REZONING REQUEST

By: Duke Energy Carolinas, LLC, DFC Stokes, LLC and DFC Stokes 2, LLC RA and M1 to M1-CZ

Case# 24-1163

REQUEST: This request is by applicant Duke Energy Carolinas, LLC, DFC Stokes, LLC and DFC Stokes 2, LLC to rezone approximately 667 +/- acres from Residential Agricultural (RA) and Light Manufacturing (M1) to Light Manufacturing Conditional Zoning (M1-CZ) at US 311 and Tuttle Rd and Oldtown Rd, listed as Stokes County Parcels (6973734188, 6973767124, 6964918321, 6982812546). This request is to build a large-scale solar farm.

SITE INFORMATION:

REZONING PARCEL SIZE: Approximately 667 +/- acres

PROPOSED DISTRICT: Light Manufacturing – Conditional Zoning (M1-CZ)

FLOOD HAZARD AREA: Located adjacent to flood zone

WATERSHED DISTRICT: N/A

TOWNSHIP: Sauratown

SURROUNDING LAND USE: Surrounding land use consists of low-density residential neighborhoods with limited access to water and sewer utilities and reserved lands / conservation areas. The reserved lands / conservation area is comprised of very low-density development that includes many of the rural areas in Stokes County. This zone includes areas with very limited or no water and sewer infrastructure. Some areas within this zone could ultimately transition into the preserved lands / conservation area transect zone by expanding public lands and preserving highly sensitive natural resources.

ISSUES TO CONSIDER:

- Potential tax base increase due to expansion of Commercial Property.
- Land use, as it pertains to the Stokes County 2035 Long Range Plan.
- Is this proposal reasonable and in the best interest of the citizens of Stokes County?
- How will this proposal affect the natural environment and Agri-Tourism of Stokes County?
- The effect this proposal will have on neighboring Stokes County residents.
- Will the additional power this facility generates directly benefit Stokes County residents?

STAFF COMMENTS:

Duke Energy Carolinas, LLC, DFC Stokes, LLC and DFC Stokes 2, LLC is requesting rezoning of four parcels of 667 +/- acres from RA (Residential Agricultural) and M1 (Light Manufacturing) to M1-CZ (Light Manufacturing-Conditional Zoning) for the construction of a 667 +/- acre large-scale solar farm consisting of 263,648 fixed tilt Canadian Solar brand modules. Duke Energy has stated that this facility will provide 130 MW (Megawatt) of renewable energy each year, which is enough emission-free energy to power approximately 22,700 homes, and will provide 46 MW (Megawatt) of energy storage. Duke Energy has stated that this facility would create 300 new construction jobs, increase tax revenue for Stokes County, generate economic benefits to local businesses during construction and help improve overall reliability of the electric grid. The site-plan shows the facility with panels from the Tuttle Rd and Hwy 311 area with power conversion stations with inverters, transmission lines and entrances from Tuttle Rd. The site-plan also depicts the Oldtown Rd side of the project consisting of panels and conversion stations with inverters including the Oldtown Rd West entrance. There will be a substation with access from Middleton Loop with a switching station, a 100 KV solar generation substation and an AC coupled 46 MW(Megawatt) battery storage facility. The proposed facility would have a minimum 50' vegetated buffer area as well as two row and three row planted buffers around the perimeter as depicted in the Landscape Buffer Plan. The applicant is allowing for an agricultural aspect with this plan, providing an area for grazing farm animals. An email notice has been received from Scott Jones of NCDOT and included in your packets for your review stating that the applicant is in the process of fulfilling NCDOT requirements for all entrances. The applicants have gone out of their way to inform and answer any questions from property owners and citizens of Stokes County as well as any requests or questions from planning staff, and have fulfilled all requirements for submittal to Stokes County for this rezoning petition. This proposal does provide a potential tax base increase due to expansion of commercial property, however the Stokes County Planning Department does not support this proposal because it is not in line with or support the land use policy established in the Stokes County 2035 Long Range Plan.

PUBLIC INFORMATION MEETING:

The Public Meeting for this proposal was held on October 29th, 2024, from 4 pm until 7pm Pine Hall Community Center located at 3853 US-311 Pine Hall NC. Duke Energy invited nearly 1,000 property owners to the proposed Oldtown Solar Center open house. Invitations were extended to neighbors as well as residents of Walnut Cove and were sent via USPS First Class Mail postmarked October 11, 2024. Additional invitations were extended to the Walnut Tree neighborhood as a courtesy and were sent via USPS First Class Mail postmarked October 11, 2024. In addition to the in-person open house, all were invited to a web-based meeting scheduled for Wednesday, October 30, at noon. There were no registrants for the web meeting. The in-person open house offered stations covering the project proposal, project need, benefits, technology - solar and energy storage, general site plan, real estate report and environmental commitments. Participants were able to discuss their questions with subject matter specialists at each station. Handouts of materials shared during the meeting were available for participants and they will be available at the Oldtown Solar Center website: Oldtown Solar Center with Energy Storage - Duke Energy. Prior to the open house and web meeting, we surveyed potential participants about what they wanted to learn during the information sessions. We received four responses with questions about the type of cattle onsite, elevation/visibility of the site, Duke Energy continued ownership and decommissioning. Three of the four responders indicated a high understanding of the need for the project, ranking 8-10 (10 being the highest understanding) and one ranked their understanding at four. Additionally, we offered a post open house survey to participants and received five responses. Results are attached with responder names and addresses redacted for privacy. As part of our communications, we offered a toll-free phone number and email address. We have only received one phone call from a landowner interested in leasing land for a solar site and no emails. On March 4th, Duke Energy held another public meeting at Pine Hall Community Center to discuss and answer any questions that the public may have. Thirteen people attended the meeting with very limited opposition and over was overall positive according to Duke Energy Representative Jimmy Flythe.

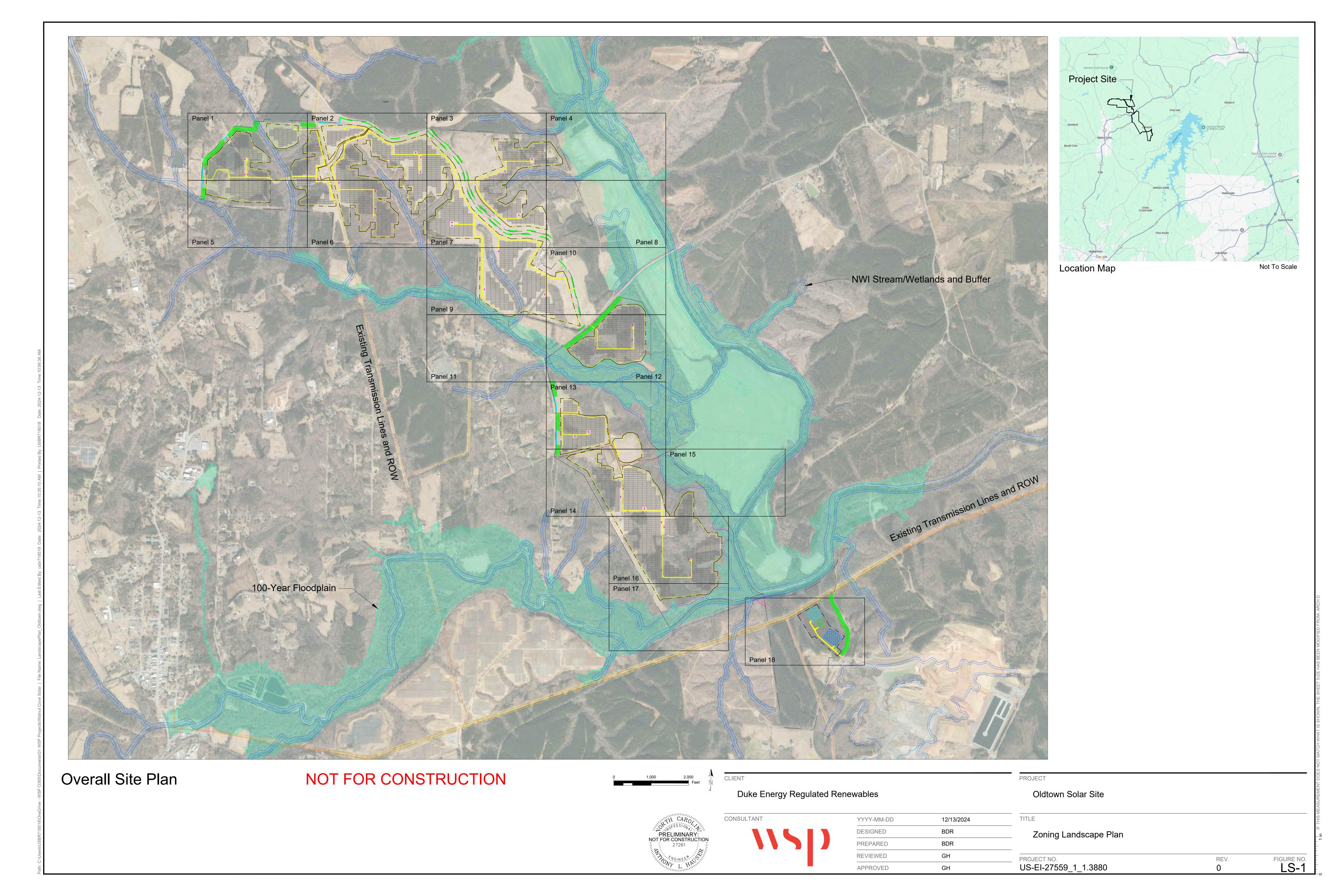
STATEMENT OF LAND USE

The Stokes County 2035 Comprehensive Plan identifies portions of the county through the Land Use Transect methodology, which shows transition zones between rural areas and more urbanized areas of the county. The proposed rezoning is best described as being in the transect zone identified as (low-density residential neighborhoods) with limited access to water and sewer utilities and (reserved lands / conservation areas). The reserved lands / conservation area is comprised of very low-density development that includes many of the rural areas in Stokes County. This zone includes areas with very limited or no water and sewer infrastructure.

| Some areas within this zone could ultimately transition into the (preserved lands / conservation area transition) | <u> 1sect</u> |
|---|---------------|
| zone) by expanding public lands and preserving highly sensitive natural resources. | |
| | |

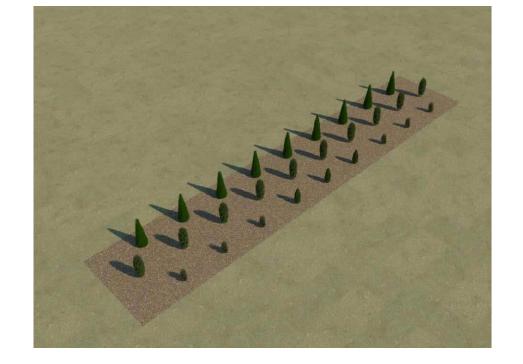
STATEMENT OF CONSISTENCY AND REASONABLENESS

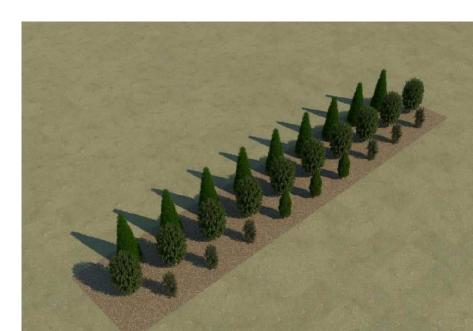
I have included example Statements of <u>Consistency</u> and <u>Reasonableness</u> supporting the request and opposing the request for your review. The Board must determine if the rezoning petition meets the requirements of the Stokes County 2035 Comprehensive Plan as to its consistency with the current development patterns and to the appropriateness of the request regarding the guide. <u>Please make all motions for approval or disapproval referencing the petitions of consistency or non-consistency with the Stokes County 2035 Comprehensive Plan.</u>



Conceptual Three-Row View - 2 Years

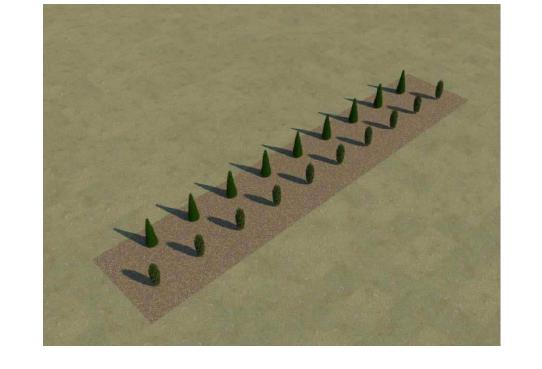
Conceptual Three-Row View - 5 Years







Conceptual Two-Row View - 2 Years

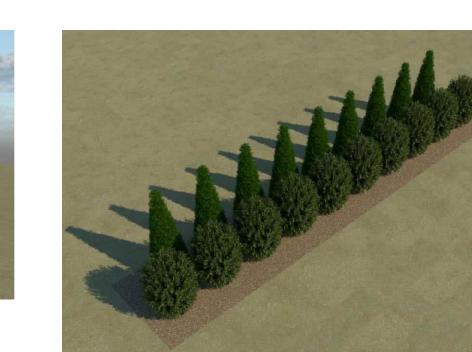






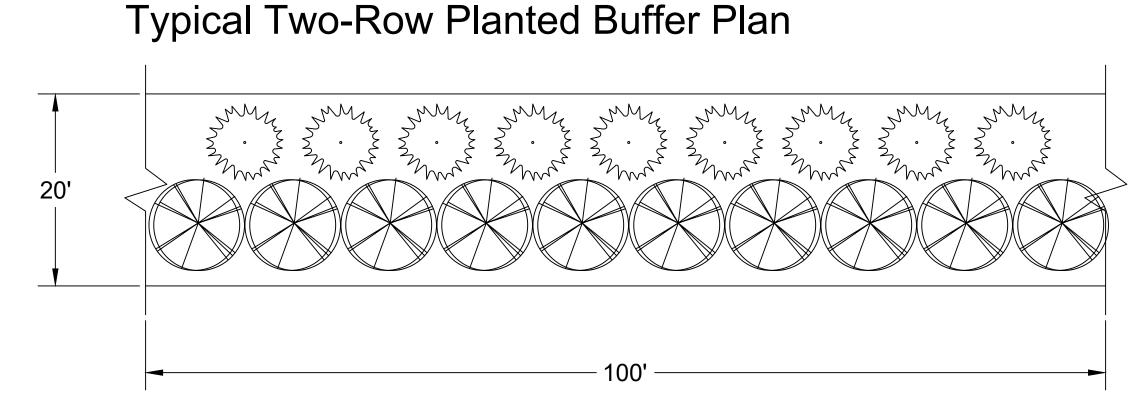
Conceptual Two-Row View - 5 Years

Conceptual Two-Row View - Maturity

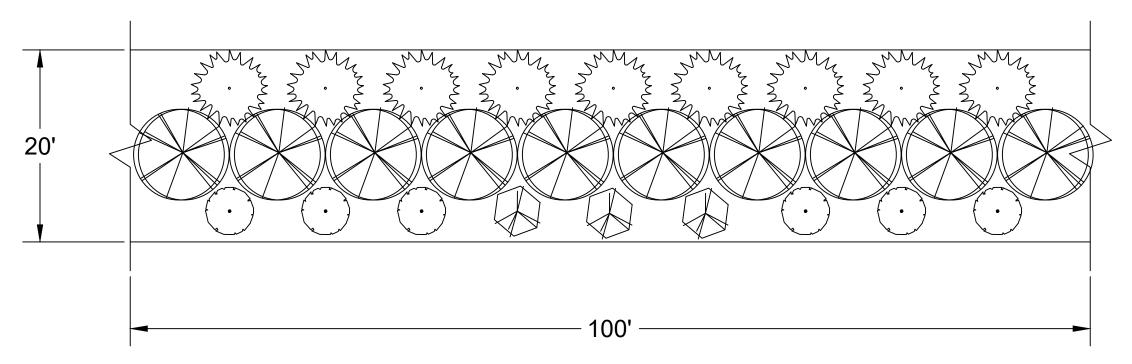


Conceptual Three-Row View - Maturity





Typical Three-Row Planted Buffer Plan



Plant Schedule

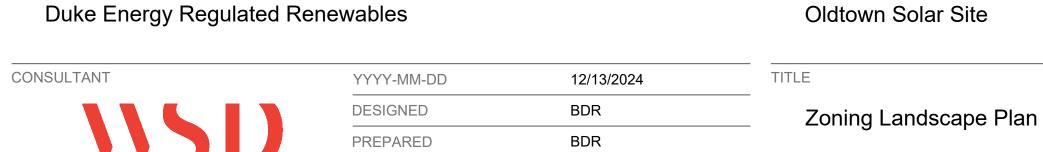
| | Plant Type | Size | Typical Spacing |
|--|---|--------|--------------------|
| | Carolina Cherry Laurel Prunus caroliniana | 5 Gal. | 10' O.C. |
| Source State of the state of th | Green Giant Arborvitae Thuja 'Green Giant' | 5 Gal. | 10' O.C. |
| | Wax Myrtle Myrica cerifera | 5 Gal. | 10' O.C. |
| | Yaupon Holly Ilex vomitoria | 5 Gal. | 10' O.C. |

Landscape Plan Notes

- 1. The solar panels shall be reasonably screened from view from road rights—of—way and adjacent residential properties by either natural vegetation or planted evergreen vegetation.
- 2. Natural vegetation screening shall be no less than 50 feet in width.
- 3. Planted screening shall be a minimum of 20 feet in width and have a minimum of two rows of evergreen plants in a staggered configuration.
- 4. Where visible from adjacent residences, the planted screening shall have a minimum of three rows of evergreen plants in a staggered configuration.
- 5. Natural screening areas in the locations shown are to be maintained or enhanced as required to provide adequate screening. All natural screening areas will be evaluated for visual screening after clearing and grading. If additional screening is required, evergreen shrubs will be planted as needed.

NOT FOR CONSTRUCTION

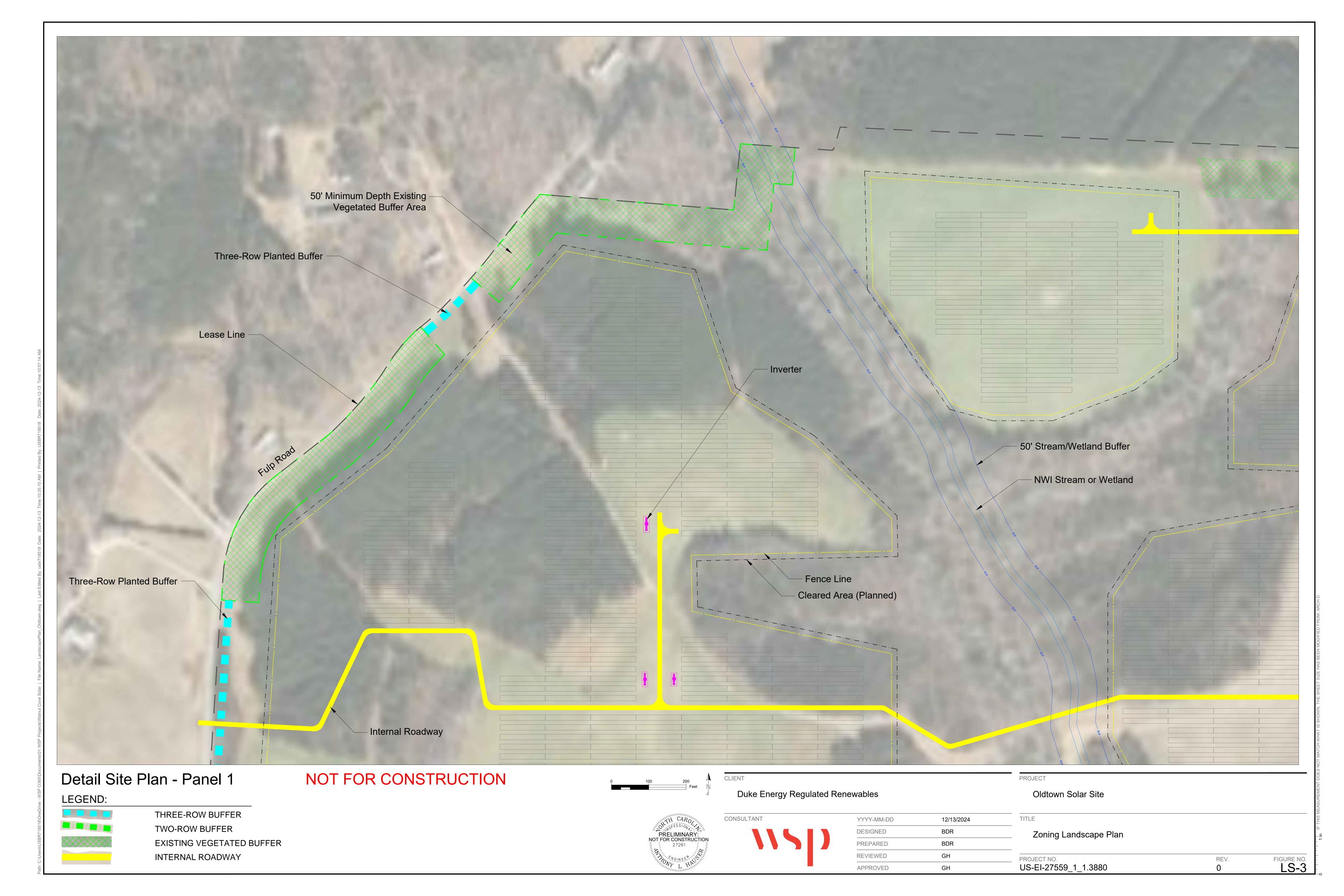
PROJECT

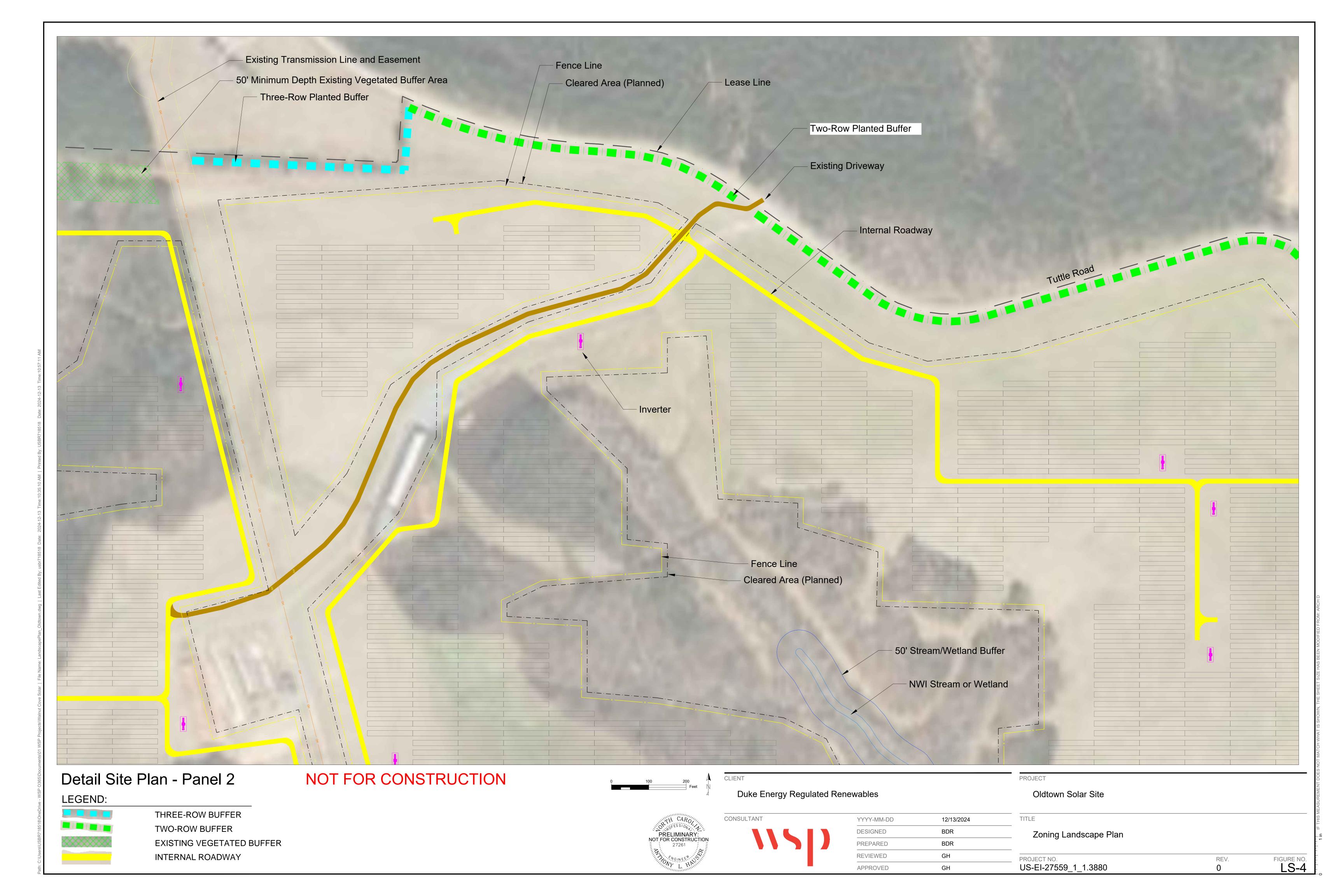


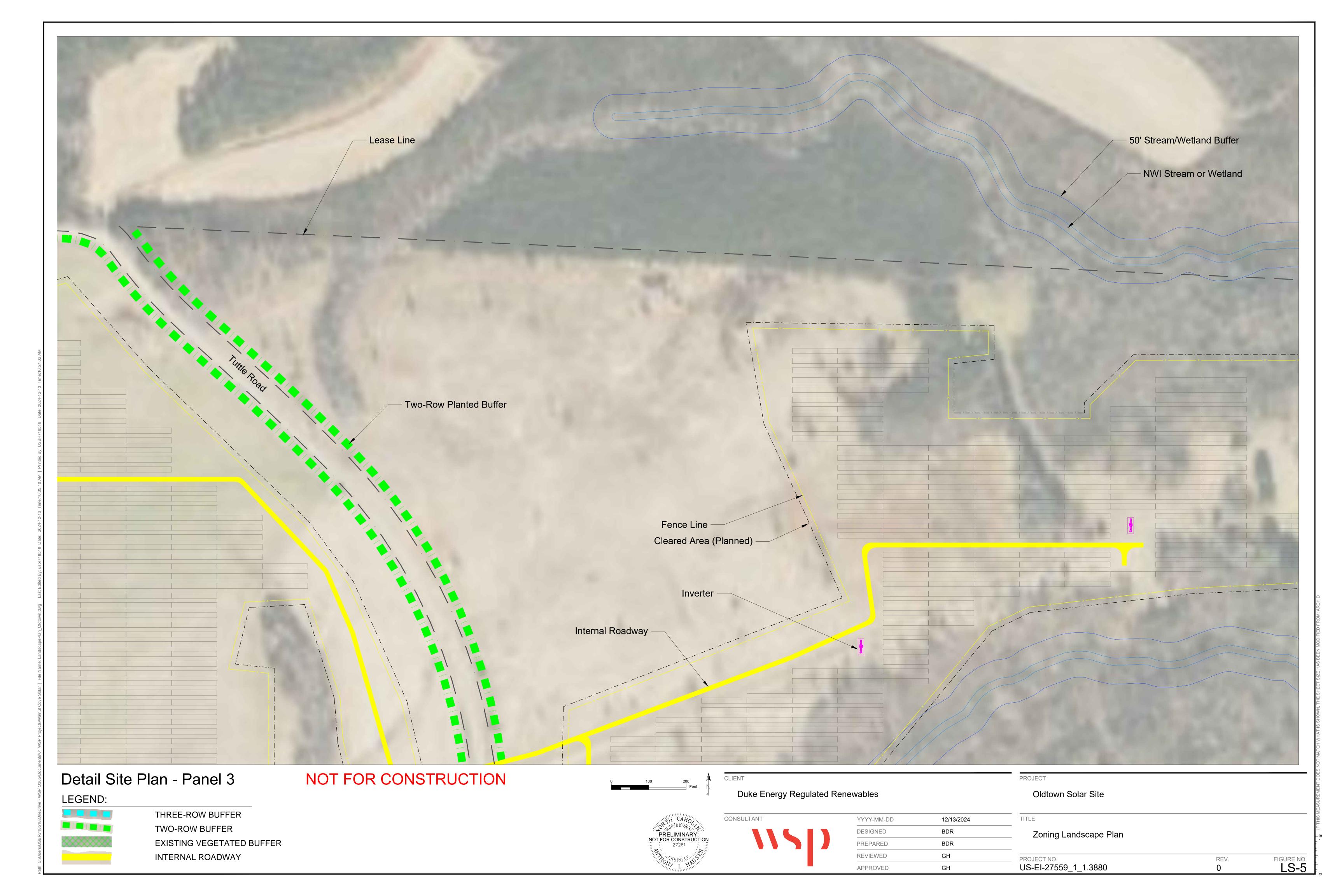
REVIEWED

APPROVED

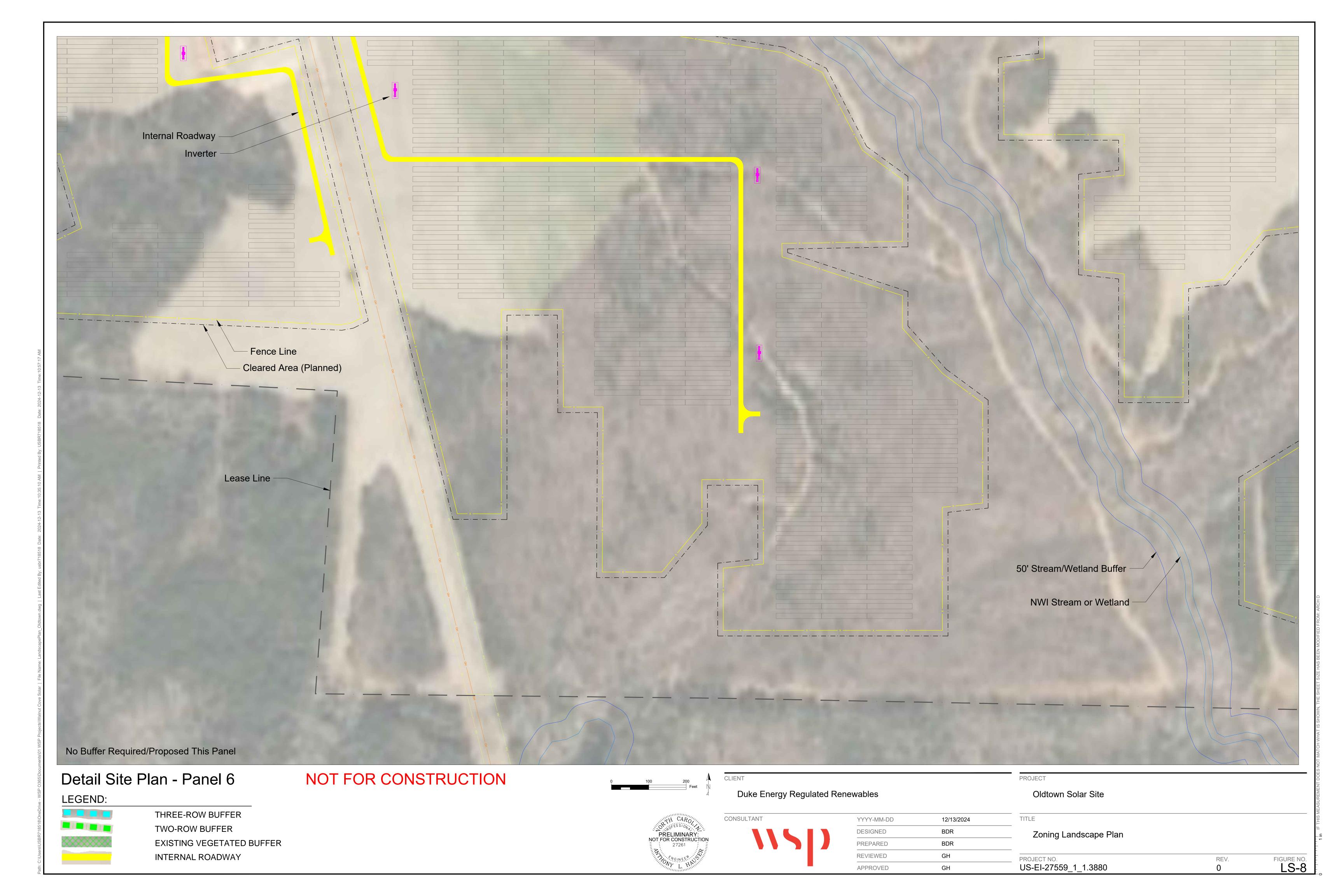
PROJECT NO. FIGURE NO. LS-2 US-EI-27559_1_1.3880 GH

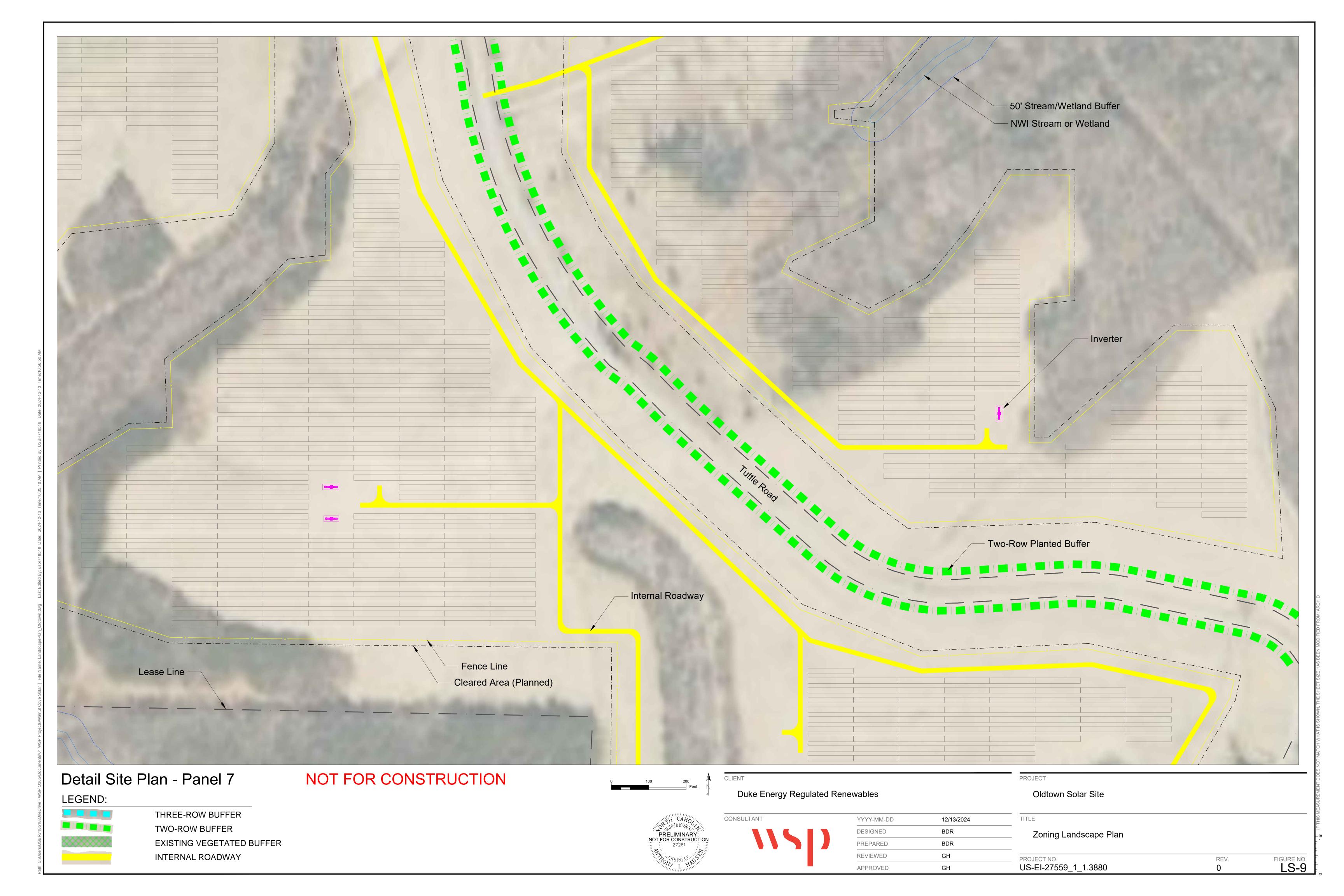


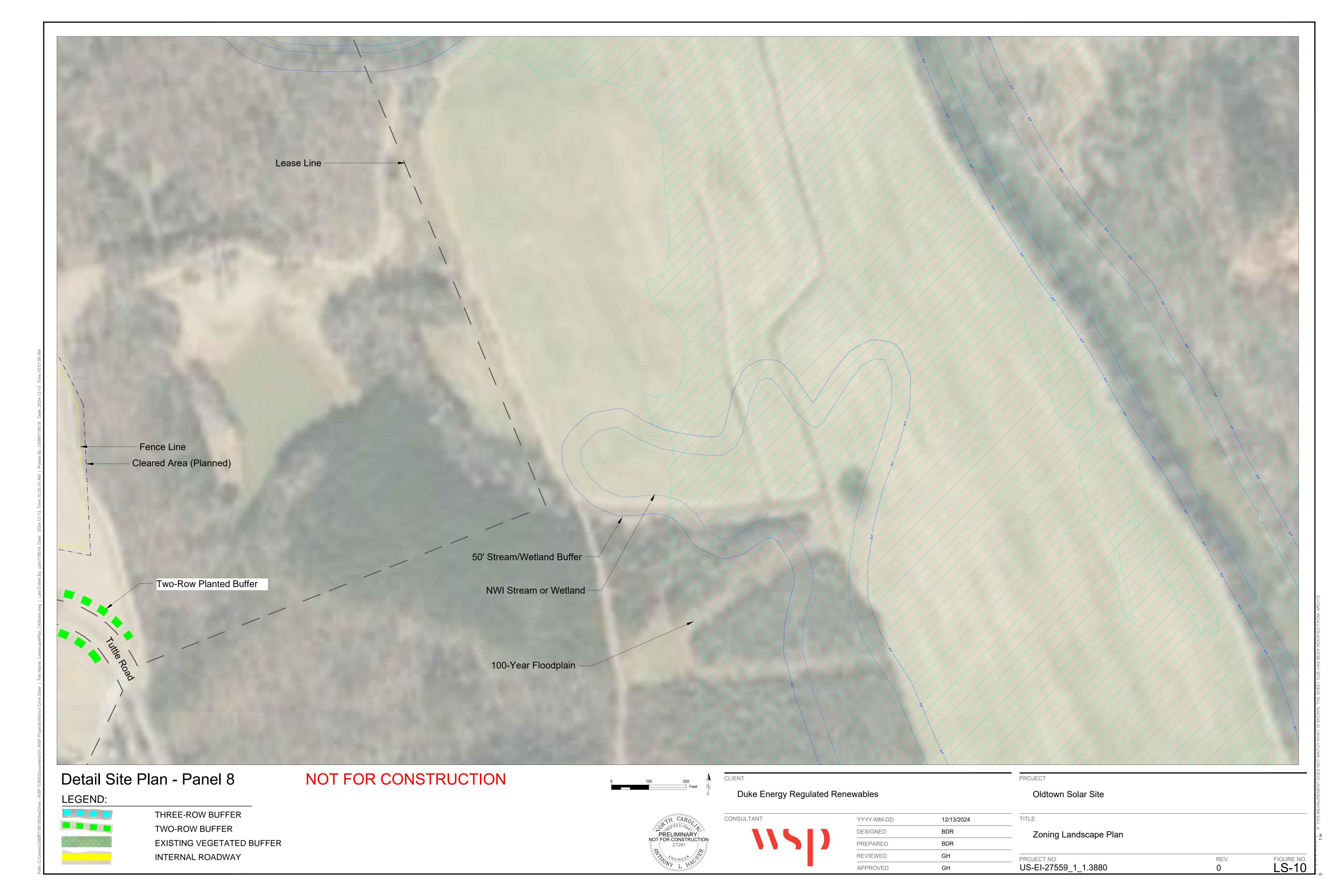


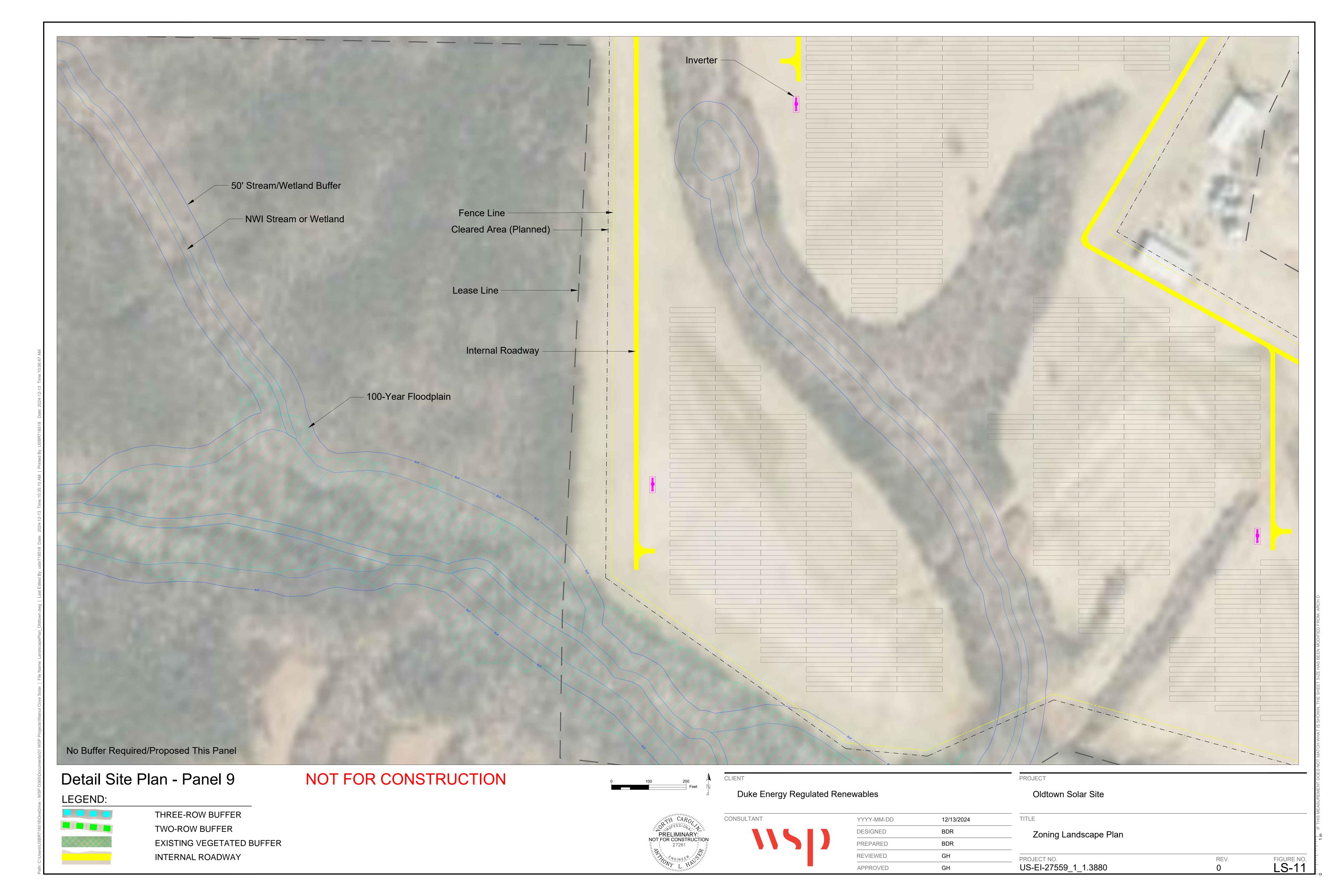


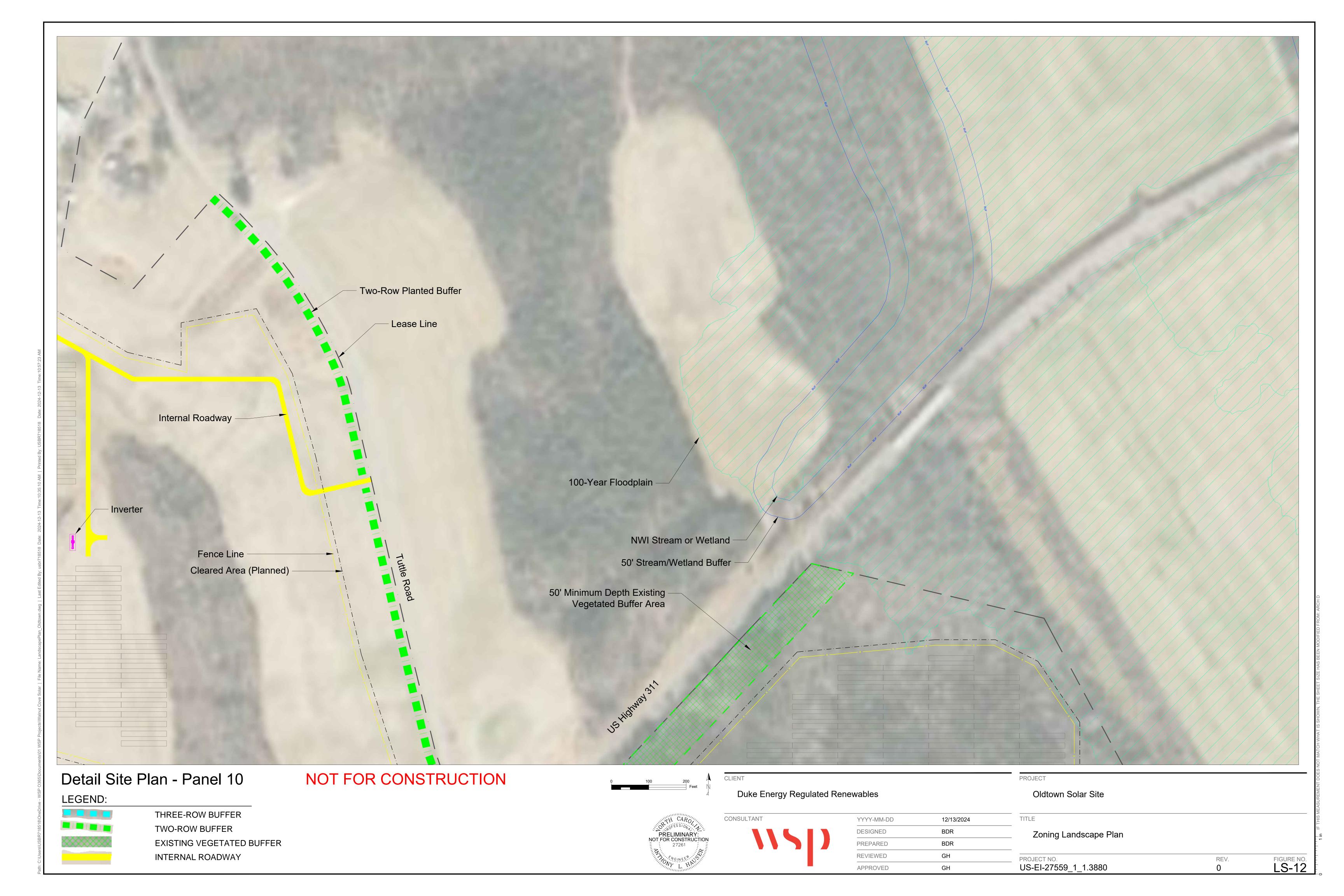




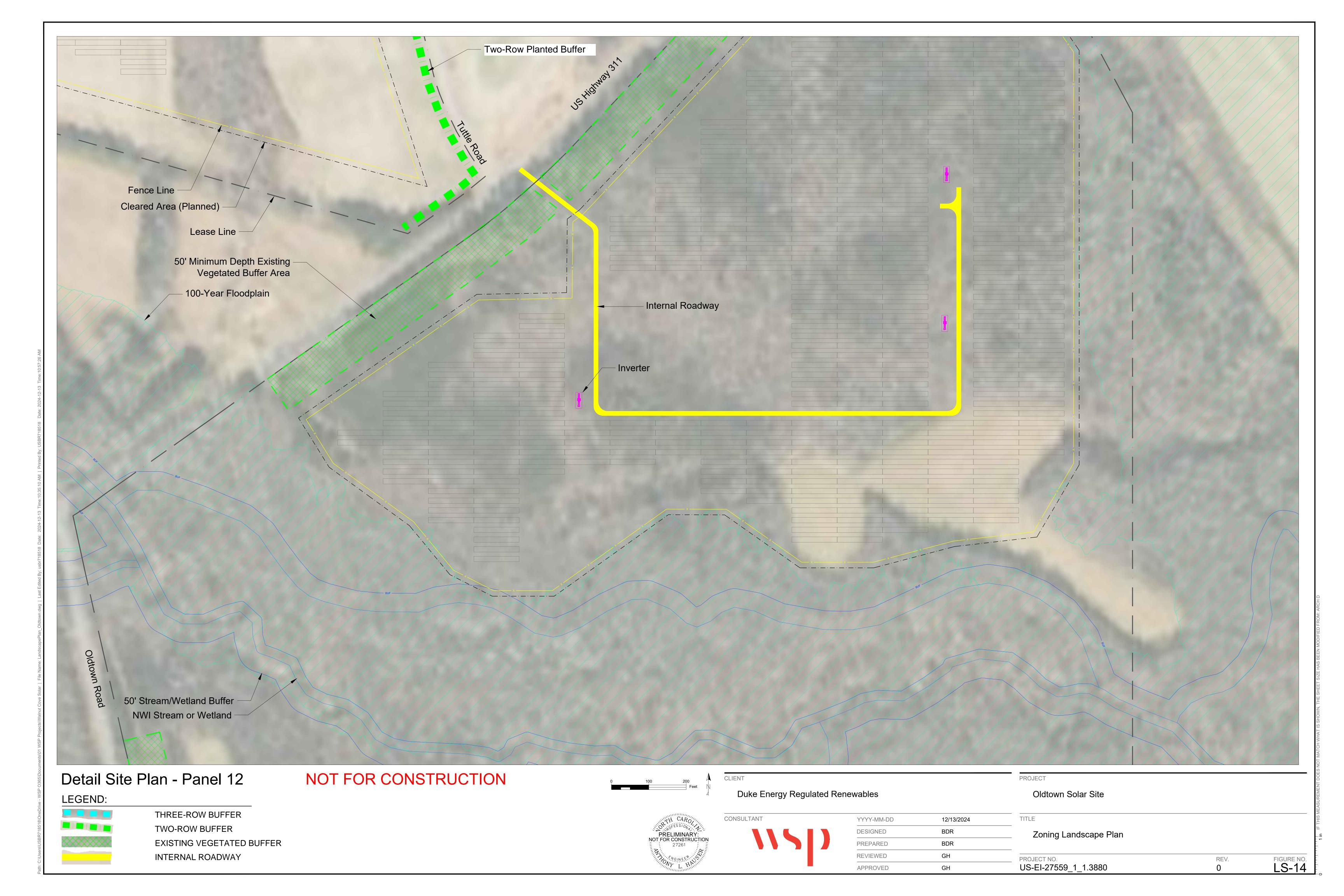


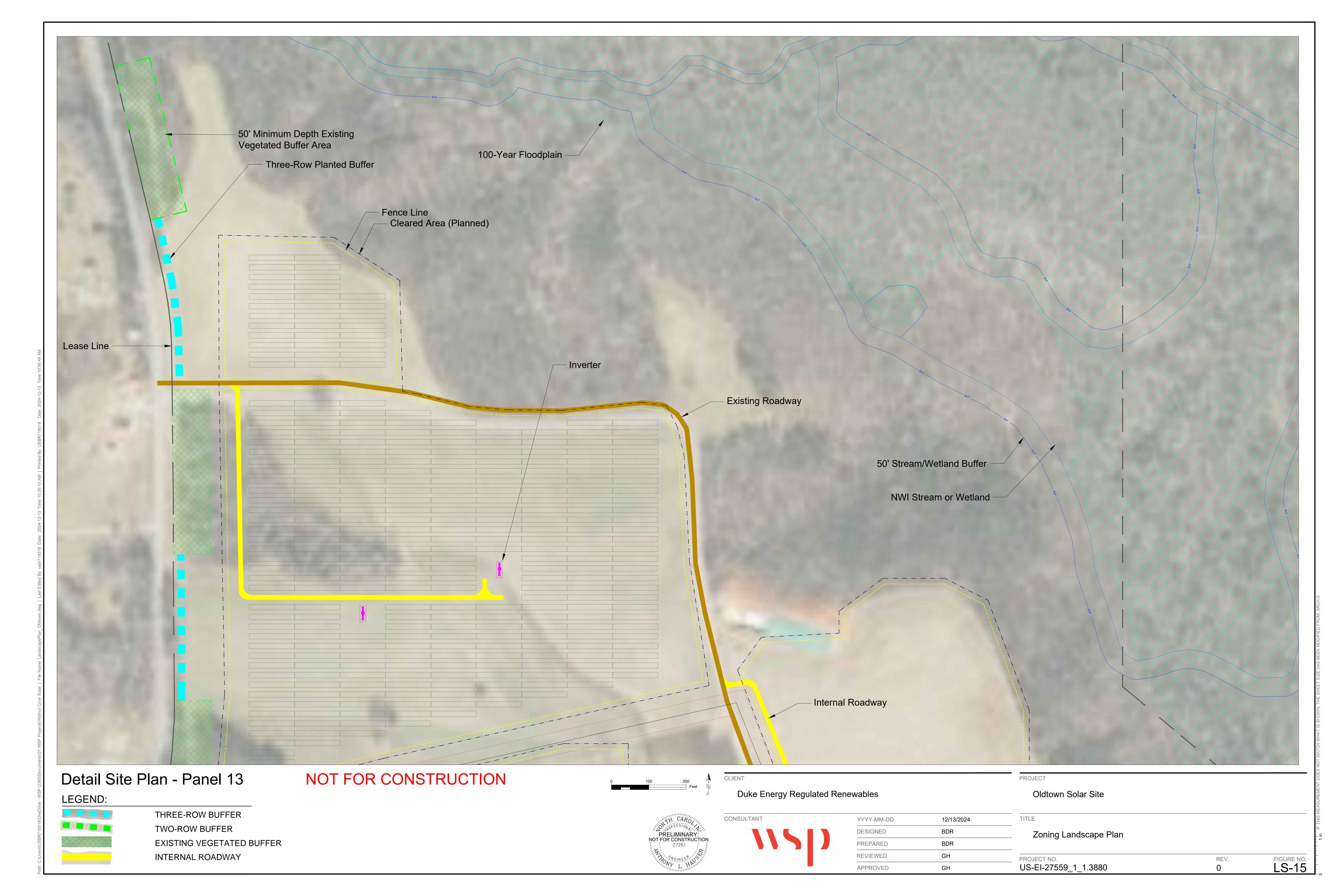


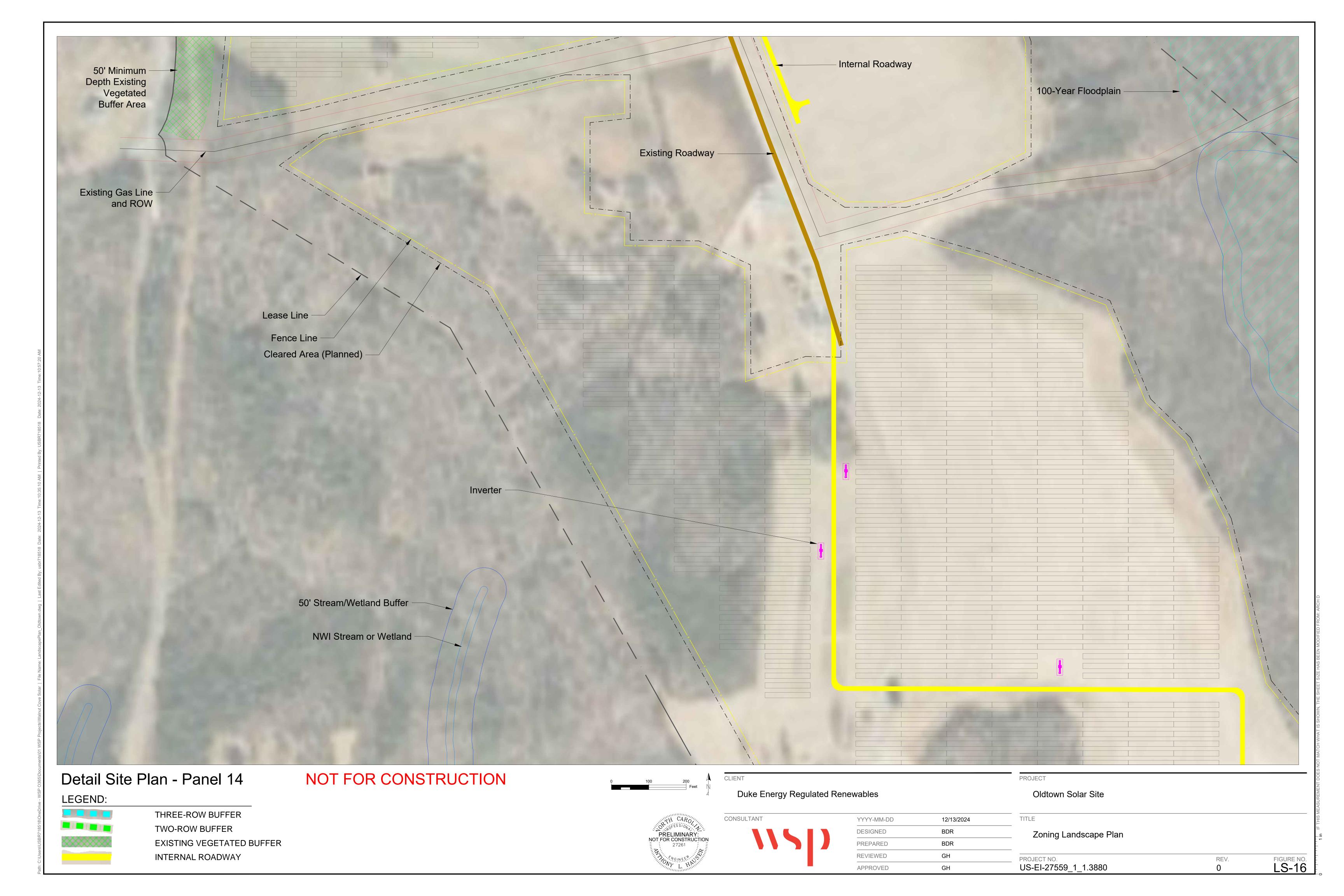




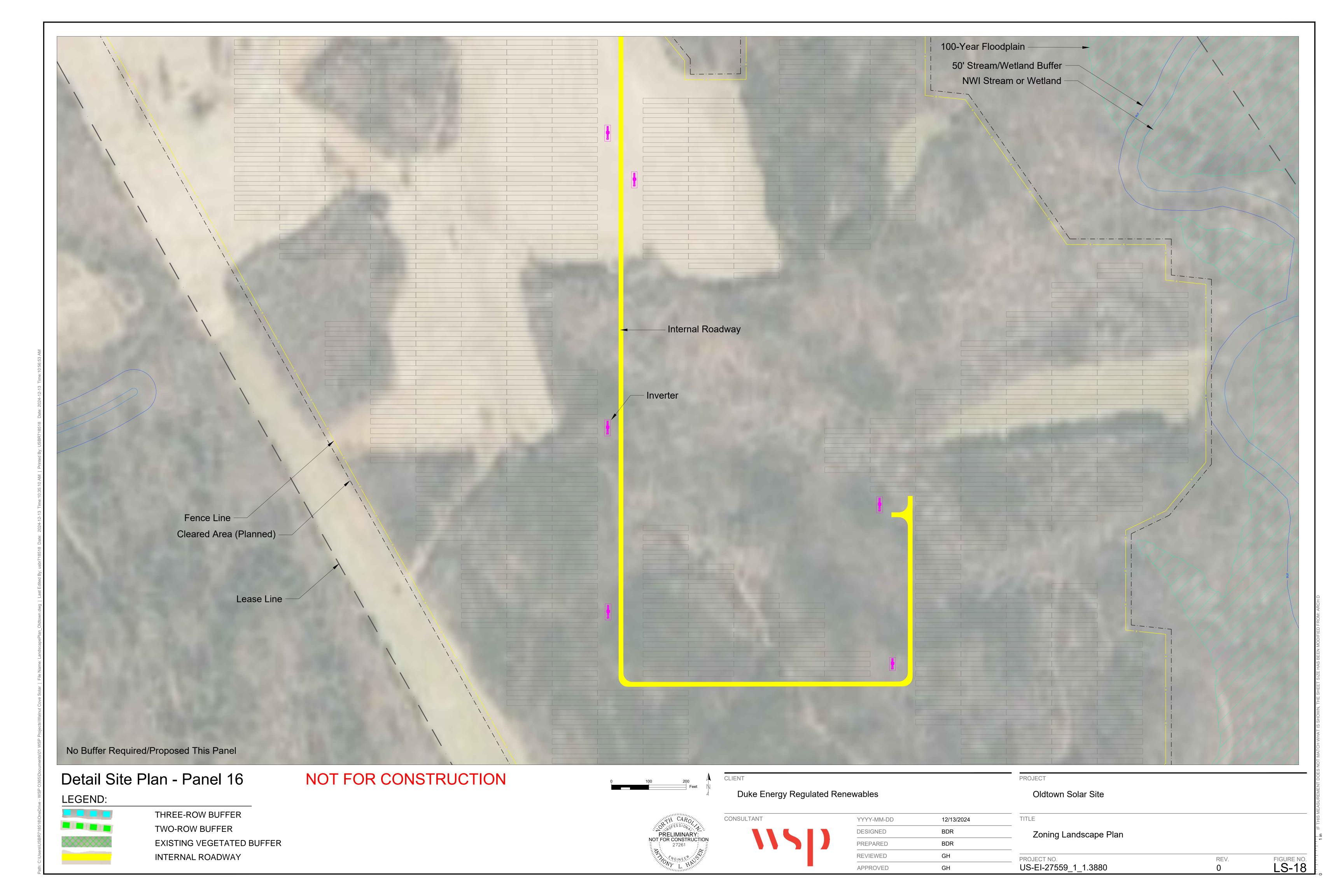


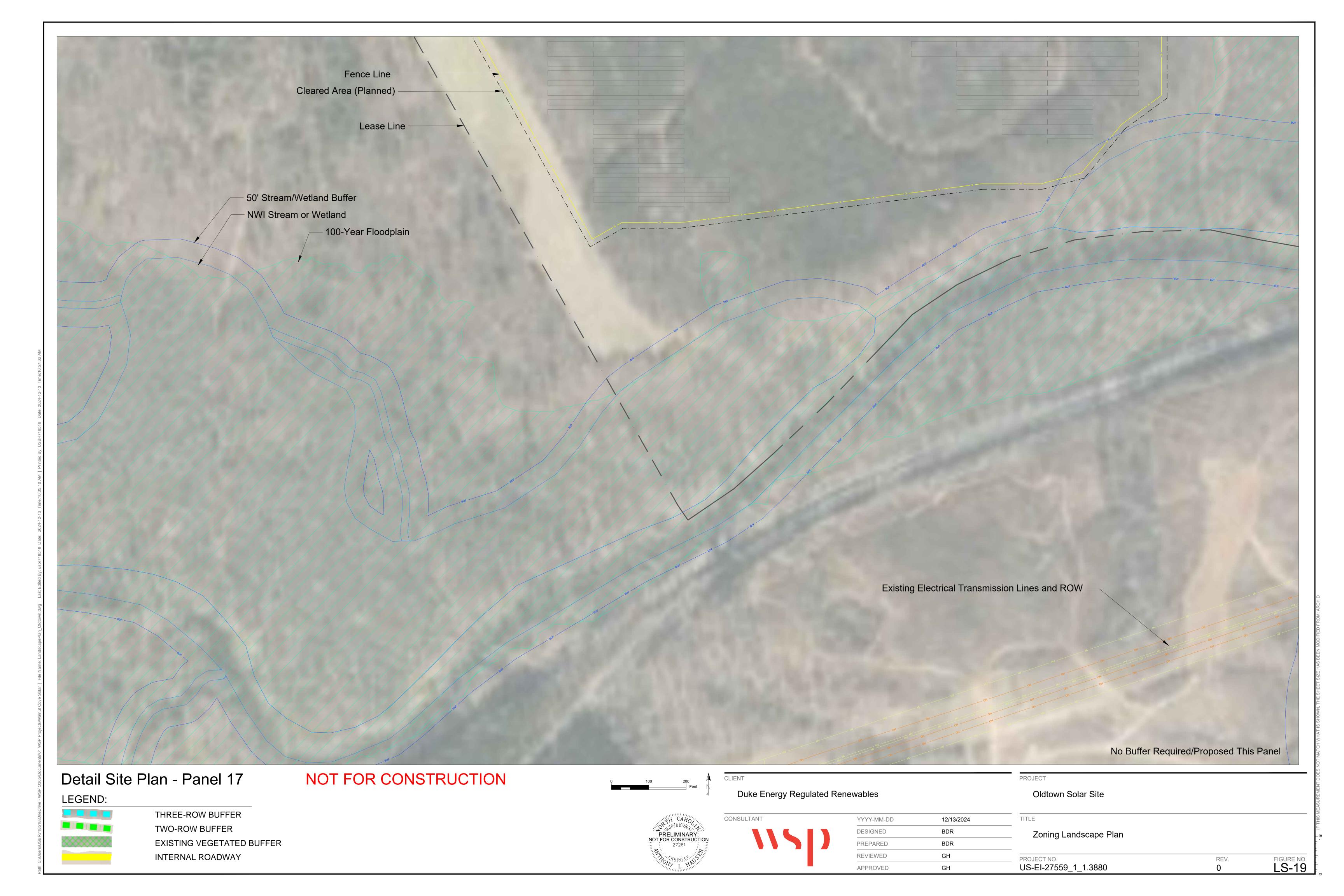














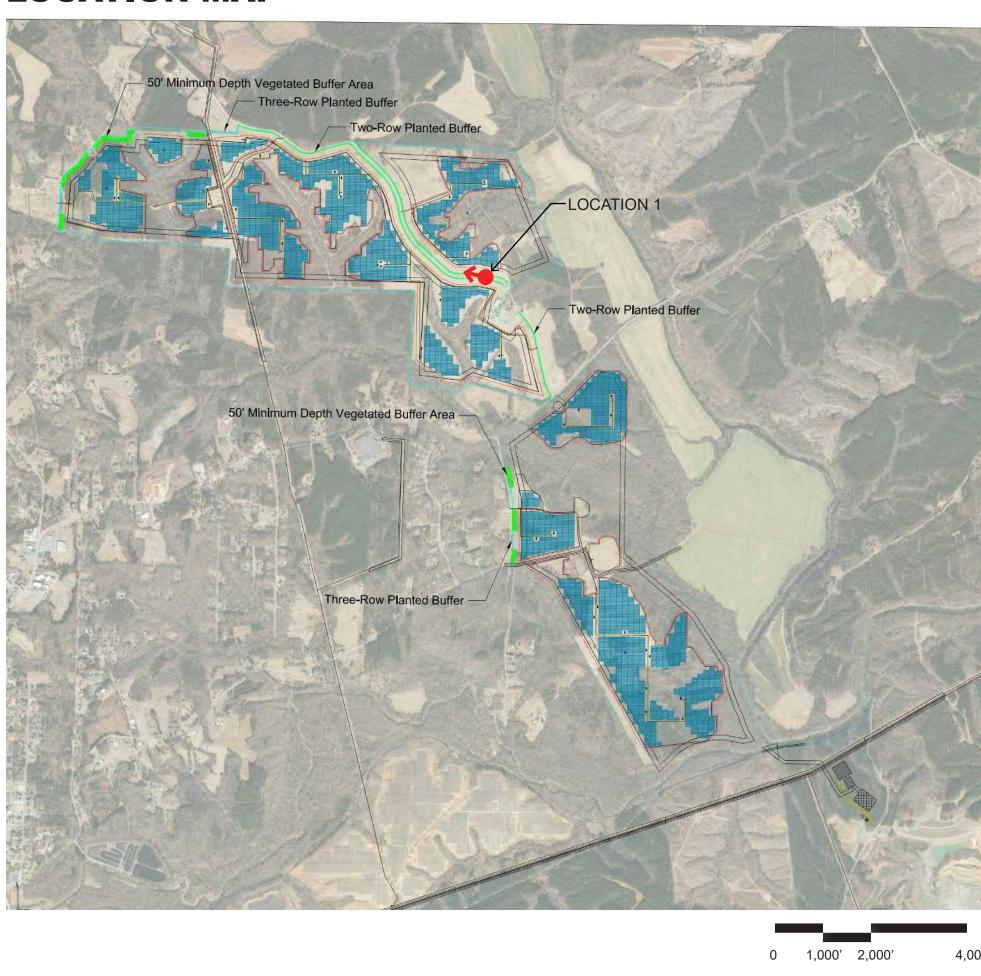
EXISTING SITE CONDITIONS



1-YEAR GROWTH



LOCATION MAP



3-YEAR GROWTH



5-YEAR GROWTH



NOTES:

- 1. LANDSCAPE MATERIAL SHALL BE LOCATED AND MAINTAINED SO AS NOT TO INTERFERE WITH UTILITIES, STREET LIGHTING, TRAFFIC CONTROL DEVICES, OR SIGHT TRIANGLES.
- 2. GROUND COVER SHALL BE PLANTED IN ALL AREAS OF THE LANDSCAPE BUFFER THAT IS NOT MULCHED.
- 3. LANDSCAPE BUFFER DESIGN, LAYOUT, AND MATERIALS ARE BASED ON THE ZONING LANDSCAPE PLAN CREATED BY WSP FOR DUKE ENERGY REGULATED RENEWABLES, DATING NOVEMEBER 1, 2024.
- 4. PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED WITH APPROVAL FROM THE PROJECT LANDSCAPE ARCHITECT BASED ON AVAILABILITY DURING THE TIME OF INSTALLATION. ALL SUBSTITUTED PLANT MATERIAL SHALL HAVE SIMILAR CHARACTERISTICS TO THE ORIGINALLY SPECIFIED MATERIALS AND SIZE.
- 5. THE PURPOSE OF THIS ILLUSTRATION IS TO DEPICT AN ESTIMATE OF THE OPAQUENESS, LAYERING, AND SIZE OF PROPOSED VEGETATION AT 1 YEAR, 3 YEARS, AND 5 YEARS GROWTH FROM TIME OF PLANTING.
- 6. EXISTING VEGETATION WITHIN BUFFER EXTENTS THAT MEET MINIMUM PLANTING STANDARDS TO BE PRESERVED FOR BUFFER CREDIT (LOCATIONS AND PLANT TYPE MAY VARY).

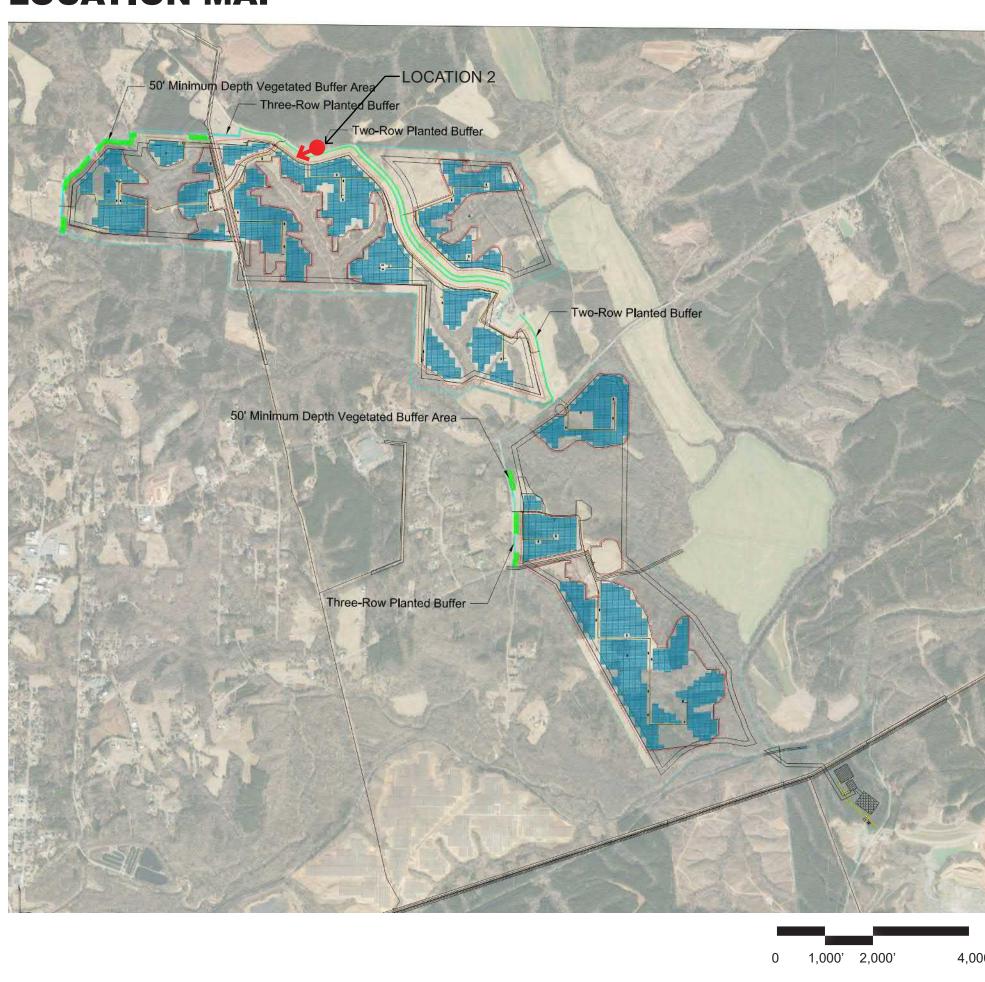
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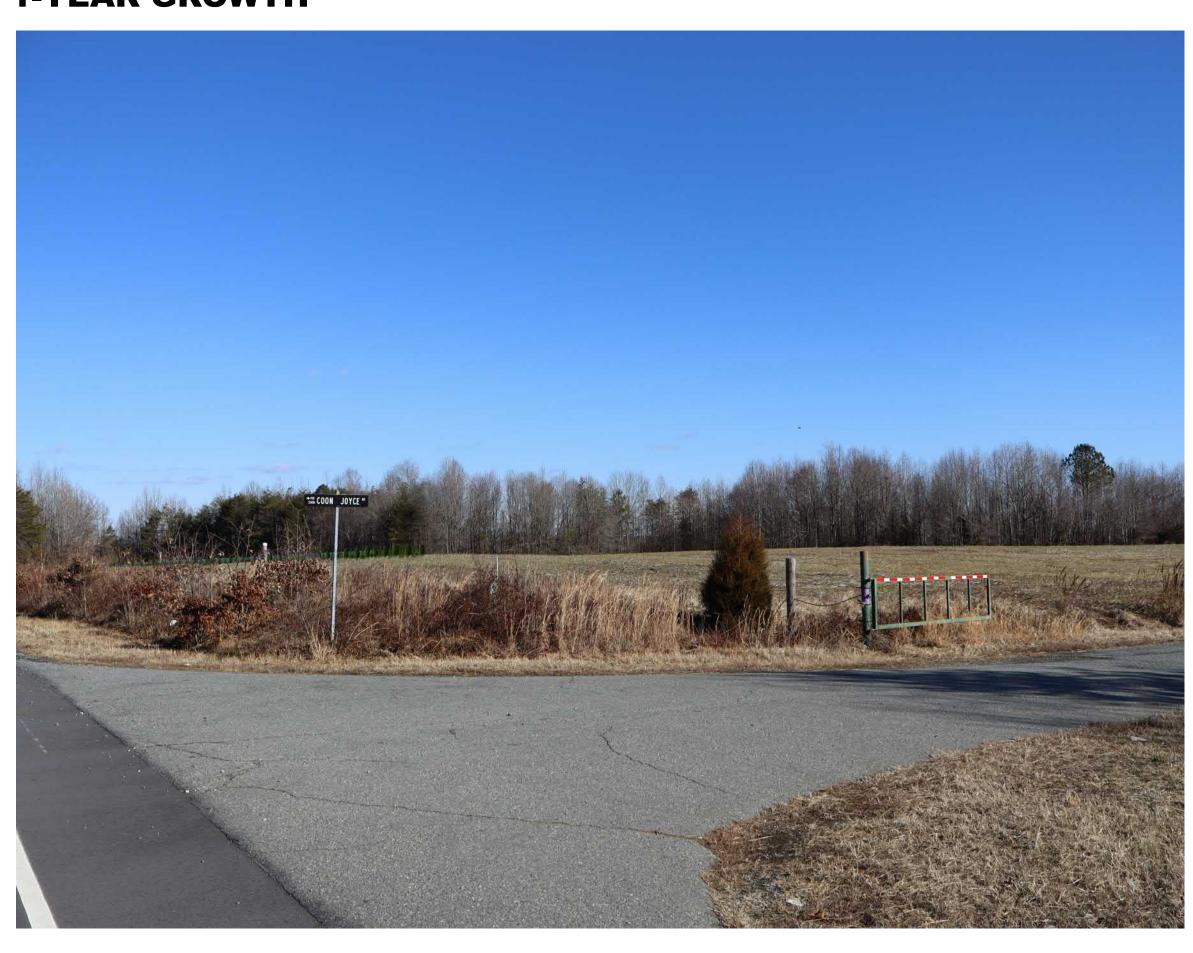
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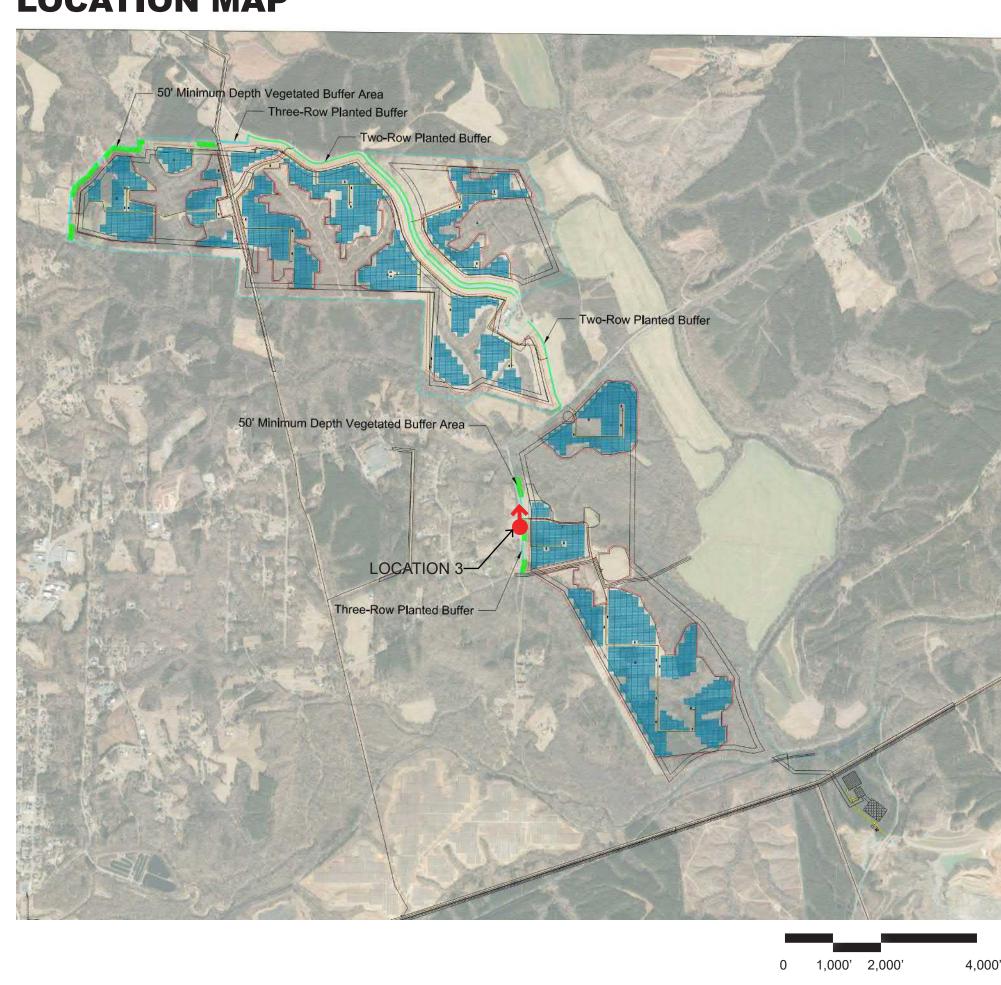
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