of "overall strengthening and diversification of the economic base of Buckingham County to provide a sound tax base to support the provision of needed public services" (Chapter VI-Vision, Goals, Objectives & Strategies, p. 203).

# 5.5 ENVIRONMENT

The Project will not have adverse environmental impacts and may, in fact, improve soil and water quality. Soil can be improved by planting native grasses and pollinators; the Project effectively allows the soil to rest. Once the Project is decommissioned, the land will be reverted back to its original state and can be ready to resume agricultural use. The roots of planted native vegetation can retain water during heavy storms or periods of drought, and plants and vegetation can help retain topsoil to improve soil health over time. A fifty foot (50') buffer will be maintained on each side of every stream and flood plain. Storm water flows within solar facilities are heavily regulated by DEQ and local ordinances. Applicant will ensure that all storm water flows produced by the Project are handled on site in accordance with state and local regulation.

# 5.6 Fire and Rescue, Law Enforcement

The Project will not put any added stress on public services, including fire and rescue and law enforcement, and tax revenues from the Project can provide additional financial support to these services.

Heat from a small flame is not sufficient to ignite a PV panel, and the majority of the components of the solar panels are not flammable. Flammable components of a PV panel include the thin layers of polymer around the PV cells, polymer backsheets and plastic junction boxes on the rear of the panel and insulation on wiring. However, most of these components are in between one or two layers of projective glass.

Applicant suggests engaging with the County in HSSE training for first responders, including working with fire & police departments to ensure safety measures are in place between the project and the County. RWE proposes providing proper firefighting training in the extremely rare instance of a fire.

# 5.7 Housing

The Project will have no impacts to housing and is not located in a land use area that would be intended for residential development.

A solar facility has no negative impacts to property values of nearby land or homes. Sourcing studies from Kirkland Appraisals, Nexia International and Cohn Reznick LLP Valuation Advisory Services, examining property value in states across the United States demonstrates that large-scale solar arrays often have no measurable impact on the value of adjacent properties, and in some cases may even have positive effects. Proximity to solar farms does not deter the sales of agricultural or residential land, and with proper setbacks and landscaped buffers, findings show there is no impact on property value adjoining a solar farm.

# 5.8 LIBRARIES

The Project will have no impacts to libraries.

# 5.9 PARKS AND OPEN SPACES

The Project will have no impacts to parks and open spaces and is not located within the viewshed of any parks or open spaces.

# 5.10 POTABLE WATER

The Project will have no impacts to the supply of domestic water needs to the County's rural residents. Solar facilities do not cause any air or water pollution. Stormwater management will be implemented on site to limit any impacts to nearby streams or waterways on site. Solar panels do not contain toxic chemicals; chemicals do not leach into groundwater because of the strong bonds holding the panels together.

### 5.11 SEWAGE

The Project is not located in an area that is serviced by a public sewer system, nor is it located in an area near a community sewer system. The Project will have no impact to individual septic systems. If a permanent office building is requested by the County and a septic system is needed, the Project would acquire the appropriate permits and use standard best management practices.

# 5.12 Schools

The Project is not located near nor will it impact any Education Facilities. The location of the Project will not put any added stress on school bus routes given its close proximity to the Cumberland County line. Tax revenues from the Project could provide potential additional financial support to Educational Facilities.

# **5.13 TELECOMMUNICATIONS**

The Project will not put a strain on local telecommunications services in the County, nor will it interfere with communications.

Within each solar field, a network of electric lines and associated communication lines will collect and transmit the power ("collection lines"). Solar panels will be grouped into series of circuits that are routed, through cable trays on the racking, to combiner boxes. Power from one or more of the combiner boxes then will be transmitted to a group of related components: a DC-to-AC inverter, a step-up transformer that increases the voltage to 34.5 kV, and a cabinet containing power control electronics ("inverter"). Buried electrical and communication lines will be made of copper or other materials standard in the electric utility industry. The operations center located in Austin, Texas is available 24/7 should any concerns arise.

# **5.14 Transportation**

Throughout construction of the site, Applicant will coordinate with the representatives from Buckingham County and VDOT to determine appropriate transportation management procedures which may include, but are not limited to, traffic control, road access restrictions, truck restrictions, and temporary/short-term road closures.

Access to the site will be provided via two (2) entrances – one (1) on Route 636 and one (1) on Route 683. Site traffic will generally utilize existing entrances/access points and new gravel access roads will be installed throughout the site to facilitate construction and subsequent operations/maintenance traffic.

Temporary staging and assembly areas will be used during the construction period for the storage of construction vehicles and equipment, as well as staging of components for the solar facility. All temporary staging, parking, and assembly areas will be located within the project area boundaries to avoid congestion and parking within the public right of way.

Based on the existing roadway conditions, the locations for proposed access points, and the available average daily traffic numbers for the agreed upon access roads, the anticipated construction traffic volumes will not exceed available roadway capacities; the roadways should not be significantly impacted by standard construction traffic. During operation and maintenance, the facility will not generate a significant volume of traffic with the anticipation of only a few pickup trucks each day.

Construction-related traffic will access the Blue Rock Solar site via state-maintained roadways. Given the existing posted speeds and anticipated slower entering/exiting traffic, temporary traffic control (TTC) measures may be necessary. Pertinent signage should be installed prior to the site preparation work and removed when mechanical/electrical work/inspections begin. It is not anticipated that daily vehicular traffic following construction will disrupt local traffic flows during normal peak hours.

Outside of the previously noted mitigation efforts, should a traffic issue arise during construction, Applicant will work the County and VDOT appropriately address the specific concern.

# 5.15 SOLID WASTE

Many components of the Facility, such as racking, wiring, piles, and panels, retain value over time. Panels, while slightly less efficient than when installed, may be reused elsewhere, or their components may be broken down and recycled. Recycling of solar panels and equipment is rapidly evolving and can be handled through a combination of sources such as certain manufacturers, e.g., PV Cycle (an international waste program founded by and for the PV industry), or waste management companies. More than 90 percent of the semiconductor material and glass can be reused in new modules and products. Other waste materials that hold no value will be recycled or disposed of via a licensed solid waste disposal facility. Panels and other equipment will not be dumped in local landfills.

# BLUE ROCK SOLAR

# 100 MWac SOLAR ELECTRIC POWER GENERATION SPECIAL USE PERMIT

BUCKINGHAM COUNTY, VIRGINIA

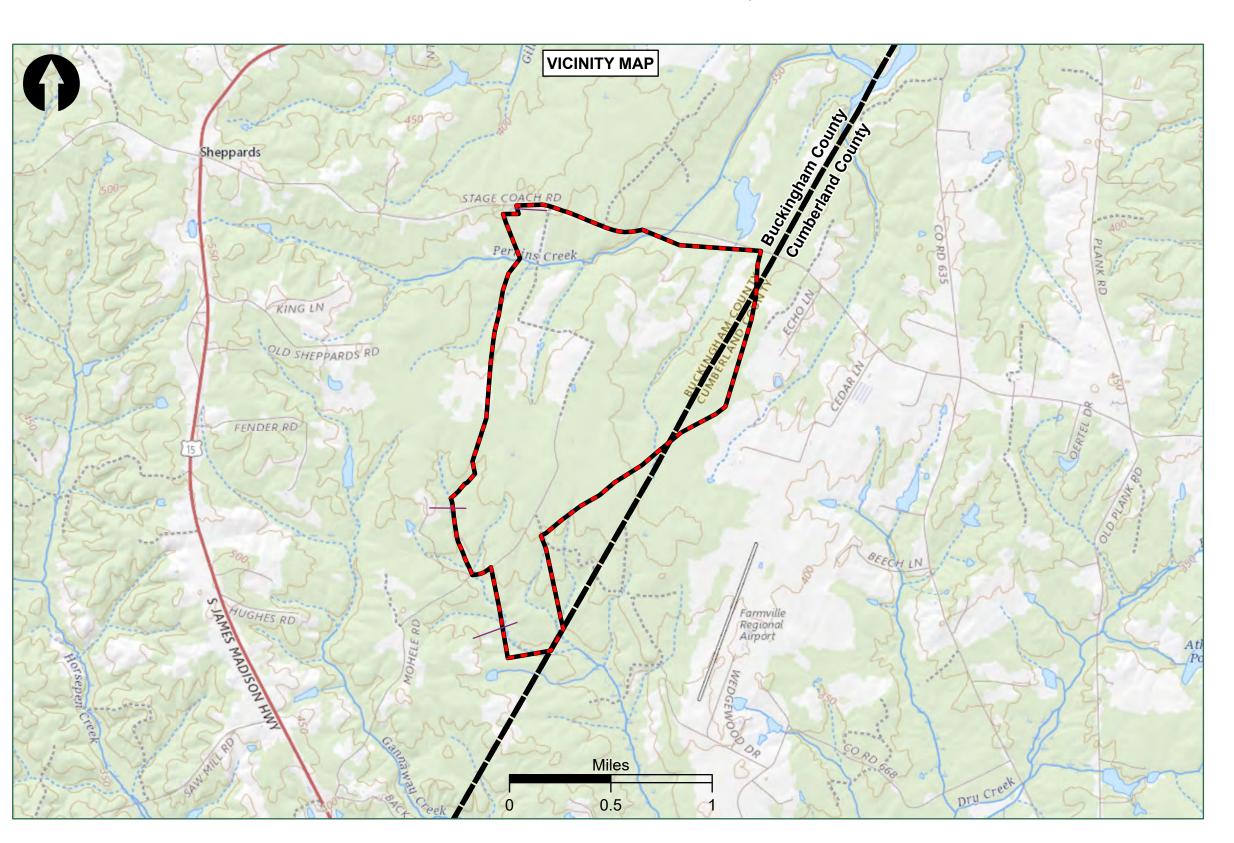


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C4.0	CONCEPTUAL SITE PLAN				
C5.0	LANDSCAPING MAP				
C5.1	LANDSCAPING SCHEMATIC				
C6.0	AERIAL TOPOGRAPHY AND SLOPE MAP				
C7.0	FOREST COVER MAP				
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# RWE RENEWABLES

# **DEVELOPER**

701 BRAZOS STREET, STE 1400 AUSTIN, TX 78701 (724) 840-8043 WWW.RWE.COM/USA

# TIMMONS GROUP

# **ENGINEER**

1001 BOULDERS PARKWAY, SUITE 300 RICHMOND, VA 23225 TEL 804.200.6538

PRELIMINARY SITE PLANS PREPARED BY TIMMONS GROUP

MAY 17, 2023





CT NAME & LOCATION

BUCKINGHAM COUNTY

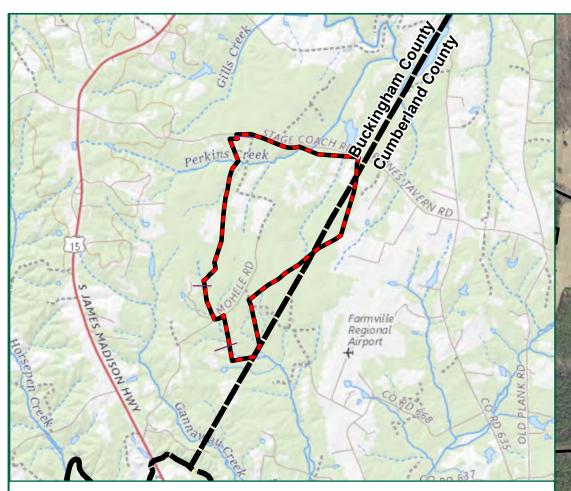
05/17/2023
DJECT NUMBER
45239.006
DJECT NAME
BLUE ROCK SOLAR
SIGNED BY / DRAWN BY

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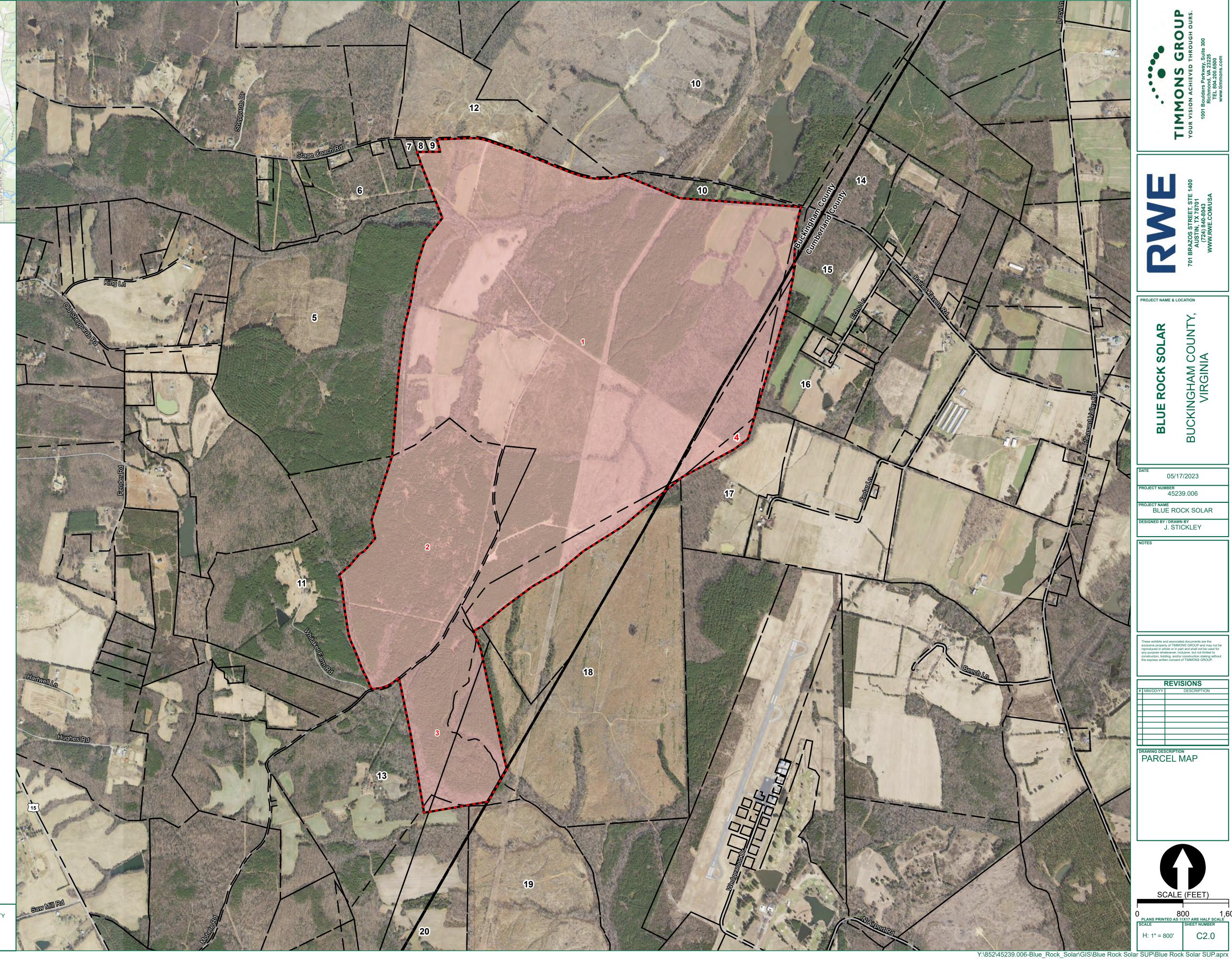
COVER SHEET

C1.0



Project Limits - 1,127.2 Acres

Buckingham and Cumberland County Tax Parcels
County Boundary



NOTES:
PARCEL AND ZONING DATA FROM BUCKINHAM COUNTY GIS AND CUMBERLAND COUNTY COUNTY BOUNDARY DATA FROM VDEM. AERIAL IMAGERY FROM VGIN.

05/17/2023

J. STICKLEY

REVISIONS

H: 1" = 800'

		Buckingham County Project I	Parcels	
Map Identifier	Parcel Identifier	Owner		Zoning District
•	202-70	BLUE ROCK RESOURCES LLC	PO BOX 256, DILLWYN VA 23936	A1 - AGRICULTURAL
2	207-40	JAMN LIMITED PARTNERSHIP LLP	814 E MAIN ST, RICHMOND VA 23219	A1 - AGRICULTURAL
3	207-41	BLUE ROCK RESOURCES LLC	PO BOX 256, DILLWYN VA 23936	A1 - AGRICULTURAL
Map Identifier	Parcel Identifier	Cumberland County Project F Owner		Zoning District
•	95-A-1	BLUE ROCK RESOURCES, LLC	PO BOX 256, DILLWYN, VA, 23936	A2 - AGRICULTURAL
		Buckingham County Adjacent	, ,	<u> </u>
Map Identifier	Parcel Identifier	Owner		Zoning District
; )	202-48	WILHOIT DUSTIN & CRYSTAL W	851 COUNTRY CLUB RD, APPOMATTOX VA 24522	A1 - AGRICULTURAL
5	202-63	ATKINS KENNETH ESTATE FOR THE	2343 STAGE COACH RD, FARMVILLE VA 23901	A1 - AGRICULTURAL
,	202-67	ATKINS DENNIS W & DAWN M ATKINS	683 ASHANTI FARM RD, GORDONSVILLE VA 22942	A1 - AGRICULTURAL
3	202-68	CARWILE ROBERT C JR	PO BOX 729, FARMVILLE VA 23901	A1 - AGRICULTURAL
)	202-69	SUDESBERRY ROGER DALE	1522 SCOTT DR, FARMVILLE VA 23901	A1 - AGRICULTURAL
0	202-71A	R E DOWDY #11 LLC	7209 INTERNATIONAL DR, ORLANDO FL 32819	A1 - AGRICULTURAL
1	207-39	RICHARDS RICKIE L & SANDRA W	1521 SELDEN ST, VIRGINIA BEACH VA 23454	A1 - AGRICULTURAL
2	196-68	R E DOWDY #11 LLC	7209 INTERNATIONAL DR, ORLANDO FL 32819	A1 - AGRICULTURAL
3	207-42	LEE ELIZABETH D	270 CHURCH POINT LN OAK GROVE VA 22443	A1 - AGRICULTURAL
		Cumberland County Adjacent	Parcels	
Map Identifier	Parcel Identifier	Owner		Zoning District
4	88-A-40	COLVIN, NAN H.	801 HIGH STREET, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
5	87-A-1	BOBKO, STEPHEN E. & GENEVIEVE J.	599 RAINES TAVERN ROAD, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
6	95-A-3	WHITE, CLIFTON C. & KIMBERLY N.	1 ANDERSON HWY, POWHATAN, VA, 23139	A2 - AGRICULTURAL
7	95-A-2-A	SPRY, THOMAS A. & SARAH A.	180 CEDAR LANE, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
8	95-A-4	BTG PACTUAL OEF PROPERTY 2, LP	PROPERTY TAX ADMINISTRATION P.O.BOX 3349	A2 - AGRICULTURAL
9	95-A-5	BLUE ROCK RESOURCES, LLC	PO BOX 256, DILLWYN, VA, 23936	A2 - AGRICULTURAL
20	102-A-1	LEE, ELIZABETH D.	270 CHURCH POINT LANE, OAK GROVE, VA, 22443	A2 - AGRICULTURAL





DJECT NAME & LOCATIO

BLUE ROCK SOLAR
BUCKINGHAM COUNTY,
VIRGINIA

05/17/2023
PROJECT NUMBER
45239.006

PROJECT NAME
BLUE ROCK SOLAR

DESIGNED BY / DRAWN BY
J. STICKLEY

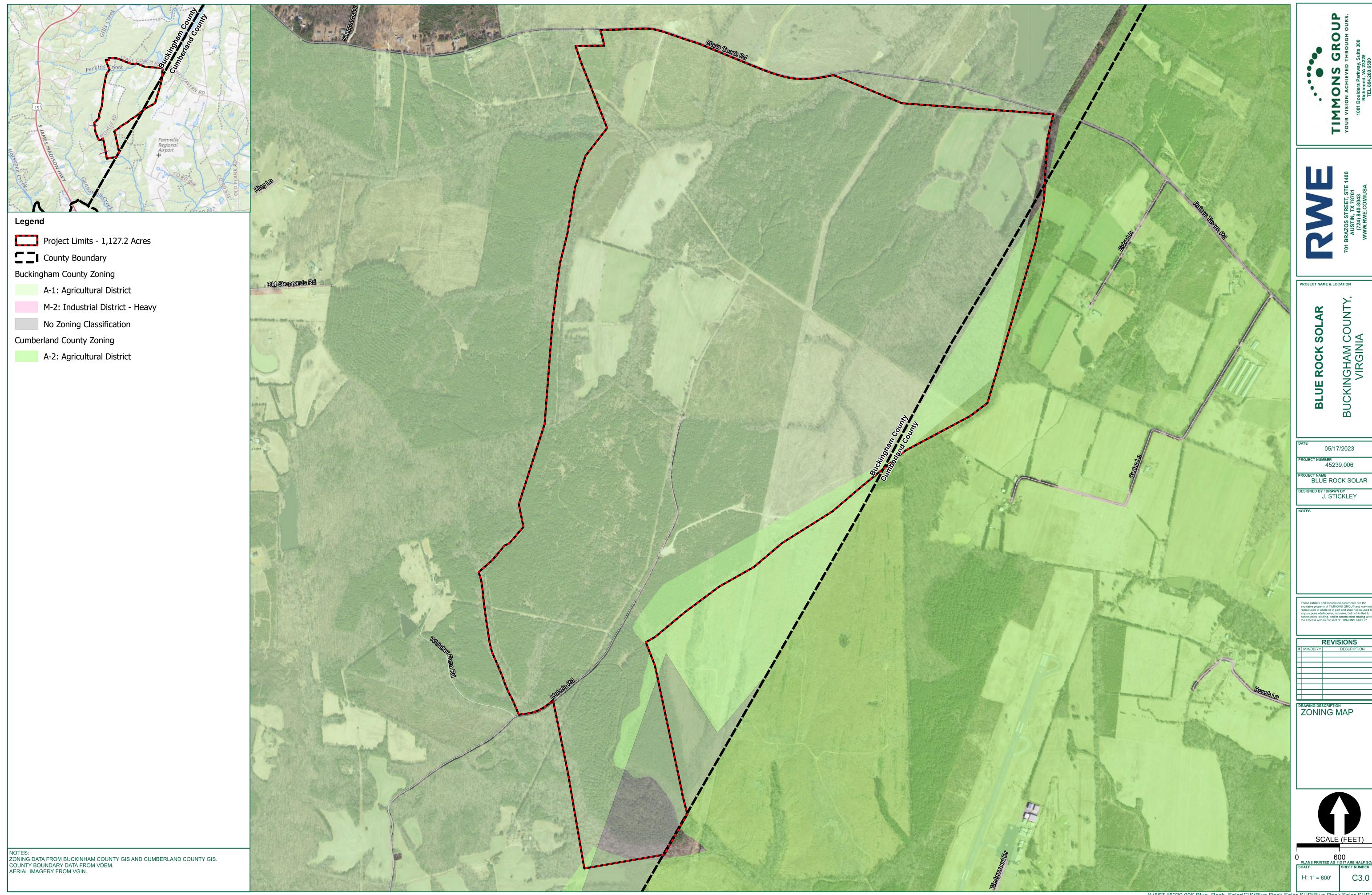
NOTES

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Г	REVISIONS						
#	# MM/DD/YY DESCRIPTION						
L							
L							
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PARCEL INFORMATION SHEET

PLANS PRINTED AS 11X17 ARE HALF SCALE
SHEET NUMBER
C2.1



BUCKINGHAM COUNT VIRGINIA BLUE ROCK SOLAR

05/17/2023 PROJECT NUMBER 45239.006

DESIGNED BY / DRAWN BY
J. STICKLEY

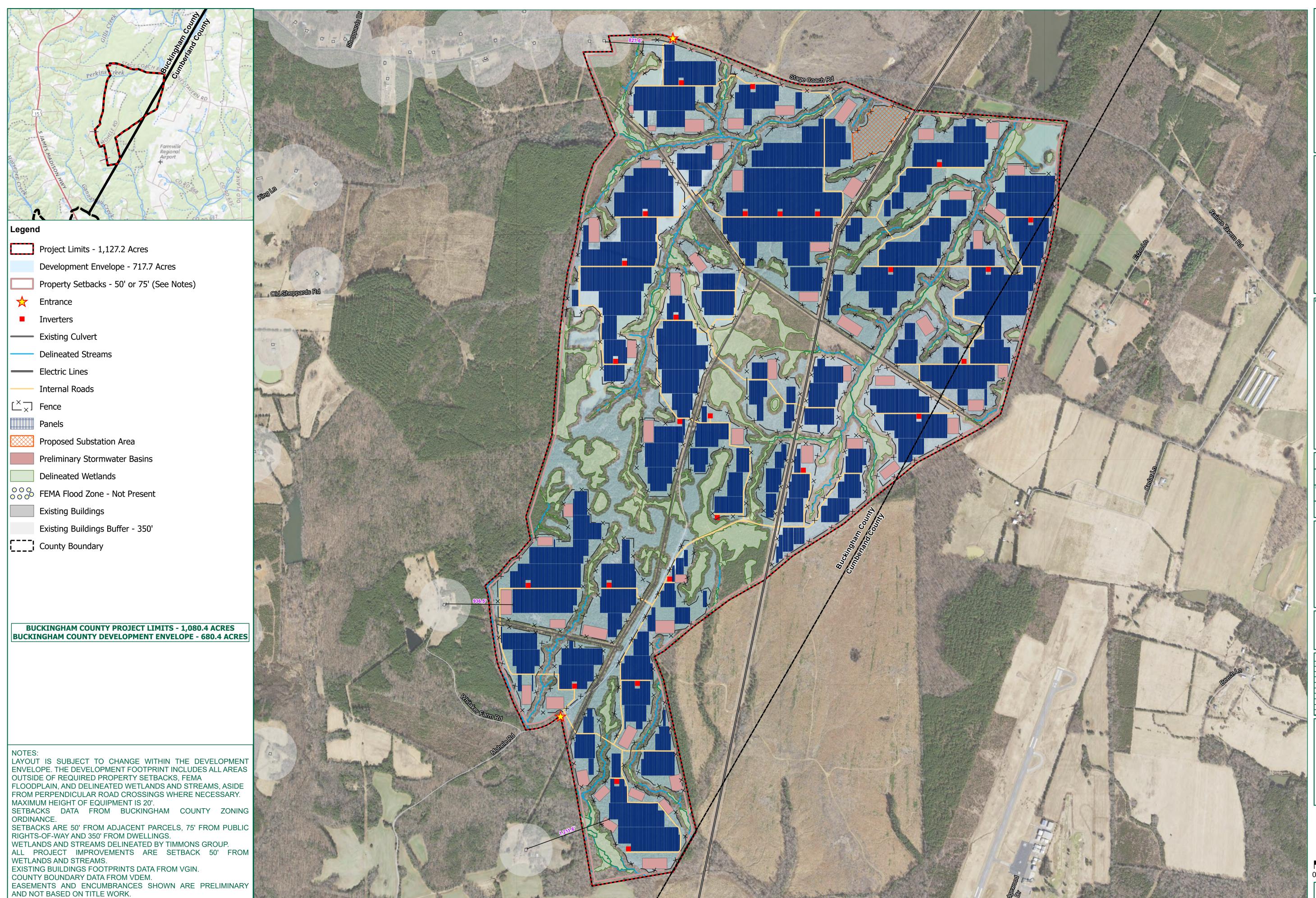
REVISIONS

ZONING MAP



H: 1" = 600'

Y:\852\45239.006-Blue\_Rock\_Solar\GIS\Blue Rock Solar SUP\Blue Rock Solar SUP.aprx



AERIAL IMAGERY FROM VGIN.

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.
1001 Boulders Parkway, Suite 300



PROJECT NAME & LOCATION

BLUE ROCK SOLAR
BUCKINGHAM COUNTY,
VIRGINIA

05/17/2023 UECT NUMBER 45239.006

PROJECT NAME
BLUE ROCK SOLAR

DESIGNED BY / DRAWN BY
J. STICKLEY

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REVISIONS

MM/DD/YY DESCRIPTION

PRELIMINARY SITE

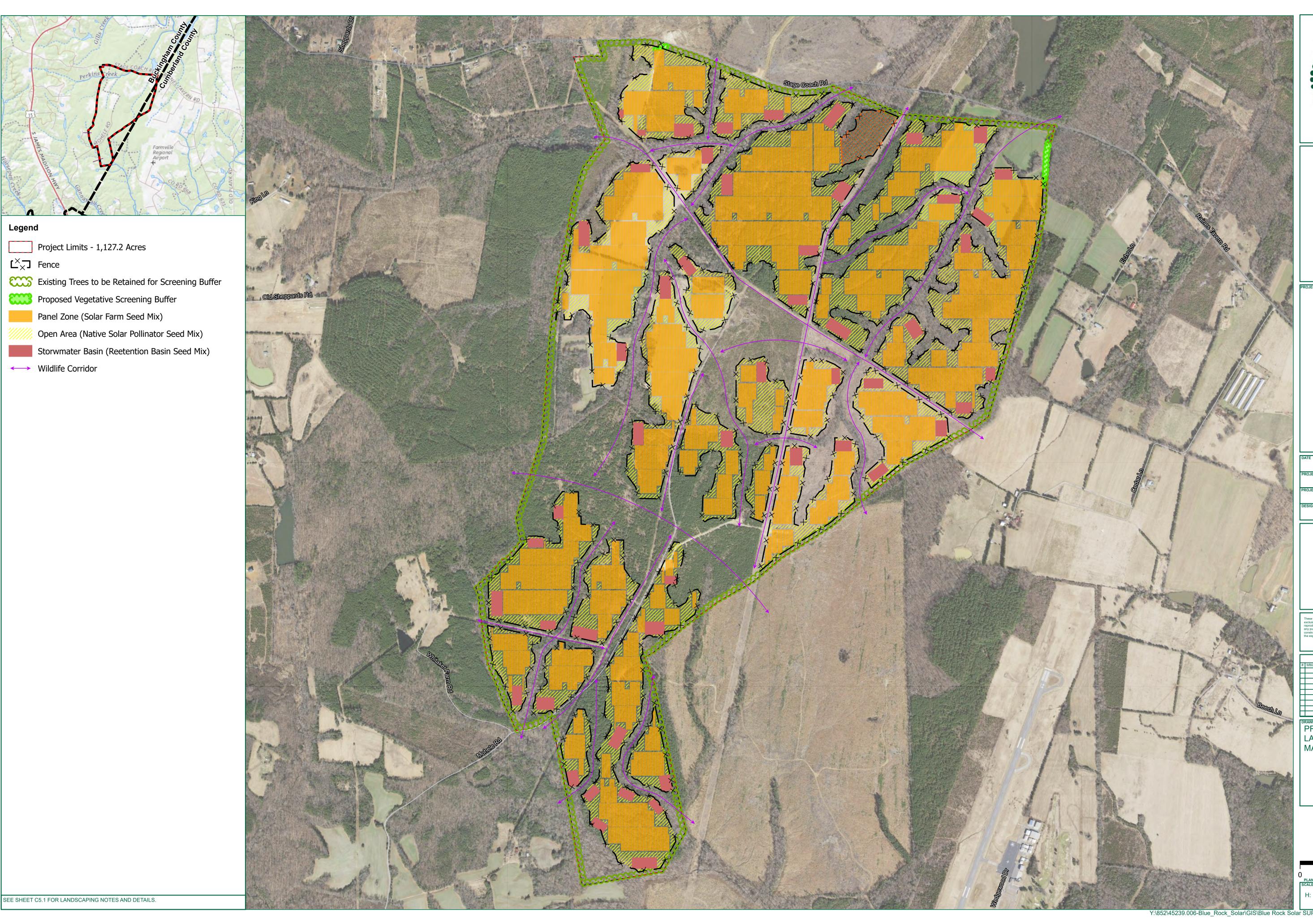


SCALE (FEET)

600
ANS PRINTED AS 11X17 ARE HALF SO

H: 1" = 600' C4.0

Y:\852\45239.006-Blue\_Rock\_Solar\GIS\Blue Rock Solar SUP\Blue Rock Solar SUP.aprx





BUCKINGHAM COUNTY, VIRGINIA

05/17/2023 ROJECT NUMBER 45239.006

PROJECT NAME BLUE ROCK SOLAR

REVISIONS

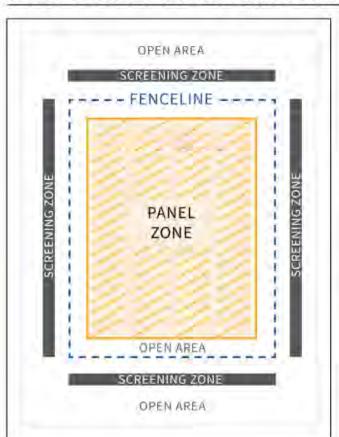
PROPOSED
LANDSCAPING
MAP



H: 1" = 600'

Y:\852\45239.006-Blue\_Rock\_Solar\GIS\Blue Rock Solar SUP\Blue Rock Solar SUP.aprx

# PROJECT AREA DIAGRAM



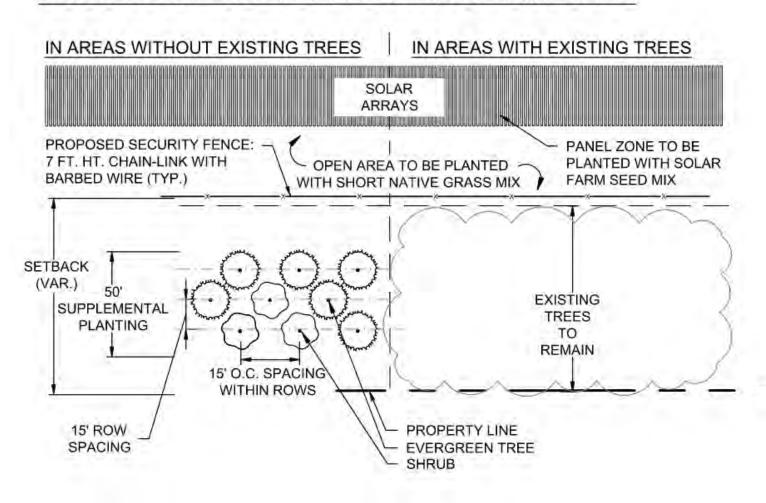
DEFINITIONS Open Area: Any area beyond the panel rane, ithin the property boundary. Panel Zone: The area underneath the solar irrays, including inter-row spacing. Screening Zone: A vegetated visual barrier. Solar Native Plant Finder: The Virginia Solar Site Native Plant Finder (link), an online esearch tool developed by the DCR Natural teritage Program. Used by Pollinators: Plant species with a pollinator" designation on the Virginia Solar ite Native Plant Emder

SOURCE: VIRGINIA POLLINATOR-SMART COMPREHENSIVE PLAN

# **VEGETATIVE BUFFER NOTES**

- PROVIDE A 50 FOOT-WIDE LANDSCAPE BUFFER CONSISTING OF A STAGGERED ROW OF EVERGREEN AND DECIDUOUS TREES ALONG EXISTING PUBLIC RIGHT-OF-WAYS TO OBSCURE VIEWS OF THE SOLAR FARM.
- PRESERVE EXISTING WETLANDS AND WOODLANDS TO SERVE AS A VEGETATIVE BUFFER. IF EXISTING TREES AND VEGETATION ARE DISTURBED, PROVIDE NEW BUFFER PLANTINGS. WHERE INTERMITTENT EXISTING TREES OR SHRUBS EXIST WITHIN A PROPOSED BUFFER LOCATION, PROPOSED SCREENING MUST BE FIELD-LOCATED AND PLANTED AS NEEDED TO SUPPLEMENT THE EXISTING VEGETATIVE SCREENING.
- ENSURE THAT ALL PLANT MATERIAL MEETS REQUIREMENTS OF THE BUCKINGHAM COUNTY ZONING ADMINISTRATOR.
- SEED POLLINATOR MEADOW WITH SOLAR POLLINATOR BUFFER MIX.
- TREES PLANTED 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. ALL TREES TO BE PLANTED SHALL MEET THE SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
- VARY THE SPECIES USED EVERY 100 LINEAR FEET.
- FENCING MUST BE INSTALLED ON THE SOLAR PANEL SIDE OF THE BUFFER (SEE PLANTING TEMPLATE BELOW).

# VEGETATIVE BUFFER PLANTING TEMPLATE



# RECOMMENDED GROUNDCOVER SEED MIXES

NATIVE DETENTION BASIN SEED MIX FOR USE IN STORMWATER BASINS VA SOUTHERN PIEDMONT DETENTION BASIN MIX - ERNMIX-864



# Ernst Conservation Seeds

8884 Mercer Pike Meadville, PA 16335 (800) 873-3321 Fax (814) 336-5191 www.ernstseed.com

Date: April 10, 2023

# VA Southern Piedmont Detention Basin Mix - ERNMX-864

	Botanical Name	Common Name	Price/Lb
30.00 %	Panicum virgatum, NJ Ecotype	Switchgrass, NJ Ecotype	14.63
20,00 %	Elymus virginicus, PA Ecotype	Virginia Wildrye, PA Ecotype	9.14
17.00 %	Panicum clandestinum, Tioga	Deertongue, Tioga	22.51
15,50 %	Panicum rigidulum, PA Ecotype	Redtop Panicgrass, PA Ecotype	57.60
5.00 %	Carex vulpinoidea, PA Ecotype	Fox Sedge, PA Ecotype	28.80
5.00 %	Chasmanthium latifolium, WV Ecotype	River Oats, WV Ecotype	96.00
2.00 %	Agrostis perennans, Albany Pine Bush-NY Ecotype	Autumn Bentgrass, Albany Pine Bush-NY Ecotype	16.80
2.00 %	Juncus effusus	Soft Rush	48.00
2.00 %	Juncus tenuis, NC Ecotype	Path Rush, NC Ecotype	79.20
0.40 %	Helenium autumnale, Northern VA Ecotype	Common Sneezeweed, Northern VA Ecotype	216.00
0.40 %	Helenium flexuosum, VA Ecotype	Purplehead Sneezeweed, VA Ecotype	144.00
0.40 %	Vernonia noveboracensis, PA Ecotype	New York Ironweed, PA Ecotype	264.00
0.30 %	Scirpus cyperinus, PA Ecotype	Woolgrass, PA Ecotype	115.20
100.00 %		Mix Price/Lh Bulk:	\$30.93

Seeding Rate: Seed at 20 lbs/acre with a cover crop. For a cover crop use Japanese Millet (10 lbs/acre; 1

May to 31 Aug), Barnyard Grass (10 lbs/acre; 1 May to 31 Aug), or Grain Rye (30 lbs/acre; 1 Sept to 30 Apr).

Grasses & Grass-like Species - Herbaceous Perennial; Stormwater Management

Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

> Price quotes guaranteed for 30 days. All prices are FOB Meadville, PA. Please check our web site at www.ernstseed.com for current pricing when placing orders.

# RECOMMENDED COVER CROPS (TEMPORARY SEEDING)

BOTANICAL NAME	COMMON NAME	SEEDS RATE: POUNDS PER ACRE
AVENA SATIVA	GRAIN OATS	50-100
SETARIA ITALICA	GERMAN MILLET	50
SECALE CEREALE	GRAIN RYE	50-100

# RECOMMENDED BUFFER PLANT LIST

EVERGREEN TREES (REQUIRED TO MITIGATE VISUAL IMPACT) BOTANICAL NAME / COMMON NAME ILEX OPACA / AMERICAN HOLLY JUNIPERUS VIRGINIANA 'BRODIE' / EASTERN RED CEDAR PINUS VIRGINIANA / VIRGINIA PINE PINUS TAEDA / LOBLOLLY PINE

# SHRUBS

BOTANICAL NAME / COMMON NAME KALMIA LATIFOLIA / MOUNTAIN LAUREL PHYSOCARPUS OPULIFOLIUS / NINEBARK SAMBUCUS CANADENSIS / CANADIAN ELDERBERRY VIBURNUM DENTATUM / SOUTHERN ARROWOOD

# RECOMMENDED GROUNDCOVER SEED MIXES

SOLAR FARM SEED MIX FOR USE IN PANEL ZONE ERNST CUSTOM SUSSEX COUNTY SOLAR FARM SEED MIX



8869 Greenwood Place Suite C Savage, MD 20763 301-725-7333

4/11/2023

Page Number

SHIP TO:

Phone: 804-200-6500

1 of 2

# **CUSTOM MIX QUOTATION**

DATE:	4/11/2023		
TO:	Timmons Group		
JOB:	Sussex Cou	nty Solar	
CVS Panel Zone Mixture	% BY WT.	Lbs/Acre	
Creeping Bentgrass - Agrostis stolonifera	14.89%	7.00	
Bermudagrass RAW - Cynodon dactylon	21.28%	10.00	
White Clover (VNS) - Trifolium repens	21,28%	10.00	
Annual Ryegrass - Lolium multiflorum	21,28%	10.00	
Cereal Rye - Secale cereale	21.28%	10.00	
Mix Price/Lb	\$	3.66	
Total Pounds/acre	47.00		

# PRICES ARE QUOTED FIRM FOR 30 DAYS AND SUBJECT TO AVAILABILITY AT TIME OF ORDER

APPLY THIS MIX AT 42 LBS PLS/ACRE WITH A COVER CROP. FOR A COVER CROP USE ONE OF THE FOLLOWING: OATS (30 LBS/ACRE; 1 JAN TO 30 APR), BROWN TOP MILLET (10 LBS/ACRE; 1 MAY TO 31 AUG), OR GRAIN RYE (30 LBS/ACRE; 1 SEP TO 31 DEC).

NATIVE SOLAR POLLINATOR BUFFER MIX FOR USE IN OPEN AREA AND SCREENING ZONE ERNST CUSTOM SUSSEX COUNTY SOLAR POLLINATOR MIX

SEE VEGETATION MANAGEMENT PLAN FOR SEEDING NOTES.



# Ernst Conservation Seeds Inc

8884 Mercer Pike Meadville, PA 16335-9275 Phone (814) 336-2404; (800) 873-3321; Fax (814) 336-5191 www.ernstseed.com; sales@ernstseed.com

Timmons Group Timmons Group 1001 Boulders Pkwy Ste 300 1001 Boulders Pkwy Ste 300 Richmond, VA 23225-5512 Richmond, VA 23225-5512 UNITED STATES

804-200-6500 804-560-1648

Customer Pi	O# Cust	omer ID	Shipping Method	UPS Shipper #	Terms	Salesper	son ID
EM 041123 I	NH TIN	MM002	UPS GROUND		Credit Card		
Bulk Qty	PLS Qty	MOU	Item Number	Description		Unit Price	Ext. Price
0.000		EACH	SUSSEX CO VA SOLAR BU			\$0.00000	\$0.0
0.007	0.006	LB PLS	ASCSYR01	Common Milkweed, PA Ecotype		\$86.66667	\$0.5
0.017	0.015	LB PLS	ASCTUB05	Butterfly Milkweed		\$286.34667	54.3
0.004	0.008	LB PLS	ASTLAT01	Calico Aster		\$324.64000	\$2.6
0.039	0.030	LB PLS	CHAFAS01	Partridge Pea, PA Ecotype		\$7.89800	50.2
0.011	0.010	LB PLS	CHANICO4	Sensitive Pea, NC Ecotype		\$52,17600	\$0.5
0.338	0.300	LB PLS	ELYVIRO1	Virginia Wildrye, PA Ecotype		\$9.00000	\$2.7
0.011	0.010	LB PLS	ERAHIRO1	Bigtop Lovegrass, VA Ecotype		\$136.00000	\$1.3
0.022	0.020	LB PLS	GEUCAN01	White Avens, PA Ecotype		\$174.32000	\$3.4
0.011	0.010	LB PLS	HELANG01	Narrowleaf Sunflower, Coastal Pl	ain NC Ecotype	\$64.20000	\$0.6
0.011	0.010	LB PLS	HELHEL01	Oxeye Sunflower, PA Ecotype		\$29.96000	50.3
0.019	0.018	LB PLS	LESCAP03	Roundhead Lespedeza, RI Ecotyp	e	\$102.40000	\$1.8
0.009	0,008	LB PLS	LESVIROS	Slender Lespedeza, VA Ecotype		\$198.90000	\$1.5
0.005	0.004	LB PLS	MONFIS03	Wild Bergamot, Fort Indiantown	Gap-PA Ecotype	\$101.80000	\$0.4
0.004	0.004	LB PLS	MONPUN03	Spotted Beebalm, Albany Pine Bu	sh-NY Ecotype	\$271.70000	\$1.0
0.064	0.050	LB PLS	PANANC01	Beaked Panicgrass, Eastern Shore	MD Ecotype	\$45.86400	\$2.2
0.006	0.006	LB PLS	PENLAE01	Appalachian Beardtongue, PA Eco	otype	\$294.00000	\$1.7
0.005	0.004	LB PLS	PYCINC02	Hoary Mountainmint, MD Ecotyp	e	\$412.20000	\$1.6
0.011	0.010	LB PLS	PYCTEN01	Narrowleaf Mountainmint		\$150.78000	\$1.5
0.063	0.060	LB PLS	RUDHIR04	Blackeyed Susan		\$27.25233	\$1.6
0.011	0.010	LB PLS	RUDTRIO2	Browneyed Susan, WV Ecotype		\$51.69600	\$0.5
0.416	0.350	LB PLS	SCHSCO08	Little Bluestem, Fort Indiantown	Gap-PA Ecotype	\$14.00000	\$4.9
0.010	0.010	LB PLS	SENHEB01	Wild Senna, VA & WV Ecotype		\$24.50400	50.2
0.011	0.010	LB PLS	SENMAR01	Maryland Senna		\$25.27200	\$0.2
0.005	0.004	LB PLS	SOLBICO1	White Goldenrod, PA Ecotype		\$243.00000	\$0.9
0.005	0,004	LB PLS	SOLNEM01	Gray Goldenrod, PA Ecotype		\$260.15000	\$1.0
0.004	0.002	LB PLS	SOLODO01	Licorice Scented Goldenrod, PA E	cotype	\$689.60000	\$1.3
0.006	0.002	LB PLS	SOLRUG01	Wrinkleleaf Goldenrod, PA Ecoty		\$695.20000	\$1,3
0.026	0.025	LB PLS	ZIZAUR01	Golden Alexanders, PA Ecotype		\$63.19200	\$1.5
1.000			TOTAL	MIX NOTES		\$0.00000	\$0.0

Total 100%

APPLY THIS MIX AT 10 LBS PLS/ACRE WITH A COVER CROP. FOR A COVER CROP USE ONE OF THE FOLLOWING: OATS (30 LBS/ACRE; 1 JAN TO 30 APR), BROWN TOP MILLET (10 LBS/ACRE; 1 MAY TO 31 AUG), OR GRAIN RYE (30 LBS/ACRE; 1 SEP TO 31 DEC). SEE VEGETATION MANAGEMENT PLAN FOR SEEDING NOTES.



PROJECT NAME & LOCATION

SOL ROCK Ш BLUI

05/17/2023 45239.006 BLUE ROCK SOLAR

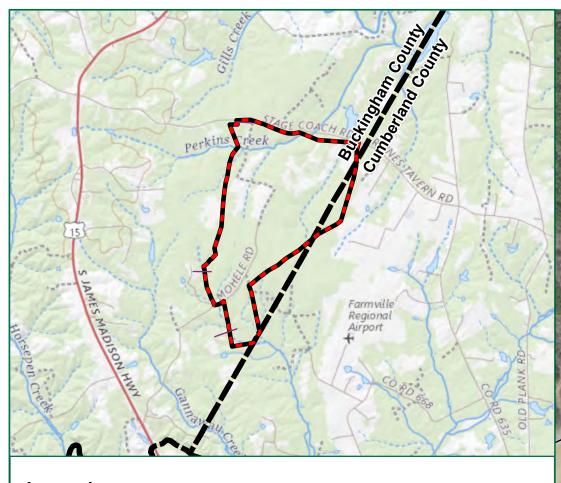
M. HILL

REVISIONS

NOTES AND DETAILS

LANDSCAPING

PLANS PRINTED AS 11X17 ARE HALF SCALE C5.1



Project Limits - 1,127.2 Acres

County Boundary

5' Topographic Contour

Percent Slope

0 - 15%

15 - 25%

25% +





BUCKINGHAM COUNT VIRGINIA

05/17/2023 ROJECT NUMBER 45239.006

PROJECT NAME BLUE ROCK SOLAR

REVISIONS

YY DESCRIPTION

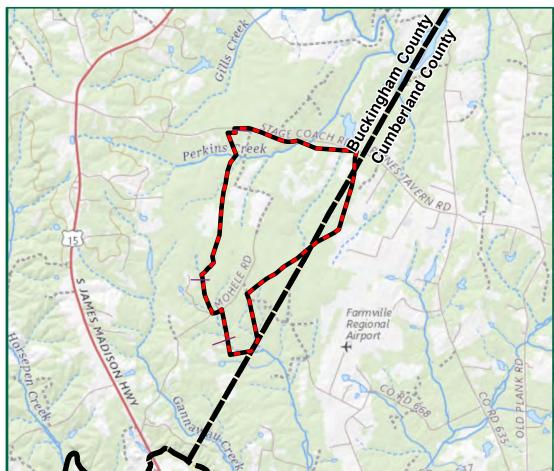
AERIAL TOPOGRAPHY AND SLOPE MAP



H: 1" = 600'

Y:\852\45239.006-Blue\_Rock\_Solar\GIS\Blue Rock Solar SUP\Blue Rock Solar SUP.aprx

NOTES:
TOPOGRAPHIC CONTOURS AND SLOPE GENERATED FROM USGS LIDAR.
COUNTY BOUNDARY DATA FROM VDEM.
AERIAL IMAGERY FROM VGIN.



Project Limits - 1,127.2 Acres Mature Forest Cover - 734.2 Acres

County Boundary





BUCKINGHAM COUNT VIRGINIA BLUE ROCK SOL

05/17/2023 ROJECT NUMBER 45239.006

PROJECT NAME BLUE ROCK SOLAR ESIGNED BY / DRAWN BY
J. STICKLEY

REVISIONS

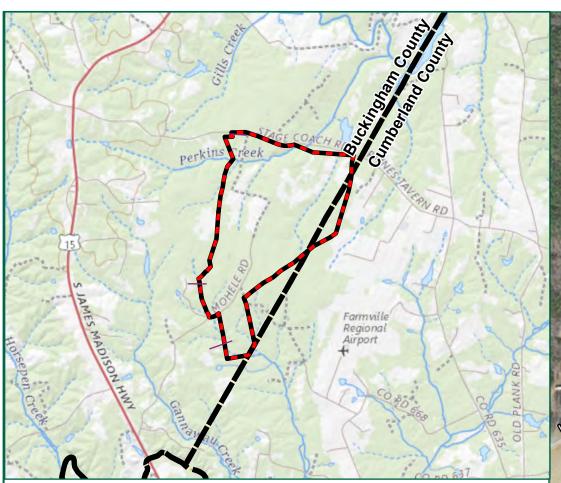
YY DESCRIPTION

MATURE FOREST COVER MAP



H: 1" = 600'

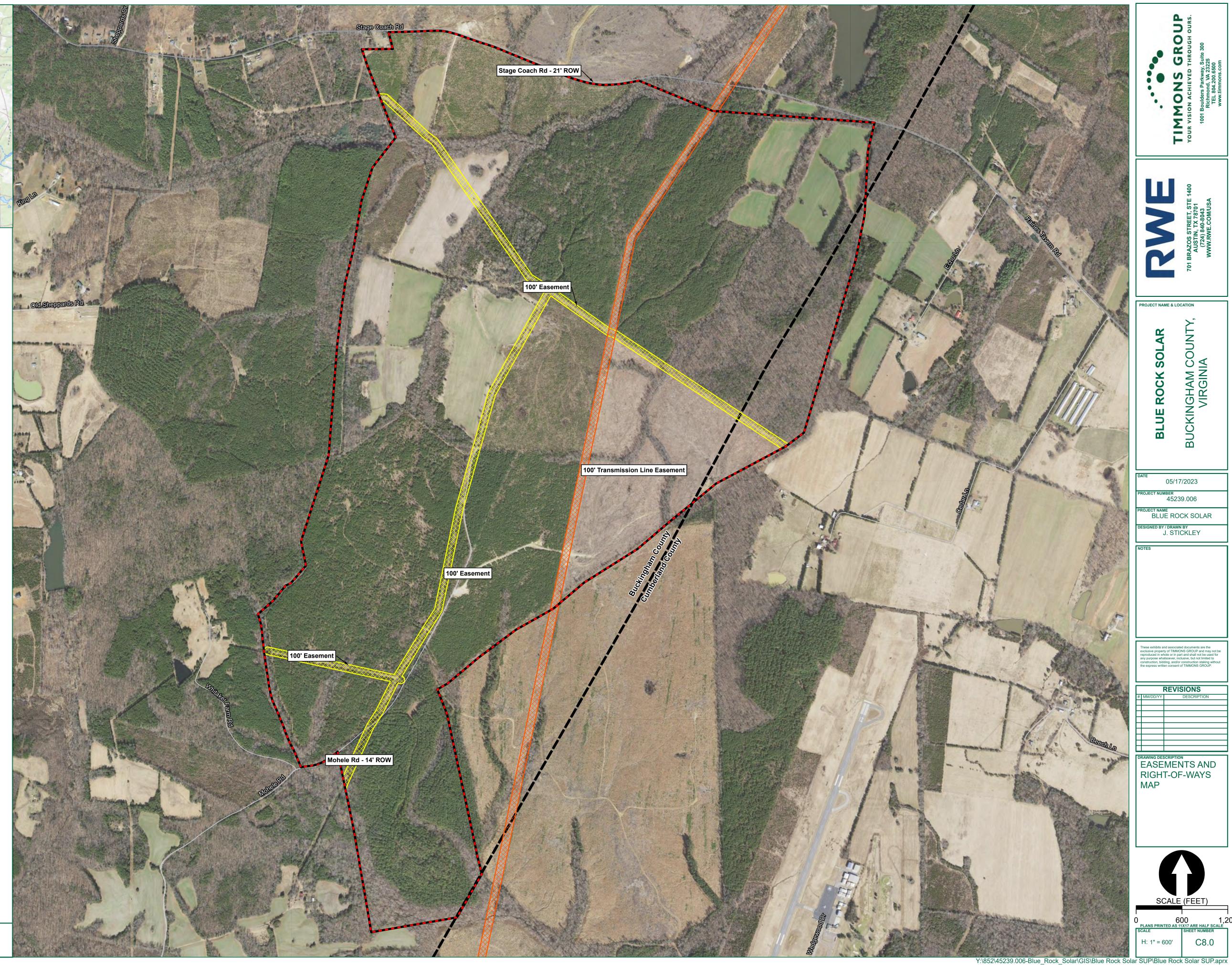
NOTES:
MATURE FOREST COVER DELINEATED THROUGH USE OF AERIAL IMAGERY.
COUNTY BOUNDARY DATA FROM VDEM.
AERIAL IMAGERY FROM VGIN.



Project Limits - 1,127.2 Acres Transmission Line Easement

Distribution Line Easement

County Boundary





BUCKINGHAM COUNT VIRGINIA BLUE ROCK SOLAR

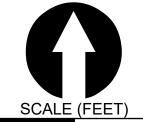
05/17/2023 ROJECT NUMBER 45239.006 PROJECT NAME BLUE ROCK SOLAR

ESIGNED BY / DRAWN BY
J. STICKLEY

REVISIONS

YY DESCRIPTION

DRAWING DESCRIPTION
EASEMENTS AND
RIGHT-OF-WAYS
MAP



H: 1" = 600'

NOTES: COUNTY BOUNDARY DATA FROM VDEM. AERIAL IMAGERY FROM VGIN.

# 7 ADJACENT PROPERTY OWNER'S LIST

Buckingham County Project Parcels							
Map Identifier	Parcel Identifier	Owner		Zoning District			
1	202-70	BLUE ROCK RESOURCES LLC	PO BOX 256, DILLWYN VA 23936	A1 - AGRICULTURAL			
2	207-40	JAMN LIMITED PARTNERSHIP LLP	814 E MAIN ST, RICHMOND VA 23219	A1 - AGRICULTURAL			
3	207-41	BLUE ROCK RESOURCES LLC	PO BOX 256, DILLWYN VA 23936	A1 - AGRICULTURAL			
		Cumberland County Project Po	arcels				
Map Identifier	Parcel Identifier	Owner		Zoning District			
4	95-A-1	BLUE ROCK RESOURCES, LLC	PO BOX 256, DILLWYN, VA, 23936	A2 - AGRICULTURAL			
		Buckingham County Adjacent P	Parcels				
Map Identifier	Parcel Identifier	Owner		Zoning District			
5	207-42	LEE ELIZABETH D	270 CHURCH POINT LN, OAK GROVE VA 22443	A1 - AGRICULTURAL			
6	202-48	WILHOIT DUSTIN & CRYSTAL W	851 COUNTRY CLUB RD, APPOMATTOX VA 24522	A1 - AGRICULTURAL			
7	202-63	ATKINS KENNETH ESTATE FOR THE	2343 STAGE COACH RD, FARMVILLE VA 23901	A1 - AGRICULTURAL			
8	202-67	ATKINS DENNIS W & DAWN M ATKINS	683 ASHANTI FARM RD, GORDONSVIL LE VA 22942	A1 - AGRICULTURAL			
9	202-68	CARWILE ROBERT C JR	PO BOX 729, FARMVILLE VA 23901	A1 - AGRICULTURAL			
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11	202-71A	R E DOWDY #11 LLC	7209 INTERNATION AL DR,	A1 - AGRICULTURAL			

			ORLANDO FL 32819	
12	207-39	RICHARDS RICKIE L & SANDRA W	1521 SELDEN ST, VIRGINIA BEACH VA 23454	A1 - AGRICULTURAL
14	196-68	R E DOWDY #11 LLC	7209 INTERNATION AL DR, ORLANDO FL 32819	A1 - AGRICULTURAL
	_	Cumberland County Adjacent P	arcels	
Map Identifier	Parcel Identifier	Owner		Zoning District
15	88-A-40	COLVIN, NAN H.	801 HIGH STREET, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
16	87-A-1	BOBKO, STEPHEN E. & GENEVIEVE J.	599 RAINES TAVERN ROAD, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
17	95-A-3	WHITE, CLIFTON C. & KIMBERLY N.	1 ANDERSON HWY, POWHATAN, VA, 23139	A2 - AGRICULTURAL
18	95-A-2-A	SPRY, THOMAS A. & SARAH A.	180 CEDAR LANE, FARMVILLE, VA, 23901	A2 - AGRICULTURAL
19	95-A-4	BTG PACTUAL OEF PROPERTY 2, LP	PROPERTY TAX ADMINISTRAT ION P.O.BOX 3349	A2 - AGRICULTURAL
20	95-A-5	BLUE ROCK RESOURCES, LLC	PO BOX 256, DILLWYN, VA, 23936	A2 - AGRICULTURAL
21	102-A-1	LEE, ELIZABETH D.	270 CHURCH POINT LANE, OAK GROVE, VA, 22443	A2 - AGRICULTURAL

# 8 ENVIRONMENTAL RESOURCE IMPACT ANALYSIS

# BLUE ROCK SOLAR

MAY 17, 2023

# **Timmons Group**

1001 Boulders Parkway Suite 300 Richmond, VA 23225

P 804.200.6500 F 804.560.1016 www.timmons.com



# **Environmental Resource Impact Analysis**

Blue Rock Solar

Timmons Group has completed an analysis and report of desktop environmental and cultural resources for a proposed electric solar power generation facility. The project encompasses approximately 1,127.2 acres and is located in Buckingham and Cumberland County. The study was developed as a preliminary planning tool to help identify constraints and to assist in planning the proposed Blue Rock Solar (Site).

This comprehensive review of publicly available environmental mapping and database resources will assist in identifying local, state, and federally regulated resources that have the potential to significantly impact the feasibility of the Site.

# **OUR MISSION**

"To achieve unparalleled understanding of our clients, their businesses, and their visions resulting in unrivaled customer service and shared success."

# **Table of Contents**

Site Conditions	4
Threatened and Endangered Species Database Search	6
Cultural Resources Search	7

# Site Conditions

# Shaded Relief and Aerial Topography

Topographic data is sourced from the VGIN LiDAR and shows areas of significant topographic relief on the site. Elevations range from a low of approximately 340 feet in the south to a high of approximately 490 feet in the central portion of the Site. Additionally, there are areas of See Figure 1: Shaded Relief Map.

# Prime Farmland

Based on the Natural Resources Conservation Service (NRCS) soils layer, there are areas of prime farmland and farmland of statewide importance within the Site. Prime farmland totals 79 acres, farmland of statewide importance<sup>2</sup> totals 709.2 acres, and the remainder of the Site, 339 acres, is neither prime farmland nor farmland of statewide importance. The Virginia Cooperative Extension recently developed a prime farmland dataset known as the Virginia Land and Energy Navigator (VaLEN). The results of our analysis of prime farmland were consistent with the VaLEN dataset. See Figure 2: Prime Farmland Map.

# Wetlands, Streams, and Flood Zones

A wetland delineation has been performed by Timmons Group, and this delineation shows there are various wetland and stream systems onsite. According to FEMA's National Flood Hazard layer, there are no 100-year flood zones present on Site.

Type	Area or Length
Wetlands	100.3 acres
Waterbodies	0.0 acres
Flood Zone	0.0 acres
Streams	46,129.1 feet

-

<sup>&</sup>lt;sup>1</sup> Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for those uses.

<sup>&</sup>lt;sup>2</sup> Farmland of statewide importance generally includes areas that almost meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.

Wetlands and streams form a natural wildlife corridor, and as they will generally not be impacted by the project, will remain as interior corridors for wildlife utilization for the duration of the project. The Virginia Department of Wildlife Resources (VDWR) advises that interior passages through solar projects helps reduce potential impacts to wildlife, to which this project will adhere. If wetland or stream impacts are unavoidable, the Applicant will obtain the appropriate US Army Corps of Engineers (USACE) permit for any unavoidable impacts to USACE jurisdictional wetlands and streams.

# Threatened and Endangered Species Database Search

Timmons Group has conducted a threatened and endangered (T&E) species review of the Blue Rock Solar project using the VDWR Wildlife Environmental Review Mapping System (WERMS).

The search determined there is the potential for two species with federal and/or state protection to occur within the Site. The potentially present species and their associated databases are listed below in Table 1.

Table 1. Protected Species Potentially Present at Blue Rock Solar

Common Name	Status	Agency Source
Mussel		
Atlantic Pigtoe	State Threatened	VDWR
Green Floater	Federal Threatened,	VDWR
	State Threatened	

According to the VDWR WERMS search, the federally and state threatened Atlantic pigtoe (Fusconaia masoni) and the state threatened green floater (Laminoa subviridis) have the potential to occur on the Site. These species are associated with the Appomattox River, which is located one mile south of the Site. The Site will adhere to stormwater and erosion and sediment control guidelines, so adverse impacts to aquatic resources are not expected. During permitting efforts at the state level, the applicant will coordinate with agencies to ensure the protection and avoidance of T&E species that may occur onsite.

# Cultural Resources Search

A Virginia Department of Historic Resources (VDHR) database search for the Site and a one-half mile (0.5 mi) buffer surrounding the Site. An exhibit showing the approximate location of the Site with previously recorded architectural and archaeological resources from the Virginia Cultural Resource Information Services (VCRIS) database is included in Attachment 4: VCRIS Database Search.

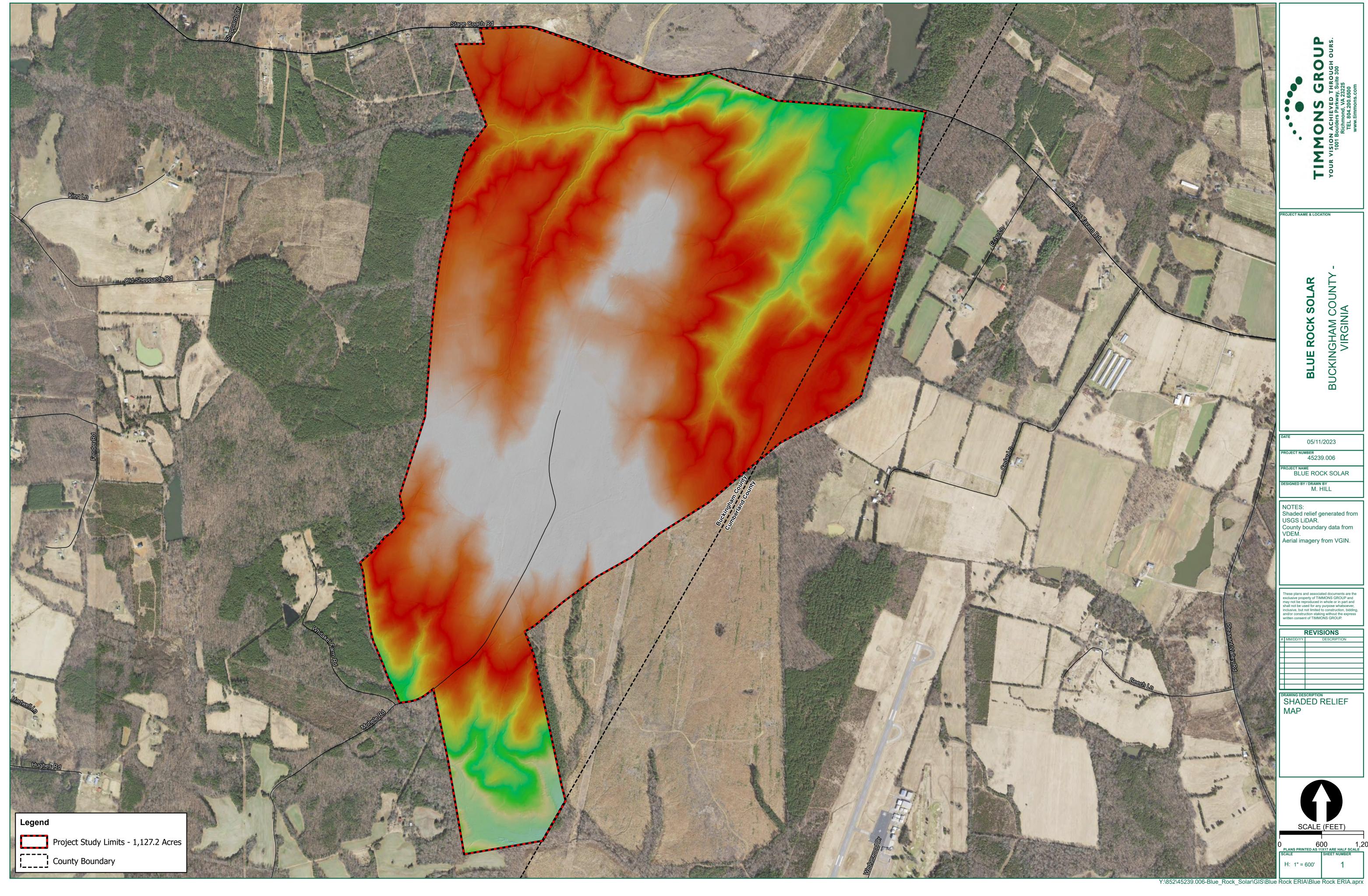
The Site is not expected to have any impacts to cultural and historical resources due to the amount of cultural work required at the state permitting level. In-depth cultural surveys conducted by qualified professionals will be submitted for approval and concurrence by VDHR. According to the VCRIS database, there are no previously recorded resources present within the Site. Four architectural and no archaeological resources intersect with the one-half mile buffer around the Site. The resources have been evaluated and determined not eligible for placement on the National Register of Historic Places (NRHP) and the Virginia Landmarks Register (VLR).

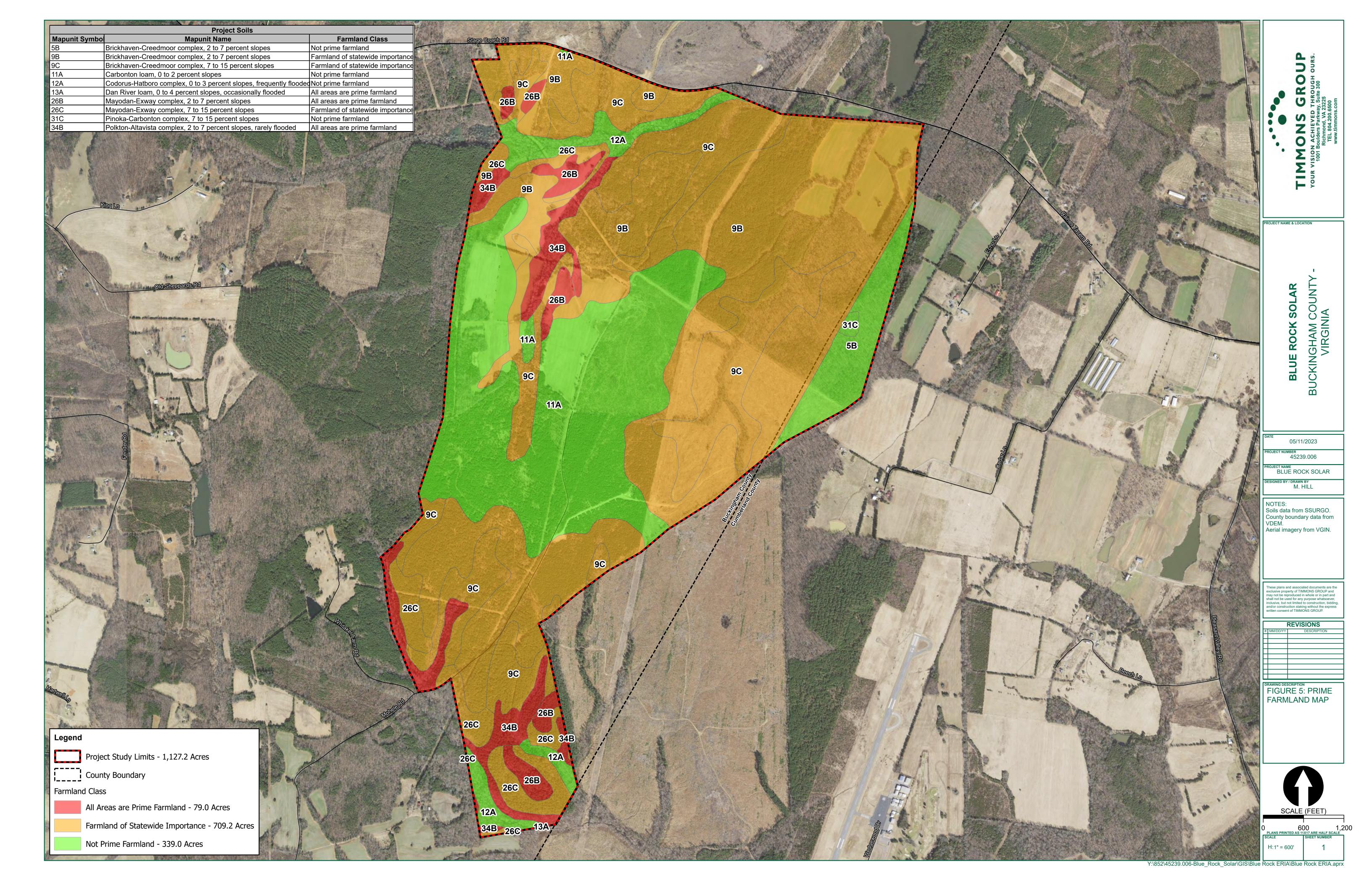
Attachment 1: Shaded Relief Map

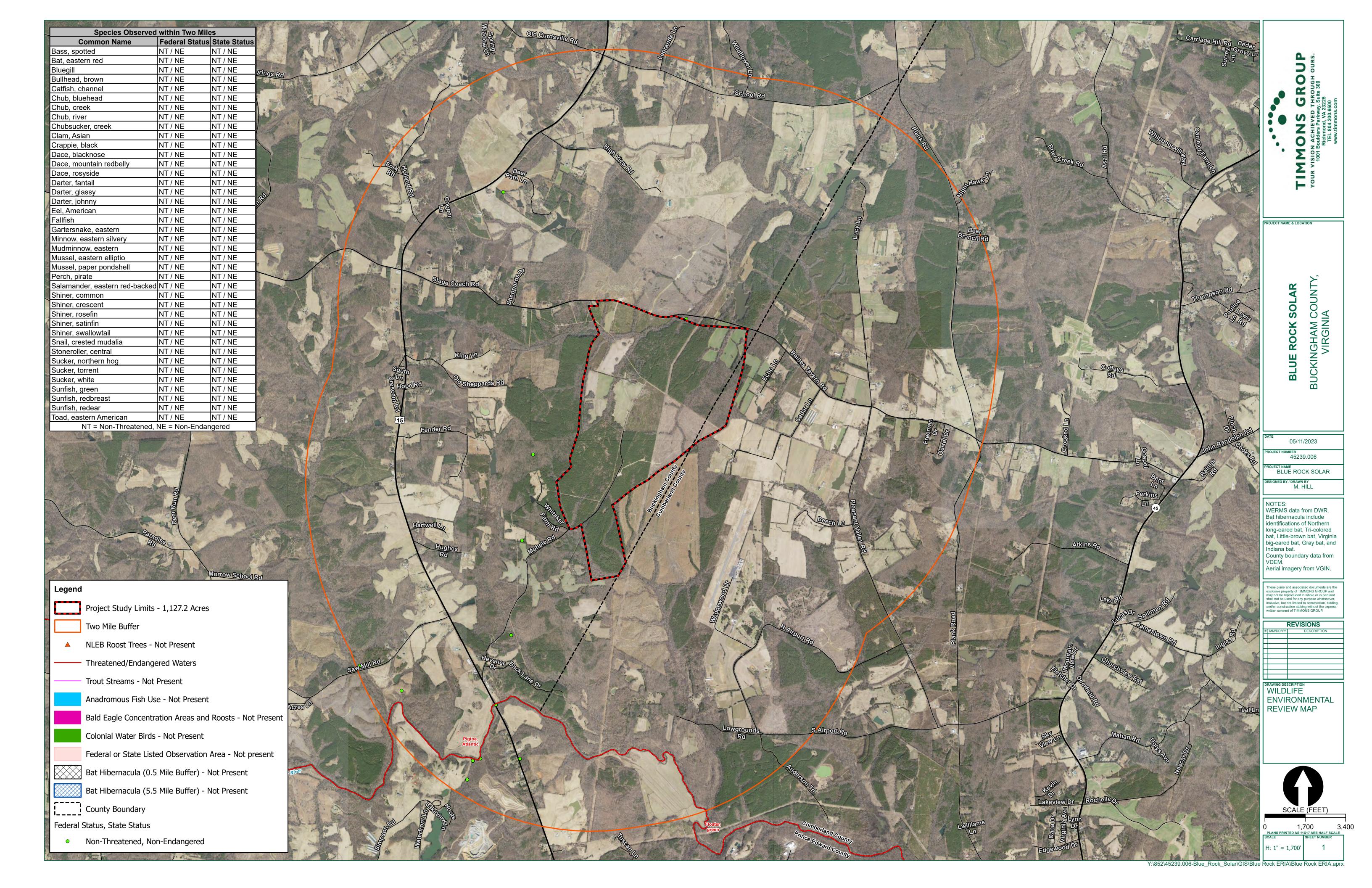
Attachment 2: Prime Farmland Map

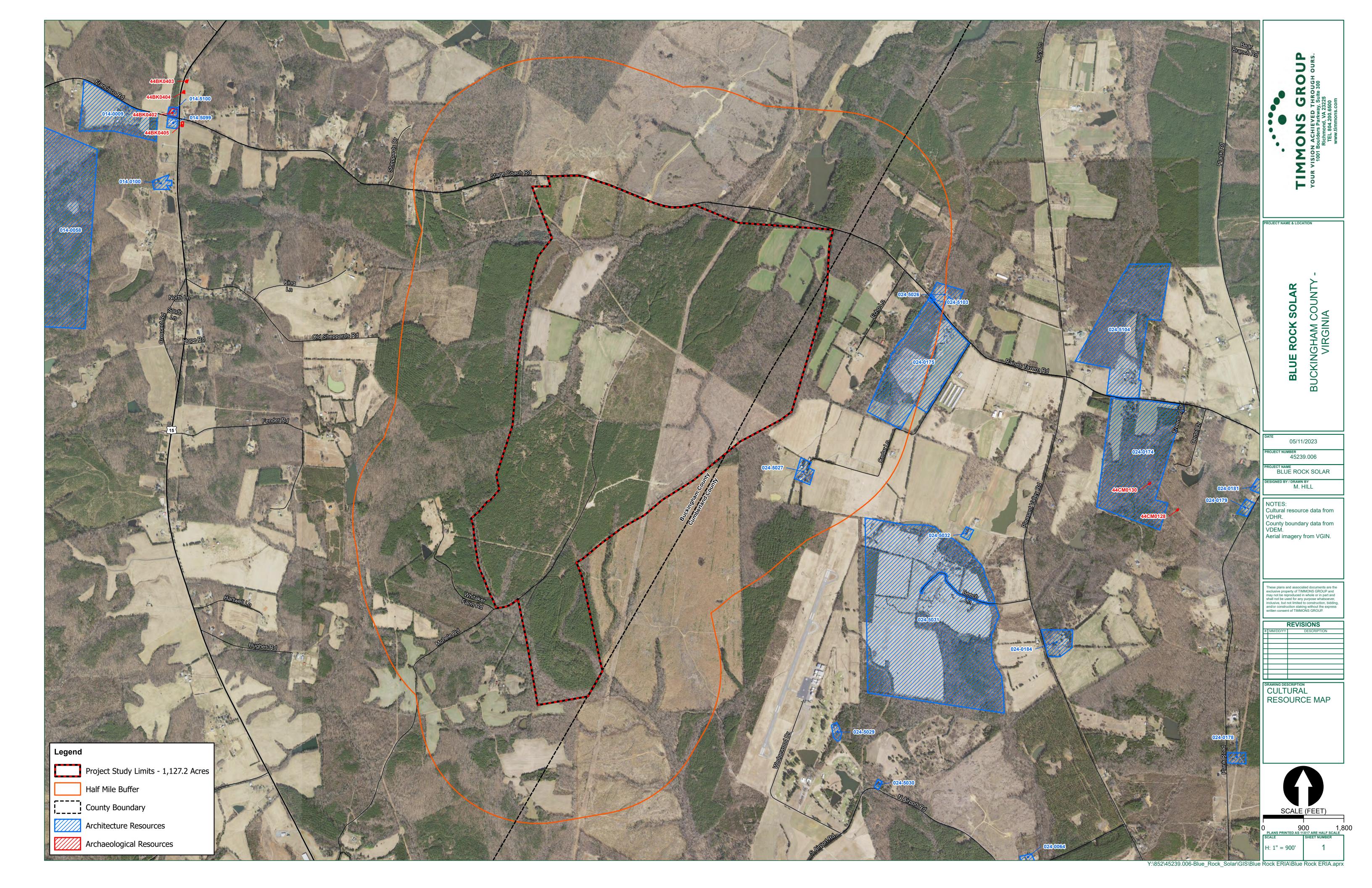
Attachment 3: Wildlife Environmental Review Mapping System

Attachment 4: Cultural Resources Map









## 9 Transportation Evaluation

# Traffic & Route Evaluation Study Blue Rock Solar Project

Buckingham County, Virginia

May 2023

Prepared For:

RWE Renewables Americas, LLC



**Contact: Scott Dunn, AICP, PTP** 

# **Traffic & Route Evaluation Study**

## **Blue Rock Solar Project**

Buckingham County, Virginia

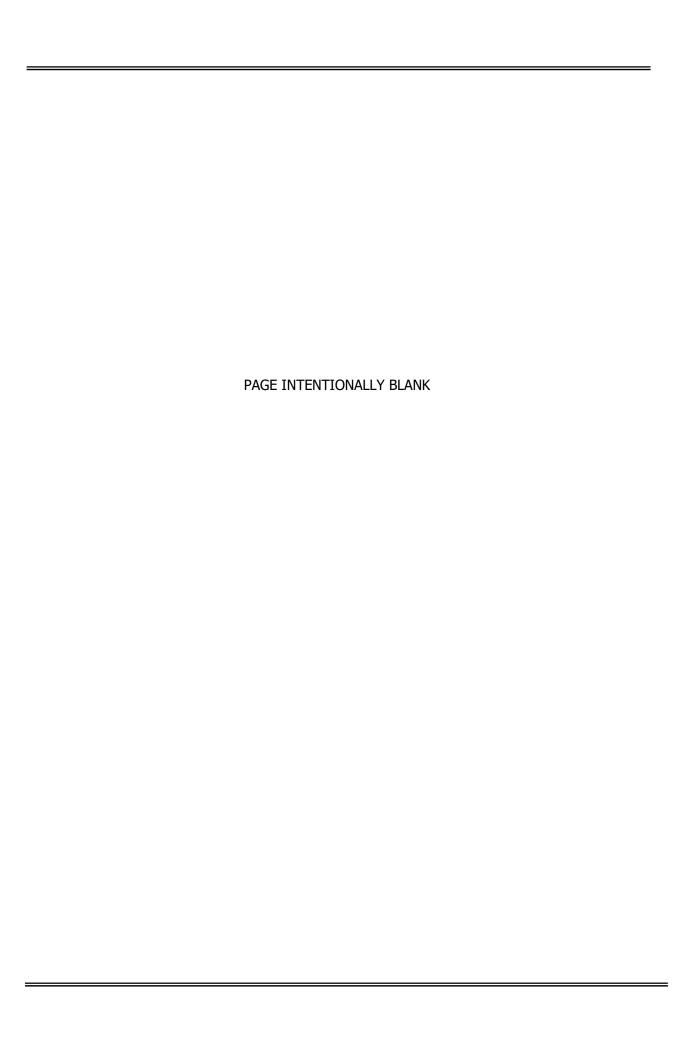
Prepared For:

RWE Renewables Americas, LLC 353 N Clark Street 30<sup>th</sup> Floor Chicago, IL 60654

Prepared By:

Timmons Group 1001 Boulders Parkway Suite 300 Richmond, Virginia 23225 (804) 200-6500

May 2023



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#### 1 PROJECT OVERVIEW

Timmons Group, at the request of RWE Renewables Americas, LLC, completed a transportation assessment for the proposed Blue Rock Solar Project, located in Buckingham County, Virginia. This work has been prepared in conjunction with the site's evaluation to identify any potential transportation issues and recommend solutions. The tasks associated with this assessment included:

- Review of data and documents provided by the Client relative to the project;
- Coordination with the Client on access, schedule, and other parameters that are reflected in the traffic assessment;
- Obtaining available geometric (roadway widths, intersection control, etc.) and speed limit data that is readily available via a review of available aerial imagery through Google Earth, Bing, or County GIS systems and a field visit conducted on Tuesday, May 9, 2023;
- Obtaining available VDOT traffic data for those roads adjacent to the site;
- Obtaining available VDOT crash data for those roads adjacent to the site; and
- Preparing a narrative summarizing (1) existing conditions, (2) traffic along the adjacent roadway network, (3) anticipated impacts, if any, associated with the site-related traffic, and (4) potential mitigation measures.

#### 2 EXISTING CONDITIONS

Timmons Group compiled existing roadway conditions and crash data for facilities adjacent to the proposed Blue Rock Solar Project located in Buckingham County, Virginia. The proposed site is located approximately 6 miles northwest of the Town of Farmville in Buckingham County, Virginia.

The site is generally located east of US Route 15, south of Route 636, north of Route 683, and west of the Buckingham County Line.

The project location is shown on Figure 1 (all figures are located at the end of the report) and a concept site plan can be found in Figure 2.

For the purposes of this work, the assumed delivery routes include direct access to the proposed site entrances from state-maintained roads as shown on Figure 1.

#### **EXISTING ROADWAYS**

A visual assessment of the adjacent roadways was performed on May 9, 2023.

<u>US Route 15 (South James Madison Highway)</u> is a two-lane, undivided minor arterial road with a posted speed limit of 55 mph. According to 2021 VDOT AADT data, US Route 15 services 5,200 vehicles per day between the Route 600 (Plank Road) and the Prince Edward County line. The pavement on US Route 15 is approximately 50' wide with center and edge line markings.

Route 636 (Stage Coach Road) is a two-lane, undivided minor collector with no available posted speed limit signs and therefore assumed to be 55 mph. According to 2021 VDOT AADT data, Route 636 services 540 vehicles per day between US Route 15 and the Cumberland County Line. The pavement on Route 636 is approximately 24' wide with center and edge line markings. Pavement deficiencies on Route 636 can be found in Figures 4-9 with their locations marked on Figure 3.

Route 683 (Mohele Road) is a two-lane, undivided local road with no available posted speed limit signs; given the residential/agricultural nature of the area and the facility itself, the posted speed is assumed to be 35 mph. According to 2021 VDOT AADT data, Route 683 services 110 vehicles per day between US Route 15 and Whitaker Farm Road and 8 vehicles per day between Whitaker Farm Road and dead end. The pavement on Route 683 is approximately 22' wide, and neither center nor edge line pavement markings are present. Mohele Road transitions into a gravel road approximately 200 feet from US Route 15. One (1) roadway deficiency was noted on Mohele Road (see Figure 9, Photo 22.

Overall, the existing roadways are acceptable for use by local traffic.

#### **EXISTING STRUCTURES**

There are two (2) culverts in the vicinity of the project – one (1) located east of the proposed site entrance on Route 636 and one (1) on Route 683 between US Route 15 and the site entrance. A summary of each culvert is provided below:

- One (1) culvert is located on Route 636 (Stage Coach Road) approximately 0.6 miles east of Site Entrance #1; it is not anticipated that this structure will be impacted by site-generated construction traffic. Per the VDOT-maintained Bridge and Culvert Database, the culvert over Perkins Creek is classified as in good condition and has not weight or width restrictions. The location of the crossing is shown in Figure 10 and photos of the crossing can be found in Figure 11.
- One (1) culvert is located on Route 683 (Mohele Road) approximately 0.5 north of US Route
  15; this structure will be impacted by all traffic access the site via Site Entrance #2. Per the
  VDOT-maintained Bridge and Culvert Database, the culvert is classified as in good condition
  and has not weight or width restrictions. The location of the crossing is shown in Figure 10
  and photos of the crossing can be found on Figure 12.

#### **EXISTING INTERSECTIONS**

Two (2) key intersections were identified within the study area and are included in this evaluation:

- 1. US Route 15 and Route 636 (Unsignalized); and
- 2. US Route 15 and Route 683 (Unsignalized).

#### US Route 15 (South James Madison Highway) and Route 636 (Stage Coach Road)

At the unsignalized four-legged intersection of US Route 15 and Route 636, Route 636 is the stop-controlled approach. The east and west approaches consist of one (1) lane that serves all left/through/right movements. The north and south approaches consist of one (1) through lane, one (1) left turn lane and one (1) right turn lane; the noted auxiliary lanes have storage lengths ranging from 200' to 250' and tapers ranging from 150' to 225'. The pavement on US Route 15 is approximately 50' wide (12' travel lanes) and the pavement on Route 636 is approximately 24' wide (12' travel lanes). Photos of the intersection can be found on Figure 13.

#### US Route 15 (South James Madison Highway) and Route 683 (Mohele Road)

At the unsignalized three-legged intersection of US Route 15 and Route 683, Route 683 is the stop-controlled approach. Each approach consists of one (1) lane that serves all left/through/right movements. The pavement on US Route 15 is approximately 23' wide and the pavement on Mohele Road is approximately 24' wide; Mohele Road transitions to a gravel road approximately 200' north of the intersection. Photos of the intersection can be found on Figures 14 and 15.

#### **CRASH DATA**

Based on VDOT crash data from March 31, 2018 through March 31, 2023 there have been a total of 27 crashes in the vicinity of the Blue Solar project:

- Four (4) rear end crashes;
- Five (5) angle crashes;
- One (1) sideswipe (same direction) crash;
- Eight (8) fixed object (off road) crashes;
- Six (6) deer crashes; and
- Three (3) "other" of crashes.

An aerial showing the location/type of the 27 crashes can be found on Figure 16.

With respect to crash severity:

- Four (4) crashes resulted in severe injury;
- Seven (7) resulted in visible injury;
- One (1) resulted in nonvisible injury; and
- Fifteen (15) resulted in property damage only.

An aerial showing the location/severity of the crashes can be found on Figure 17.

Eighteen (18) occurred during dawn/daylight hours and nine (9) occurred at night/dusk. During four (4) of the crashes the pavement was wet or icy.

With respect to noted trends, as expected, there is a cluster of crashes at the US Route 15/Route 636 intersection. Beyond that, crashes were spread out along US Route 15, which carries more vehicles and has a higher posted speed than the smaller/adjacent secondary roads.

#### 3 SITE ACCESS

#### SITE ENTRANCES

Access to the site will be provided via two (2) entrances – one (1) on Route 636 and one (1) on Route 683. The locations of these entrances are shown on Figure 1.

Site traffic will generally utilize existing entrances/access points and new gravel access roads will be installed throughout the site to facilitate construction and subsequent operations/maintenance traffic.

Temporary staging and assembly areas will be used during the construction period for the storage of construction vehicles and equipment, as well as staging of components for the solar facility. All temporary staging, parking, and assembly areas will be located within the project area boundaries to avoid congestion and parking within the public right of way.

#### Site Entrance #1 on Route 636

Site Entrance #1 on Route 636 is approximately 1.80 miles east of the US Route 15/Route 636 intersection; this entrance is currently an existing dirt driveway. Route 636 in front of this proposed entrance is approximately 20' wide while the existing driveway is approximately 18' wide. Field conducted sight distance assessments at the proposed entrance location indicate a stopping site distance west and east on Route 636 of 207' and 528', respectively. The required stopping sight distance for a 55-mph road is 495'; the available stopping sight distance to the west does not meet this requirement.

Photos of the potential location of Site Entrance #1 can be found in Figure 18.

#### Site Entrance #2 on Route 683

Site Entrance #2 on Route 683 is approximately 1.5 miles northeast of the US Route 15/Route 683 intersection; site traffic will use Route 683 north of Route 674 (Whitaker Farm Road) to access this site. A sight distance assessment was not performed at this entrance as the existing Route 683 continues into the site until the end of state maintenance, approximately 1.0 miles to the northeast; there is no intersection. The northern portion of Route 683 within the site is a gravel road that is approximately 12' to 14' wide.

Photos Route 683 in the vicinity of Site Entrance #2 can be found in Figure 19.

#### TRAFFIC MITIGATION

Throughout construction of the site, RWE Renewables Americas, LLC will coordinate with the representatives from Buckingham County and VDOT to determine appropriate transportation management procedures which may include, but are not limited to, traffic control, road access restrictions, truck restrictions, and temporary/short-term road closures.

Based on the existing roadway conditions, the locations for proposed access points, and the available average daily traffic numbers for the agreed up access roads, the anticipated construction traffic volumes will not exceed available roadway capacities; the roadways should not be significantly impacted by standard construction traffic. During operation and maintenance, the facility will not generate a significant volume of traffic with the anticipation of only a few pickup trucks each day.

Construction-related traffic will access the Blue Rock Solar site via state-maintained roadways. Given the existing posted speeds and anticipated slower entering/exiting traffic, temporary traffic control (TTC) measures may be necessary. Pertinent signage should be installed prior to the site preparation work and removed when mechanical/electrical work/inspections begin. It is not anticipated that daily vehicular traffic following construction will disrupt local traffic flows during normal peak hours.

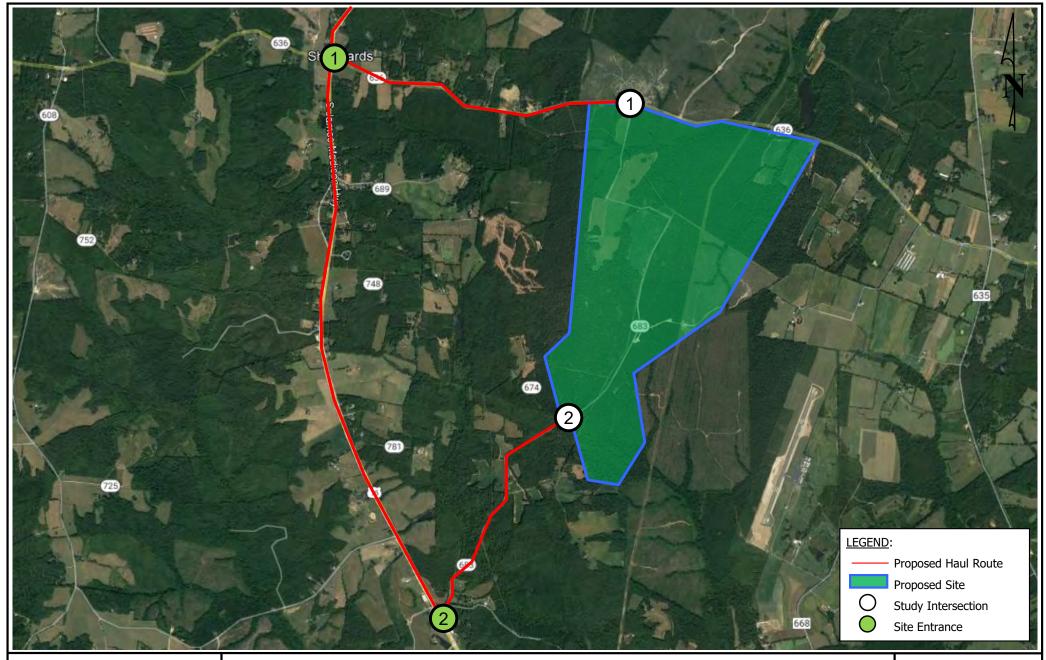
Outside of the previously noted mitigation efforts, should a traffic issue arise during construction, RWE Renewables Americas, LLC will work the County and VDOT appropriately address the specific concern.

#### 4 **CONCLUSIONS**

Based on our review of the available data relating to the site, existing conditions, and estimated traffic, the following is offered:

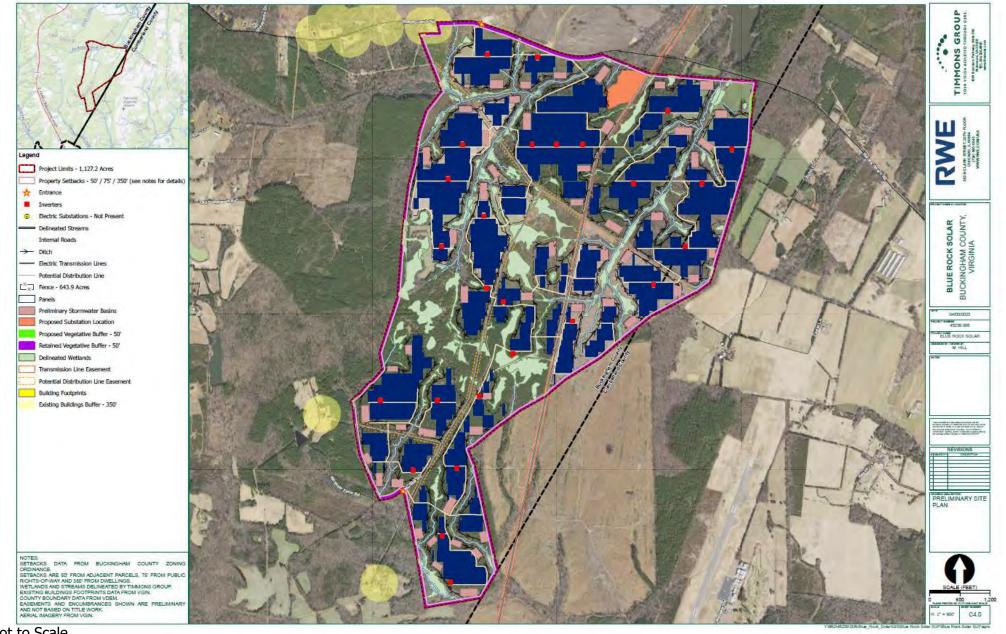
- The proposed Blue Rock Solar Site is located northwest of the Town of Farmville in Buckingham County, Virginia (see Figures 1 and 2).
- Access to the sites will be provided via US Route 15 (South James Madison Highway), Route 636 (Stage Coach Road), and Route 683 (Mohele Road).
- Each of the three (3) previously mentioned roadway facilities have the available capacity to accommodate site generated traffic, both during construction and operations/maintenance activities based on existing ADTs.
- Assuming site-traffic is focused on US Route 15, Route 636, and Route 683, no improvements
  are necessary/anticipated to accommodate site-generated traffic. However, the potential
  exists for temporary traffic control measures to be implemented for the duration of the site
  preparation/construction phase.

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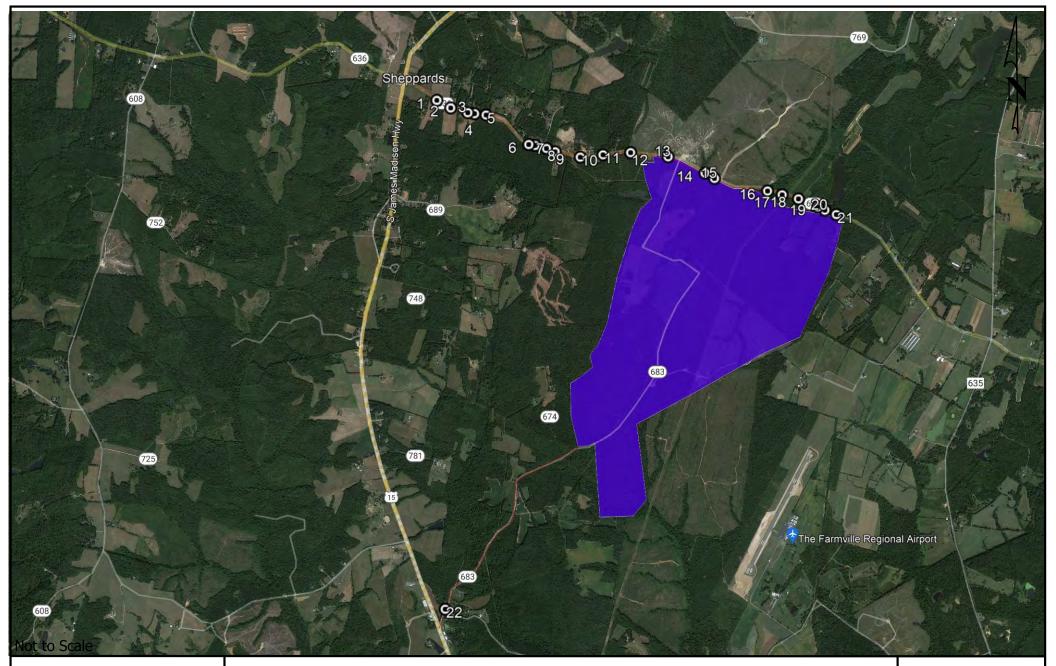
Surrounding Roadway Network and Site Location Blue Rock Solar Buckingham County, Virginia



Not to Scale



Concept Site Plan Blue Rock Solar Buckingham County, Virginia





Map of Pavement Deficiencies Blue Rock Solar Buckingham County, Virginia



1. Potholes and Cracking



2. Potholes



3. Potholes



4. Potholes





5. Longitudinal Cracking



6. Edge Raveling



7. Edge Raveling



8. Potholes





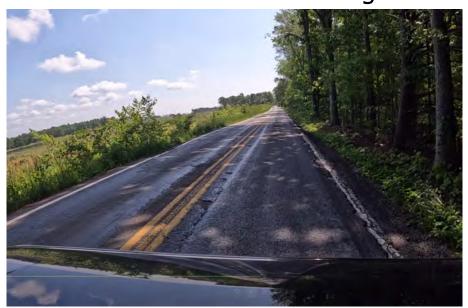
9. Potholes and Cracking



11. Potholes and Patching



10. Potholes and Patching



12. Potholes and Edge Raveling



Figure

6



13. Bleeding and Patching



15. Block Cracking



14. Potholes



16. Potholes and Patching





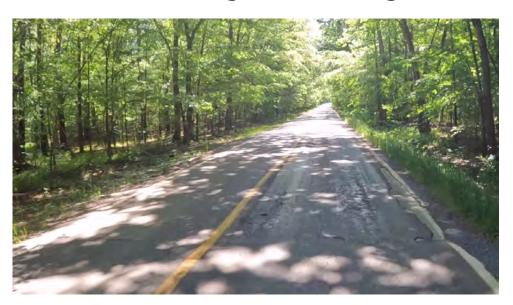
17. Patching



19.Longitudnal Cracking



18. Patching and Bleeding



20. Patching and Edge Raveling





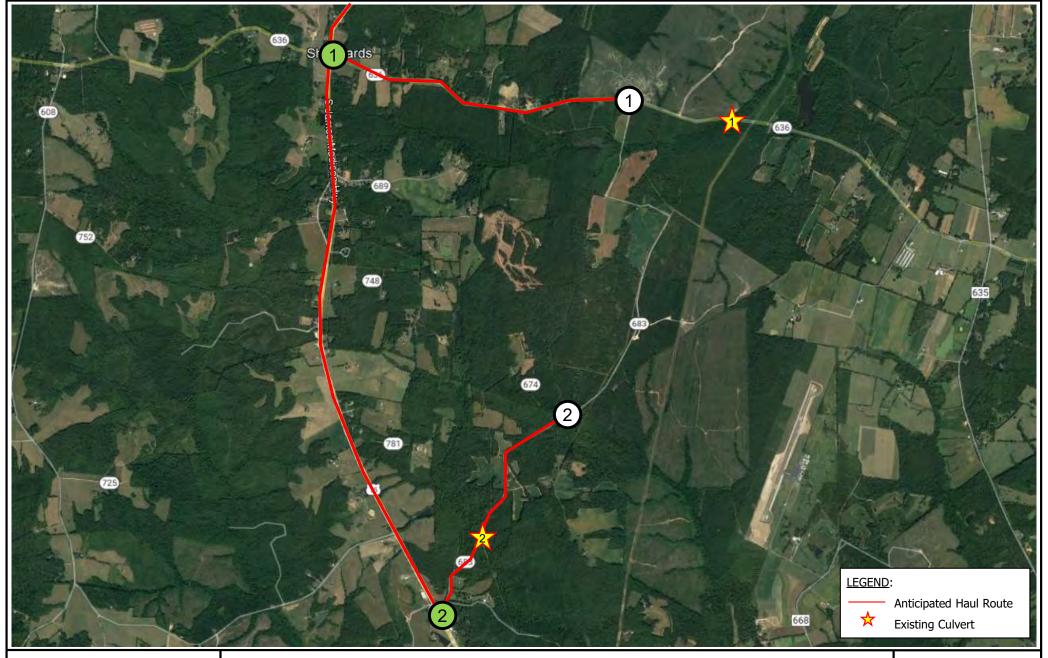
21. Potholes and Patching



22. Pothole (Route 683)



Pavement Deficiencies on Route 636 & Route 683 Blue Rock Solar Buckingham County, Virginia





Location of Existing Structures
Blue Rock Solar
Buckingham County, Virginia



Culvert East of Site Entrance #1 on Route 636





Existing Structure East of Site Entrance #1 – Route 636 Blue Rock Solar Buckingham County, Virginia



Culvert Along Haul Route on Route 683



# North along Route 683







Existing Structure on Haul Route – Route 683 Blue Rock Solar Buckingham County, Virginia







West along Route 636



North along Route 15



South along Route 15



Intersection #1 – US Route 15 and Route 636 Blue Rock Solar Buckingham County, Virginia





North along Route 15



East along Route 683



South along Route 15



Intersection #2 – US Route 15 and Route 683
Blue Rock Solar
Buckingham County, Virginia

Figure

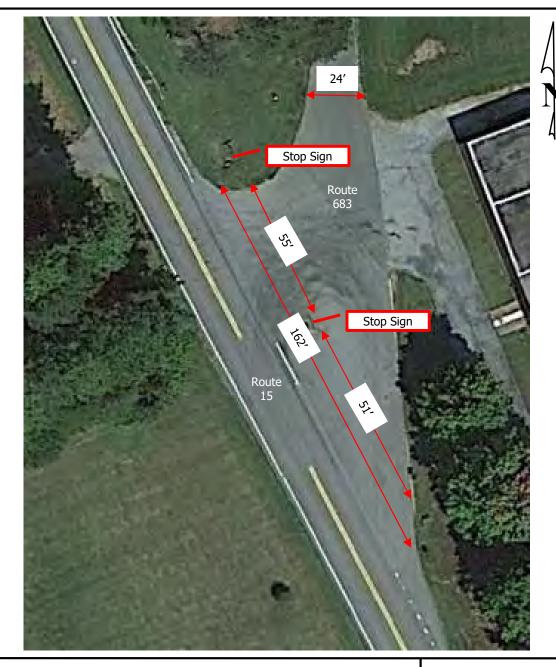
14



South along Route 15

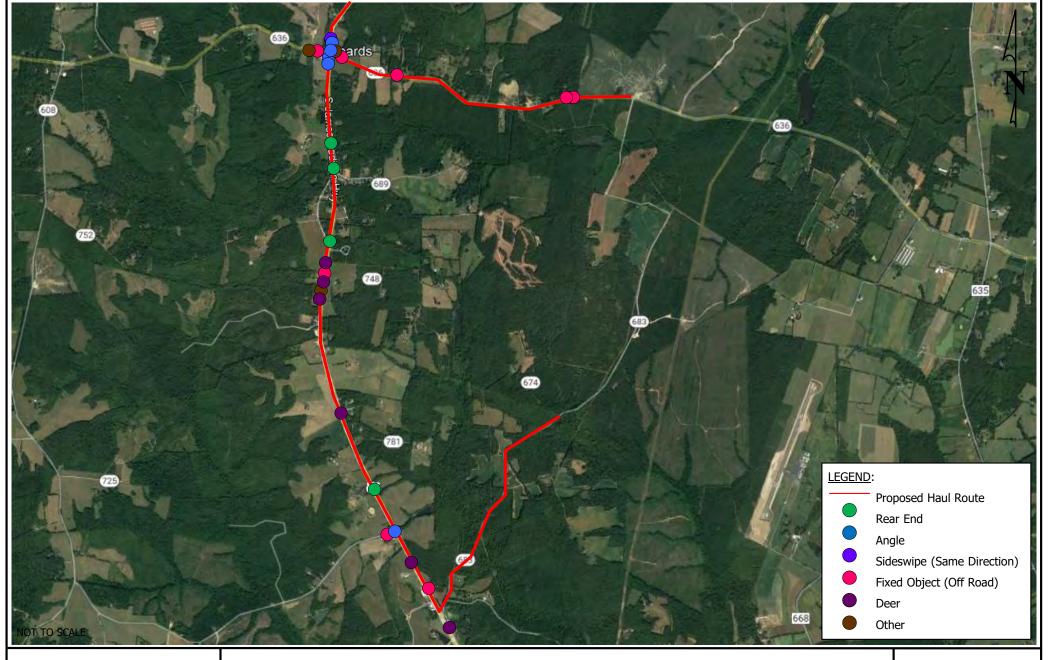


North along Route 15



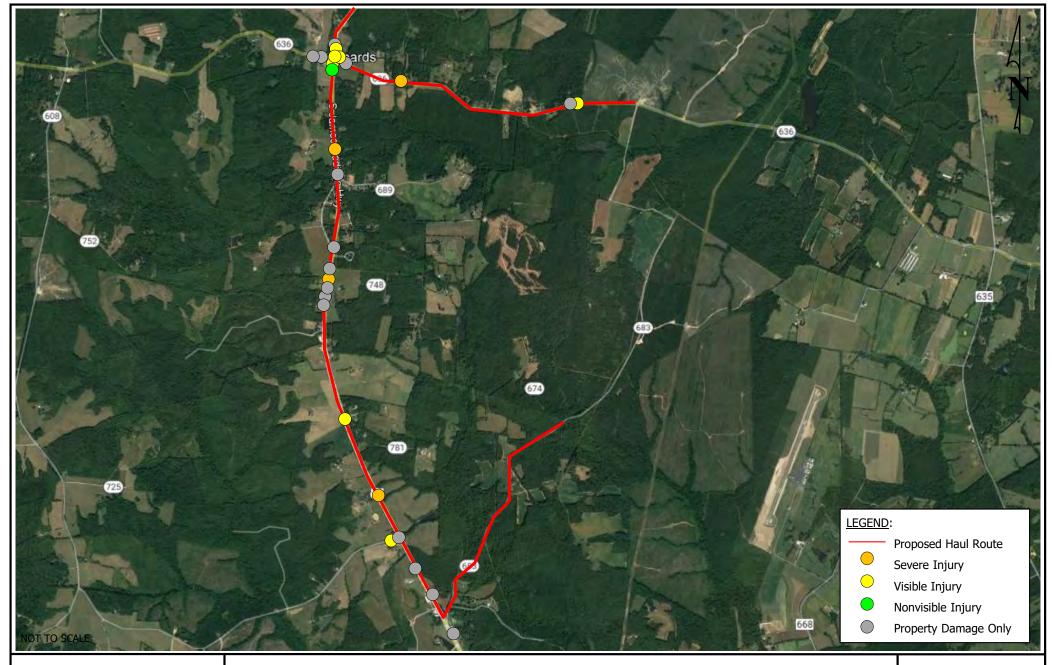


Intersection #2 – Mohele Road Diagram Blue Rock Solar Buckingham County, Virginia





Crash Map — Crash Type Blue Rock Solar Buckingham County, Virginia





Crash Map – Crash Severity Blue Rock Solar Buckingham County, Virginia



Site Entrance #1





East along Route 636



West along Route 636



Site Entrance #1 - Route 636 (Stage Coach Road)
Blue Rock Solar
Buckingham County, Virginia



Site Entrance #2





North along Route 683

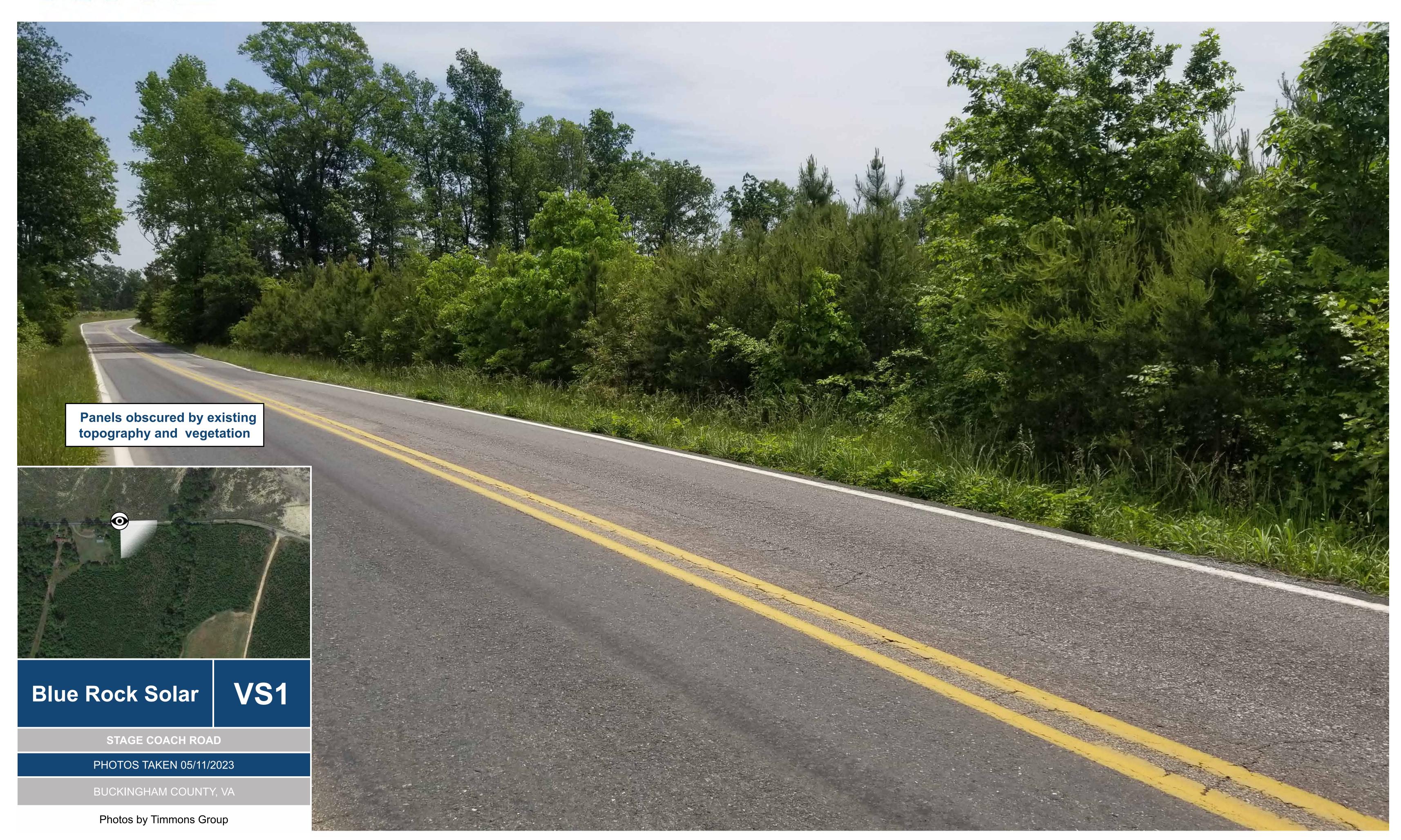


South along Route 683



Site Entrance #2 - Route 683 (Mohele Road)
Blue Rock Solar
Buckingham County, Virginia

## **10 VISUALIZATIONS**













# 11 DECOMMISSIONING PLAN



# **Blue Rock Solar**

Decommissioning Plan

Buckingham and Cumberland Counties,

Date: 5/30/2023

Virginia

This cost estimate was not based on detailed construction drawings but is typical for a project of this size and type. The listed equipment quantities are subject to change based on the actual installed facilities.

**Prepared For:** 





# Blue Rock Solar Decommissioning Plan

CLIENT NAME	Blue Rock Solar, LLC
PROJECT NAME	Blue Rock Solar
LOCATION	Buckingham and Cumberland Counties, VA
PROJECT	Solar PV Electric Generating Facility

Rev.	Date	Description	Prepared	Checked	Approved
0	5/30/2023	Released for Client Use	NBF	KJ	LW





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### 1 Introduction

Blue Rock Solar, LLC (Hereinafter referred to as "Blue Rock") is proposing to construct an up to 100 MWac solar photovoltaic (PV) electric generating facility in Buckingham and Cumberland Counties, Virginia (Facility). The facility will span approximately 717.7 acres and will connect to the 115 kV electrical grid at a switchyard located within the project site. The switchyard and the interconnecting high voltage transmission line, crossing the Project site, is owned and operated by the Interconnecting Utility and will not be decommissioned. The operational life of the Facility is anticipated to be approximately 40 years. This Decommissioning Methodology (Plan) describes the procedures associated with decommissioning the Facility and has been created to support the Facility's application in seeking a Special Use Permit.

Within 12 months of initiating the decommissioning, the Project Owner will safely have the relevant components removed from the land and will then restore the site as described below.

This Plan lays out the procedures for restoring the site to its original use, based on the recent historical land use of the property or other economical land uses as desired by the relevant landowner, at the end of the Facility's operational life. The Plan describes procedures for the removal of Facility components. The components of the Facility are described in detail in the Appendix A.

# 2 Project Components

Appendix A provides detailed information regarding the anticipated location and description of the Facility components. The Facility generally consists of the equipment and infrastructure listed below:

- Steel Piers and Racking
- PV Panels
- Inverters
- Electrical Collection Lines
- Access Roads
- Fencing, Gating, and Safety Features
- Operations and Maintenance (O&M) Building (TBD)
- Weather Stations
- · Gen-tie Transmission Line
- Collector Substation

# 3 Regulatory Compliance

Prior to the commencement of decommissioning, Blue Rock will perform the appropriate due diligence requirements and obtain the necessary approvals from Buckingham County, Cumberland County, the state, and federal agencies to complete decommissioning activities. To mitigate any environmental impact from decommissioning, Blue Rock will assess the necessary permits and approvals in the future regulatory environment to maintain regulatory compliance. Anticipated types of evaluations may include the following:





- Review of on-site jurisdictional status and potential impacts to wetlands and waterbodies to comply with the Clean Water Act.
- Consultation with the United States Fish and Wildlife Service to evaluate compliance with the Endangered Species Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and any other relevant regulations at the time of decommissioning.
- Consultation with the Virginia Department of Environmental Quality for compliance with any pertinent state regulatory requirements.
- Completion of a Phase I Environmental Site Assessment in support of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) protection.
- Development and implementation of a Stormwater Pollution Prevention Plan (SWPPP).
- Buckingham, Cumberland Counties building, road, discharge, or erosion control permits (as necessary).
- Special state or local hauling permits (as necessary).

# 4 Decommissioning

The Project will be decommissioned at the end of its useful life. The Project is presumed to be at the end of its useful life if the facility generates no electricity for a continuous period of 12 months. At least 40 days prior to the commencement of decommissioning activities, Blue Rock will notify the Buckingham County and Cumberland County officials. The following general decommissioning activities will occur.

Once the solar facility has been removed, it is expected that the site will be returned to as close to its original condition as possible. Some minor grading may be required; topsoil (if removed) will be reapplied to allow for reseeding and growth. Site restoration will occur no more than twelve (12) months after notification of decommissioning.

The following general decommissioning activities will occur:

#### **Decommissioning Sequence:**

- 1. Obtain required site permits from Authority Having Jurisdiction (AHJ)
- 2. Disconnect all utility grid power
- 3. Move all disconnects to the off position
- 4. Disconnect all above ground wirings, cables, and electrical connections
- 5. Remove all PV Modules
- 6. Remove Inverters, mounting equipment, and posts
- 7. Remove all electrical equipment, and their foundations
- 8. Remove DAS equipment, feeders, and conduit





- Remove all above ground mounting equipment components and posts
- 10. Excavate and remove Underground feeders and conduit
- 11. Remove all MV feeders and utility poles
- 12. Remove access road
- 13. Remove all fencing
- 14. Fill/Grade/Seed as needed

Some components may be left in place under certain circumstances. Electrical lines that will not impact future use of the Project Area or Substation foundation (at least 3 feet in depth) may be left in place per renewable industry practices. Steel piles, where full removal is unattainable, may be cut and left in place at a depth of 3 feet or greater below the ground surface. Additionally, landowners may desire that private access roads and/or stormwater facilities remain in place for their use. County Line will obtain a written request from the landowner for a road or structure (such as the stormwater features) to remain in place.

# 5 Materials, Recycling, and Disposal

Many components of the Facility, such as racking, wiring, piles, and panels, retain value over time. Panels, while slightly less efficient, may be reused elsewhere, or components may be broken down and recycled. Recycling of solar panels and equipment is rapidly evolving and can be handled through a combination of sources such as certain manufacturers, PV Cycle (an international waste program founded by and for the PV industry), or waste management companies. More than 90 percent of the semiconductor material and glass can be reused in new modules and products. Other waste materials that hold no value will be recycled or disposed of via a licensed solid waste disposal facility. If recycling of solar panels is not feasible, disposal will be accomplished in accordance with AHJ requirements, and the salvage value will be adjusted.

# 6 Site Restoration

Following the completion of decommissioning activities, it is anticipated that the site will primarily be converted back to the pre-construction land uses. Decommissioning of the Facility, including the removal of materials followed by site restoration, should be completed in approximately 12 months.





# 7 Decommissioning Cost Estimate

# 7.1 OPINION OF PROBABLE DECOMMISSIONING COST

Detailed Project Description: Blue Rock Solar is a 100 MWac in Buckingham and Cumberland Counties, Virginia. At: 37.375980, -78.451625

Table 7-1: Estimated Decommissioning Cost:

PV Module Removal	QUANTITY	UNITS	Unit Cost	Total	Comment
# Solar Panels - 550W	223,640	EA	\$5	\$1,118,200	Disassembly, Haul off-site
SUBTOTAL				\$1,118,200	
Foundations Structural Removal	QUANTITY	UNITS	<b>Unit Cost</b>	Total	Comment
# Panel Support Steel Piles	26,740	EA	\$12	\$320,880	Disassembly, Haul off-site
# Panel Racks	8,283	EA	\$200	\$1,656,600	Disassembly, Haul off-site
SUBTOTAL				\$1,977,480	
Electrical Equipment Removal	QUANTITY	UNITS	<b>Unit Cost</b>	Total	Comment
Inverter - 4.0 MW	26	EA	\$1,000	\$26,000	Disassembly, Haul off-site
MV Transformers, 4.2 KVA	26	EA	\$3,500	\$91,000	Disassembly, Haul off-site
Tracker Motor	150	EA	\$15	\$2,250	Disassembly, Haul off-site
SUBTOTAL				\$119,250	
Electrical Wires Removal	QUANTITY	UNITS	<b>Unit Cost</b>	Total	Comment
MV Conductor (10% removal)	112500	FT	\$35	\$393,750	Removal, Excavation
DC/LC Conductor	220,000	FT	\$1	\$220,000	Removal, Non-Excavation
SUBTOTAL				\$613,750	
Collector Substation Removal	QUANTITY	UNITS	<b>Unit Cost</b>	Total	Comment
Collector Substation Removal Circuit Breakers 34.5 kV	QUANTITY 3	UNITS EA	Unit Cost \$9,500	<b>Total</b> \$28,500	Comment Disassembly, Haul off-site
Circuit Breakers 34.5 kV	3	EA	\$9,500	\$28,500	Disassembly, Haul off-site
Circuit Breakers 34.5 kV HV Circuit Breakers 115 kV Substation Steel Foundation/Fence	3	EA EA	\$9,500 \$12,500	\$28,500 \$10,000	Disassembly, Haul off-site Disassembly, Haul off-site
Circuit Breakers 34.5 kV HV Circuit Breakers 115 kV Substation Steel	3 1 1	EA EA LOT	\$9,500 \$12,500 \$250,000	\$28,500 \$10,000 \$250,000	Disassembly, Haul off-site Disassembly, Haul off-site Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5	3 1 1 1	EA EA LOT LOT	\$9,500 \$12,500 \$250,000 \$125,000	\$28,500 \$10,000 \$250,000 \$125,000	Disassembly, Haul off-site Disassembly, Haul off-site Disassembly, Haul off-site Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5 kV 78/104/130	3 1 1 1 1	EA EA LOT LOT	\$9,500 \$12,500 \$250,000 \$125,000 \$75,000	\$28,500 \$10,000 \$250,000 \$125,000 \$75,000	Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5 kV 78/104/130  Substation Control House	3 1 1 1 1 1	EA EA LOT LOT EA EA	\$9,500 \$12,500 \$250,000 \$125,000 \$75,000 \$45,000	\$28,500 \$10,000 \$250,000 \$125,000 \$75,000 \$45,000	Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5 kV 78/104/130  Substation Control House  Capacitor Bank (final TBD)	3 1 1 1 1 1	EA EA LOT LOT EA EA	\$9,500 \$12,500 \$250,000 \$125,000 \$75,000 \$45,000	\$28,500 \$10,000 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000	Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5 kV 78/104/130  Substation Control House  Capacitor Bank (final TBD)  SUBTOTAL  Fence/land, Removal/Restoration  Fence Perimeter	3 1 1 1 1 1	EA EA LOT LOT EA EA EA	\$9,500 \$12,500 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000	\$28,500 \$10,000 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000 \$568,500	Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5 kV 78/104/130  Substation Control House  Capacitor Bank (final TBD)  SUBTOTAL  Fence/land, Removal/Restoration	3 1 1 1 1 1 1 QUANTITY	EA EA LOT LOT EA EA UNITS	\$9,500 \$12,500 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000	\$28,500 \$10,000 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000 \$568,500	Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5 kV 78/104/130  Substation Control House  Capacitor Bank (final TBD)  SUBTOTAL  Fence/land, Removal/Restoration  Fence Perimeter  Civil Site Remediation (disturbed area)  Storm Water Management Ponds	3 1 1 1 1 1 1 QUANTITY 140,560	EA EA LOT LOT EA EA EA FT	\$9,500 \$12,500 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000 <b>Unit Cost</b> \$1	\$28,500 \$10,000 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000 \$568,500 <b>Total</b> \$140,560	Disassembly, Haul off-site  Comment Disassembly, Haul off-site
Circuit Breakers 34.5 kV  HV Circuit Breakers 115 kV  Substation Steel  Foundation/Fence  Main Power Transformers 115 - 34.5 kV 78/104/130  Substation Control House  Capacitor Bank (final TBD)  SUBTOTAL  Fence/land, Removal/Restoration  Fence Perimeter  Civil Site Remediation (disturbed area)	3 1 1 1 1 1 1 1 1 QUANTITY 140,560 717.2	EA EA LOT LOT EA EA FT Acre	\$9,500 \$12,500 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000 <b>Unit Cost</b> \$1	\$28,500 \$10,000 \$250,000 \$125,000 \$75,000 \$45,000 \$35,000 \$568,500 <b>Total</b> \$140,560 \$3,586,000	Disassembly, Haul off-site Restoration and Seeding





Summary of Cost Estimates	
PV Module Removal	\$1,118,200
Foundations Structural Removal	\$1,977,480
Electrical Equipment Removal	\$119,250
Electrical Wires Removal	\$613,750
Collector Substation Removal	\$568,500
Fence/land, Removal/Restoration	\$4,175,560
ESTIMATED GRAND TOTAL	\$8,572,740

### **Data Sources:**

- 1. Material List and Quantities: Based on schematic design.
- 2. Unit Price Values: Based on R.S. Means and typical quantities for various components.

### 7.2 OPINION OF PROBABLE SALVAGE VALUE COST

There should be opportunity to reclaim metal scrap value from electrical equipment. Switching equipment and collector system contain a significant amount of conductive material such as copper and aluminum. Steel structures contain a significant amount of steel. Rubble from the foundation demolition and all other materials would be sent to landfill at cost. The scrap value of the Project is presented in Table 7-2.

Table 7-2 Estimated Salvage Value:

PV Module (At: \$.33/W before Removal and Hauling)	QUANTITY	UNITS	Estimated New Cost/Unit	Estimated New Total Cost	Estimated Salvage Value 10% of New Cost
# Solar Panels 550W @ \$.33/W =\$180less	223,640	EA	\$180.00	\$40,255,200	\$4,025,520
SUBTOTAL					\$4,025,520
Foundations Structural (at:\$ .20/LB after Removal and Hauling)	QUANTITY	UNITS	Estimated Weight LB.	Estimated Salvage Value	Estimated Salvage Value
# Panel Support Steel Piles	26,740	EA	100	\$0.20	\$534,800.00
# Panel Racks	8,283	EA	1,000	\$0.20	\$1,656,600.00
SUBTOTAL					\$2,191,400.00
Electrical Equipment	QUANTITY	UNITS	Estimated New Cost/Unit	Estimated New Total Cost	Estimated Salvage Value 20% of New Cost
MV Transformers: 4,200 kVA	26	EA	\$115,500	\$3,003,000	\$600,600
					\$600,600





Electrical Collector Substation	QUANTITY	UNITS	Estimated New Cost/Unit	Estimated New Total Cost	Estimated Salvage Value 20% of New Cost
Circuit Breakers 34.5 kV	3	EA	\$55,000	\$165,000	\$33,000
HV Circuit Breakers 115 kV	1	EA	\$120,000	\$120,000	\$24,000
Substation Steel	1	LOT	\$1,900,000	\$1,900,000	\$380,000
Foundation/Trench/Conduit/Cable*	1	LOT	\$250,000	\$250,000	\$50,000
Main Power Transformers 115 - 34.5 kV 78/104/130	1	EA	\$2,000,000	\$2,000,000	\$400,000
Substation Control House	1	EA	\$800,000	\$800,000	\$160,000
Capacitor Bank (final TBD)	1	EA	\$450,000	\$450,000	\$90,000
SUBTOTAL				\$5,685,000	\$1,137,000
			Estimated	Estimated	Estimated
Electrical Wires/cables	QUANTITY	UNITS	New Cost/Unit	New Total Cost	Salvage Value 10% of New Cost
Electrical Wires/cables  MV Conductor (only 10% of total)	<b>QUANTITY</b> 112,500	UNITS	New	New Total	10% of New
			New Cost/Unit	New Total Cost	10% of New Cost
MV Conductor (only 10% of total)	112,500	FT	New Cost/Unit \$35	New Total Cost \$3,937,500	10% of New Cost \$393,750 \$110,000 \$503,750
MV Conductor (only 10% of total) DC/LC Conductor	112,500	FT	New Cost/Unit \$35	New Total Cost \$3,937,500	10% of New Cost \$393,750 \$110,000
MV Conductor (only 10% of total)  DC/LC Conductor  SUBTOTAL	112,500 220,000	FT FT	New Cost/Unit \$35 \$5	New Total Cost \$3,937,500 \$1,100,000 Estimated Salvage	10% of New Cost \$393,750 \$110,000 \$503,750 Estimated Salvage Value/Including
MV Conductor (only 10% of total)  DC/LC Conductor  SUBTOTAL  Fence  Fence Perimeter (1.3 lb. per square ft, 6ft	112,500 220,000 QUANTITY	FT FT UNITS	New Cost/Unit \$35 \$5 Estimated Weight LB.	New Total Cost \$3,937,500 \$1,100,000 Estimated Salvage Value	10% of New Cost \$393,750 \$110,000 \$503,750 Estimated Salvage Value/Including Removal

Summary of Salvage Values Estimate				
PV Module	\$4,025,520			
Foundations Structural	\$2,191,400			
Electrical Equipment	\$600,600			
Electrical Wires	\$1,137,000			
Electrical Collector Substation	\$503,750			
Fence	\$278,777			
ESTIMATED GRAND TOTAL	\$8,737,047			

# 7.3 NET DECOMMISSIONING COST

The net decommissioning cost for the Project is calculated by subtracting the salvage value from the total of the disassembly and removal costs. As noted in Table 7-1 the total estimated decommissioning costs will be \$8,572,740 and Table 7-2 the total estimated salvage value of Project components will be \$8,737,047. The estimated net decommissioning cost will be a (\$164,307) positive return.





Summary of Estimate	
Estimated Decommissioning Cost	\$8,572,740
Estimated Salvage Value	\$8,737,047
ESTIMATED NET COST	(\$164,307)
Note: Negative values, in parenthesis, is positive	e returns to the Project.

#### Note:

Final decision if the Estimated Salvage Value will be credited in calculating the appropriate escrow, surety, or security for the cost of the decommissioning and reclamation of the project is Subject to Buckingham and Cumberland Counties' approval.

#### 7.4 DECOMMISSIONING ASSUMPTIONS

To develop a cost estimate for the decommissioning of the Blue Rock Solar Project, Timmons Group made the following assumptions and costs were estimated based on current pricing, technology, and regulatory requirements. The assumptions are listed in order from top to bottom of the estimate spreadsheet. We developed time and materials-based estimates considering composition of work crews. When materials have a salvage value at the end of the project life, the construction activity costs, and the hauling/freight cost are separated from the disposal costs or salvage value to make revisions to salvage values more transparent.

- 1. Decommissioning year is based on a 10-year initial period for the financial security. The projected life of the project is 40 years.
- 2. This Cost Estimate is based on the Timmons Group data request forwarded May, 2023.
- 3. Common labor will be used for the majority of the tasks except for heavy equipment operation. Pricing is based on local Southeast US labor rates.
- 4. Permit applications required include the preparation of a Stormwater Pollution Protection Plan (SWPPP) and a Spill Prevention Control and Countermeasure (SPCC) Plan.
- 5. Road gravel removal was estimated on a time and material basis using a 16-foot width and an 8-inch thickness for the access roads. Substation aggregate is included in the substation quantities. Since the material will not remain on site, a hauling cost is added to the removal cost. Road aggregate can often be disposed of by giving to landowners for use on driveways and parking areas. Many landfills will accept clean aggregate for use as "daily cover" and do not charge for the disposal.
- 6. Grade Road Corridor reflects the cost of mobilizing and operating light equipment to spread and smooth the topsoil stockpiled on site to replace the aggregate removed from the road.
- 7. Erosion and sediment control along road reflects the cost of silt fence on the downhill side of the road and surrounding all on-site wetlands.





- 8. Topsoil is required to be stockpiled on site during construction, therefore this topsoil is available on site to replace the road aggregate, once removed. Subsoiling cost to decompact roadway areas is estimated as \$1,000 per acre (based on previous bid prices), and revegetation on removed road area, which includes seed, fertilizer, lime, and care until vegetation is established is \$4,000 per acre. The majority of the project area is "overseeded" since the decommissioning activities are not expected to eliminate the existing grasses and vegetation under the arrays or heavily compact the soils. Over-seeding does not include fertilizer and lime and is estimated at \$5,000 per acre.
- 9. Fence removal includes loading, hauling, and recycling or disposal. Fences and posts weigh approximately 2.3 pounds per foot.
- 10. Array support posts are generally lightweight "I" beam sections installed with a piece of specialized tracked equipment. Crew productivity is approximately 240 posts per day, and the same crew and equipment should have a similar productivity removing the posts, resulting in a per post cost of approximately \$15. We assume a cost of \$12.00 per post to include hauling fees and contingencies.
- 11. A metal recycling facility (FEA Salvage and Recycling) is located in Orange, Virginia and is relatively close to the project site. Steel scrap pricing was acquired from www.scrapmonster.com.
- 12. The solar panels rated 550 watts can easily be disconnected, removed, and packed by a three-person crew at a rate we estimate at 12 panels per hour.
- 13. No topsoil is planned to be removed from the site during decommissioning and most of the site will not have been compacted by heavy truck or equipment traffic, so the site turf establishment cost is based on RS Means unit prices for applying lime, fertilizer, and seed at the price of per acre plus an allowance for some areas to be decompacted.
- 14. There is an active market for reselling and recycling electrical transformers and inverters with several national companies specializing in recycling. We have assumed a 20% recovery of these units based on field experience with used transformers as opposed to trying to break them down into raw material components.
- 15. The underground collection lines are assumed to be aluminum conductor.
- 16. Care to prevent damage and breakage of equipment, PV modules, inverters, capacitors, and SCADA will be exercised, but removal assumes unskilled common labor under supervision.

The estimated salvage values are derived from years of experience decommissioning and uprating electric substations, overhead transmission and distribution hardware and underground distribution hardware that would include but not be limited to substation and pad mounted transformers, overhead and underground conductors, poles, fencing, ground grid conductors, control housings, circuit breakers (high and medium voltage), protective relaying, and other hardware items. These individual items have high salvage value either as stand-alone components to be reused or recycled and sold as used items. These items also have a relatively high salvage value as pure scrap for steel, copper and other commodities.

For all medium voltage transformers, breakers and other items, Southeastern Transformer Company in Dunn, NC provides complete repair, upgrading and recycling and resale for all items mentioned above. Their website is: <a href="https://www.setransformer.com">https://www.setransformer.com</a>. They have a national presence.





For any and all recycling and upgrading, Solomon Corporation offers the same set of services for transformer repair and recycling and complete substation decommissioning services. With seven different locations, Solomon is one of several vendors that can decommission and recycle the components as noted above. Their website is: <a href="https://www.solomoncorp.com/">https://www.solomoncorp.com/</a>. Solomon Corporation is only one of many transmission and distribution recycle and decommissioning shops that do this mainly to harvest the components.

For recycling conductor, General Cable and Southwire both utilize extensive scrap procurement programs to reuse copper and aluminum conductor harvested from projects such as this one to supplement and reduce their raw material costs.

Here is the link to the General Cable program which only increases the salvage values found in this Plan: General Cable Recycling <a href="https://es.generalcable.com/na/us-can/socialresponsibility/sustainability/recycling">https://es.generalcable.com/na/us-can/socialresponsibility/sustainability/recycling</a>

As for solar panels, they are in demand as salvageable items either in whole or for their raw material. According to the International Renewable Energy Agency (IRENA), more than 90% of all the materials are high grade silicon, aluminum and glass and are typically harvested to produce new panels. This is far less expensive than buying unprocessed raw materials for production.

The base industry assumption is that since solar panels are expected to retain about 75% of their production capability after 40 years of use, a salvage value of 10% of original cost is a low estimate of their expected value and as we note in assumption. This considers possible technology improvements and undervalues the anticipated salvage value of the panel's raw materials. The Solar Energy Industries Association (SEIA) has an approved set of PV recycling vendors that specialize in doing this today and they can be found at: <a href="https://www.seia.org/initiatives/seia-national-pv-recycling-program">https://www.seia.org/initiatives/seia-national-pv-recycling-program</a>.

First Solar, which has been active in the solar industry since its inception, takes solar modules and recycles 90% of the semiconductor material which is then reused in new modules. 90% of the glass product can be reused as new glass products, including panels and fiber optic cable. We can conclude that realistically the estimated 20% salvage value is low and reflects a conservative figure. Information about First Solar's recycling program is at: <a href="http://www.firstsolar.com/en/Modules/Recycling">http://www.firstsolar.com/en/Modules/Recycling</a>.

# 8 Financial Assurance

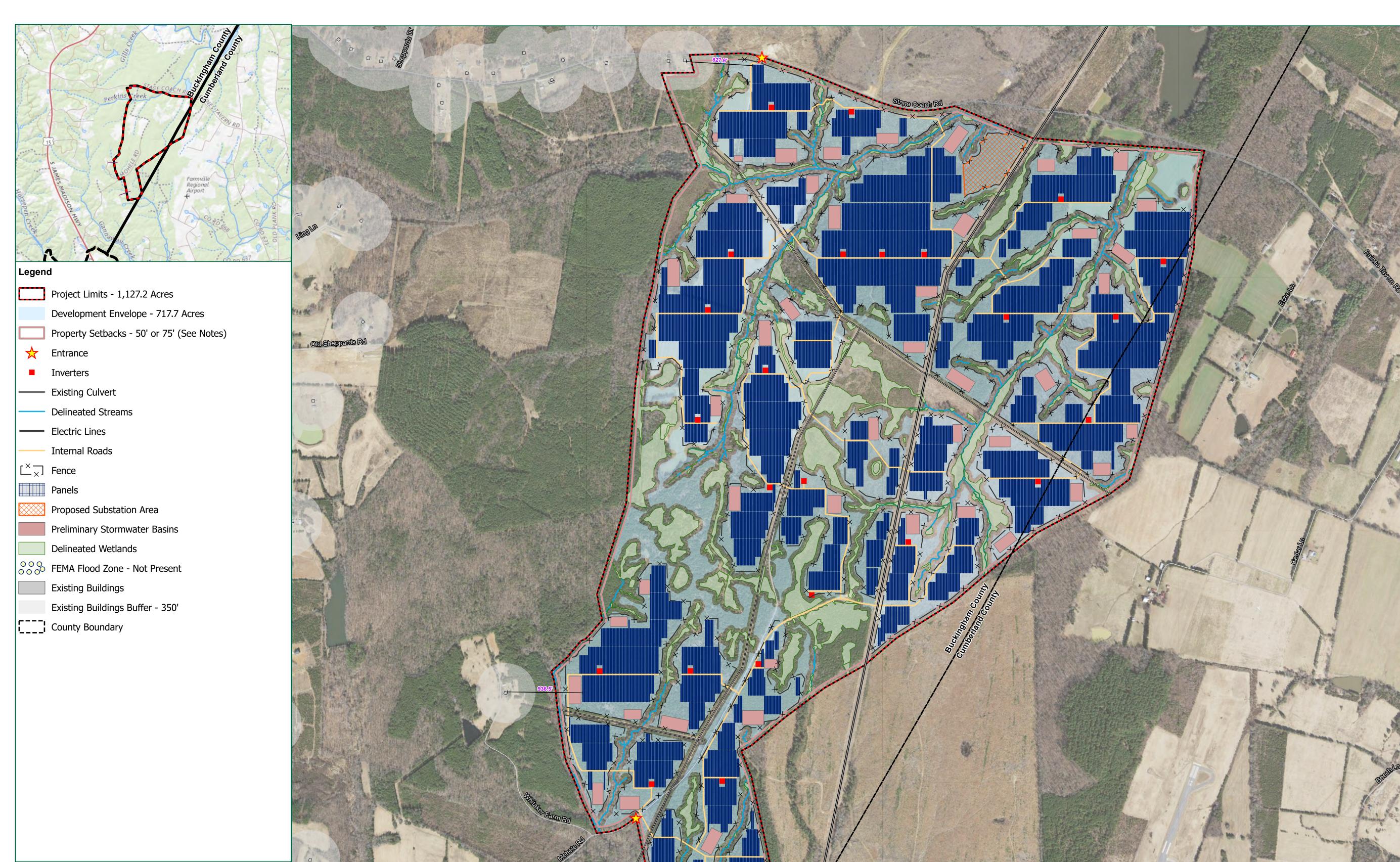
Blue Rock will post a financial surety with Buckingham and Cumberland Counties as the obligee that is equal to the net cost of decommissioning the facility (decommissioning costs). Based on industry trends, the projected and actual costs of decommissioning are expected to go down over time based on improvements both to best practices in calculating these costs and the decommissioning process itself. Blue Rock will reevaluate decommissioning costs with a qualified engineering consultant every five years during the life of the Project.





# Appendix A – Site Plan





NOTES:

LAYOUT IS SUBJECT TO CHANGE WITHIN THE DEVELOPMENT ENVELOPE. THE DEVELOPMENT FOOTPRINT INCLUDES ALL AREAS OUTSIDE OF REQUIRED PROPERTY SETBACKS, FEMA

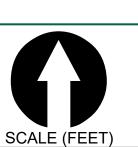
FLOODPLAIN, AND DELINEATED WETLANDS AND STREAMS, ASIDE FROM PERPENDICULAR ROAD CROSSINGS WHERE NECESSARY. MAXIMUM HEIGHT OF EQUIPMENT IS 20'.

SETBACKS DATA FROM BUCKINGHAM COUNTY ZONING ORDINANCE.

SETBACKS ARE 50' FROM ADJACENT PARCELS, 75' FROM PUBLIC RIGHTS-OF-WAY AND 350' FROM DWELLINGS.
WETLANDS AND STREAMS DELINEATED BY TIMMONS GROUP.
EXISTING BUILDINGS FOOTPRINTS DATA FROM VGIN.

COUNTY BOUNDARY DATA FROM VDEM.
EASEMENTS AND ENCUMBRANCES SHOWN ARE PRELIMINARY
AND NOT BASED ON TITLE WORK.

AERIAL IMAGERY FROM VGIN.



PROJECT NAME & LOCATION

BLUE ROCK SOLAR
BUCKINGHAM COUNTY,
VIRGINIA

05/17/2023

45239.006

REVISIONS

PRELIMINARY SITE

PLAN

PROJECT NAME BLUE ROCK SOLAR

SCALE (FEET)

0 600 1,20

PLANS PRINTED AS 11X17 ARE HALF SCALE

SCALE SHEET NUMBER

H: 1" = 600' C4.0

Y:\852\45239.006-Blue\_Rock\_Solar\GIS\Blue Rock Solar SUP\Blue Rock Solar SUP.aprx

# 12 Erosion & Sediment Control Plan

An Erosion and Sediment Control Plan, developed in accordance with the Erosion and Sediment Control Ordinance of Buckingham and Virginia Erosion and Sediment Control Law, will be submitted to the County for review and approval 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, Applicant will contact the County's erosion and sediment control reviewer and use reasonable efforts to arrange a meeting on the Property with RWE's engineer.

During the construction of the Project, Applicant will agree to 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 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.
- 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 int eh Phase should be recorded along with stabilization areas.

A stormwater Management Plan will be submitted to the Virginia Department of Environmental Quality (VDEQ) and approved by the VDEQ prior to any land disturbance. RWE will obtain approval of a Stormwater Pollution Prevention Plan ("SWPPP"). Applicant and its contractor will have operational day-to-day control of the Project and must implement the SWPPP measures. 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.

# 13 ECONOMIC AND FISCAL CONTRIBUTION REPORT

# BLUE ROCK SOLAR ECONOMIC AND FISCAL CONTRIBUTION TO THE COUNTIES OF BUCKINGHAM AND CUMBERLAND, VIRGINIA



# **Prepared for**



**MAY 2023** 



4198 COX ROAD, SUITE 104 GLEN ALLEN, VIRGINIA 23060 804-322-7777

MANGUMECONOMICS.COM

# About Mangum Economics, LLC

Mangum Economics is a Glen Allen, Virginia based firm that was founded in 2003. Since then, we have become known as a leader in industry analysis, economic impact assessment, policy and program evaluation, and economic and workforce strategy development. The Mangum Team specializes in producing objective and actionable quantitative economic research that our clients use for strategic decision making in a variety of industries and environments. We know that our clients are unique, and that one size does not fit all. As a result, we have a well-earned reputation for tailoring our analyses to meet the specific needs of specific clients, with a specific audience.

Most of our research falls into four general categories:

- Information Technology: Working with some of the largest names in the business, the Mangum
  Team has produced analyses of the economic and fiscal impact of data centers at the state and
  local level across the country.
- Energy: The Mangum Team has produced analyses of the economic and fiscal impact of over 19 GW of proposed solar, wind, battery storage, and hydro projects spanning nineteen states.
   Among those projects was Dominion Energy's 2.6 GW Coastal Virginia Offshore Wind project off of Virginia Beach. In addition, the Mangum Team has also performed economic and fiscal impact analyses for the natural gas, nuclear, oil, and pipeline industries.
- Economic Development and Special Projects: The Mangum Team has performed hundreds of
  analyses of proposed economic development projects. Most recently, we were called upon by
  Henrico County to provide an analysis of the proposed \$2.3 billion Green City "net-zero eco
  district." The Mangum Team has also authored multiple economic development plans, including
  identifying industries that were likely recruitment targets because of the high-speed MAREA and
  BRUSA sub-sea cable landings in Virginia Beach.
- Policy Analysis: The Mangum Team also has extensive experience in identifying and quantifying the intended and unintended economic consequences of proposed legislative and regulatory initiatives.

#### The Project Team

Martina Arel, M.B.A., Director – Economic Development & Energy Research

Rebecca Kyle, Research Analyst

A. Fletcher Mangum, Ph.D., Founder and CEO



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# **Executive Summary**

This report assesses the economic and fiscal contribution that the proposed Blue Rock Solar project would make to the counties of Buckingham and Cumberland, Virginia. The primary findings from that assessment are as follows:

- Blue Rock Solar is a proposed 100-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located near the intersection of Route 683 and Route 636 in the counties of Buckingham and Cumberland, Virginia.
  - The total leased and purchased acreage encompasses approximately 1,127 acres of agricultural land and timberland. The actively used, fenced-in portion of the project site would encompass approximately 686 acres located in Buckingham County and approximately 31 acres located in Cumberland County.
- 2) The proposed Blue Rock Solar project would make an economic contribution to the counties of Buckingham and Cumberland:
  - The proposed Blue Rock Solar project would employ approximately 114 full-time equivalent construction workers over the construction period.
  - The proposed Blue Rock Solar project would provide an estimated one-time pulse of economic activity to the counties of Buckingham and Cumberland during its construction phase supporting approximately:
    - 53 direct and 18 indirect and induced local jobs.
    - \$3.2 million in associated local wages and benefits.
    - \$15.0 million in local economic output.
  - The proposed Blue Rock Solar project would provide an estimated annual economic impact to the counties of Buckingham and Cumberland during its ongoing operational phase supporting approximately:
    - 2.5 direct and 1 indirect and induced local jobs.
    - \$0.4 million in associated local wages and benefits.
    - \$0.8 million in local economic output.
- 3) The proposed Blue Rock Solar project would also make a fiscal contribution to the counties of Buckingham and Cumberland. The proposed project would generate approximately:
  - \$0.3 million in state and local tax revenue from the one-time pulse of economic activity associated with the project's construction.
  - Buckingham County:
    - \$9.6 million in cumulative county revenue over the facility's anticipated 40-year operational life assuming revenues are generated from the reassessment of the real property and payments associated with a locally adopted revenue share ordinance.



**\** 

The payments would be based on the project's generation capacity and would include a 10 percent escalator every five years.<sup>1</sup>

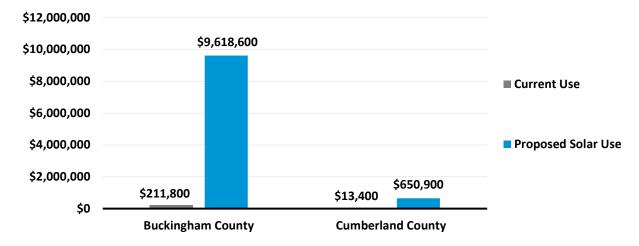
#### <u>Cumberland County:</u>

\$0.7 million in cumulative county revenue over the facility's anticipated 40-year operational life assuming revenues are generated from the reassessment of the real property and payments associated with a locally adopted revenue share ordinance. The payments would be based on the project's generation capacity and would include a 10 percent escalator every five years pursuant to recently passed legislation.<sup>2</sup>

# 4) The proposed Blue Rock Solar project would have a significantly greater fiscal impact on the counties of Buckingham and Cumberland than the property generates in its current use:

- <u>Buckingham County:</u> The proposed Blue Rock Solar project would generate approximately \$9.6 million in cumulative county revenue over the facility's anticipated 40-year operational life as compared to approximately \$211,800 in cumulative county revenue in the property's current use that's a 45-fold increase over the current use revenues.
- <u>Cumberland County:</u> The proposed Blue Rock Solar project would generate approximately \$0.7 million in cumulative county revenue over the facility's anticipated 40-year operational life as compared to approximately \$13,400 in cumulative county revenue in the property's current use that's a 49-fold increase over current use revenues.

#### **Estimated Cumulative County Revenue over 40 Years**



<sup>&</sup>lt;sup>1</sup> Estimated revenue does not include voluntary payments associated with a potential siting agreement, which is subject to negotiation between Blue Rock Solar and Buckingham County.

<sup>&</sup>lt;sup>2</sup> Estimated revenue does not include voluntary payments associated with a potential siting agreement, which is subject to negotiation between Blue Rock Solar and Cumberland County.







# Introduction

This report assesses the economic and fiscal contribution that the proposed Blue Rock Solar project would make to the counties of Buckingham and Cumberland, Virginia. This report was commissioned by RWE Clean Energy, LLC (RWE) and produced by Mangum Economics.

# The Project

Blue Rock Solar is a proposed 100-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located near the intersection of Route 683 and Route 636 in the counties of Buckingham and Cumberland, Virginia. The total leased and purchased acreage encompasses approximately 1,127 acres of agricultural land and timberland. The actively used, fenced-in portion of the project site would encompass approximately 686 acres located in Buckingham County and approximately 31 acres located in Cumberland County.

# **Electricity Production in Virginia**

This section provides a backdrop for the proposed Blue Rock Solar project by profiling Virginia's electricity production sector and the role that solar energy could play in that sector.

#### **Overall Market**

As shown in Figure 1, in 2021 electricity sales and direct use in Virginia totaled 127.9 million megawatt hours, ranking the state 10<sup>th</sup> among the fifty states in terms of electricity consumption. However, only 73 percent of that demand was met by in-state utilities, independent producers, and other sources. As a result, Virginia had to import the remaining electricity it consumed from producers in other states. As with all imports, this means that the jobs, wages, and economic output created by that production went to localities in those states, not to localities in Virginia.

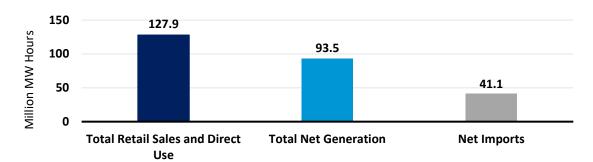


Figure 1: Demand and Supply of Electricity in Virginia in 2021 (in millions of megawatt-hours)<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Data Source: U.S. Energy Information Administration. In this chart, "Net Imports" also takes into account losses during transmission. As a result, it does not directly equal the residual of "Total Net Generation" minus "Total Retail Sales and Direct Use."



### Sources of Production

Between 2011 and 2021, the total amount of electricity produced in Virginia increased from 66.7 to 93.5 million megawatt hours, while retail and direct consumption of electricity increased from 112.1 to 127.9 million megawatt hours. Consequently, imports of electricity decreased by 11.8 million megawatt hours (or 22 percent) during this time. Figure 2 provides a comparison of the energy sources that were used to produce electricity in Virginia in each of those years. As these data show, the most significant change between 2011 and 2021 was a decrease in the use of coal and an increase in the use of natural gas. Where coal was the state's second largest source of electricity in 2011, accounting for 19.9 million megawatt hours (or 29.9 percent) of production, by 2021 production had fallen by 16.7 million megawatt hours, making coal a distant fifth place source of electricity with only 3.4 percent of production.

In contrast, the share of electricity produced using cleaner-burning low-emissions energy sources increased over the period. Where natural gas accounted for only 18.3 million megawatt hours (or 27.5 percent) of Virginia's electricity production in 2011, by 2021 that proportion had almost tripled to 53.6 million megawatt hours (or 57.3 percent of production), making natural gas the state's largest source of electricity. In addition, solar, which entered the Virginia electricity production market in 2016, increased its share to 3.3 million megawatt hours in 2021.

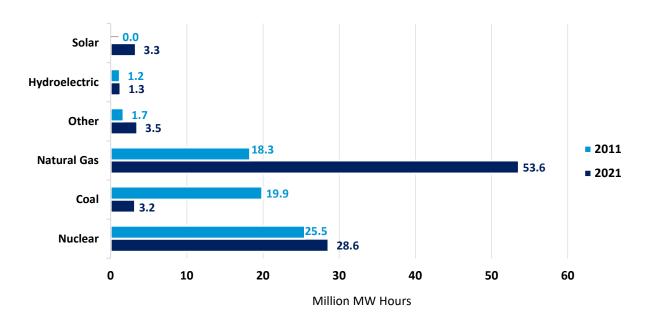


Figure 2: Electricity Generation in Virginia by Energy Source in 2011 and 2021 (in millions of megawatt-hours)<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Data Source: U.S. Energy Information Administration. The "Other" category includes battery, wood, wind, petroleum, other biomass, "other", and pumped storage.



<sup>&</sup>lt;sup>4</sup> Imports also takes into account losses during transmission. As a result, totals do not equal sum of components.

Figure 3 provides similar data for the U.S. as a whole. A quick comparison of Figures 2 and 3 shows that although the degree of reliance on specific energy sources for electricity production is quite different between the U.S. and Virginia, the trend toward lower-emissions energy sources is the same. Nationally, between 2011 and 2021 the amount of electricity produced using coal declined by 835.5 million megawatt hours from 42 to 22 percent of production, while in contrast the amount of electricity produced using natural gas increased by 565.7 million megawatt hours from 25 to 38 percent of production. Nationwide, as in Virginia, the reliance on renewable energy sources such as solar increased during this time but at a slower pace than in Virginia. Between 2011 and 2021, the amount of electricity produced using solar increased by 113.5 million megawatt hours to 2.8 percent of total electricity production in the nation compared to 3.5 percent of total electricity production in Virginia.

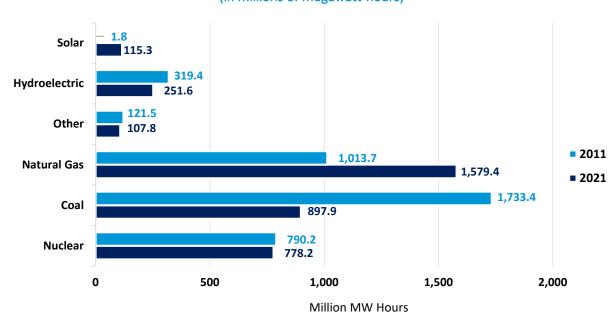


Figure 3: Electricity Generation in the United States by Energy Source in 2011 and 2021 (in millions of megawatt-hours)<sup>6</sup>

### Impact on the Environment

In discussing the impact of these trends on the environment, it is important to realize that electricity production is one of the U.S.'s largest sources of greenhouse gas emissions. Figure 4 depicts carbon dioxide emissions from electricity production in 2011 and 2021 for both Virginia and the U.S. As these data indicate, between 2011 and 2021, as the share of electricity produced in Virginia by coal fell from 29.9 to 3.4 percent, carbon dioxide emissions from electricity production fell from 32.6 to 27.6 million metric tons. Where at the national level, as the share of electricity produced by coal fell from 42 to 22 percent, carbon dioxide emissions from electricity production fell from 2,287.1 to 1,651.9 million metric tons.

<sup>&</sup>lt;sup>6</sup> Data Source: U.S. Energy Information Administration. "Other" includes battery, geothermal, hydroelectric, other, other biomass, other gas, petroleum, pumped storage, wind, and wood.



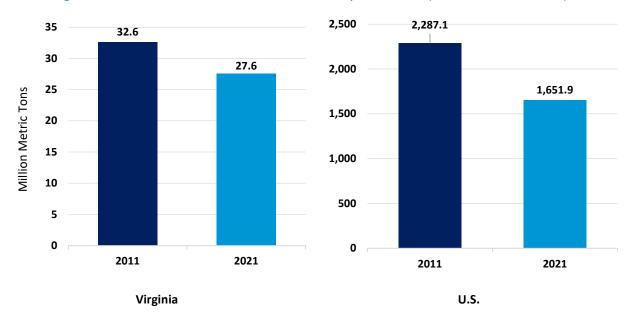


Figure 4: Carbon Dioxide Emissions from Electricity Production (millions of metric tons)<sup>7</sup>

# Virginia Solar Industry Trends

As of the fourth quarter of 2022, Virginia was ranked 9<sup>th</sup> in the nation for its total installed solar capacity of more than four thousand megawatts. Over five hundred megawatts of that capacity alone were installed in 2022. Over the next five years, Virginia is projected to add almost six thousand megawatts of solar to its portfolio, ranking it 9<sup>th</sup> in the nation for projected growth. Total investment into the solar industry in Virginia as of the fourth quarter of 2022 amounts to \$4.8 billion.<sup>8</sup>

Figure 5 shows the total megawatts of utility-scale solar projects installed in Georgia in a given year over the last ten years. After an initial addition of 139 MW in utility-scale solar in 2016, the annual amount installed fluctuated and then peaked in 2021 at 888 MW of new utility-scale solar.<sup>9</sup>

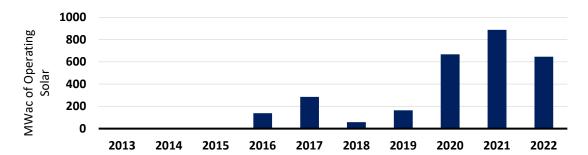


Figure 5: Utility-Scale Solar Projects Over 1 MWac in Virginia (By Year of Installation) – 2013 to 2022<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Data Source: Solar Energy Industries Association.



 $<sup>^{\</sup>rm 7}$  Data Source: U.S. Energy Information Administration.

<sup>&</sup>lt;sup>8</sup> Data Source: Solar Energy Industries Association.

 $<sup>^{9}</sup>$  Data Source: Solar Energy Industries Association.

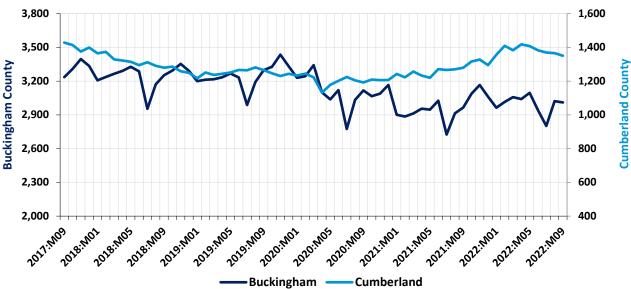
# Local Economic Profile

This section provides context for the economic and fiscal impact assessments to follow by profiling the local economies of the counties of Buckingham and Cumberland.

# **Total Employment**

Figure 6 depicts the trend in total employment in the counties of Buckingham and Cumberland from September 2017 through September 2022. As these data show, aside from seasonal fluctuations, employment in Buckingham County generally declined throughout the five-year period. Employment in Cumberland County declined during the first half of the period and increased during the second half. As of September 2022, county employment stood at 3,010 jobs in Buckingham County and 1,350 jobs in Cumberland County. This represents an overall decrease in employment of 7.0 percent (or 225 jobs) in Buckingham County and 5.5 percent (or 78 jobs) in Cumberland County over the five-year period. To put this number in perspective, over this same period, total statewide employment in Virginia increased by 3.4 percent.<sup>11</sup>





To control for seasonality and provide a point of reference, Figure 7 compares the year-over-year change in total employment in the counties of Buckingham and Cumberland to that of the state of Virginia over the same five-year period. Any point above the zero line in this graph indicates an increase in employment, while any point below the zero line indicates a decline in employment. As these data show, Buckingham County tracked close to statewide trends but experienced declines in employment

<sup>&</sup>lt;sup>12</sup> Data Source: U.S. Bureau of Labor Statistics.



<sup>&</sup>lt;sup>11</sup> Data Source: U.S. Bureau of Labor Statistics.

throughout most of the five-year period. Cumberland County experienced periods of high employment growth and high employment loss throughout the period. As of September 2022, the year-over-year change in total employment was 1.5 percent in Buckingham County and 5.6 percent in Cumberland County as compared to 3.4 percent statewide in Virginia.

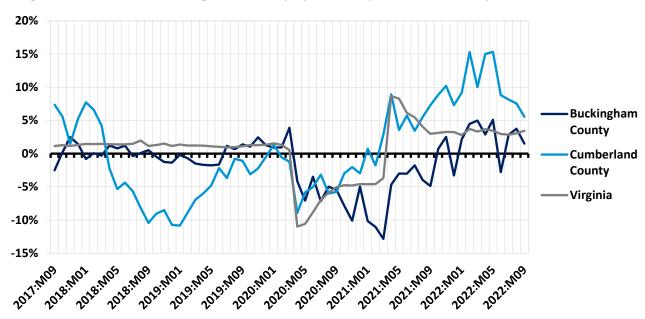


Figure 7: Year-Over-Year Change in Total Employment – September 2017 to September 2022<sup>13</sup>

# **Employment and Wages by Industry Supersector**

To provide a better understanding of the underlying factors motivating the total employment trends depicted in Figures 6 and 7, Figures 8 through 10 provide data on private employment and wages in the counties of Buckingham and Cumberland by industry supersector.<sup>14</sup>

Figure 8 provides an indication of the distribution of private sector employment across industry supersectors in the counties of Buckingham and Cumberland in the third quarter of 2022. As these data indicate, the largest industry sector that quarter in both counties was Trade, Transportation, and Utilities with 478 jobs in Buckingham County and 190 jobs in Cumberland County.

Figure 9 provides a similar ranking for average private sector weekly wages by industry supersector in the counties of Buckingham and Cumberland in the third quarter of 2022. As these data show, the highest paying industry sector that quarter in Buckingham County was Information (\$2,708 per week). In Cumberland County, the highest paying sector was Natural Resources and Mining (\$1,218 per week).

<sup>&</sup>lt;sup>14</sup> A "supersector" is the highest level of aggregation in the coding system that the Bureau of Labor Statistics uses to classify industries.



<sup>&</sup>lt;sup>13</sup> Data Source: U.S. Bureau of Labor Statistics.

Figure 8: Private Employment by Industry Supersector in the Counties of Buckingham and Cumberland— 3<sup>rd</sup> Qu. 2022<sup>15</sup>

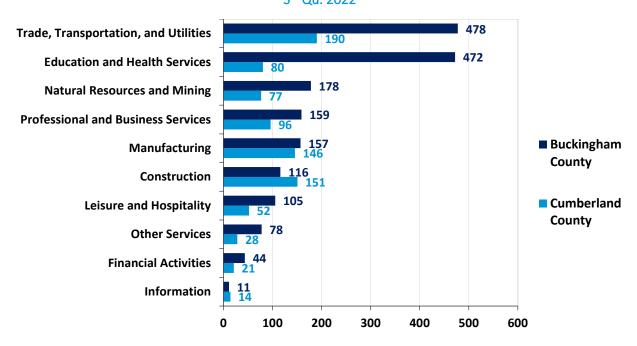
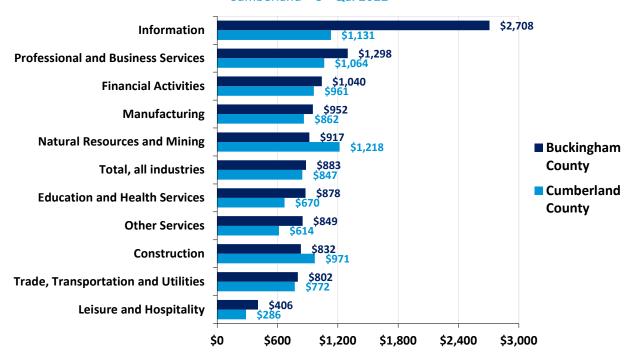


Figure 9: Average Private Weekly Wages by Industry Supersector in the Counties of Buckingham and Cumberland  $-3^{rd}$  Qu.  $2022^{16}$ 



<sup>&</sup>lt;sup>15</sup> Data Source: U.S. Bureau of Labor Statistics.

<sup>&</sup>lt;sup>16</sup> Data Source: U.S. Bureau of Labor Statistics.



Figure 10 details the year-over-year change in private sector employment from the third quarter of 2021 to the third quarter of 2022 in the counties of Buckingham and Cumberland by industry supersector. Over this period, the largest employment gains in Buckingham County occurred in the Education and Health Services (up 20 jobs) sector, and the largest employment loss occurred in the Leisure and Hospitality (down 14 jobs) sector. The largest employment gain in Cumberland County occurred in the Construction (up 40 jobs) sector, and the largest employment loss occurred in the Education and Health Services (down 6 jobs) sector.

**Education and Health Services Trade, Transportation and Utilities** Construction 21 Cumberland Manufacturing 10 County Other Services ■ Buckingham County **Financial Activities Professional and Business Services Natural Resources and Mining Leisure and Hospitality** -14 -20 -10 10 20 30 50

Figure 10: Change in Private Employment by Industry Supersector in the Counties of Buckingham and Cumberland from 3<sup>rd</sup> Qu. 2021 to 3<sup>rd</sup> Qu. 2022<sup>17</sup>

#### Unemployment

Figure 11 illustrates the unemployment trend in the counties of Buckingham and Cumberland over the five-year period from March 2018 through March 2023 and benchmarks those data against the statewide trend for Virginia. As these data show, unemployment rates in the counties of Buckingham and Cumberland generally tracked closely to the statewide norm but at rates above the statewide average. In April 2020 unemployment in both counties and the state significantly rose as a result of the labor dislocations caused by the COVID-19 pandemic. Buckingham County's rates surpassed the statewide peak while Cumberland County's rates remained below the statewide peak. As of March 2023, unemployment stood at 4.2 percent in Buckingham County, 3.6 percent in Cumberland County, and 2.8 percent in Virginia as a whole.

<sup>&</sup>lt;sup>17</sup> Data Source: Bureau of Labor Statistics. Data on the Information sector in Buckingham County and on the Information and Financial Activities sectors in Cumberland County have been suppressed due to data confidentiality.



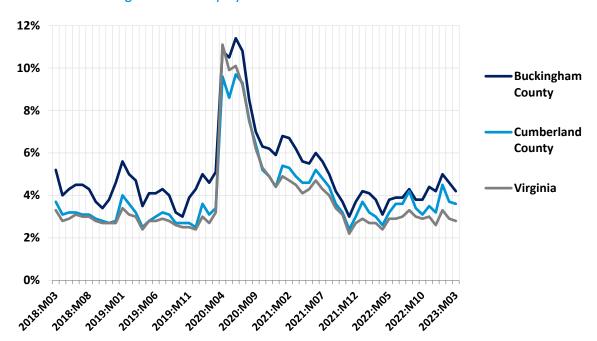


Figure 11: Unemployment Rate – March 2018 to March 2023<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Data Source: Bureau of Labor Statistics.



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## **Economic and Fiscal Impact**

This section quantifies the economic and fiscal contribution that the proposed Blue Rock Solar project would make to the counties of Buckingham and Cumberland. The analysis separately evaluates the one-time pulse of economic activity that would occur during the construction phase of the project, as well as the annual economic activity that the project would generate during its ongoing operations phase.

#### Method

To empirically evaluate the likely local economic impact attributable to the proposed Blue Rock Solar project, the analysis employs a regional economic impact model called IMPLAN.<sup>19</sup> The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S., and in Virginia is used by UVA's Weldon Cooper Center, the Virginia Department of Planning and Budget, the Virginia Employment Commission, and other state agencies and research institutes. Like all economic impact models, the IMPLAN model uses economic multipliers to quantify economic impact.

Economic multipliers measure the ripple effects that an expenditure generates as it makes its way through the economy. For example, as when the Blue Rock Solar project purchases goods and services — or when contractors hired by the facility use their salaries and wages to make household purchases — thereby generating income for someone else, which is in turn spent, thereby becoming income for yet someone else, and so on, and so on. Through this process, one dollar in expenditures generates multiple dollars of income. The mathematical relationship between the initial expenditure and the total income generated is the economic multiplier.

One of the primary advantages of the IMPLAN model is that it uses regional and national production and trade flow data to construct region-specific and industry-specific economic multipliers, which are then further adjusted to reflect anticipated actual spending patterns within the specific geographic study area that is being evaluated. As a result, the economic impact estimates produced by IMPLAN are not generic. They reflect as precisely as possible the economic realities of the specific industry, and the specific study area, being evaluated.

In the analysis that follows, these impact estimates are divided into three categories. First round direct impact measures the direct economic contribution of the entity being evaluated (e.g., own employment, wages paid, goods and services purchased by the Blue Rock Solar project). Second round indirect and induced impact measures the economic ripple effects of this direct impact in terms of business to business, and household (employee) to business, transactions. Total impact is simply the sum of the preceding two. These categories of impact are then further defined in terms of employment (the jobs that are created), labor income (the wages and benefits associated with those jobs), and economic output (the total amount of economic activity that is created in the economy).

<sup>&</sup>lt;sup>19</sup> IMPLAN is produced by IMPLAN Group, LLC.



#### **Construction Phase**

This portion of the section assesses the economic and fiscal impact that the one-time pulse of activity associated with construction of the proposed Blue Rock Solar project would have on the counties of Buckingham and Cumberland.

#### **Economic Impact Assumptions**

The analysis is based on the following inputs and assumptions:

- Total investment in the Blue Rock Solar project is estimated to be approximately \$139.4 million.<sup>20</sup>
- Of that total:
  - Architecture, engineering, site preparation, and other construction and development costs are estimated to be approximately \$33.6 million.<sup>21</sup>
  - Capital equipment costs are estimated to be approximately \$105.8 million.<sup>22</sup> It is anticipated that no capital equipment would be purchased from vendors in the counties of Buckingham and Cumberland.<sup>23</sup>
- The proposed Blue Rock Solar project would employ approximately 114 full-time equivalent construction workers over the construction period.<sup>24</sup>
- For ease of analysis, all construction expenditures are assumed to take place in a single year.

#### **Economic Impact**

Applying these inputs in the IMPLAN model results in the following estimates of one-time economic and fiscal impact. As shown in Table 1, construction of the proposed Blue Rock Solar project would directly provide a one-time pulse supporting approximately: 1) 53 jobs, 2) \$2.5 million in wages and benefits, and 3) \$12.1 million in economic output to the counties of Buckingham and Cumberland.<sup>25</sup>

Taking into account the economic ripple effects that direct investment would generate, the total estimated one-time impact on the counties of Buckingham and Cumberland would support approximately: 1) 71 jobs, 2) \$3.2 million in wages and benefits, 3) \$15.0 million in economic output, and 4) \$0.3 million in state and local tax revenue.

<sup>&</sup>lt;sup>25</sup> It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support an existing job during the construction of the project.



<sup>&</sup>lt;sup>20</sup> Data Source: RWE.

<sup>&</sup>lt;sup>21</sup> Data Source: RWE.

<sup>&</sup>lt;sup>22</sup> Data Source: RWE.

<sup>&</sup>lt;sup>23</sup> Data Source: IMPLAN Group LLC.

<sup>&</sup>lt;sup>24</sup> Data Source: RWE.

Table 1: Estimated One-Time Economic and Fiscal Impact on the Counties of Buckingham and Cumberland from Construction of the Blue Rock Solar Project<sup>26</sup>

Economic Impact	Employment	Wages and Benefits	Output
1st Round Direct Economic Activity	53	\$2,507,900	\$12,122,900
2 <sup>nd</sup> Round Indirect and Induced Economic Activity	18	\$729,800	\$2,867,500
Total Economic Activity	71	\$3,237,700	\$14,990,400
Fiscal Impact			
State and Local Tax Revenue			\$302,900

<sup>\*</sup>Totals may not sum due to rounding.

### **Ongoing Operations Phase**

This portion of the section assesses the annual economic and fiscal impact that the proposed Blue Rock Solar project would have on the counties of Buckingham and Cumberland during its anticipated 40-year operational phase.

#### **Economic Impact Assumptions**

The analysis is based on the following assumptions:

• The Blue Rock Solar project would employ approximately 2.5 full-time employees and spend approximately \$0.7 million each year for salaries, maintenance and repair, vegetative control, and other operational expenditures.<sup>27</sup>

#### **Economic Impact**

Applying these inputs in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 2, annual operation of the proposed Blue Rock Solar project would on average directly support approximately: 1) 2.5 jobs, 2) \$0.3 million in wages and benefits, and 3) \$0.7 million in economic output to the counties of Buckingham and Cumberland.

Taking into account the economic ripple effects that direct impact would generate, the total estimated annually supported impact on the counties of Buckingham and Cumberland would be approximately: 1) 3.5 jobs, 2) \$0.4 million in wages and benefits, and 3) \$0.8 million in economic output.

<sup>&</sup>lt;sup>27</sup> Data Source: RWE.



<sup>&</sup>lt;sup>26</sup> It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support an existing job during the construction of the project. Although employment within a local construction sector can sometimes quickly expand to take advantage of new opportunities, because of the relatively small size of the local construction sector, it is not possible to know with certainty what proportion of these jobs would go to county construction contractors or be filled by county residents.

Table 2: Estimated Annual Economic Impact on the Counties of Buckingham and Cumberland from the Ongoing Operation of the Blue Rock Solar Project

Economic Impact	Employment	Wages and Benefits	Output
1 <sup>st</sup> Round Direct Economic Activity	2.5	\$321,700	\$683,700
2 <sup>nd</sup> Round Indirect and Induced Economic Activity	1	\$36,000	\$152,500
Total Economic Activity	3.5	\$357,700	\$836,200

<sup>\*</sup>Totals may not sum due to rounding.

#### **Fiscal Impact Assumptions**

The analysis is based on the following inputs and assumptions:

- The Blue Rock Solar project would purchase and lease approximately 1,092 acres in Buckingham County, of which approximately 686 acres would be fenced-in. Blue Rock Solar would also lease approximately 35 acres in Cumberland County, of which approximately 31 acres would be fenced-in.<sup>28</sup>
- The actively used, fenced-in acreage in Buckingham County would be reassessed at \$9,000 per acre.<sup>29</sup>
- The entire leased acreage in Cumberland County would be reassessed at \$10,000 per acre. 30
- Tax rates remain constant throughout the analysis.
- The initial interconnection request for Blue Rock Solar was filed in March 2019.<sup>31</sup>
- The Blue Rock Solar project's total generation capacity would be 100 MW AC, of which approximately 93.8 MW would be located in Buckingham County and approximately 6.2 MW would be located in Cumberland County.<sup>32</sup>
- The Blue Rock Solar project would become operational in the third quarter of 2026.<sup>33</sup>

#### Fiscal Impact – Buckingham County

This portion of the section quantifies the direct fiscal contribution that the proposed Blue Rock Solar project would make to Buckingham County. Local revenues would be generated from the increased

<sup>33</sup> Data Source: RWE.



<sup>&</sup>lt;sup>28</sup> Data Source: RWE.

<sup>&</sup>lt;sup>29</sup> Data Source: Buckingham County Commissioner of Revenue's Office. Current assessment value of existing solar farm in the county.

<sup>&</sup>lt;sup>30</sup> Data Source: Cumberland County Commissioner of Revenue's Office.

<sup>31</sup> Data Source: RWE.

<sup>32</sup> Data Source: RWE.

property assessments associated with reassessing the site as solar use property and from the locally adopted revenue share ordinance which is based on the project's total generation capacity.

#### Reassessment of Property

Table 3 details the increased property assessments associated with reassessing the 686-acre fenced-in site as solar use property. The county real estate tax revenue from the project after reassessment is estimated to be approximately \$34,000 per year, for a cumulative total of approximately \$1.4 million over the project's anticipated 40-year operational life expectancy.<sup>34</sup> In contrast, the property currently generates approximately \$5,300 per year in real estate tax revenue for the county, for a cumulative total of approximately \$211,800 over 40 years.<sup>35</sup>

Table 3: Estimated Buckingham County Revenue Generated by the Proposed Blue Rock Solar Project over 40 Years from Real Estate Taxes

Estimated Increased Appraised Value of Property under Solar Use <sup>36</sup>	\$6,176,700
Buckingham County Real Estate Tax Rate <sup>37</sup>	0.0055
Annual County Real Estate Tax – Solar Use	\$34,000
Cumulative Revenue over 40 Years	\$1,358,900

<sup>\*</sup>Totals may not sum due to rounding.

#### Revenue Share Ordinance

The following section describes the additional annual revenue that the proposed Blue Rock Solar project would generate for Buckingham County under the locally adopted energy revenue share ordinance under Virginia Code §58.1-2636 in lieu of taxes on capital investment. This statute currently stipulates that a locality may assess an annual revenue share of up to \$1,400 per megawatt (MW) alternating current (AC) generation capacity of a solar facility. However, legislation that was passed in the 2021 General Assembly (SB 1201/HB 2006) and went into effect July 1, 2021, allows a 10 percent escalator to be applied to the \$1,400 per MW revenue share every five years, beginning in 2026. Buckingham County adopted a revenue share ordinance in October 2021.

Table 4 details the revenue generated from a revenue share ordinance including the 10 percent escalator. Based on a total generation capacity of 93.8 MW AC and an assumed commissioning date in the third quarter of 2026, a revenue share ordinance would generate approximately \$8.3 million over the anticipated 40-year operational life of the project.

<sup>&</sup>lt;sup>37</sup> Data Source: Buckingham County website.



<sup>&</sup>lt;sup>34</sup> Assumes property will be reassessed at \$9,000 per acre once it is under solar use.

<sup>&</sup>lt;sup>35</sup> Derived from Buckingham County's Mapping database.

<sup>&</sup>lt;sup>36</sup> Calculated as 686 acres times \$9,000.

Table 4: Estimated Buckingham County Revenue Generated from a Revenue Share Ordinance over 40 Years

Year	MW	Revenue Share per MW with Escalator	Annual County Revenue
1	93.8	\$1,540	\$144,452
2	93.8	\$1,540	\$144,452
3	93.8	\$1,540	\$144,452
4	93.8	\$1,540	\$144,452
5	93.8	\$1,540	\$144,452
6	93.8	\$1,694	\$158,897
7	93.8	\$1,694	\$158,897
8	93.8	\$1,694	\$158,897
9	93.8	\$1,694	\$158,897
10	93.8	\$1,694	\$158,897
11	93.8	\$1,863	\$174,787
12	93.8	\$1,863	\$174,787
13	93.8	\$1,863	\$174,787
14	93.8	\$1,863	\$174,787
15	93.8	\$1,863	\$174,787
16	93.8	\$2,050	\$192,266
17	93.8	\$2,050	\$192,266
18	93.8	\$2,050	\$192,266
19	93.8	\$2,050	\$192,266
20	93.8	\$2,050	\$192,266
21	93.8	\$2,255	\$211,492
22	93.8	\$2,255	\$211,492
23	93.8	\$2,255	\$211,492
24	93.8	\$2,255	\$211,492
25	93.8	\$2,255	\$211,492
26	93.8	\$2,480	\$232,641
27	93.8	\$2,480	\$232,641
28	93.8	\$2,480	\$232,641
29	93.8	\$2,480	\$232,641
30	93.8	\$2,480	\$232,641
31	93.8	\$2,728	\$255,906
32	93.8	\$2,728	\$255,906
33	93.8	\$2,728	\$255,906
34	93.8	\$2,728	\$255,906
35	93.8	\$2,728	\$255,906
36	93.8	\$3,001	\$281,496
37	93.8	\$3,001	\$281,496
38	93.8	\$3,001	\$281,496
39	93.8	\$3,001	\$281,496
40	93.8	\$3,001	\$281,496
<b>Cumulative Total</b>			\$8,259,700



#### Total Fiscal Impact

Table 5 combines the results from the calculations depicted in Tables 3 and 4 to provide an estimate of the cumulative fiscal contribution that the proposed Blue Rock Solar project would make to Buckingham County over its 40-year anticipated operational life. As these data indicate, that cumulative total is approximately \$9.6 million.

Table 5: Estimated Cumulative Buckingham County Revenue from the Proposed Blue Rock Solar Project over 40 Years

	Total Revenue
County Real Estate Tax	\$1,358,900
County Revenue from Revenue Share Ordinance	\$8,259,700
Total Cumulative Revenue over 40 Years <sup>38</sup>	\$9,618,600

<sup>&</sup>lt;sup>38</sup> Estimated revenue does not include voluntary payments associated with a potential siting agreement, which is subject to negotiation between Blue Rock Solar and Buckingham County.



#### Fiscal Impact – Cumberland County

This portion of the section quantifies the direct fiscal contribution that the proposed Blue Rock Solar project would make to Cumberland County. Local revenues would be generated from the increased property assessments associated with reassessing the site as solar use property and from the locally adopted revenue share ordinance which is based on the project's total generation capacity.

#### Reassessment of Property

Table 6 details the increased property assessments associated with reassessing the leased 35-acre site as solar use property. The county real estate tax revenue from the project after reassessment is estimated to be approximately \$2,630 per year, for a cumulative total of approximately \$0.1 million over the project's anticipated 40-year operational life expectancy. In contrast, the property currently generates approximately \$340 per year in real estate tax revenue for the county, for a cumulative total of approximately \$13,400 over 40 years. 40

Table 6: Estimated Cumberland County Revenue Generated by the Proposed Blue Rock Solar Project over 40 Years from Real Estate Taxes

Estimated Increased Appraised Value of Property under Solar Use <sup>41</sup>	\$350,000
Cumberland County Real Estate Tax Rate <sup>42</sup>	0.0075
Annual County Real Estate Tax – Solar Use	\$2,630
Cumulative Revenue over 40 Years	\$105,000

<sup>\*</sup>Totals may not sum due to rounding.

#### Revenue Share Ordinance

The following section describes the additional annual revenue that the proposed Blue Rock Solar project would generate for Cumberland County under the locally adopted energy revenue share ordinance under Virginia Code §58.1-2636 in lieu of taxes on capital investment. This statute currently stipulates that a locality may assess an annual revenue share of up to \$1,400 per megawatt (MW) alternating current (AC) generation capacity of a solar facility. However, legislation that was passed in the 2021 General Assembly (SB 1201/HB 2006) and went into effect July 1, 2021, allows a 10 percent escalator to be applied to the \$1,400 per MW revenue share every five years, beginning in 2026. Cumberland County adopted a revenue share ordinance in April 2021.

<sup>&</sup>lt;sup>42</sup> Data Source: Cumberland County website.



<sup>&</sup>lt;sup>39</sup> Assumes property will be reassessed at \$10,000 per acre once it is under solar use.

<sup>&</sup>lt;sup>40</sup> Derived from Cumberland County's Mapping database.

<sup>&</sup>lt;sup>41</sup> Calculated as 35 acres times \$10,000.

Table 7 details the revenue generated from a revenue share ordinance including the 10 percent escalator. Based on a total generation capacity of 6.2 MW AC and an assumed commissioning date in the third quarter of 2026, a revenue share ordinance would generate approximately \$0.5 million over the anticipated 40-year operational life of the project.

Table 7: Estimated Cumberland County Revenue Generated from a Revenue Share Ordinance over 40 Years

Year	MW	Revenue Share per MW with Escalator	Annual County Revenue
1	6.2	\$1,540	\$9,548
2	6.2	\$1,540	\$9,548
3	6.2	\$1,540	\$9,548
4	6.2	\$1,540	\$9,548
5	6.2	\$1,540	\$9,548
6	6.2	\$1,694	\$10,503
7	6.2	\$1,694	\$10,503
8	6.2	\$1,694	\$10,503
9	6.2	\$1,694	\$10,503
10	6.2	\$1,694	\$10,503
11	6.2	\$1,863	\$11,553
12	6.2	\$1,863	\$11,553
13	6.2	\$1,863	\$11,553
14	6.2	\$1,863	\$11,553
15	6.2	\$1,863	\$11,553
16	6.2	\$2,050	\$12,708
17	6.2	\$2,050	\$12,708
18	6.2	\$2,050	\$12,708
19	6.2	\$2,050	\$12,708
20	6.2	\$2,050	\$12,708
21	6.2	\$2,255	\$13,979
22	6.2	\$2,255	\$13,979
23	6.2	\$2,255	\$13,979
24	6.2	\$2,255	\$13,979
25	6.2	\$2,255	\$13,979
26	6.2	\$2,480	\$15,377
27	6.2	\$2,480	\$15,377
28	6.2	\$2,480	\$15,377
29	6.2	\$2,480	\$15,377
30	6.2	\$2,480	\$15,377
31	6.2	\$2,728	\$16,915
32	6.2	\$2,728	\$16,915
33	6.2	\$2,728	\$16,915
34	6.2	\$2,728	\$16,915
35	6.2	\$2,728	\$16,915
36	6.2	\$3,001	\$18,606



Year	MW	Revenue Share per MW with Escalator	Annual County Revenue
37	6.2	\$3,001	\$18,606
38	6.2	\$3,001	\$18,606
39	6.2	\$3,001	\$18,606
40	6.2	\$3,001	\$18,606
<b>Cumulative Total</b>			\$546,000

#### Total Fiscal Impact

Table 8 combines the results from the calculations depicted in Tables 6 and 7 to provide an estimate of the cumulative fiscal contribution that the proposed Blue Rock Solar project would make to Cumberland County over its 40-year anticipated operational life. As these data indicate, that cumulative total is approximately \$0.7 million.

Table 8: Estimated Cumulative Cumberland County Revenue from the Proposed Blue Rock Solar Project over 40 Years

	Total Revenue
County Real Estate Tax	\$105,000
County Revenue from Revenue Share Ordinance	\$546,000
Total Cumulative Revenue over 40 Years <sup>43</sup>	\$651,000

<sup>&</sup>lt;sup>43</sup> Estimated revenue does not include voluntary payments associated with a potential siting agreement, which is subject to negotiation between Blue Rock Solar and Cumberland County.



## **Current Agricultural Use**

This section provides a benchmark for the previous estimates of the economic contribution that the proposed Blue Rock Solar project would make to the counties of Buckingham and Cumberland by estimating the economic and fiscal contribution that the site makes to the counties in its current use.

#### **Economic Impact Assumptions**

The analysis is based on the following inputs and assumptions:

- The proposed Blue Rock Solar project would be situated on an approximately 717-acre tract of land.<sup>44</sup>
- The land currently is timberland and agricultural land used to produce corn, soybeans, and hay.<sup>45</sup>

#### **Economic Impact**

Applying these inputs to the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 9, in its current use, the proposed Blue Rock Solar project site directly supports approximately: 1 < 1 job, 2 <

Taking into account the economic ripple effects that direct impact generates, on average, the total annually supported impact on the counties of Buckingham and Cumberland is approximately: 1) 1 job, 2) \$36,700 in wages and benefits, and 3) \$96,900 in economic output.

Table 9: Total Estimated Annual Economic Impact of the Blue Rock Solar Project Site on the Counties of Buckingham and Cumberland—Current Use<sup>46</sup>

Economic Impact	Employment	Wages and Benefits	Output
1st Round Direct Economic Activity	< 1	\$26,100	\$72,100
2 <sup>nd</sup> Round Indirect and Induced Economic Activity	< 1	\$10,600	\$24,800
Total Economic Activity	1	\$36,700	\$96,900

<sup>\*</sup>Totals may not sum due to rounding.

<sup>45</sup> Data Source: RWE.

<sup>&</sup>lt;sup>46</sup> Data Source: RWE. Calculations based data from the U.S. Department of Agriculture and IMPLAN Group, LLC for Buckingham County, Cumberland County, and Virginia.



<sup>&</sup>lt;sup>44</sup> Data Source: RWE.

#### **Fiscal Impact Assumptions**

The analysis is based on the following inputs and assumptions:

- The proposed Blue Rock Solar project would be situated on approximately 686 acres fenced-in acres in Buckingham County and approximately 35 leased acres in Cumberland County.<sup>47</sup>
- The current assessment value of the affected acreage in Buckingham County is approximately \$962,800.<sup>48</sup>
- The current assessment value of the affected acreage in Cumberland County is approximately \$44,600.<sup>49</sup>

## Fiscal Impact – Buckingham County

Table 10 details the estimated tax revenue that the proposed Blue Rock Solar site generates for Buckingham County in its current use. As the data in Table 10 indicate, the current county real estate tax revenue from the project site is estimated to be approximately \$5,300 per year, for a cumulative total of approximately \$211,800 over 40 years.

Table 10: Estimated Buckingham County Revenue Generated by the Proposed Blue Rock Solar Project
Site over 40 Years from Real Estate Taxes – Current Use

Estimated Assessed Value of Property – Current Use	\$962,800
Buckingham County Current Real Estate Tax Rate <sup>50</sup>	0.0055
Estimated Annual County Real Estate Tax – Current Use	\$5,300
Total Cumulative Revenue over 40 Years	\$211,800

<sup>\*</sup>Totals may not sum due to rounding.

## Fiscal Impact – Cumberland County

Table 11 details the estimated tax revenue that the proposed Blue Rock Solar site generates for Cumberland County in its current use. As the data in Table 11 indicate, the current county real estate tax revenue from the project site is estimated to be approximately \$340 per year, for a cumulative total of approximately \$13,400 over 40 years.

<sup>&</sup>lt;sup>50</sup> Data Source: Buckingham County website.



<sup>&</sup>lt;sup>47</sup> Data Source: RWE.

 $<sup>^{\</sup>rm 48}$  Data Source: Derived from Buckingham County's Mapping database.

<sup>&</sup>lt;sup>49</sup> Data Source: Derived from Cumberland County's Mapping database.

Table 11: Estimated Cumberland County Revenue Generated by the Proposed Blue Rock Solar Project
Site over 40 Years from Real Estate Taxes – Current Use

Estimated Assessed Value of Property – Current Use	\$44,600
Cumberland County Current Real Estate Tax Rate51	0.0075
Estimated Annual County Real Estate Tax – Current Use	\$340
Total Cumulative Revenue over 40 Years	\$13,400

<sup>\*</sup>Totals may not sum due to rounding.

The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing the quality of that information. However, because these estimates attempt to foresee the consequences of circumstances that have not yet occurred, it is not possible to be certain that they will be representative of actual events. These estimates are intended to provide a good indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

<sup>&</sup>lt;sup>51</sup> Data Source: Cumberland County website.



# COPY OF CURRENT STATUS OF REAL ESTATE TAXES

	T A X R E C E	IPT -	Y E A	R 2 0	2 2 - 2nd	H A Ticket	#:00013560002 @@
	BUCKINGHAM COUN CHRISTY L CHRIS						: 5/24/2022 er: TC4/TC1
	(434) 969-4744					Trans.	#: 13326
	POST OFFICE BOX	106				Dept #	: RE202202
	BUCKINGHAM	VA 23921				ACCT#	: 10806
	REAL ESTATE 202	2				Previous	
	RT 636 - 2 MI E	_	202	7.0		Balance \$	3034.46
						balance ş	3034.40
	SHEPPARDS 796	. 6 / A C	Acres:	796.670			
						Being Paid \$	3034.46
	Land: 1166100		Imp:	1000		Penalty \$	. 0 0
						Interest \$	.00
	BLUE ROC	K RESOURCE	ES LLC		A.	mount Paid \$	3034.46
PO BOX 256				* B	alance Due		
	DILLWYN					5 / 2 4 / 2 0 2 2 \$	.00
					C h e c k #	BOFA 309837	\$ 80627.00
Pd by BLUE ROCK RESOURCES							
	ANY BALANCE DUE	DOES NOT	INCLUDE	PENALTY	AND INTER	EST.	(DUPLICATE)

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BUCKINGHAM COUNTY CHRISTY L CHRISTIAN			Regis	: 5/24/2022 ster: TC4/TC1	
(434) 969-4744 POST OFFICE BOX 106				3. #: 13326 #: RE202202	
BUCKINGHAM VA 23921			ACCT#	10946	
REAL ESTATE 2022			Previous	5	
OFF RT 683 - 3 MI SE OF SHEPPARDS 108 AC	207 Acres:		Balance	\$ 421.20	
SHEPPARDS 100 AC	ACIES.		rincipal Being Paid	\$ 421.20	
Land: 162000	Imp:	0	Penalty		
			Interest	\$ .00	
BLUE ROCK RESOURCE PO BOX 256		Amount Paid *Balance Due	\$ 421.20		
DILLWYN VA 23936			as of 5/24/2022	\$ .00	
			Check# BOFA 309837	80627.00	
Pd by BLUE ROCK RESOURCES					
ANY BALANCE DUE DOES NOT	INCLUDE	PENALTY	AND INTEREST.	(DUPLICATE)	

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BUCKINGHAM COUNTY				Date : 5/22/2023
CHRISTY L CHRISTIAN				Register: KS2/KAS1
(434) 969-4744				Trans. #: 03709
POST OFFICE BOX 106				Dept # : RE202301
BUCKINGHAM VA 23921				ACCT# : 10945
REAL ESTATE 2023				vious
RT 683 - 3 MI SE OF	207	4 0	Bala	nce \$ 610.78
SHEPPARDS 192.91 AC	Acres:	192.910		
			Principal Being	Paid \$ 610.78
Land: 222100	Imp:	0		alty \$ .00
	-		Inte	rest \$ .00
JAMN LIMITED PARTI	NERSHIP	LLP	Amount	Paid \$ 610.78
814 E MAIN ST	-		*Balance	·
RICHMOND VA 23219			as of 5/22/	
			Check# SUNTRU	ST 2886 \$ 2379.31
Pd by JAMN LIMITED PARTI	NERSHIP	LLP		
ANY BALANCE DUE DOES NOT	INCLUD	E PENALTY	AND INTEREST.	(DUPLICATE)

# 15 PROPERTY DEEDS

#114

DOCUMMENTS PREPARED BY: E. M. WRIGHT, JR. ATTORNEY AT LAW P. O. BOX 200 BUCKINGHAM, VIRGINIA 23921

Tax Map ID #S 202 71, 52-10, 207 41, 152 3 1, 173 5, 173 10A, 194 14, 49 2, 79 47, 94 1, 140 51, 153 2, 66 23, 111 40, 126 5, 77 2, 195 16, 195 14, 187 15, 194 61, 81 3, 80 46, 81 2, 194 2, 77 4, 172 27, 172 31, 70 87, 173 6B, 126 4, 67 27, 67 26, 172 30, 172.82, 190 6, 126 6, 153 1, 153 50, 202 70, 190 5, 187 2, 199 2, 194 4, 171 30, 171 31A, 190 4 6, 171 37B, 152 5 2, 193 10, 172 74, 153 44, 173-41, 190 23, 172 81, 190 16, 172 80, 181, 29, 126 10

THIS DEED, made this 1<sup>st</sup> day of April, 2005, by and between <u>THE</u>

<u>DISTHENE GROUP, INC.</u>, a Virginia Corporation, Grantor, and <u>BLUE ROCK</u>

<u>RESOURCES, LLC</u>, a Virginia Limited Liability Company, Grantee, provides:

THAT in consideration of the sum of TEN DOLLARS (\$10.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, the Grantor does hereby grant and convey, with Special Warranty, unto the Grantee, all the following described real estate:

#### SEE ATTACHMENT A

The tracts described on Attachment A were conveyed to Kyanite Mining Corporation. The Disthene Group, Inc. is the successor in interest to Kyanite Mining Corporation by virtue of a name change filed with the State Corporation Commission of Virginia, such change is effective April 1, 2005.

This property is conveyed subject to conditions, restrictions, easement, and rights of way of record or as may be apparent from inspection of the property.

WITNESS the following signature and seal.

THE DISTHENE GROUP, INC.

GENE B. DIXON I

STATE OF VIRGINIA COUNTY OF BUCKINGHAM, to-wit:

The forgoing instrument was acknowledged before me this 1<sup>st</sup> day of April, 2005, by Gene B. Dixon, Jr., as President of the Disthene Group, Inc., a Virginia corporation, on behalf of the corporation.

Given under my hand this 1st day of April, 2005.

My commission expires March 31, 2007.

Notary Public Design

Grantee's Address: P. O. Box 256
Dillwyn, Va. 23936

This instrument is exempt from the recording taxes imposed by Sections 58.1-801, 58.1-802 and 58.1-814 of the 1950 Code of Virginia, as amended, by virtue of Sections 58.1-811A-8 and/or 9 and 58.1-811C-1.

NO TITLE SEARCH BY ATTORNEY PREPARING DEED

#### **ATTACHMENT A**

<u>Tract One.</u> Tax ID# 202 71)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 196.36 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 174, at page 244, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 2004 Deed to Ronald E. Dowdy and a Deed for 3.37 acres

Tract Two. (Tax ID# 52-10)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 285.7 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 306, at page 921, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

Tract Three. (Tax ID# 207 41)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 108.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 77, at page 302, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

<u>Tract Four.</u> (Tax ID# 152 3 1)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 2.20 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 220, at page 857, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

Tract Five. (Tax ID# 173 5)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 213.46 acres, more or less, and being more particularly described as to metes and bounds on a plat of survey by Robert S. Maxey, Jr., L.S., such plat being dated January 7, 2005 and attached hereto.

This being a portion of the property more particularly described in Deed Book 84, at page 33, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia. See tract one conveyed to Kyanite Mining Corporation by Deed of same date

## <u>Tract Six.</u> (Tax ID# 173 10A)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 107.12 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 184, at page 613, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### Tract Seven. (Tax ID# 194 14)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 209.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 107, at page 392, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Eight. (Tax ID# 49 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Slate River District of Buckingham County, Virginia containing 34.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 75, at page 300, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

# Tract Nine. (Tax ID# 79 47)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Slate River District of Buckingham County, Virginia containing 79.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 74, at page 143, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

# Tract Ten. (Tax ID# 94 1)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Maysville District of Buckingham County, Virginia containing 39.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 74, at page 94, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### Tract Eleven. (Tax ID# 140 51)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 40.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 206, at page 316, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### Tract Twelve. (Tax ID# 153 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 20.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 206, at page 316, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### <u>Tract Thirteen.</u> (Tax ID# 66 23)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 87.50 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 138, at page 564, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Fourteen. (Tax ID# 111 40)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 52.63 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 73, at page 300, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a Deed for 3.62 acres in 1970, a Deed for 2.01 acres in 1972, a Deed for 2.00 acres, 2.01 acres, 2.00 acres, 1.80 acres, 1.75 acres, 2.00 acres in 1973, a Deed for 2.55 acres in 1974, a Deed for 12.60 acres, 3.00 acres, 1.09 acres, 1.08 acres in 1976, a Deed for 10.26 acres in 1978, a Deed for 2.6 acres in 1979, a Deed for 3.28 acres and 1.83 acre in 1980.

## <u>Tract Fifteen.</u> (Tax ID# 126 5)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 30.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 73, at page 300, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

# ROOV 313 11 945

### <u>Tract Sixteen.</u> (Tax ID# 77 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the James River District of Buckingham County, Virginia containing 167.50 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 94, at page 219, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## <u>Tract Seventeen.</u> (Tax ID# 195 16)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 30.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 93, at page 284, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Eighteen. (Tax ID# 195 14)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 181.55 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 84, at page 363, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 1971 Deed to Robert C. Carwile.

# Tract Nineteen. (Tax ID# 187 15)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 565.60 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 78, at page 572, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 1968 Deed to Carwile and a Deed from 1981 to Crump and a 1972 Deed to Commonwealth of Virginia and a 1998 Deed to Crump.

## Tract Twenty. (Tax ID# 194 61)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 289.33 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 78, at page 572, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 1968 Deed to Carwile and a Deed from 1981 to Crump and a 1972 Deed to Commonwealth of Virginia and a 1998 Deed to Crump.

## <u>Tract Twenty-one.</u> (Tax ID# 81 3)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 788.82 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 119, at page 419, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## <u>Tract Twenty-two.</u> (Tax ID# 80 46)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Slate River District of Buckingham County, Virginia containing 19.10 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 222, at page 409, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## <u>Tract Twenty-three.</u> (Tax ID# 81 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 28.76 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 126, at page 515, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## <u>Tract Twenty-four.</u> (Tax ID# 194 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 71.50 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 147, at page 105, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

# <u>Tract Twenty-five.</u> (Tax ID# 77 4)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the James River District of Buckingham County, Virginia containing 112.60 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 147, at page 105, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### <u>Tract Twenty-six.</u> (Tax ID# 172 27)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 204.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 61, at page 586, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### <u>Tract Twenty-seven.</u> (Tax ID# 172 31)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 11.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 61, at page 586, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## <u>Tract Twenty-eight.</u> (Tax ID# 70 87)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 47.91 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 105, at page 322, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Twenty-nine. (Tax ID# 173 6B)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 45.18 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 193, at page 818, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

# Tract Thirty. (Tax ID# 126 4)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 102.05 acres, more or less, but being a conveyance by the boundary and not by the acre.

This being a portion of the property more particularly described in Deed Book 59, at page 363, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia. See tract 18 conveyed to Kyanite Mining Corporation by Deed of same date.

#### <u>Tract Thirty-one.</u> (Tax ID# 67 27)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 267.91 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 226, at page 213, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### Tract Thirty-two. (Tax ID# 67 26)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 10.89 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 238, at page 691, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### <u>Tract Thirty-three.</u> (Tax ID# 172 30)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 192.53 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 61, at page 592, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 1975 Deed to Hamby and a 1960 Deed to the Commonwealth of Virginia.

## Tract Thirty-four. (Tax ID# 172 82)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of 5Buckingham County, Virginia containing 68.50 acres, more or less, but being a conveyance by the boundary and not by the acre, and being the land to the south of the center line of Virginia Secondary Route 600.

This is a portion of the property more particularly described in Deed Book 118, at page 501, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Thirty-five. (Tax ID# 190 6)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 32.50 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 193, at page 167, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### <u>Tract Thirty-six.</u> (Tax ID# 126 6)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 43.41 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 118, at page 23, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 1990 Deed to Allen.

## <u>Tract Thirty-seven.</u> (Tax ID# 153 1)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 346.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 204, at page 831, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Thirty-eight. (Tax ID# 153 50)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 12.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 103, at page 94, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

# Tract Thirty-nine.(Tax ID# 202 70)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 796.67 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 135, at page 246, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 2004 Deed to Dowdy.

# Tract Forty. (Tax ID# 190 5)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 63.47 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 232, at page 484, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### <u>Tract Forty-one.</u> (Tax ID# 187 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 73.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 292, at page 35, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### <u>Tract Forty-two.</u> (Tax ID# 199 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 14.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 145, at page 170, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### <u>Tract Forty-three.</u> (Tax ID# 194 4)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 51.75 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 157, at page 249, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Forty-four. (Tax ID# 171 30)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 352.64 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 120, at page 555, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

# Tract Forty-five. (Tax ID# 171 31A)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 5.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 260, at page 506, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Forty-six. (Tax ID# 190 4 6)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 28.31 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 176, at page 351, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## <u>Tract Forty-seven.</u> (Tax ID# 171 37B)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 20.34 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 264, at page 754, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### Tract Forty-eight. (Tax ID# 152 5 2)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 30.52 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 217, at page 762, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### Tract Forty-nine. (Tax ID# 193 10)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Francisco District of Buckingham County, Virginia containing 36.95 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 72, at page 404, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Fifty. (Tax ID# 172 74)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 57.13 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 125, at page 575, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Fifty-one. (Tax ID# 153 44)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 178.93 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 84, at page 566, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia and a 1971 Deed to Seay.

#### <u>Tract Fifty-two.</u> (Tax ID# 173-41)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 144.08 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 257, at page 803, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### Tract Fifty-three. (Tax ID# 190 23)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 169.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 83, at page 355, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

### Tract Fifty-four. (Tax ID# 172 81)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 60.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 69, at page 119, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

## Tract Fifty-five. (Tax ID# 190 16)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 71.50 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 91, at page 419, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### Tract Fifty-six. (Tax ID# 172 80)

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All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 55.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 72, at page 156, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### Tract Fifty-seven.(Tax ID# 181 29)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Curdsville District of Buckingham County, Virginia containing 50.00 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 72, at page 156, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

#### Tract Fifty-eight. (Tax ID# 126 10)

All that certain tract or parcel of land, together with all improvements and appurtenances thereunto belonging, lying and being in the Marshall District of Buckingham County, Virginia containing 4.33 acres, more or less, but being a conveyance by the boundary and not by the acre.

For a more particular description of the property see Deed Book 108, at page 78, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia.

035 Rec Fee St. R. Tax	VIRGINIA: CLERK'S OFFICE OF THE CIRC	UIT COURT OF BUCKINGHAM COUNTY
Co. R. Tax Transfer Clerk Lib. (145) T.T.F.	The foregoing instruments was admitted to record on ab: 46P M. in D.B.313  Teste: MALCOLM BOOKER	
Grantor Tax 036 Proc.Fee Total \$	57 00 Pr. Time Buyan	DEPUTY CLERK

See plat in Cab A Slide 142C

# 800K 159 PAGE 511 800K 135 PAGE 246

THIS DEED, made this 6th day of December, 1984, by and between ANNE PAGE JOHNS, Widow, by THOMAS N.P. JOHNS, her attorney in-fact; ANNE ROSEWELL JOHNS GAINES, Trustee; MARTHA JOHNS LANG-FORD, Trustee; THOMAS N.P. JOHNS, Trustee; MELVILLE M. JOHNS, Executor of the Estate of Harriet Johns; AGNES J. ANDERSON and JOHN WALTON ANDERSON, her spouse; LOUISE J. PEARSON and ROY L. PEARSON, her spouse; MARGARET J. NIJHUIS and ROLF NIJHUIS, her spouse; REUBEN ANN JOHNS, single; MELVILLE M. JOHNS and DOROTHY G. JOHNS, his spouse; WILLIAM A. JOHNS and LOGAN P. JOHNS, his spouse; JAMES MONROE JOHNS and DEMA JOHNS, his spouse; LUCY J. SWARTZ and GARLAND F. SWARTZ, her spouse; AGNES J. SHEPARD and VAN P. SHEPARD, her spouse; MARTHA J. TAYLOR and ROBERT E. TAYLOR, JR., her spouse; FRANK H. JOHNS, JR. and EILEEN S. JOHNS, his spouse; LOGAN J. RAMO\$ and THEODORO RAMOS MENDZ, her spouse; AGNES J. SWEET and EDWARD SWEET, JR., her spouse; BEN IRVING JOHNS and ELIZABETH JOHNS, his spouse; PENULTIMA J. WISEMAN and PLUMER W. WISEMAN, her spouse; LUCY PAGE SIMONS and JOHN SIMONS, her spouse; LUCY B. POTTS and EDWIN C. POTTS, her spouse; HARRIET B. STOKES and ALLEN Y. STOKES, her spouse; SARAH B. IPOCK and THOMAS IPOCK, her spouse; ERNEST H. BOWLING, JR. and REBECCA H. BOWLING, his spouse; THOMAS N.P. JOHNS and HELEN JOHNS, his spouse; MARTHA J. LANGFORD, a/k/a PATSY J. LANGFORD, and HERBERT G. LANGFORD, her spouse; RUTH J. HILL and WILLIAM M. HILL, her spouse; and ANNE ROSEWELL JOHNS GAINES, divorced, all of whom are hereinafter referred to as "GRANTORS", and KYANITE MINING CORPORATION, a Virginia Corporation, hereinafter referred to as "GRANTEE".

WHEREAS, ANNE PAGE JOHNS and THE ESTATE OF HARRIET JOHNS each own a one-half undivided fee simple interest in the below described real estate; and

WHEREAS, all of the named Grantors constitute the owners of the entire fee simple interest in the below described real estate, any possible interest of Lucy A. Johns, wife of Allen A. Johns, who died intestate on May 5, 1974, being owned by Penultima J. Wiseman and Lucy Page Simons, the sole heirs of Lucy A Johns; and

WHEREAS, THOMAS N.P. JOHNS signs this deed and conveys said realty on behalf of ANNE PAGE JOHNS by virtue of a power of attorney recorded in the Clerk's Office of the Circuit Court of

LAW OFFICE OF DONALD C. BLESSING P. O. BOX 860 FARMVILLE, VIRGINIA 23901

#171

## 800K 159 PAGE 512 800K 135 PAGE 247

Buckingham County, Virginia, in Deed Book 135, at page 242, and,

WHEREAS, THOMAS N.P. JOHNS, Trustee, ANNE ROSEWELL JOHNS GAINES, Trustee, and MARTHA JOHNS LANGFORD, Trustee, sign this deed and convey said realty as Trustees pursuant to three trusts recorded in the Clerk's Office of the Circuit Court of Buckingham County, Virginia, in Deed Book 131, at page 152; Deed Book 131, at page 147: and Deed Book 131, at page 142: and also recorded in the Clerk's Office of the Circuit Court of Cumberland County, Virginia, in Deed Book 156, at page 839: Deed Book 156, at page 839; and

WHEREAS, MELVILLE M. JOHNS, Executor, signs this deed and conveys said realty on behalf of THE ESTATE OF HARRIET JOHNS under her will, which is recorded in the Clerk's Office in the Circuit Court of Buckingham County, Virginia, in Will Book \_\_\_\_\_\_, at page \_\_\_\_\_\_, and also recorded in the Clerk's Office of the Circuit Court of Cumberland County, Virginia, in Will Book \_\_\_\_\_\_, at page \_\_\_\_\_\_, and

WHEREAS, all other Grantors are either heirs of HARRIET
JOHNS as shown in a list of heirs recorded in the Clerk's Office
of the Circuit Court of Buckingham County, Virginia, in Will Book
ll, at page 493, and also recorded in the Clerk's Office of the
Circuit Court of Cumberland County, Virginia in Will Book
\_\_\_\_\_\_\_,
at page \_\_\_\_\_\_: and

WHEREAS, each party signing this deed intends to and is only conveying all of his or her proportionate fee ownership interest in the said realty.

## WITNESSETH:

THAT FOR AND IN CONSIDERATION OF TWO HUNDRED AND FIFTY
THOUSAND AND 00/100 DOLLARS (\$250,000.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, the Grantors do hereby grant and convey in fee simple and absolutely with GENERAL WARRANTY of title unto the GRANTEE, with the exception of the named Executor of Harriet Johns and the named Trustees, under said three trusts, who grant and convey in their respective capacities with SPECIAL WARRANTY of title unto the Grantees, all that real estate described as follows, to-wit:

LAW OFFICE OF DONALD C. BLESSING P. O. BOX 860 FARMVILLE, VIRGINIA 23901 All THAT CERTAIN tract or parcel of land, with improvements thereon, lying and being predominantly in Curdsville Magisterial District, Buckingham County, Virginia, and lying and being partially in Randolph Magisterial District, Cumberland County, Virginia, containing 891.03 acres, more or less, being conveyed in gross and not by the acre, according to a survey of Austin Brockenbrough and Associates, Consulting Engineers, dated January 10, 1979. Said realty being more precisely described on "Exhibit A" which is attached hereto and incorporated herein.

DB 133

The real estate and improvements are conveyed AS IS.

This deed is made expressly subject to all covenants, restrictions, and easements now of record on said property as the same may lawfully apply.

WITNESS the following seals and signatures:

Anne Page Sohwer atzi SEAL
Show all the attain SEAL ANNE PAGE JOHNS by THOMAS N. P.
ANNE PAGE JOHNS, by THOMAS N.P. JOHNS, her attorney-in-fact.
Johns, her accorney-in-ract.
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ANNE ROSEWELL JOHNS GAINES, Truste
MARTHA JOHNS LANGFORD, Trustee
MARTHA JOHNS LANGFORD, Trustee
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THOMAS N.P. JOHNS, Trustee
Helite malans (SEAL
MELVILLE M. JOHNS, Executor of the
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AGNES J. ANDERSON (SEAL
John Wallow anderso (SEAL
JOHN WALTON ANDERSON
1 - 1 0
cure J. Pearson (SEAL)
LOUISE J. PEARSON
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by L. Carron

ROY L! PEARSON

LAW OFFICE OF DONALD C. BLESSING P 0 BOX 860 FARMVILLE VIRGINIA 73901 ACOK 159 PAGE 514 800

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Margaret J. Nijhuis	(SEAL)
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Hemle M. Johns	(077)
MELVILLE M. JOHNS	(SEAL)
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DOROTHY G. JOHNS	
WILLIAM A. JOHNS	(SEAL)
LOSAN P. Johns	(SEAL)
James Momore Johns	(SEAL)
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ROBERT E. TAYLOR, JR.	-
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LAW OFFICE OF DONALD C. BLESSING P. O. BOX 860 FARMVILLE, VIRGINIA 23901

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Harry B Stake	(SEAL)
ALLEN Y. STOKES	(SEAL)

taw office of DONALD C. BLESSING P 0 BOX 860 FARMVILLE, VIRGINIA 23901

	159 PAGE 516  A 135 PAGE 251
	Lorah B Spack (SEAL)
	SARAH B. IPOCK
	Thomas Association (SEAL)
	THOMAS IPOCK
	Carriet & Banker, a (SEAL)
	ERNEST H. BOWLING, ER.
	Teherca H. Bowling (SEAL)
	REBECCA H. BOWLING
	Jul John (SRAL)
	THOMAS N.P. JOHNS
	Hadan C. Johns (SEAL)
	HELEN JOHNS
	Martha Langford (SEAL)
	MARTHA J. LANGFORD a/k/a PATSY J. LANGFORD
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	MERREDE C. LANGERD (SEAL)
	HERBERT G. LANGFORD
	(SEAL)
	RUTH J. HILL
	William Mill (SEAL)
	WILLIAM M. HILL
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	ANNE ROSEWELL JOHNS GAINES
712 8	
STATE OF VINGINIA	
City of Fychmo	
the jurisdiction aforesaid, wh	hority, a Notary Public in and for ose commission expires 2/28/86
names are signed to the forego same before me in my aforesaid	HILL and WILLIAM M. HILL, whose ing writing, have acknowledged the jurisdiction, this 17th day of
Decombet, 1984.	

LAW OFFICE OF DONALD C. BLESSING P 0 BOX 860 FARMVILLE, VIRGINIA 23901

Notary Public

	STATE OF MINNINDI.	
	Courter of Winds . to-wit:	
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires My Commission Expires Nov. 1 do hereby certify that MARTHA JOHNS LANGFORD whose name is signed to the foregoing writing as Trustee and in her own right, has acknowledged same before me in my jurisdiction aforesaid, this day of	.
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	Notary Public ( ) A Down	
3-	Notary Public ( Allia & Matthet	-
		7
	STATE OF (IRGSNIA	
	STATE OF VIRGINIA  COUNTY OF PRINCE Edward to-wit:	
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 5-15 88 do hereby certify that MELVILLE M. JOHNS, as Executor and in his own right, and DOROTHY M. JOHNS, whose names are signed to the foregoing writing have acknowledged the same before me in my aforesaid jurisdiction, this 13 day of December , 1988.	
, , , , ,	Pat & Leonard Notary Public	
	notary rubite )	
	STATE OF A CONTROL	
	of Now to-wit:	
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires My Commission Expires Nov. do hereby certify that HERBERT J. LANGFORD whose name is signed to the foregoing writing, has acknowledged the same before me in my aforesaid jurisdiction, this day of	/985 191
	Notary Public Alla &	
	Maudents)	
	STATE of Vilania	i
	City of Richmond, to wit:	
	I, the undersigned authority, a Notary Public, in and for the jurisdiction aforesaid, whose commission expires 2/28/86 do hereby certify that THOMAS N.P. JOHNS whose name is signed to the foregoing writing as attorney-in-fact for ANNE PAGE JOHNS; as Trustee; and in his own right, has acknowledged same before me in my jurisdiction aforesaid, this 17th day of 1000 1984.	
	Penny S. Smith. Notary Public	

LAW OFFICE OF DONALD C. BLESSING P O BOX 660 FARMVILLE VIRGINIA 23901

# 800K 159 PAGE. 518

	STATE OF augona
	County of Pina, to-wit:
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 11/2/87 do hereby certify that ANNE ROSEWELL JOHNS GAINES whose name is signed to the foregoing writing as Trustee; and in her own right, has acknowledged same before me in my jurisdiction aforesaid, this 30th day of, 19 55.
	mary C. Trumbly
	MARY C. TRUJILLO NOTARY PUBLIC My Commission Expires November 2, 1987  MARY C. TRUJILLO Notary Public
	STATE OF VINGINIA
	County of Albandile, to-wit:
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires $\frac{12-3-67}{2}$ do hereby certify that AGNES J. ANDERSON and JOHN WALTON ANDERSON whose names are signed to the foregoing writing have acknowledged the same before me in my aforesaid jurisdiction, this $\frac{23}{2}$ day of $\frac{19}{2}$ .
	alvin L tong
	Notary Public
	County of Albertale, to-wit:
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 12/3/83 do hereby certify that LOUISE J. PEARSON and ROY L. PEARSON, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 23 day of Palanhi , 1984.
	alrul tong
	Notary Public
	STATE OF Virginia  Country of Prince Edward, to-wit:
	ounty of Trince Edward, to-wit:
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 5-15-88 do hereby certify that MARGARET J. NIJHUIS and ROLF NIJHUIS, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 220 day of 1984.
	Pat S. Leonard  Notary Public
11	Notary Public /

C	STATE OF Linguis  I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 2/28/86 do hereby certify that WILLIAM A. JOHNS and LOGAN P. JOHNS, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 17 th day of Legender, 19 84.  Notary Public
O D L I	STATE OF Index Edward, to wit:  I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 5 /5 % do hereby certify that JAMES MONROE JOHNS and DEMA JOHNS, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 13th day of Notary Public  STATE OF Annual Of Recember, 1984.  I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 2/28/86 do hereby certify that LUCY J. SWARTZ and GARLAND F. SWARTZ, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 17th day of
LAW OFFICE OF	STATE OF County Of Prince Edward to-wit:  I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 5-15-88 do hereby certify that AGNES J. SHEPARD and VAN SHEPARD, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 23 day of Achuary 1985.  Notary Public

		BOOK	159	PAGE	520	)	120	
			135					· .
	STATE OF <u>VIRGINIA</u> , COUNTY OF PRINCE							
	County of TRACE	Fo	WAR	to-v	/it:			
34	I, the undersigned the jurisdiction aforesaid, do hereby certify that MARTH whose names are signed to the same before me in my aforember, 1984.	aut who A J	horit se co . TAY orego aid j	y, a mmis LOR ing uris	Not sior and writ dict	ROBERT ing, ha	E. TAYLO	5-88 OR, JR.,
7			Nota	ry P	wbli	Leon c)	ard_	
C								
	STATE OF VIRGINIA  County OF PRINCE EC	LWAR	ر ا	to-w	it:			
	I, the undersigned the jurisdiction aforesaid, do hereby certify that FRANK whose names are signed to the same before me in my aforember 1984.	auth whos H. e fo	ority e con JOHN:	y, a mmis: S, Ji	Not sion R. a	expire nd EILE	s <u>5-/5-</u> EN S. JO	HNS,
			$\underline{\hspace{1cm}}$		D)		onarcL	
19 10 10 10			Notai	cy Pu	ıbli	c <i>)</i>		
	STATE OF <u>CALIFORNIA</u>							
	County Of SAN Die	=90	, t	o-wi	t:			
	I, the undersigned athe jurisdiction aforesaid, we do hereby certify that AGNES are signed to the foregoing we before me in my aforesaid jurily \$55.	uth whose	ority e com SWEET	, a miss and	Nota ion EDV	expires VARD SWE	EET, who	se names
	OFFICIAL SEAL MARLYS A. WILLIS NOTARY PUBLIC - CALIFORNIA PRINCIPAL OFFICE IN SAN DIEGO COUNTY My Commission Expires October 27, 1987	- 1 I	<u>M</u> Notar	arli y Pu	blic	(. u	illi,	2
100	COMMONWEALTH OF PUERTO RICO	cò	, t	c o-wi	z <i>ff</i> t:	348		
	I, the undersigned a the jurisdiction aforesaid, we do hereby certify that LOGAN whose names are signed to the the same before me in my afor Annoyey, 1967, 200	nose J. F for	e com RAMOS regoin	miss and	ion THE	expires ODORO R	AMOS MEN	IDZ,
	0 708100	N	lotary	Pul	olic	man in stretch to from a source document in factors	a seriosco da resulta a sa considera da	
		-10	Ĭ	Actions	16 65-75 45 - Tark-19-15			

DONALD C. BLESSING P 0 BOX 960 ARMVILLE, VIRGINIA 23901

ì	11
	STATE OF VICTION
	<u>City</u> of <u>Alexandrin</u> , to-wit:
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires [ch], 1987 do hereby certify that BEN IRVING JOHNS and ELIZABETH JOHNS, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 185 day of
	February, 1995.
	Miling & Gart O.
100	Notary Public Notary Public
	B 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
71 <sub>11</sub>	STATE OF Vinginia
100	STATE OF Virginia Of Danville, to-wit:
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires 5-24-86 do hereby certify that PENULTIMA J. WISEMAN and PLUMER W. WISEMAN, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 284 day of december, 1984.
	Benert, B. Den
	Benerly B. Sung Notary Public
1¥	
ć tin	City of Burnmand, to-wit:
- 4	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires
<i>i</i>	do hereby certify that LUCY PAGE SIMONS and JOHN SIMONS, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 19th day of Lecender, 1984.
	Reagust Smith
	Reacy Dublic Notary Public
ı	
e e	STATE OF Virginia  County of Loudoun, to-wit:
00 21.	County of Loudoun, to-wit:
	I, the undersigned authority, a Notary Public in and for the jurisdiction aforesaid, whose commission expires Jan. 27 1985
	do hereby certify that LUCY B. POTTS and EDWIN C. POTTS, whose names are signed to the foregoing writing, have acknowledged the same before me in my aforesaid jurisdiction, this 40 day of DANUARY, 1985.

DONALD C. BLESSING P 0 BOX 860 FARMVILLE, VIRGINIA 23901

Notary Public

ACCK 159 PAGE 523

802k 135 AG 258

STATE OF VIA	GINIA	414	
County	of _	Albertale	, to-wit:
the jurisdicti do hereby cert foregoing writ	ion aforesaid, whose rify that REUBEN AN ring, has acknowled	nority, a Notary Puble commission expires N JOHNS, whose name i ged the same before m day of Dreet	s signed to the me in my
		alvan	L fows

See Plat Book 4 Page 127

ALL that certain tract or parcel of land, together with all improvements and appurtenances thereto belonging, shown by the hereinafter described plat, lying and being in Curdsville District of Buckingham County, Virginia (but carried in the Land Book of Buckingham County in Francisco District), and Randolph District of Cumberland County, Virginia, containing 891.03 acres, more or less, but being a conveyance in gross and not by the acre, said tract being more particularly described as to metes and bounds by a plat of Austin Brockenbrough and Assoc., Consulting Engineers, which is dated January 10, 1979. The tract is bounded by the lands now or formerly of Continental Can Co., Inc., the lands now or formerly of Frank C. Anderson and Sarah M. Anderson, the lands now or formerly of David L. and Phyllis J. McGuire, the lands of Melville M. Johns et al, the lands now or formerly of E. M. Johnson, the lands now or formerly of W. C. Sprouse, the lands now or formerly of S. Atkins, the lands now or formerly of Ray Sudesberry, the lands now or formerly of Kenneth Atkins, the lands now or formerly of Makesuski the lands now or forme lands now or formerly of Makowski, the lands now or formerly of Chesapeake Corporation of Virginia, and the lands of Kyanite Mining Corporation.

VIRGINIA: CLERK'S OFFICE OF THE CIRCUIT COURT OF BUCKINGHAM COUNTY. The foregoing instrument with acknowledgement was admitted to record on 3-5 1985 at 10:50AM. in D.B135 Page(s) 246-258 375 00 St. R. Tax 1 00 20 00 Co. R. Tax Transfer Recording costs paid as shown. Clerk 24900 Teste: MALCOLM BOOKER JR., CLERK GrantorTax Total \$ MN BCMRUS, DEPUTY CLERK

Virginia: In the Clerk's Office of the Circuit Court of Cumberland

County, March 5, 1985.

This deed was this day presented in said office and, with certificate of acknowledgment annexed, admitted to record at 12:15 o'clock p.m. The tax imposed by Section 58.1-802 of the Code was paid in the amount of \$2.00. Teste:

Quastall

This Deed prepared by: J. Robert Snoddy, III P.O. Box 325 Dillwyn, Va 23936 (434)983-2408 (434)983-3444 VSB #13494

## BOOK 435 PAGE 710

THIS DEED OF GIFT, made this 29th day of September, 2016, by and between SLATE RIVER LAND & TIMBER, LLC a Virginia limited liability company, party of the first part (grantor), and JAMN LIMITED PARTNERSHIP, LLP, a Virginia Limited Liability Partnership, party of the second part (grantee).

WITNESSETH, that for and in consideration of the premises and for no monetary consideration whatsoever, the party of the first part does hereby give, grant and convey with Special Warranty but subject to the matters hereinafter contained, all the following described real estate, to-wit:

SEE SCHEDULE A HERETO ATTACHED, WHICH IS INCORPORATED HEREIN VERBATIM BY THIS REFERENCE THERETO, FOR A COMPLETE DESCRIPTION OF THE LANDS HEREBY CONVEYED.

This conveyance is made expressly subject to any and all easements, restrictions, conditions and reservations which are: contained in duly recorded deeds, plats, and/or other instruments constituting constructive notice in the chain of title to the property hereby conveyed which have not expired by limitation of time contained therein or have otherwise become ineffective; or, apparent upon inspection of the premises. It is not the intent of this deed to reimpose any such easement, condition, restriction or reservation.

Return to:
J. Robert Snoddy, III

TM#s 68-17,67-01,66-22 & 207-40 Title Insurance: Chicago Title

## BOOK 435 PAGE

This instrument is exempt from recording taxes pursuant to Virginia Code §58.1-811-D.

IN TESTIMONY WHEREOF, the party of the first part has caused this instrument to be executed on its behalf by Glade M. Knight, its Manager and sole member, pursuant to the company's operating agreement or a duly adopted resolution of its membership, all as of the date of this instrument.

> SLATE RIVER LAND & TIMBER, LLC A Virginia Limited Liability Company

(SEAL)

STATE OF VIRGINIA CITY/COUNTY OF RICHMOND , to-wit:

I, SHELLA KUN7, a notary public in and for the city/county and State aforesaid, do hereby certify that Glade M. Knight, whose name as Member of Slate River Land & Timber, LLC is signed to the writing above, has acknowledged the same before me in my city/county aforesaid.

Given under my hand this 20th day of SEPTEMBER 2016. My commission expires 11/30/2018

Notary Registration Number 7327105

WRIGHT WRIGHT

REGISTRATION NO. 7327705
MY COMM EXPIRES
11/30/2018
11/30/2018
ARY PUBLICATION

Grantee's Address: 814 E. Main St. Richmond, VA 23219

# BOOK 435 PAGE 712

Attached to a deed of gift dated September 29, 2016 from Slate River Land & Timber, LLC, a Virginia limited liability company, to JAMN Limited Partnership, LLP, a Virginia limited liability partnership, to-wit:

#### TRACT T-325 (Davidson) - Tax Parcel 68-17:

All that certain tract or parcel of land situate, lying and being in Marshall Magisterial District of Buckingham County, Virginia, containing 138.96 acres, more or less, and being more particularly shown and described according to that certain plat of survey prepared by Fred C. Howell, C.L.S., dated May 16, 1979, and recorded in Plat Book 1, page 65, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia, which plat by this reference thereto is incorporated herein for a more particular and accurate description of said property.

LESS AND EXCEPT .176 acre conveyed to Buckingham County School Board by The Glatfelter Pulp Wood Company in deed dated May 8, 2000, and recorded in Deed Book 255, page 444, and shown on plat of survey prepared by Robert L. Lum, C.L.S., dated April 24, 2000, which plat is attached to said deed and recorded in Deed Book 255, page 446, in said Clerk's Office.

#### TRACT T-347 (Morris) - Tax Parcels 67-01 & 66-22:

#### Parcel 1:

All that certain tract or parcel of land situate, lying and being in Marshall Magisterial District of Buckingham County, Virginia, containing 177 acres, more or less, and being more particularly described by metes and bounds by a plat thereof recorded in the Clerk's Office of the Circuit Court of Buckingham County, Virginia, in Deed Book 12, page 290, prepared by William Peile, Surveyor, dated March 25, 1903, which plat by this reference thereto is incorporated herein for a more particular and accurate description of said property.

#### Parcel 2:

All that certain tract or parcel of land situate, lying and being in Marshall Magisterial District of Buckingham County, Virginia, containing 6.1 acres, more or less, and being more particularly described by metes and bounds shown on that certain plat of survey prepared by Carroll Gillipsie, C.L.S., S.B.C., dated August 14, 1975, which plat is recorded in Deed Book 98, page 386, in the Clerk's Office of the Circuit Court of Buckingham County,

### BOOK 435 PAGE 713

which plat by this reference thereto is incorporated herein for a more particular and accurate description of said property.

#### TRACT T-326 (Varner) - Tax Parcel 207-40

#### Parcel 1:

All those certain tracts or parcels of land situate, lying and being in Francisco magisterial District of Buckingham County, Virginia, containing 192.91 acres, more or less, said lands lying on both sides of Virginia Secondary Route #683, and being more particularly described as the aggregate of a 182.16 acre parcel and a 10.75 acre parcel which are depicted on that certain plat of survey prepared Charles J. Kerns, Jr., L.S., dated February 26, 1990, and recorded in Plat Book 3, page 95, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia, which plat by this reference thereto is incorporated herein for a more particular and accurate description of said property.

#### Parcel 2:

All that certain strip or parcel of land situate, lying and being in Francisco Magisterial District of Buckingham County, Virginia, said strip being any and all of the lands lying within the margins of Virginia Secondary Route #683 as the same runs in a general northeasterly direction from a point therein near said road's intersection with Virginia Secondary Route #674, said point being depicted as Point "B" on a plat of survey prepared by Charles J. Kerns, Jr., L.S., dated February 26, 1990, and recorded in Plat Book 3, page 95, in the Clerk's Office of the Circuit Court of Buckingham County, Virginia, which plat by this reference thereto is incorporated herein for a more particular and accurate description of said property, to the northern end of maintenance of said Route #683 at or near the boundary line between the lands, now or formerly, of Kyanite Mining Corporation on the northeast and 182.16 acre and 10.75 acre parcels on the southwest, all as are depicted on the aforesaid plat.

TRACTS T-325, T-347 & T-326 being the same conveyed by identical designations unto Slate River Land & Timber, LLC, a Virginia limited liability company from GIC Virginia Timberlands, LLC, a Delaware limited liability company, by deed dated January 31, 2008 and recorded in the Clerks's Office of the Circuit Court of Buckingham County in Deed Book 355, at page 837 et seq.

 $t_{\parallel}$  virginia: Clerk's office of the circuit court of Buckingham county 035 Rec Fee Co. R. Tax The foregoing instrument with acknowledgement 1 00 Transfer was admitted to record on 10/11 20 0, at 3: 50 PM. in D.B. 135 Page(s) 10-713 صا 20 Clerk Lib.(145) T.T.E. Teste: MALCOLM BOOKER, JR., CLERK Grantor Tax 036 Proc. Fee \_, DEPUTY CLERK Total \$

26 Building Permits were issued in the amount of \$3924.67 for the month of July 2023

Permit	District	Name	Purpose	Cost of	Cost of Permit
No.				Construction	
19552	Slate River	John Yoder	Commerical Construction	\$27,000.00	\$346.60
19553	Slate River	John Yoder	Commerical Construction	\$1,500.00	\$61.00
19556	Slate River	Jason Huvar	Residential Remodel	\$0.00	\$51.00
19558	Maysville	Pankey Builders	Detached Garage	\$38,000.00	\$189.52
19559	Maysville	Levi Fisher	New Dwelling Stickbuilt	\$0.00	\$322.85
19560	Curdsville	Generator Supercenter	Generator	\$13,900.00	\$102.00
19561	James River	Patrica Alexander	Electrical	\$2,260.00	\$51.00
19562	Curdsville	Michael and Sons	Electrical	\$6,327.82	\$51.00
19563	Maysville	Gaberial Francis	Electrical	\$7,500.00	\$51.00
19564	Curdsville	Freedom Forever Virginia	Solar Residential	\$215,000.00	\$61.00
19565	Francisco	Benuel Bieler	Farm Building Exempt	\$60,000.00	\$10.00
19566	Francisco	Jonathan King	Commerical Construction	\$2,000.00	\$61.00
19567	Francisco	Jonathan King	Commerical Construction	\$40,000.00	\$151.37
19568	Curdsville	Glenda Harris	Mobile Home Singlewide	\$0.00	\$229.90
19569	Curdsville	Jay Ownby	Electrical	\$0.00	\$51.00
19570	Maysville	Jonthan Yoder	New Dwelling Stickbuilt	\$500,000.00	
19571	James River	Travis Hill	Electrical	\$0.00	\$51.00
19572	James River	Foster Fuels	Generator	\$5,984.15	\$51.00
19573	Maysville	Mills Heating and Air	Generator	\$18,500.00	\$51.00
19574	James River	Berkley Kitchen	Generator	\$9,500.00	\$51.00
19575	Curdsville	EE Talbott	Demolition	\$8,500.00	\$51.00
19577	Slate River	Matthew Browning	Residential Remodel	\$25,000.00	\$195.84
19583	Francisco	Ellington Energy	Mechanical	\$3,615.00	\$51.00
19584	James River	Ellington Energy	Generator	\$5,364.00	\$51.00
19585	James River	Ellington Energy	Generator	\$14,315.00	\$102.00
19586	Marshall	Ellington Energy	Generator	\$11,940.00	\$102.00
19395		Rock River	Re-Inspection Fee		\$200.00
19450		Jessica and Matthew Nicholas	Amendment Fee		\$50.00
**Cost (	of permit is calcule	ated based on square footage of st	ructure**	\$1,016,205.97	\$3,924.67