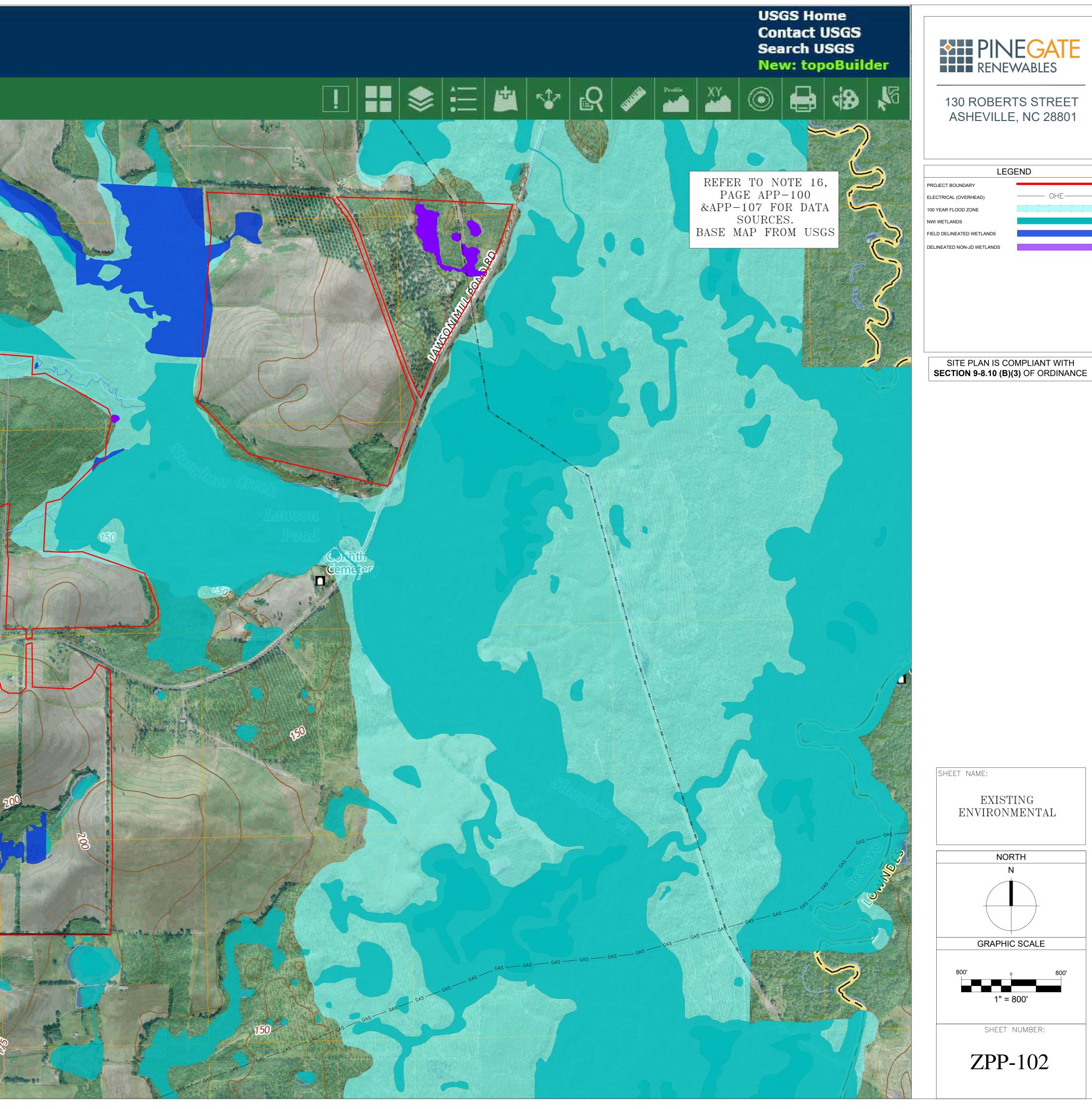
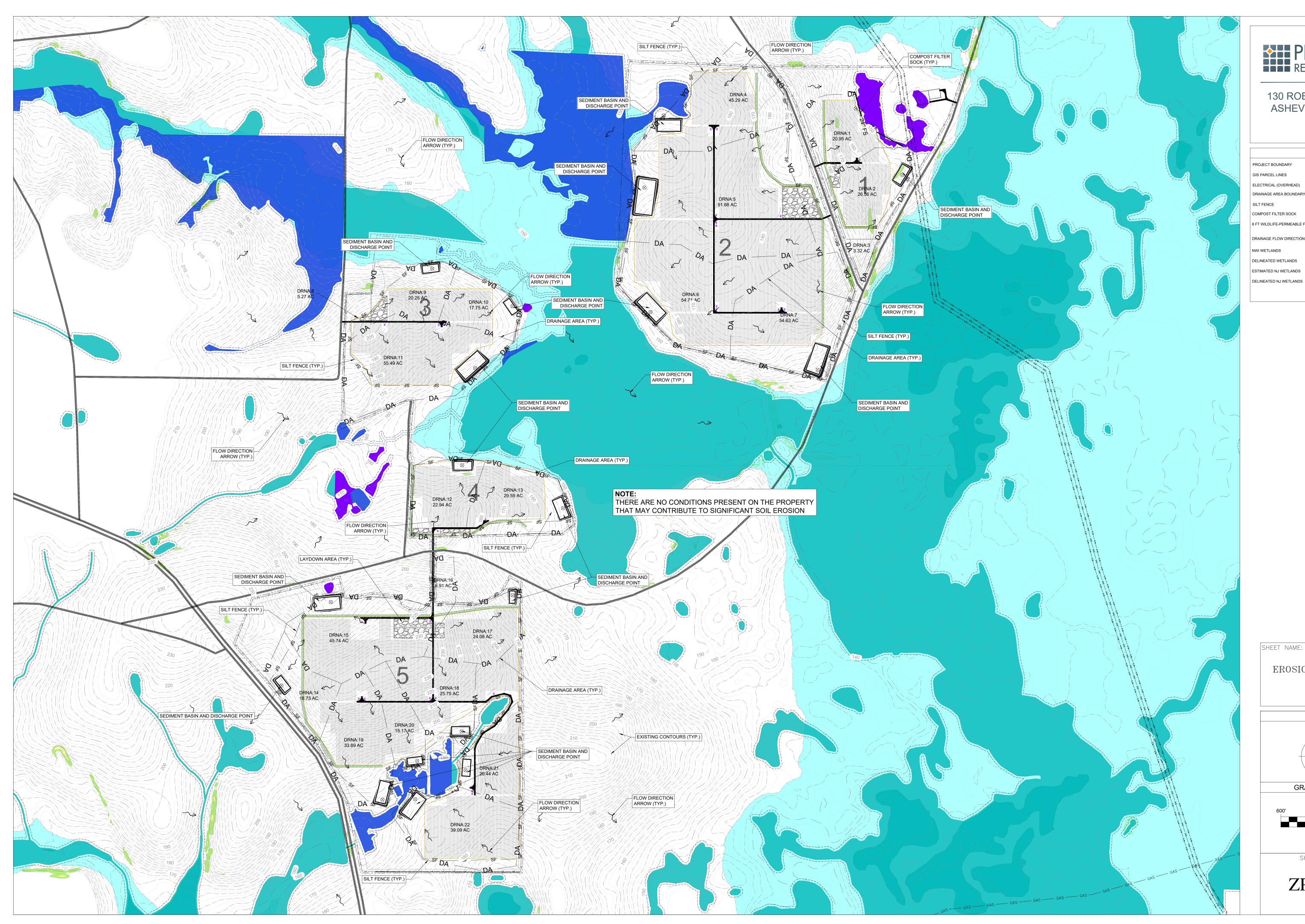


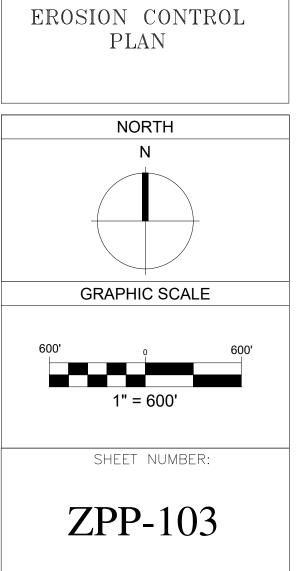


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CONFIDENTIA TEN CONSENT. THE INFORMATION THEREIN IS CONSIDER PINE GATE RENEWABLES, LLC'S PRIOR WR THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT





SHEET NAME:

ASHEVILLE, NC 28801 LEGEND PROJECT BOUNDARY \_\_\_\_\_ GIS PARCEL LINES ELECTRICAL (OVERHEAD) \_\_\_\_\_ OHF \_\_\_\_ DRAINAGE AREA BOUNDARY DA SILT FENCE SF COMPOST FILTER SOCK 24" FS 8 FT WILDLIFE-PERMEABLE FENCING DRAINAGE FLOW DIRECTION ARROW  $\sim >$ 

PINEGATE RENEWABLES

**130 ROBERTS STREET** 

CONFIDENTIA TEN CONSENT. THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND THE INFORMATION THEREIN IS CONSIDERE DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT PINE GATE RENEWABLES, LLC'S PRIOR WRI

#### **GENERAL NOTES**

- THE PROJECT HAS CREATED A PLAN FOR THE PREVENTION AND MITIGATION OF STORM WATER RUNOFF AND SOIL EROSION, WITH PAGE ZPP-103 CONTAINING A TOPOGRAPHIC DRAWING OF THE PROPERTY THAT INDICATES HOW STORM WATER CURRENTLY FROM THE PROPERTY, IDENTIFIES THE LOCATION OF DISCHARGE POINTS OR AREAS, AND CONFIRMS THERE ARE NO CONDITIONS PRESENT ON THE PROPERTY THAT MAY CONTRIBUTE TO SIGNIFICANT SOIL EROSION, AS PER SECTION 9-8.10 (B)(4) AND 9-8.10 (C)(1).
- THE PROJECT'S EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL STORM WATER MANAGEMENT, EROSION, AND SEDIMENT CONTROL PROVISIONS AND IMPERVIOUS SURFACE COVERAGE REQUIREMENTS AS PER SECTION 9-8.6 (C) OF ORDINANCE. HOWEVER, AS MORVEN COUNTY IS NOT A LOCAL ISSUING AUTHORITY FOR LAND DISTURBANCE PERMITS, ACCORDING TO GEORGIA STATE LAW, ALL EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLANS (ECSP PLANS) MUST BE REVIEWED AND APPROVED BY THE ENVIRONMENTAL PROTECTION DIVISION (EPD) OF THE GEORGIA DEPARTMENT OF NATURAL RESOURCES (GADNR) WHEN THE LAND DISTURBANCE PERMIT IS APPLIED FOR. RECEIPT OF A SPECIAL EXCEPTION IS A PREREQUISITE FOR APPLYING FOR THE LAND DISTURBANCE PERMIT . AS SUCH, THE ATTACHED PLANS ARE SUBJECT TO CHANGE AS REQUESTED BY THE EDP WHO HAS JURISDICTION OVER ESCP PLANS.
- PROJECT WILL COMPLY WITH THE FOLLOWING AS PER SECTION 18-45 OF THE UNDERLYING BROOKS COUNTY CODE:
- Sediment Control in Georgia published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:
- (1) Stripping of vegetation, regarding and other development activities shall be conducted in a manner so as to minimize erosion;
- (2) Cut-fill operations must be kept to a minimum;
- (3) Development plans must conform to topography and soil type so as to create the lowest practical erosion potential;
- (4) Whenever feasible, natural vegetation shall be retained, protected and supplemented;
- (5) The disturbed area and the duration of exposure to erosive elements shall be kept to a practicable minimum;
- (6) Disturbed soil shall be stabilized as quickly as practicable;
- (7) Temporary vegetation or mulching shall be employed to protect exposed critical areas during development;
- (8) Permanent vegetation and structural erosion control practices shall be installed as soon as practicable;
- (9) To the extent necessary, sediment in runoff water must be trapped by the use of debris basins, sediment basins, silt traps, or similar measures until the disturbed area is stabilized. As used in this subsection, a disturbed area is stabilized when it is brought to a condition of continuous compliance with the requirements of O.C.G.A. § 12-7-1 et seq.;
- (10)Adequate provision must be provided to minimize damage from surface water to cut face of excavations or the sloping of fills;
- (11)Cuts and fills may not endanger adjoining property;
- (12)Fills may not encroach upon natural watercourses or constructed channels in a manner so as to adversely affect other property owners; (13) Grading equipment must cross flowing streams by means of bridges or culverts except when such methods are not feasible, provided, in any case, that such crossings are kept to a minimum;
- (14)Land-disturbing activity plans for erosion and sedimentation control shall include provisions for treatment or control of any source of sediments and adequate sedimentation control facilities to retain sediments on-site or preclude sedimentation of adjacent waters beyond the levels specified in this section;
- (15)Except as provided in subsection (16) of this section, there is established a 25 foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the director determines to allow a variance that is at least as protective of natural resources and the environment, where otherwise allowed by the director pursuant to O.C.G.A. § 12-2-8, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications, and are implemented; provided, however, the buffers of at least 25 feet established pursuant to part 6 of Article 5, Chapter 5 of Title 12 (O.C.G.A. § 12-5-440 et seq.), the "Georgia Water Quality Control Act", shall remain in force unless a variance is granted by the director as provided in this subsection. The following requirements shall apply to any such buffer: No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and
- (16)There is established a 50 foot buffer as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any state waters classified as "trout streams" pursuant to Article 2 of Chapter 5 of Title 12 (O.C.G.A. § 12-5-20 et seq.), the "Georgia Water Quality Control Act", except where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the board, so long as any such pipe stops short of the downstream landowner's property and the landowner complies with the buffer requirement for any adjacent trout streams. The director may grant a variance from such buffer to allow land-disturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to such buffer: No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed: provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed

#### NPDES REQUIREMENTS

- 1) CONSTRUCTION ON OFF-SITE OR ON-SITE IMPROVEMENTS SHALL ADHERE TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE COUNTY STORM DRAIN SYSTEMS.
- 2) ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND
- 3) STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- 4) FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- 5) EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- 6) TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND. IF A COVERED RECEPTACLE IS NOT AVAILABLE, CONTRACTOR SHALL IMPLEMENT TEMPORARY CONTAINER COVER METHODS SO LONG AS THEY ARE IN COMPLIANCE INSPECTED AND MAINTAINED REGULARLY PRIOR TO WASTE DISPOSAL OFF-SITE.
- 7) SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF-WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- 8) ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

9) CLEAN UP SPILLS USING DRY METHODS.

10)CALL 911 IN CASE OF A HAZARDOUS SPILL

11) UPON SATISFACTORY COMPLETION OF THE WORK, THE ENTIRE WORK SITE SHALL BE CLEANED AND LEFT WITH A SMOOTH AND NEATLY GRADED SURFACE FREE OF CONSTRUCTION WASTE, RUBBISH, AND DEBRIS OF ANY NATURE.

## **EROSION CONTROL NOTES**

- IDENTIFICATION.

- TRAPS OR STABLE OUTLETS.
- AND ALL WOS.

- PERIOD OF 14 CALENDAR DAYS.

- PERMITTED LCID LANDFILL.

1. ANY FILL DIRT OR WASTE DIRT MUST BE FROM OR TO A PERMITTED SITE.

2. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.

3. THE CONTRACTOR SHALL PROVIDE GROUND COVER ON PERIMETER SWALES, DIKES, AND SLOPES GREATER THAN 3:1 WITHIN 14 DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. CONTRACTOR SHALL PROVIDE GROUND COVER ON ALL OTHER AREAS WITHIN 24 HOURS IF WORK IS TO CEASE FOR 7 DAYS. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED WITHIN 7 WORKING DAYS FOLLOWING COMPLETION OF CONSTRUCTION, EXCEPT AS STATED BELOW:

A. WHERE STABILIZATION BY THE 7TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.

B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 7 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

5. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY CALENDAR WEEK AND AFTER EVERY RAIN EVENT PRODUCING A DISCHARGE. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY, USED THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF

PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.

ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.

8. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

9. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE

10. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. ADDITIONAL EROSION CONTROL MEASURES EQUIVALENT OT A 50-FOOT BUFFER ARE TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT NATURAL BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE ADDITIONAL EROSION CONTROL

11. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.

12. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.

13. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A

14. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL

15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.

16. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).

17. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:

A. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.

B. WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;

C. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND

D. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND AFTER EVERY RAIN EVENT THAT PRODUCES DISCHARGE. INSPECTIONS MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.

18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR GEORGIA'S WATER QUALITY STANDARDS. IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.

19. SPOIL OR BORROW SITES SHOULD BE REVIEWED AND APPROVED BY GEORGIA DEQ OR DISPOSED OF AT A

20. PROVIDE EROSION CONTROL MEASURES AS NECESSARY TO PREVENT SOIL FROM GETTING OFF SITE OR INTO EXISTING DRAINAGE STRUCTURES. SOIL PILES AND CONTRACTOR STAGING AND MATERIALS LAY DOWN AREAS SHOULD BE A MINIMUM OF 50' AWAY FROM ANY STORM DRAIN OR WATERCOURSE.

21. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED FOR ADDITIONAL CONTRACTOR LAYDOWN AREA. CONTRACTOR TO COORDINATE WITH ENGINEER DURING CONSTRUCTION. THE LIMITS OF DISTURBANCE SHOULD CONTAIN ANY ADDITIONAL LAYDOWN AREAS. IF ADDITIONAL LAYDOWN AREA IS NEEDED OUTSIDE THE LIMITS OF DISTURBANCE, A REVISED EROSION CONTROL PLAN SHOULD BE REVIEWED AND PERMITTED.

22. NO PARKING SHALL BE LOCATED OUTSIDE THE LIMITS OF DISTURBANCE. SPECIFICALLY, PARKING ON THE SIDE OF THE ROAD IS NOT ALLOWED. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PARKING WITHIN THE LIMITS OF DISTURBANCE DELINEATED ON THE PROVIDED PLANS.

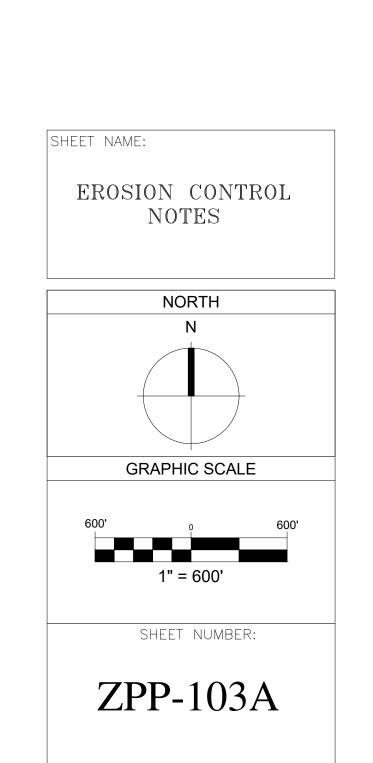
23. NO DOT AND INTERIOR ROADWAYS SHALL BE BLOCKED DURING THE DURATION OF THE PROJECT.

24. NO CONSTRUCTION LAYDOWN OR STAGING SHALL BE LOCATED OUTSIDE THE LIMITS OF DISTURBANCE

25. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.



## **130 ROBERTS STREET** ASHEVILLE, NC 28801



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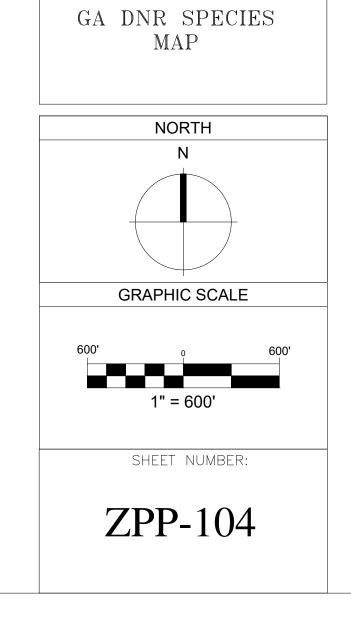
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DATA SOURCES: ESRI WMS - World Aerial Imagery, OpenStreetMap



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	Cox.	A Atlanta Office 4920P088Idata/Data from Hannah/4920P088_MorvenSolar/Maps/4920P088_MorvenSolar.aprx
<ul> <li>Project Site</li> <li>Potential Habitat for GADNR Protected S</li> <li>* Frosted Flatwoods Salamander - 7.98 ac +/-</li> <li>* Eastern Indigo Snake - 44.61 ac +/-</li> <li>Gopher Tortoise - 75.12 ac +/-</li> <li>Species Observations:</li> </ul>		N:\. ESILegacy/Data/Projects\Graphics\2022\v
Gopher Tortoise Burrow	* Potential habitat present, bu observed during field investiga	
Project No.: <u>4920P088</u> Date: <u>Nov 2022</u> Drawn By: <u>MDP</u> Reviewed By: JWB	GADNR T&E Species Map Morven Solar Site East of Robinson Road Morven, Brooks County, Georgia	Exhibit 2





SHEET NAME:

PINEGATE RENEWABLES

130 ROBERTS STREET

ASHEVILLE, NC 28801

LEGEND

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PROJECT BOUNDARY

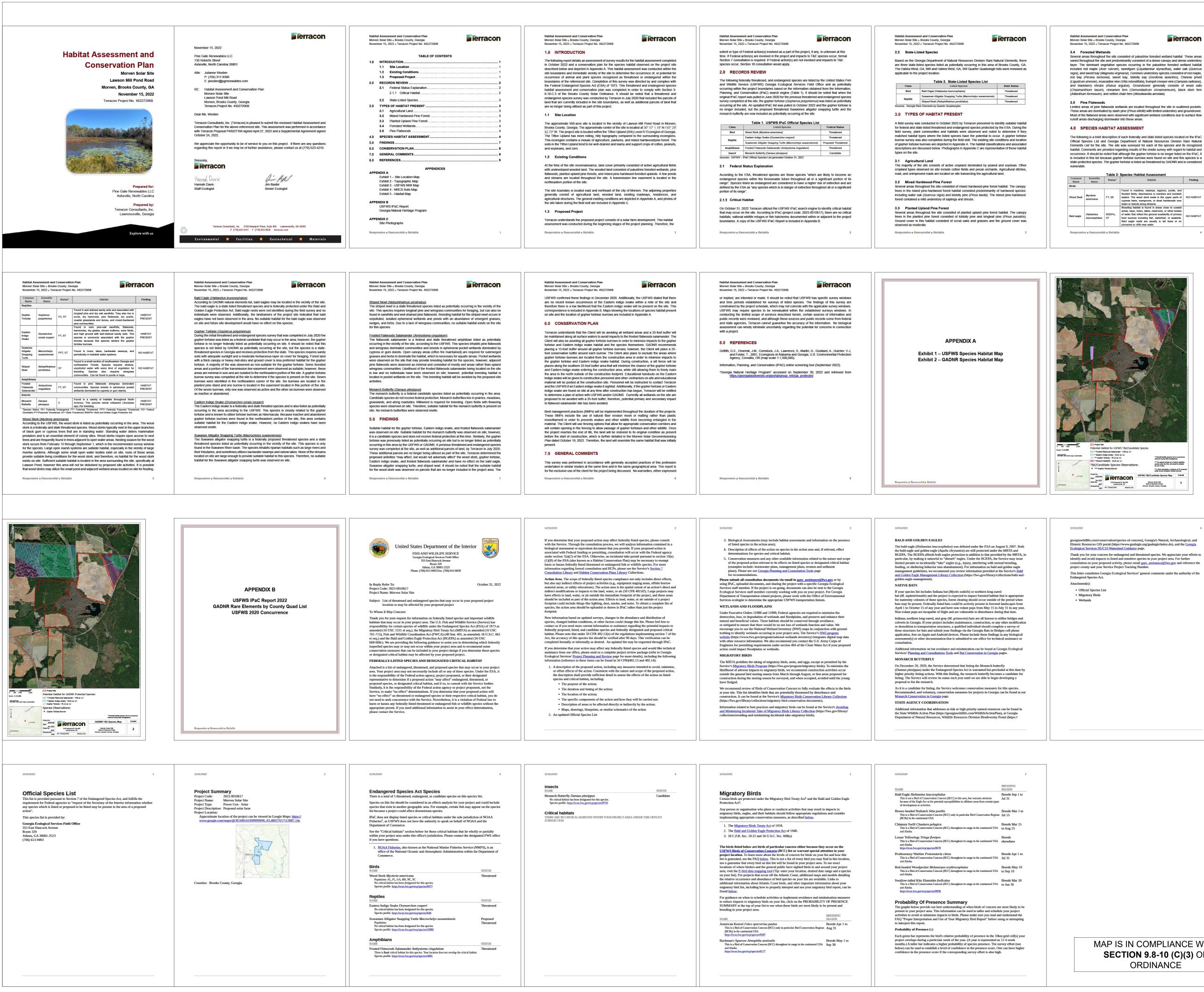
ELECTRICAL (OVERHEAD)

VEGETATIVE/VISUAL BUFFER **T&E SPECIES HABITAT** 

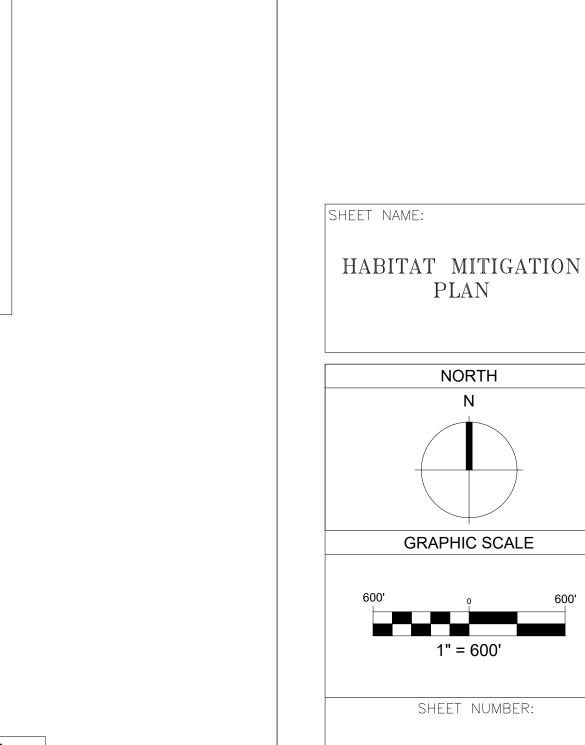
8 FT WILDLIFE-PERMEABLE FENCING PARCEL LINE - LEASED PARCEL

GIS PARCEL LINES

C THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND THE INFORMATION THEREIN IS CONSIDERED CONFIDENTIAL DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT PINE GATE RENEWABLES, LLC'S PRIOR WRITTEN CONSENT.



## MAP IS IN COMPLIANCE WITH SECTION 9.8-10 (C)(3) OF



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s List an for the sit ents are p should be his list beo	d Georgia e. The site rovided reg noted that a cause goph The gopher	f each federally and state listed species locate Department of Natural Resources Division was surveyed for each of the species and i arding results of the onsite survey with regard itthough the gopher tortoise is no longer listed of er tortoise burrows were found on site and this tortoise is listed as threatened by GADNR and Species Habitat Assessment	Rare Natural is recognized to habitat and on the IPaC, it is species is a		
cientific Name	Status <sup>1</sup>	Habitat	Finding		
teria ericana	FT; SE	Found in marshes, swamps, lagoons, ponds, and flooded fields, depressions in marshes and brackish waters. The wood stork nests in the upper parts of cypress trees, mangroves, or dead hardwoods over water or islands along streams.	NO HABITAT		
aeetus ocephalus	BGEPA; ST	Breeding habitat is found in areas close to coastal areas, bays, rivers, lakes, reservoirs, or other bodies of water that effect the general availability of primary food sources including fish, waterfowl, or seabilds. Bald eagle nests are usually in fall trees or on pinnacles or clifs near water.	NO HABITAT		
lesourcefu	l = Reliable		4		

RENEWABLES

## **130 ROBERTS STREET** ASHEVILLE, NC 28801

LEGEND

PROJECT BOUNDARY GIS PARCEL LINES ELECTRICAL (OVERHEAD) VEGETATIVE/VISUAL BUFFER

**T&E SPECIES HABITAT** 

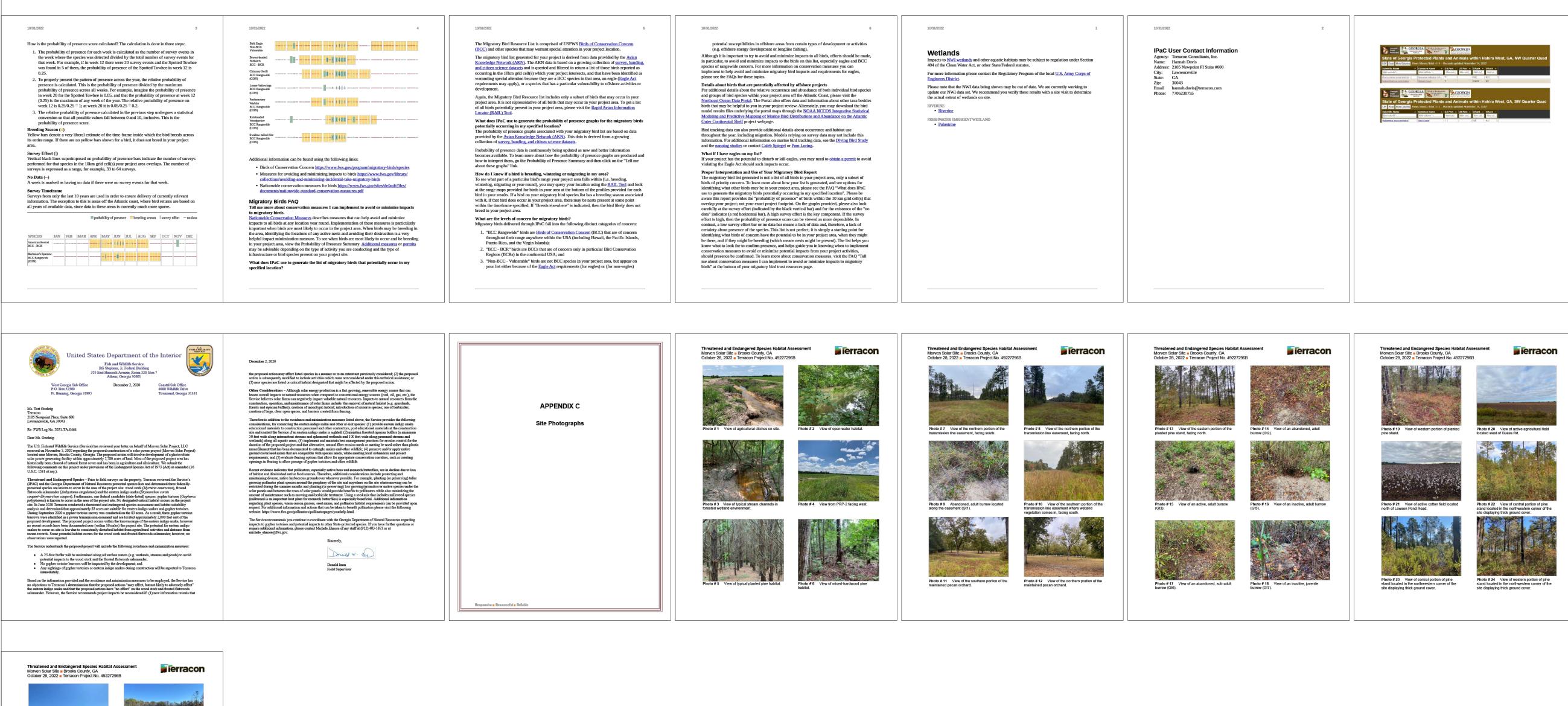
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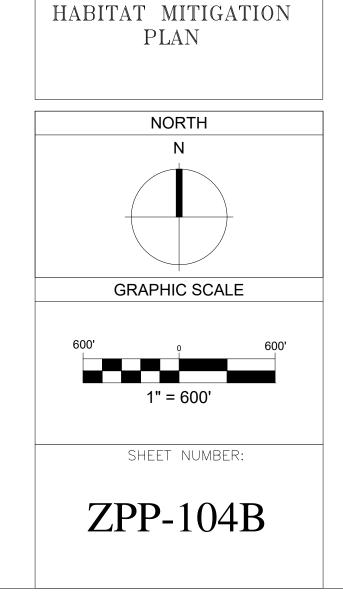
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**ZPP-104A** 





#### MAP IS IN COMPLIANCE WITH SECTION 9.8-10 (C)(3) OF ORDINANCE



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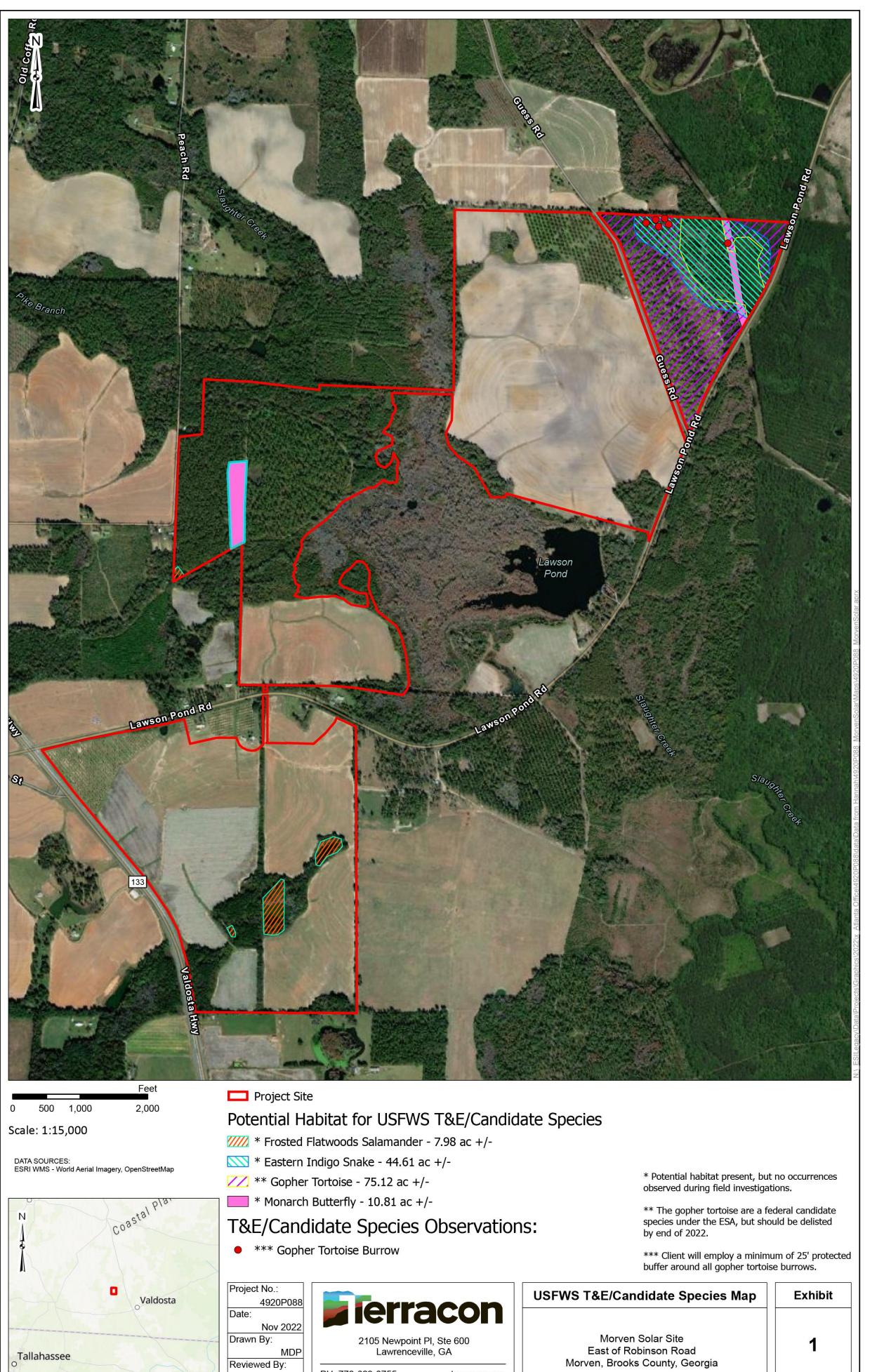
## **130 ROBERTS STREET** ASHEVILLE, NC 28801

LEGEND PROJECT BOUNDARY GIS PARCEL LINES

\_\_\_\_\_ OHE\_\_\_\_\_ ELECTRICAL (OVERHEAD) VEGETATIVE/VISUAL BUFFER

**T&E SPECIES HABITAT** 

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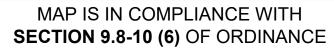


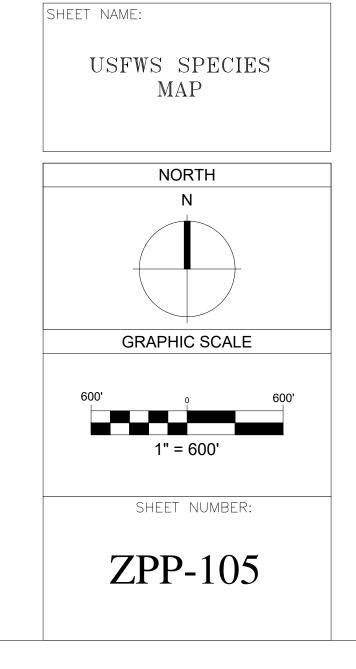
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PINEGATE RENEWABLES

130 ROBERTS STREET

ASHEVILLE, NC 28801

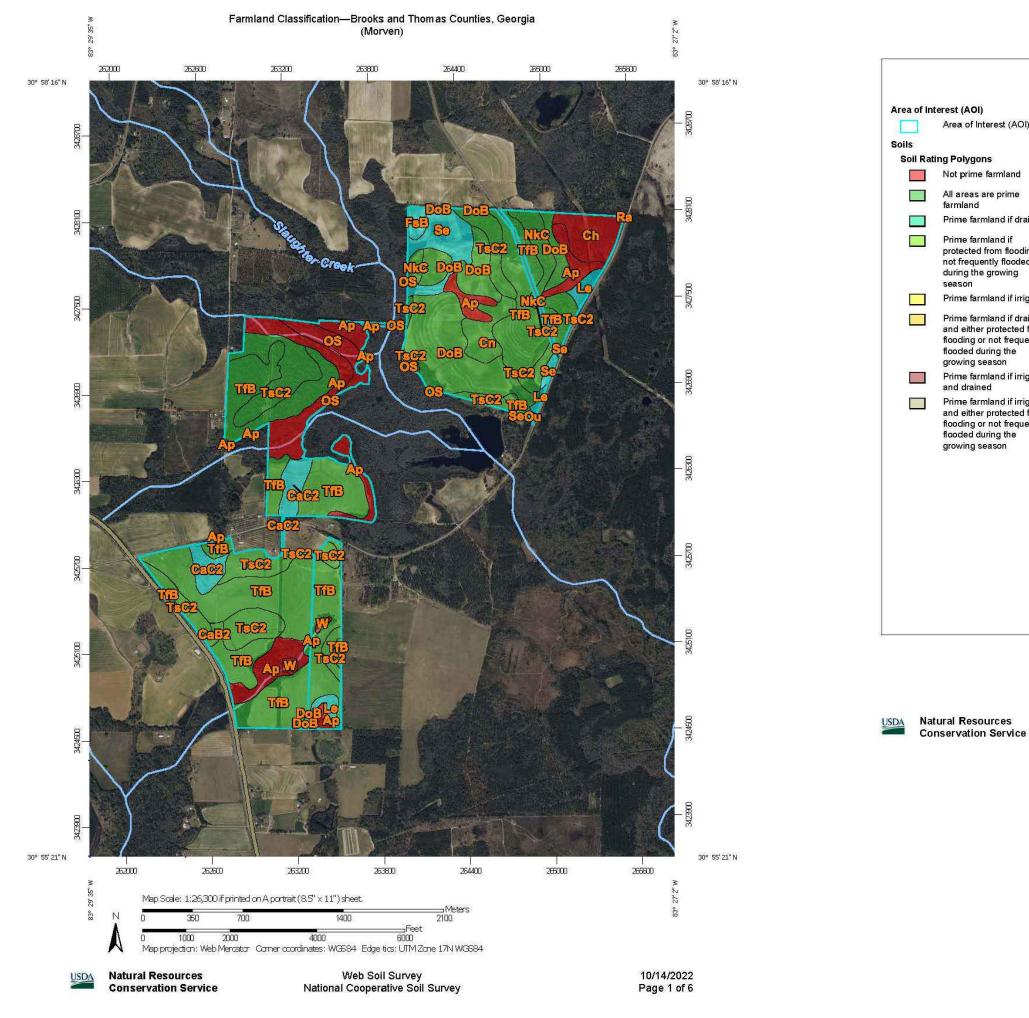
LEGEND

PROJECT BOUNDARY GIS PARCEL LINES

ELECTRICAL (OVERHEAD) VEGETATIVE/VISUAL BUFFER T&E SPECIES HABITAT

8 FT WILDLIFE-PERMEABLE FENCING

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#### Farmland Classification

Farmland Classification—Brooks and Thomas Counties, Georgia

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ар	Alapaha loamy sand, 0 to 2 percent slopes, occasionally flooded	Not prime farmland	117.2	12.3%
CaB2	Carnegie sandy loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland	3.7	0.4%
CaC2	Carnegie sandy loam, 5 to 8 percent slopes, moderately eroded	Farmland of statewide importance	28.5	3.0%
Ch	Chipley sand	Not prime farmland	28.8	3.0%
Cn	Clarendon loamy sand	All areas are prime farmland	21.9	2.3%
DoB	Dothan loamy sand, 2 to 5 percent slopes	All areas are prime farmland	127.8	13.4%
FsB	Fuquay loamy sand, 0 to 5 percent slopes	Farmland of statewide importance	6.5	0.7%
Le	Leefield loamy sand, 0 to 2 percent slopes	Farmland of statewide importance	14.9	1.6%
NkC	Nankin sandy loam, 5 to 8 percent slopes	All areas are prime farmland	23.2	2.4%
OS	Osier-Pelham complex, 0 to 2 percent slopes, frequently flooded	opes,	20.2	2.1%
Ou	Ousley fine sand	Farmland of statewide importance	0.5	0.1%
Ra	Rains loamy sand	Not prime farmland	0.0	0.0%
Se	Stilson loamy sand, 0 to 2 percent slopes	Farmland of statewide importance	37.0	3.9%
TfB	Tifton loamy sand, 2 to 5 percent slopes	All areas are prime farmland	361.7	38.0%
TsC2	Tifton sandy loam, 5 to 8 percent slopes, eroded	All areas are prime farmland	156.0	16.4%
W	Water	Not prime farmland	4.2	0.4%
Totals for Area of Inter	rest		952.0	100.0%

#### Area of Interest (AOI) Soil Rating Polygons Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing Prime farmland if irrigated Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Farmland Classification-Brooks and Thomas Counties, Georgia

#### Description

unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

#### **Rating Options**

Aggregation Method: No Aggregation Necessary *Tie-break Rule:* Lower

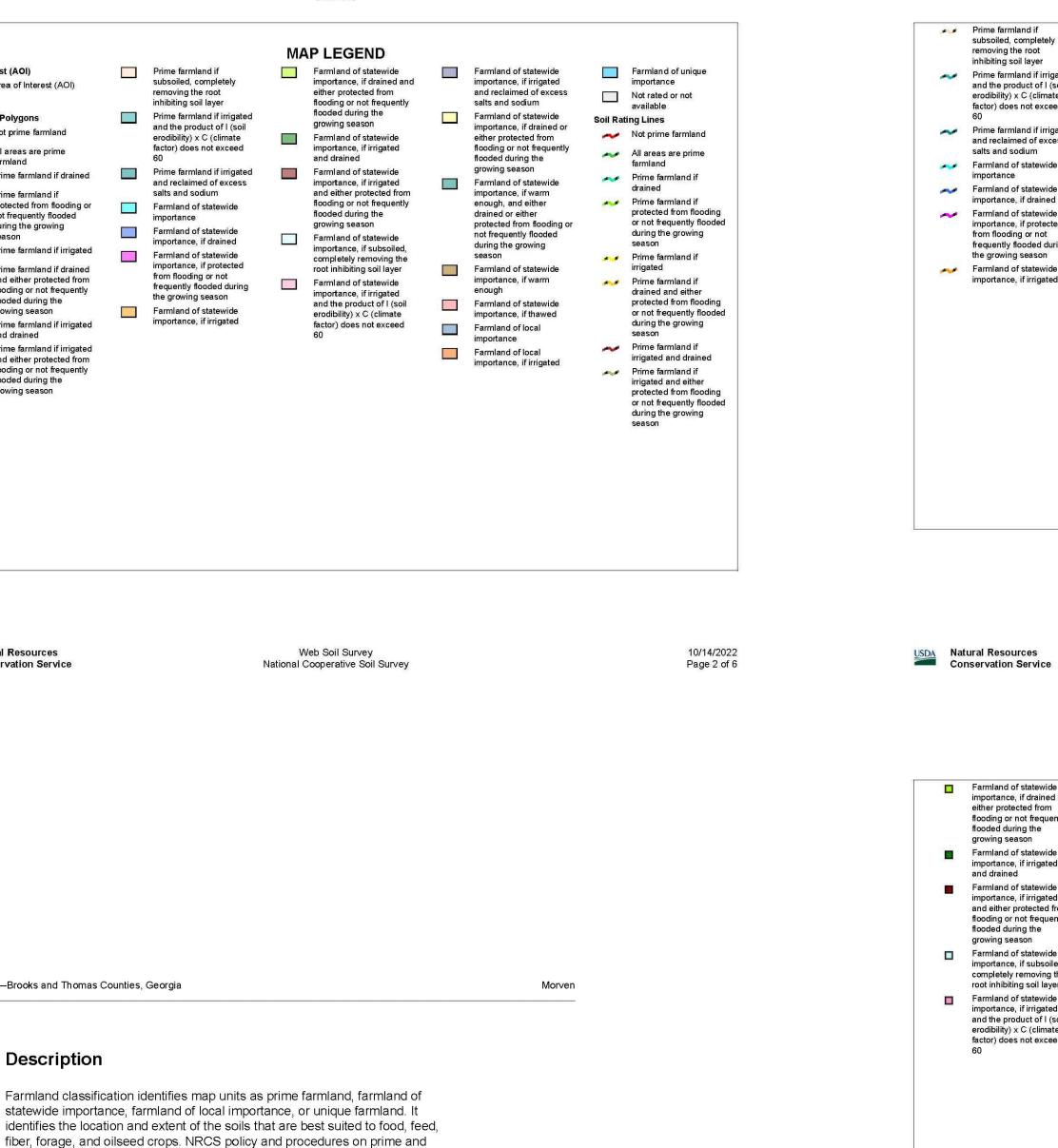
Morven

Farmland Classification—Brooks and Thomas Counties. Georgia (Morven)

Farmland of statewide

importance, if drained and

either protected from



#### inhibiting soil layer flooding or not frequently Prime farmland if irrigated flooded during the Farmland of statewide and the product of I (soil growing season erodibility) x C (climate Farmland of statewide ~ factor) does not exceed importance, if irrigated and drained Prime farmland if irrigated Farmland of statewide -Farmland of statewide and reclaimed of excess importance, if irrigated salts and sodium and either protected from flooding or not frequently Farmland of statewide flooded during the importance growing season Farmland of statewide Farmland of statewide . . importance, if drained importance, if subsoiled Farmland of statewide completely removing the importance, if protected Farmland of statewide root inhibiting soil layer from flooding or not Farmland of statewide 100 frequently flooded during importance, if irrigated the growing season and the product of I (soil Farmland of statewide Farmland of statewide erodibility) x C (climate importance, if irrigated factor) does not exceed Farmland of local Farmland of local

Farmland of statewide Farmland of statewide importance, if drained and importance, if irrigated either protected from and reclaimed of excess flooding or not frequently salts and sodium flooded during the Farmland of statewide growing season importance, if drained or Farmland of statewide either protected from importance, if irrigated flooding or not frequently and drained flooded during the Farmland of statewide growing season importance, if irrigated Farmland of statewide and either protected fron importance, if warm flooding or not frequently enough, and either flooded during the drained or either growing season protected from flooding or

> during the growing importance, if subsoiled, seasor Background completely removing the Farmland of statewide root inhibiting soil layer and the second Farmland of statewide importance, if irrigated importance, if warm enough and the product of I (soil Farmland of statewide erodibility) x C (climate importance, if thawed factor) does not exceed Farmland of local importance Farmland of local importance, if irrigated

not frequently flooded

USDA Natural Resources Conservation Service

#### US DOA NRCS SOIL MAPS - FARMLAND CLASSIFICATIONS WITHIN AREA OF INTEREST

NOTE:

IN COMPLIANCE WITH SECTION 9.8-10 (B)(7) AND 9.8-10(C)(2) OF CODE, THE FOLLOWING MITIGATION PLAN WILL BE FOLLOWED WHEN THE PROJECTED HAS REACHED END OF LIFE TO MITIGATE SOIL QUALITY AND RESTORE PRIME FARMLAND. THIS PLAN CAN ALSO BE FOUND IN THE DECOMMISSIONING PLAN ON PAGE 10.

- 1. THE RESTORATION OF SOILS WILL CONSIST OF DE-COMPACTION OF THE TOPSOIL BY DISKING OR TILLING AND RE-VEGETATION OF THE PROPERTY
- 2. EROSION AND SEDIMENT CONTROL, RE-SEEDING, SOIL STABILIZATION, WEED CONTROL AND FERTILIZATION WILL BE PROVIDED BY THE DEVELOPER AS NEEDED UNTIL THE SITE IS STABILIZED TO ITS ORIGINAL CONDITION AND WILL BE APPROVED TO BE COMPLETED BY THE COUNTY.
- 3. DECOMMISSIONING ESTIMATE IS INCLUSIVE OF THE FOLLOWING COSTS: a. TILLING 6" TOPSOIL/SCARIFYING ACCESS ROAD AND ROUGH GRADING EXISTING SOIL **b.CONTAMINATED SOILS TESTING; WILL MITIGATE ANY CONTAMINATED SOILS TO ITS** ORIGINAL CONDITION

10/14/2022 Page 6 of 6

Web Soil Survey National Cooperative Soil Survey

10/14/2022 Page 4 of 6

#### The soil surveys that comprise your AOI were mapped at Farmland of unique 1:20.000 importance Not rated or not available Please rely on the bar scale on each map sheet for map Water Features measurements. Streams and Canals Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Transportation Coordinate System: Web Mercator (EPSG:3857) Rails Maps from the Web Soil Survey are based on the Web Mercator Interstate Highways projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the US Routes Albers equal-area conic projection, should be used if more Major Roads accurate calculations of distance or area are required. Local Roads This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Aerial Photography Soil Survey Area: Brooks and Thomas Counties, Georgia Survey Area Data: Version 20, Sep 12, 2022 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Jan 8, 2022-Mar 13, 2022 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification—Brooks and Thomas Counties, Georgia (Morven)

10/14/2022 Page 3 of 6

Prime farmland if

Prime farmland if

exceed 60

Prime farmland if

sodium

Farmland of statewide

Farmland of statewide

importance

subsoiled, completely

removing the root

inhibiting soil layer

irrigated and the product

of I (soil erodibility) x C

(climate factor) does not

irrigated and reclaimed

importance, if drained

importance, if protected

frequently flooded during

from flooding or not

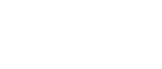
the growing season

importance, if irrigate

Farmland of statewide

Farmland of statewide

of excess salts and



# **ZPP-106**

SHEET NUMBER:

US DOA NRCS MAPS

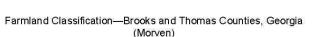
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CONFIDENTIAI TEN CONSENT. CONSIDERE MATION THEREIN IS RENEWABLES, LLC'S INFORI GATE THE | OSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT THE ENCLO



## **130 ROBERTS STREET** ASHEVILLE, NC 28801

LEGEND



Farmland of unique

importance

Not prime farmland

farmland

Soil Rating Points

🖌 🖌 Not rated or not available

All areas are prime

Prime farmland if

Prime farmland if drained

protected from flooding or

not frequently flooded

during the growing

Prime farmland if irrigated

flooded during the

growing season

and drained

Prime farmland if drained

and either protected from

flooding or not frequently

Prime farmland if irrigated

Prime farmland if irrigated

and either protected from

flooding or not frequently

flooded during the

growing season

Farmland of statewide

importance, if irrigated

salts and sodium

and reclaimed of excess

importance, if drained or

flooding or not frequently

either protected from

flooded during the

importance, if warm

protected from flooding or

not frequently flooded

during the growing

importance, if warm

importance, if thawed

importance, if irrigated

enough

mportance

Web Soil Survey

National Cooperative Soil Survey

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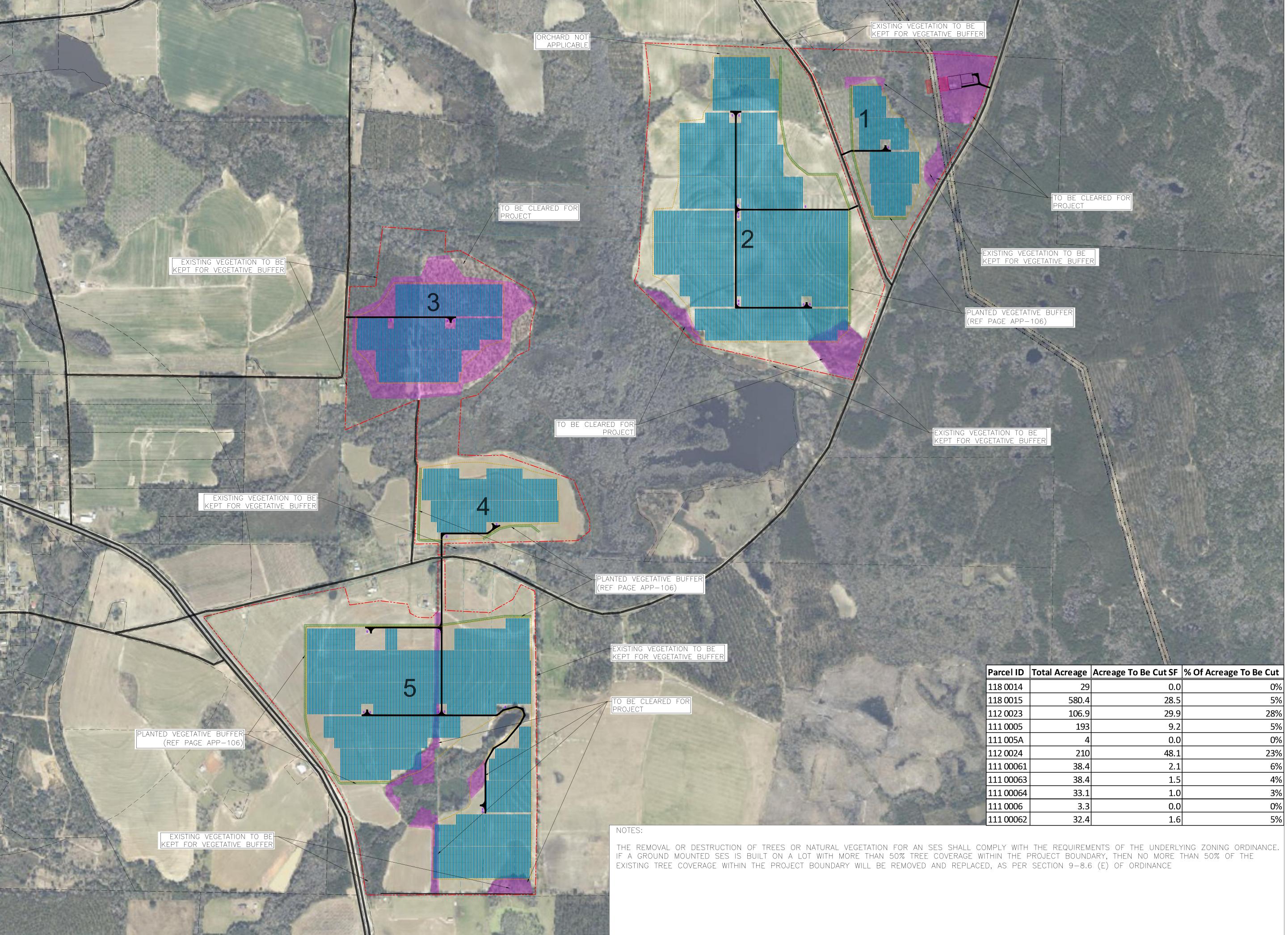
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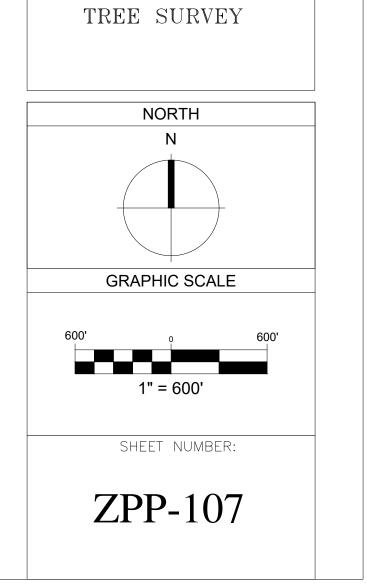
and -

enough, and either

drained or either

growing season





SHEET NAME:

PINEGATE RENEWABLES

**130 ROBERTS STREET** 

ASHEVILLE, NC 28801

LEGEND

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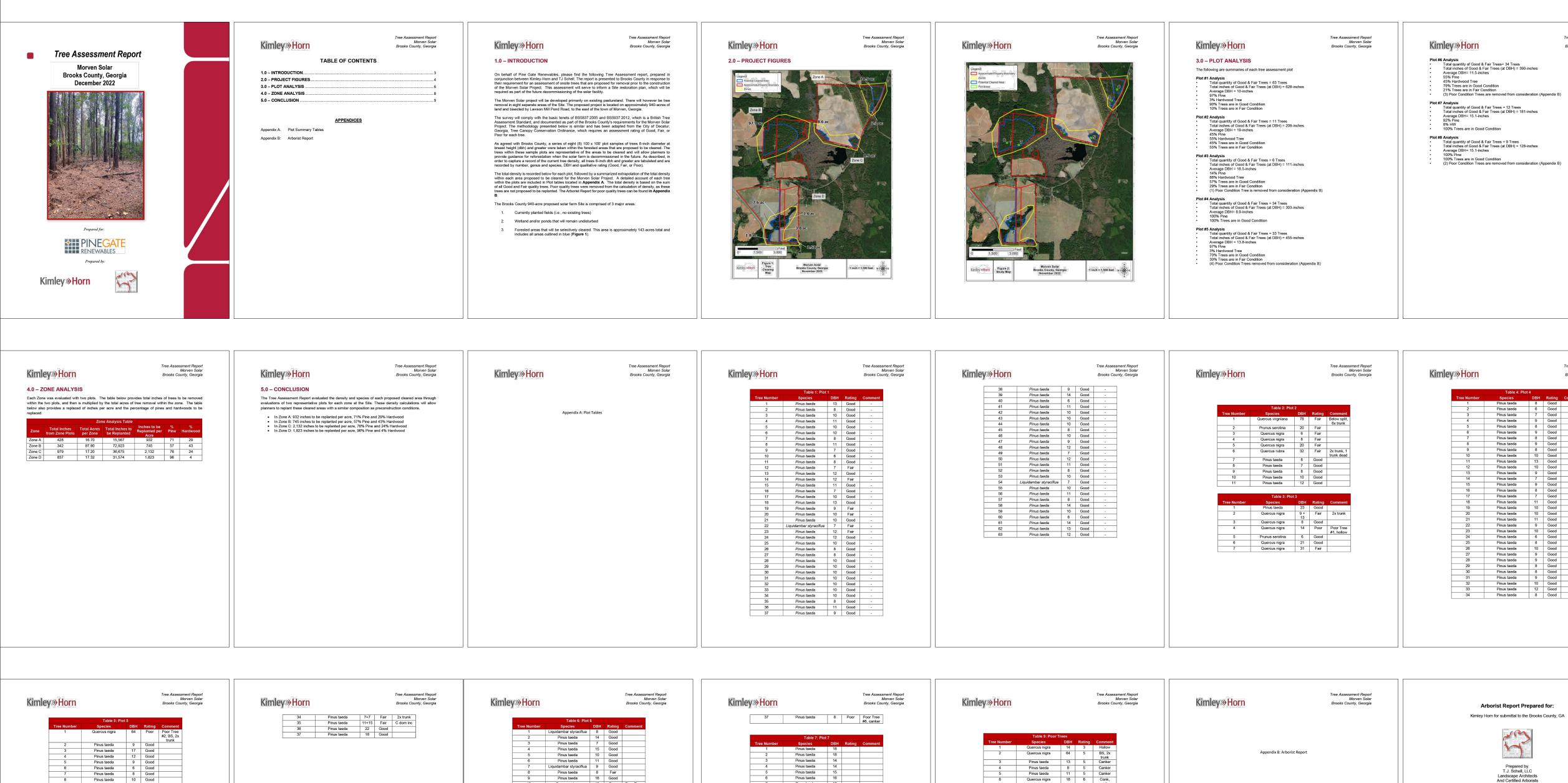
PROJECT BOUNDARY GIS PARCEL LINES

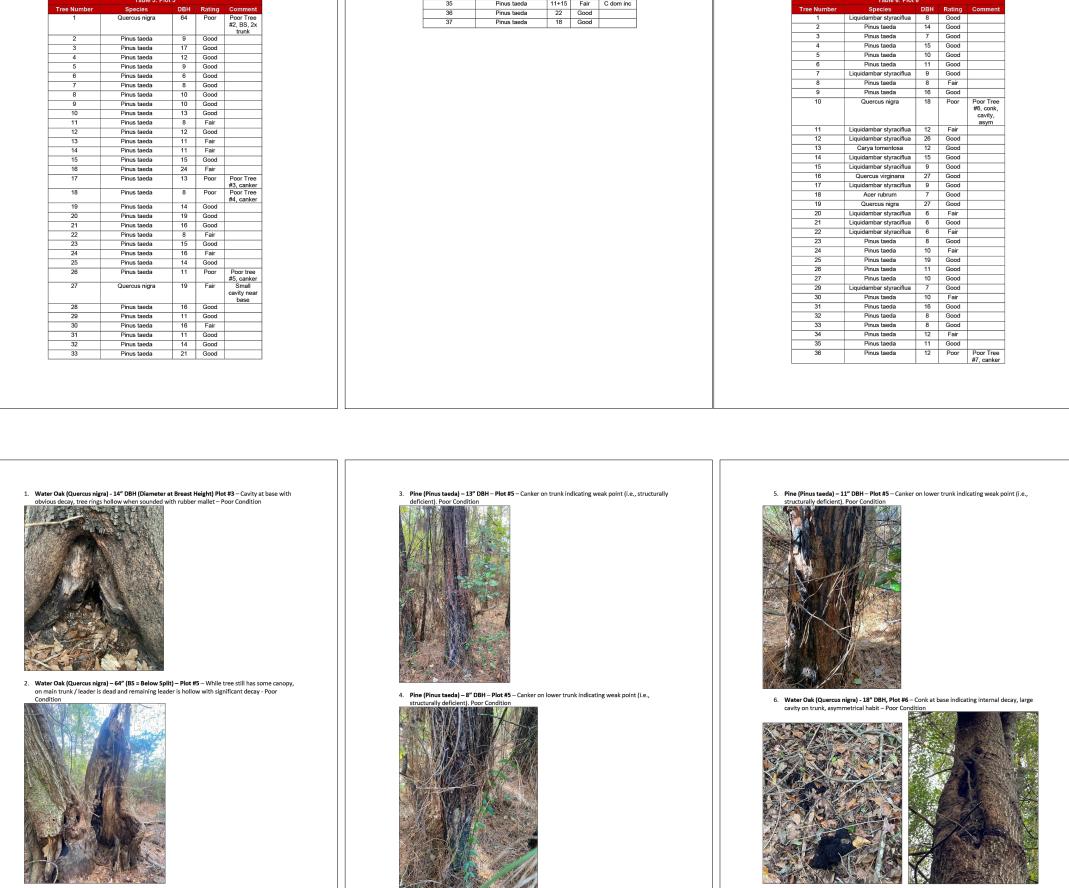
ELECTRICAL (OVERHEAD)

8 FT WILDLIFE-PERMEABLE FENCING

TREE CLEARED AREAS

CONFIDEN THE INFORMATION THEREIN IS CONSIDE PINE GATE RENEWABLES, LLC'S PRIOR W THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT

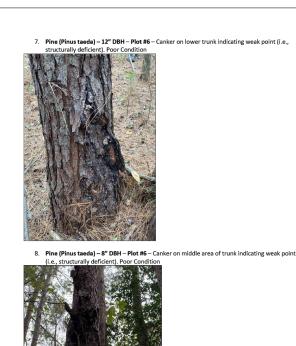




»Horn				Tree Assess I Brooks Cou
37	Pinus taeda	8	Poor	Poor Tree #8, canker
I	Table 7: Plot	7		,
-				
Tree Number	Species Pinus taeda	DBH 18	Rating	Comment
2	Pinus taeda	18		
3	Pinus taeda	10		
4	Pinus taeda	14		
5	Pinus taeda	14		
6	Pinus taeda	16		
7	Pinus taeda	16		
8	Pinus taeda	14		
9	Pinus taeda	15		
10	Pinus taeda	19		
11	Liquidambar styraciflua	9		
12	Pinus taeda	13		
	Table 8: Plot			
Tree Number	Species	DBH	Rating	Comment
1	Pinus taeda	11	Good	
2	Pinus taeda	16	Good	
3	Pinus taeda Pinus taeda	16 13	Good	
5				
6	Pinus taeda Pinus taeda	12 19	Good Good	
7	Pinus taeda Pinus taeda	19	Poor	Poor Tree
'	Fillus laeua	15	FUU	#9, canker
8	Pinus taeda	19	Good	
9	Pinus taeda	11	Good	
10	Pinus taeda	11	Good	
11	Pinus taeda	18	Poor	Poor Tree #10,

Kimley»Horn				Tree Assessment Re Morven S Brooks County, Geo	olar
	Table 9: Poor	Trees			
Tree Number	Species	DBH	Rating	Comment	
1	Quercus nigra	14	3	Hollow	
2	Quercus nigra	64	5	BS, 2x trunk	
3	Pinus taeda	13	5	Canker	
4	Pinus taeda	8	5	Canker	
5	Pinus taeda	11	5	Canker	
6	Quercus nigra	18	6	Conk, cavity, asym	
7	Pinus taeda	12	6	Canker	
8	Pinus taeda	8	6	Canker	
9	Pinus taeda	15	8	Canker	
10	Pinus taeda	18	8	Canker	

Kimley»Horn		ee Assessment Report Morven Solar rooks County, Georgia	
	Appendix B: Arborist Report		





TREE ASSESSMENT REPORT (26 PAGES)

PROJECT'S TREE SURVEY IS IN COMPLIANCE WITH SECTION 9-8.10 (B)(8) OF ORDINANCE AND AGREED UPON METHODOLOGY CONFIRMED VIA EMAIL BETWEEN KIMLEY-HORN AND BROOKS COUNTY ON 11/9/2022

2 CONFIDENTIAL. THE INFORMATION THEREIN IS CONSIDERE PINE GATE RENEWABLES, LLC'S PRIOR WRI THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT

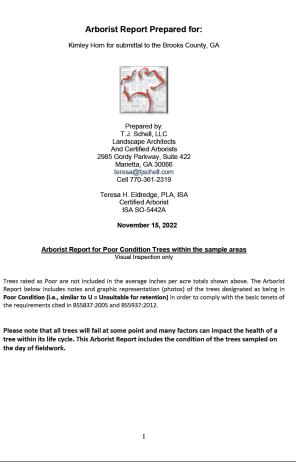


	Table 4: Pl	ot 4		
ree Number	Species	DBH	Rating	Comment
1	Pinus taeda	8	Good	
2	Pinus taeda	6	Good	
3	Pinus taeda	7	Good	
4	Pinus taeda	9	Good	
5	Pinus taeda	8	Good	
6	Pinus taeda	9	Good	
7	Pinus taeda	8	Good	
8	Pinus taeda	9	Good	
9	Pinus taeda	8	Good	
10	Pinus taeda	10	Good	
11	Pinus taeda	13	Good	
12	Pinus taeda	10	Good	
13	Pinus taeda	9	Good	
14	Pinus taeda	7	Good	
15	Pinus taeda	9	Good	
16	Pinus taeda	8	Good	
17	Pinus taeda	7	Good	
18	Pinus taeda	11	Good	
19	Pinus taeda	10	Good	
20	Pinus taeda	10	Good	
21	Pinus taeda	11	Good	
22	Pinus taeda	9	Good	
23	Pinus taeda	10	Good	
24	Pinus taeda	6	Good	
25	Pinus taeda	8	Good	
26	Pinus taeda	10	Good	
27	Pinus taeda	9	Good	
28	Pinus taeda	9	Good	
29	Pinus taeda	8	Good	
30	Pinus taeda	8	Good	
31	Pinus taeda	9	Good	
32	Pinus taeda	10	Good	
33	Pinus taeda	12	Good	
34	Pinus taeda	8	Good	

Horn				Brooks Co
	Table 4: Pl	ot 4		
ee Number	Species	DBH	Rating	Comment
1	Pinus taeda	8	Good	
2	Pinus taeda	6	Good	
3	Pinus taeda	7	Good	
4	Pinus taeda	9	Good	
5	Pinus taeda	8	Good	
6	Pinus taeda	9	Good	
7	Pinus taeda	8	Good	
8	Pinus taeda	9	Good	
9	Pinus taeda	8	Good	
10	Pinus taeda	10	Good	
11	Pinus taeda	13	Good	
12	Pinus taeda	10	Good	
13	Pinus taeda	9	Good	
14	Pinus taeda	7	Good	
15	Pinus taeda	9	Good	
16	Pinus taeda	8	Good	
17	Pinus taeda	7	Good	
18	Pinus taeda	11	Good	
19	Pinus taeda	10	Good	
20	Pinus taeda	10	Good	
21	Pinus taeda	11	Good	
22	Pinus taeda	9	Good	
23	Pinus taeda	10	Good	
24	Pinus taeda	6	Good	
25	Pinus taeda	8	Good	
26	Pinus taeda	10	Good	
27	Pinus taeda	9	Good	
28	Pinus taeda	9	Good	
29	Pinus taeda	8	Good	
30	Pinus taeda	8	Good	
31	Pinus taeda	9	Good	
32	Pinus taeda	10	Good	
33	Pinus taeda	12	Good	
34	Pinus taeda	8	Good	

»Horn	Table 4: Plot			Tree Assess I Brooks Cou	Mon
Tree Number		4 DBH	Detine	Comment	
1 ree Number	Species Pinus taeda	8	Rating Good	comment	
2	Pinus taeda	6	Good		1
3	Pinus taeda	7	Good		
4	Pinus taeda	9	Good		1
5	Pinus taeda	8	Good		
6	Pinus taeda	9	Good		
7	Pinus taeda	8	Good		1
8	Pinus taeda	9	Good		

Tree Assessment Report Morven Solar Brooks County, Georgia



## **130 ROBERTS STREET** ASHEVILLE, NC 28801

SHEET NAME:

TREE ASSESSMENT

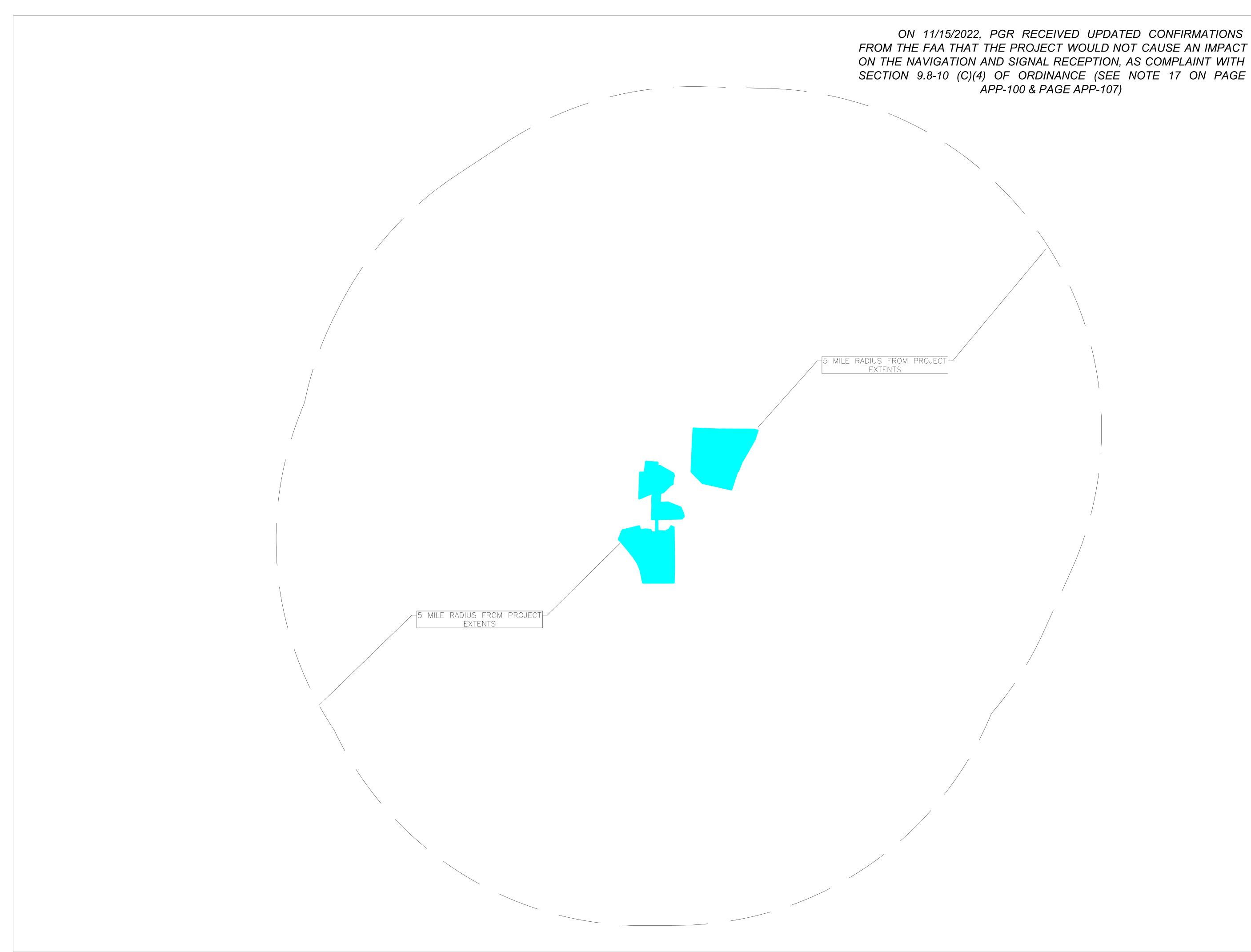
REPORT

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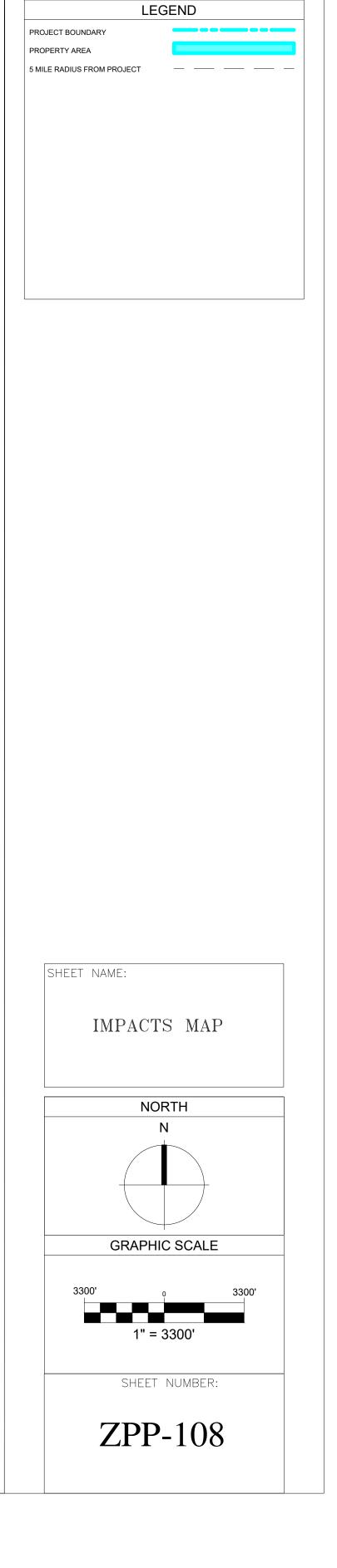
**ZPP-107A** 



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ON 11/15/2022, PGR RECEIVED UPDATED CONFIRMATIONS FROM THE FAA THAT THE PROJECT WOULD NOT CAUSE AN IMPACT SECTION 9.8-10 (C)(4) OF ORDINANCE (SEE NOTE 17 ON PAGE

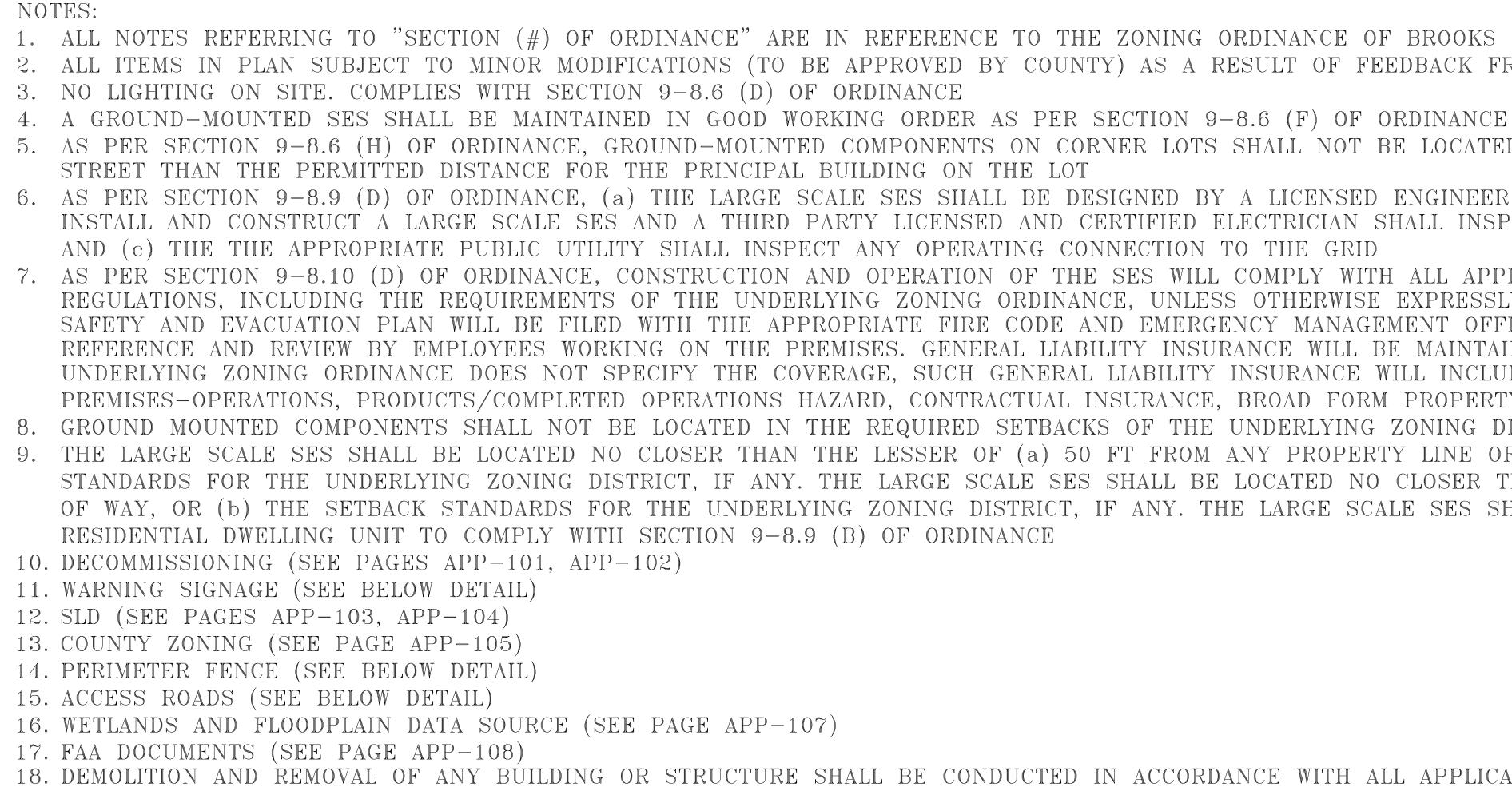


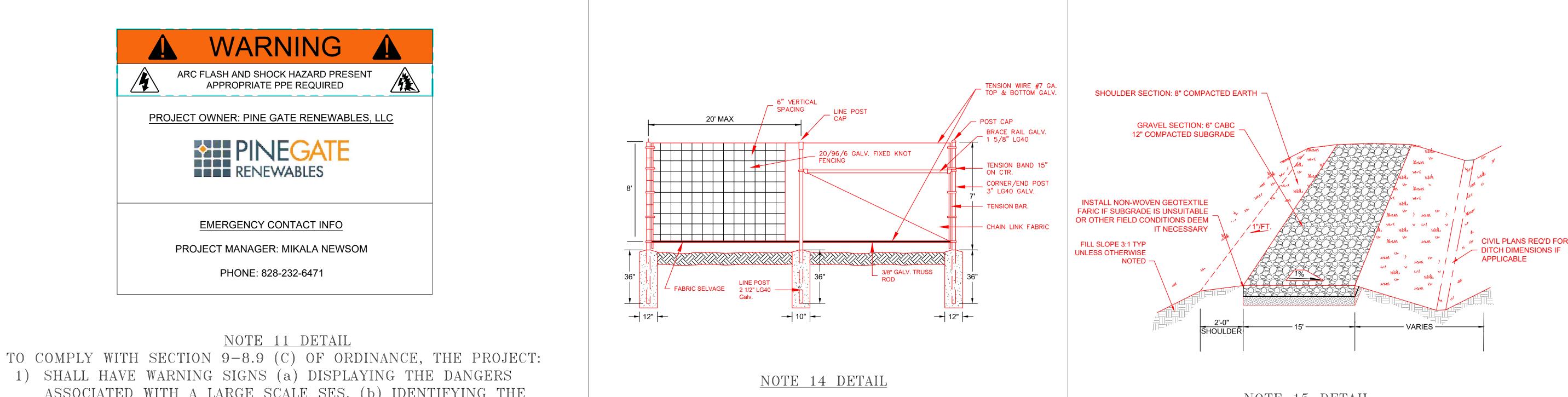
PINEGATE RENEWABLES

130 ROBERTS STREET

ASHEVILLE, NC 28801

CONFIDENTI THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND THE INFORMATION THEREIN IS CONSIDEREC DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT PINE GATE RENEWABLES, LLC'S PRIOR WRIT





- ASSOCIATED WITH A LARGE SCALE SES, (b) IDENTIFYING THE OWNER OR OPERATOR OF THE LARGE SCALE SES, AND (c) PROVIDE A 24-HOUR EMERGENCY CONTACT PHONE NUMBER 2) MAY HAVE SIGNS THAT CONTAIN EDUCATIONAL INFORMATION ABOUT THE LARGE SCALE SES
- 3) SHALL NOT HAVE SIGNS USED FOR DISPLAYING ANY ADVERTISEMENT EXCEPT FOR REASONABLE IDENTIFICATION OF THE MANUFACTURER OR OPERATOR OF THE LARGE SCALE SES

1. ALL NOTES REFERRING TO "SECTION (#) OF ORDINANCE" ARE IN REFERENCE TO THE ZONING ORDINANCE OF BROOKS COUNTY AS AMENDED ON 1/1/2021 TO INCLUDE SOLAR 2. ALL ITEMS IN PLAN SUBJECT TO MINOR MODIFICATIONS (TO BE APPROVED BY COUNTY) AS A RESULT OF FEEDBACK FROM REGULATORY AGENCIES

5. AS PER SECTION 9-8.6 (H) OF ORDINANCE, GROUND-MOUNTED COMPONENTS ON CORNER LOTS SHALL NOT BE LOCATED CLOSER TO THE SIDE PROPERTY LINE ALONG A PUBLIC

6. AS PER SECTION 9-8.9 (D) OF ORDINANCE, (a) THE LARGE SCALE SES SHALL BE DESIGNED BY A LICENSED ENGINEER, (b) A LICENSED AND CERTIFIED ELECTRICIAN SHALL INSTALL AND CONSTRUCT A LARGE SCALE SES AND A THIRD PARTY LICENSED AND CERTIFIED ELECTRICIAN SHALL INSPECT THE ELECTRICAL CONNECTIONS PRIOR TO OPERATION,

7. AS PER SECTION 9-8.10 (D) OF ORDINANCE, CONSTRUCTION AND OPERATION OF THE SES WILL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS, INCLUDING THE REQUIREMENTS OF THE UNDERLYING ZONING ORDINANCE, UNLESS OTHERWISE EXPRESSLY STATED IN THIS ORDINANCE. BEFORE OPERATION, A FIRE SAFETY AND EVACUATION PLAN WILL BE FILED WITH THE APPROPRIATE FIRE CODE AND EMERGENCY MANAGEMENT OFFICIALS, AND WILL BE AVAILABLE IN WORKPLACE FOR REFERENCE AND REVIEW BY EMPLOYEES WORKING ON THE PREMISES. GENERAL LIABILITY INSURANCE WILL BE MAINTAINED THROUGHOUT THE LIFE OF THE SES PROJECT. IF THE UNDERLYING ZONING ORDINANCE DOES NOT SPECIFY THE COVERAGE, SUCH GENERAL LIABILITY INSURANCE WILL INCLUDE, BUT NOT BE LIMITED TO, COMMERCIAL FORM, PREMISES-OPERATIONS, PRODUCTS/COMPLETED OPERATIONS HAZARD, CONTRACTUAL INSURANCE, BROAD FORM PROPERTY DAMAGE, AND PERSONAL INJURY. 8. GROUND MOUNTED COMPONENTS SHALL NOT BE LOCATED IN THE REQUIRED SETBACKS OF THE UNDERLYING ZONING DISTRICT, AS PER SECTION 9-8.6 (A) OF ORDINANCE 9. THE LARGE SCALE SES SHALL BE LOCATED NO CLOSER THAN THE LESSER OF (a) 50 FT FROM ANY PROPERTY LINE OR INGRESS/EGRESS EASEMENT, OR (b) THE SETBACK STANDARDS FOR THE UNDERLYING ZONING DISTRICT, IF ANY. THE LARGE SCALE SES SHALL BE LOCATED NO CLOSER THAN THE LESSER OF (a) 100 FT FROM ANY PUBLIC RIGHT OF WAY, OR (b) THE SETBACK STANDARDS FOR THE UNDERLYING ZONING DISTRICT, IF ANY. THE LARGE SCALE SES SHALL BE LOCATED NO CLOSER THAN 500 FT FROM ANY

18. DEMOLITION AND REMOVAL OF ANY BUILDING OR STRUCTURE SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

AN 8 FT WILDLIFE-FRIENDLY SECURITY FENCE WITH A GATE AND LOCKING MECHANISM WILL ENCLOSE THE PERIMETER OF THE SOLAR ARRAY SECTION TO DENY ACCESS TO ANY INDIVIDUALS NOT AUTHORIZED TO BE ON THE PROPERTY AND FOR PUBLIC SAFETY, AS PER SECTION 9-8.6 (J) OF ORDINANCE

NOTE 15 DETAIL

ALL ACCESS ROADS SHALL COMPLY WITH STANDARD DESIGN PRACTICES AS SHOWN ABOVE. FINAL DESIGN OF ROADWAYS AND ACCESS POINTS ARE SUBJECT TO APPROVAL FROM DOT AND REVIEW FROM BROOKS COUNTY.



## **130 ROBERTS STREET** ASHEVILLE, NC 28801

SITE PLAN IS COMPLIANT WITH SECTION 9-8.10 (D) OF ORDINANCE

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SHEET NUMBER:

NOTES

CONSIDERE

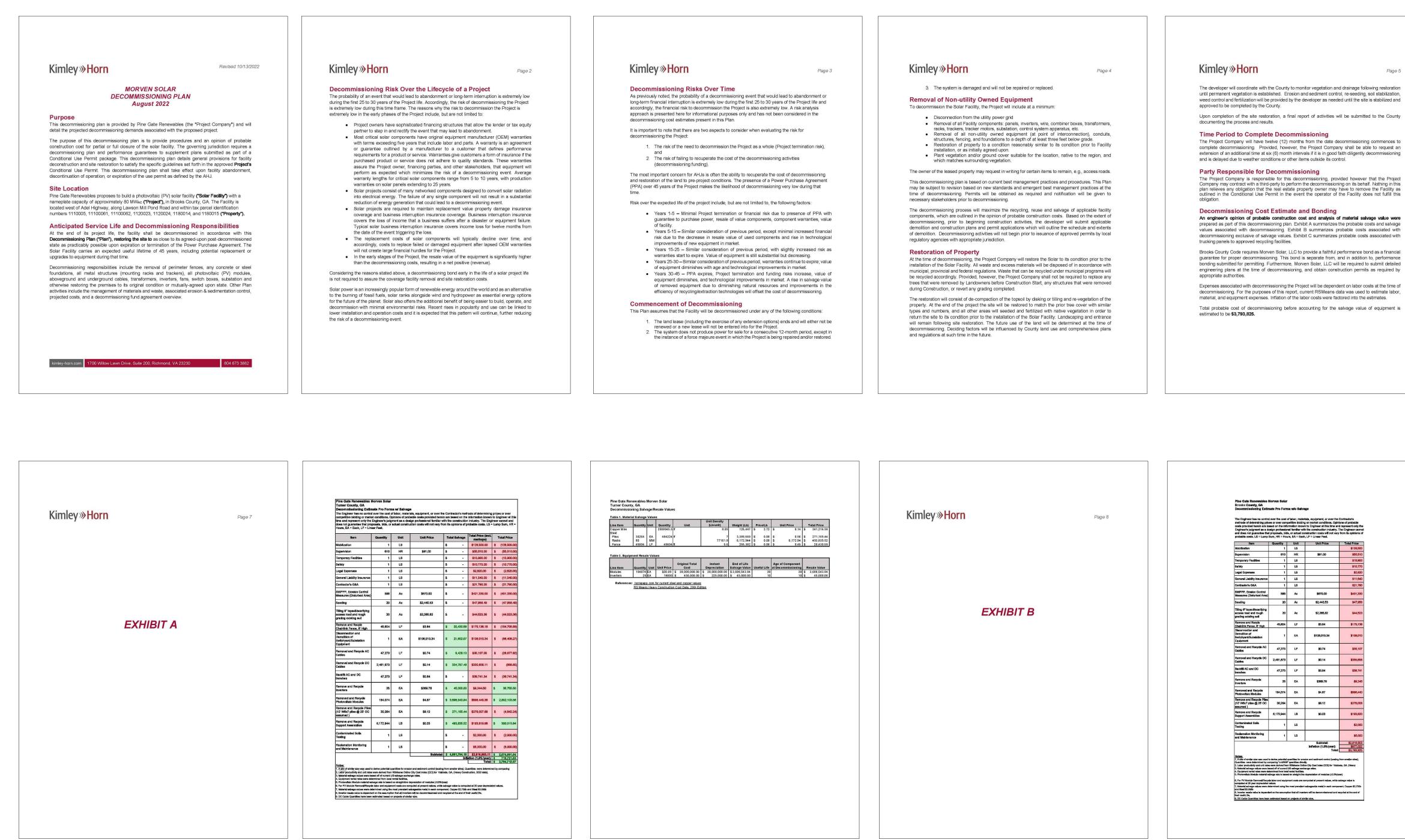
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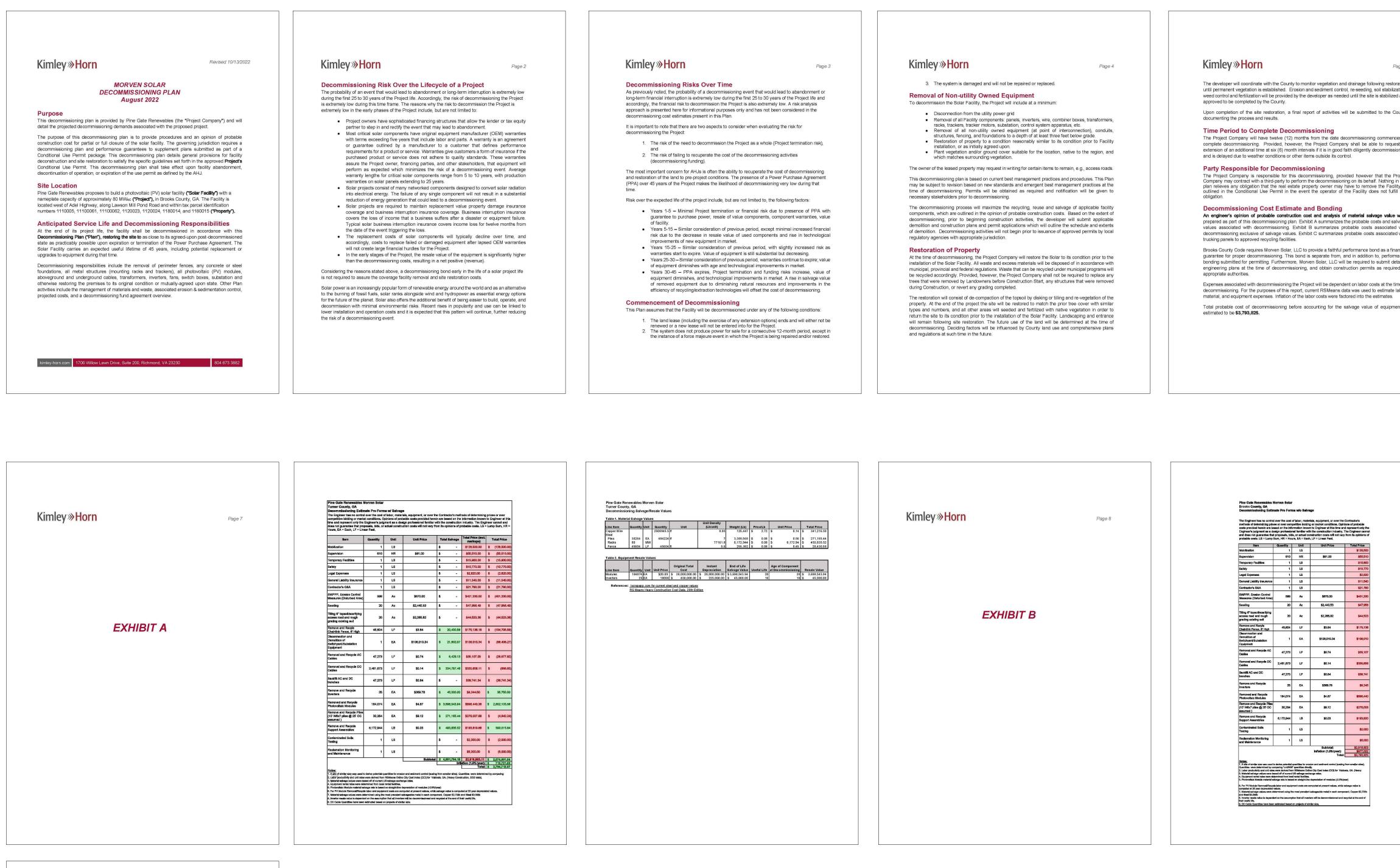
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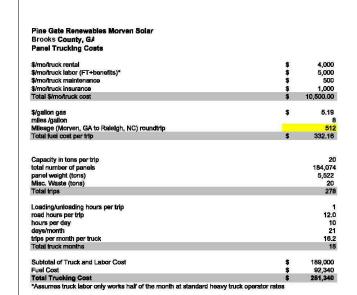
THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT

APPENDIX – GENERAL

SHEET NAME:







COMPLIES WITH SECTIONS 9-8.6 (G) & (K), SECTION 9-8.10 (E), AND SECTION 9-8.10 (C)(3) OF ORDINANCE

## DECOMMISSIONING PLAN (13 PAGES)

2

Kimley **Whorn** Page 6 Resale/Salvage Value Estimate There is a robust secondary market for resale of solar PV panels worldwide and a network of facilities available for recycling panels. Solar PV panels are estimated to degrade less than 0.5% per year, meaning they're expected to operate at 90% of capacity after 20 years. Panel manufacturers will guarantee the performance for each individual module and replace defective modules per the terms of warranty. Panels can therefore be sold for a price higher than their scrap value. In general, the highest component value would be expected at the time of construction with declining value over the life of the Project. Over most of the Project's life, components such as the solar panels value over the life of the Project. Over most of the Project's life, components such as the solar panels could be sold in the wholesale market for reuse or refurbishment. As panel efficiency and power production decrease due to aging and/or weathering, the resale value will decline accordingly. Secondary markets for used solar components include other utility scale solar facilities with similar designs that may require replacement equipment due to damage or normal wear over time; other buyers (e.g., developers, consumers) that are willing to accept a slightly lower power output in return for a significantly lower price point when compared to new equipment. The solar facility's additional supporting components, such as inverters, transformers, racking and piles, can be dismantied and resold for scrap value. Inverters and transformers are comprised of salvageable materials such as copper, aluminum, and silver. Piles and other steel components can likewise be recovered and salvaged. Resale values at the end of Year 20 for equipment of significant value were calculated with straight-line depreciation after an instant depreciation of the original material cost. A current sampling of reused solar panels indicates a wide range of pricing depending on age and condition (\$0.10 to \$0.50 per watt). Future pricing of solar panels is difficult to predict currently, due to the relatively young age of the market, changes to solar panel technology, and the ever-increasing product demand. Using straight line depreciation, a conservative estimation of the value of solar panels in Year 20 at \$0.05 per watt would yield approximately \$3,698,544. Increased costs of removal, for resale versus salvage, would be expected to preserve the integrity of the panels; however, the net revenue would still be substantially higher than the estimated salvage value. The resale value of components such as trackers, may decline more quickly; however, the salvage value of the steel that makes up a larger portion of the tracker is expected to stay at or above the value used in this report. The price used to value the steel in this report is \$160 per ton (\$0.08 per lb). The price used to value copper in this report is \$2.70 per lb. Total probable salvage value of decommissioning is estimated to be \$4,891,800. **Responsible Party Contact Information** Pine Gate Renewables Attn: Operations and Maintenance Manager Contact: 130 Roberts Street Asheville, NC 28801 Address: Phone Number: 855-969-3380 utility@pgrenewables.com Email:

RENEWABLES

## **130 ROBERTS STREET** ASHEVILLE, NC 28801

SHEET NAME:

APPENDIX -DECOMMISSIONING PLAN

SHEET NUMBER:

APP-101

#### Kimley »Horn

7/28/2022

**Brooks County** Development Services Attn. Zoning Department 1625 Johnson Short Rd Quitman, Georgia 31643

**RE:** Morven Solar – Decommissioning Cost Estimate Kimley-Horn #013632040

Dear Members of the Building & Zoning Department:

The purpose of this letter is to provide a brief summary of Kimley-Horn's experience with solar energy facilities, the preparation of decommissioning costs associated with these facilities, and an overview of our estimating methodology.

Revised 10/13/2022

Kimley-Horn has experience providing consultation on more than 55 GW of solar energy development across the country, ranging in size from <1 MW to over 1 GW. Many of these solar facilities are in the southeast region of the Unites States.

There is little current data available regarding the actual costs to decommission a solar facility because there have been few (if any) decommissioned since the average expected life span of a solar facility is approximately 35 years. However, we have combined our extensive experience in estimating sitework construction costs with the experience of our solar energy clients in the construction of all aspects of these facilities to develop quantifiable and defendable unit costs.

Quantities for the racking system, solar modules, inverters, and transformers were provided to us by Pine Gate Renewables for this decommissioning cost estimate. Quantities for siterelated items listed were estimated using the preliminary site plan for Morven Solar. Salvage values of the various metal components were estimated using current scrap metal prices for steel, copper, and aluminum obtained from iScrap App.

This estimate was performed assuming decommissioning in Year 20. As you will see, the attached decommissioning cost estimate for Year 20 results in a positive net surplus. The benefit of the salvage value resulting in a positive net surplus is that the decommissioning of the solar farm will likely result in a "buy job." The owner of the solar farm will issue RFP's (Request for Proposals) to Recycling/Restoration companies to provide their bid to restore the site to its original conditions and sell the items of value to recyclers and dispose of items with no value in a landfill. The cost estimate shows that the net surplus is a positive value, (Salvage Value (\$4,891,794.15) – Decommissioning Cost (\$2,816,803.11) = Net Surplus

1720 Amber Park Drive, Suite 600, Alpharetta, GA 30009 770.619.4280

## Kimley»Horn

(\$2,074,991.04)) which would make the bid amounts positive. Additionally, with assumed inflation of 1.5% per year over the next 20 years, the net surplus would increase (Net Surplus with Inflation valued at \$719,721.03). This means the companies will be "buying" the right to perform the work and will be able to make a profit based off the salvage value of the recyclable items from the site. Please see the attached Decommissioning Cost and Salvage Value estimates.

Please contact me at (984) 900-2008 or Luke.Lukas@Kimey-Horn.com should you have any questions or concerns.

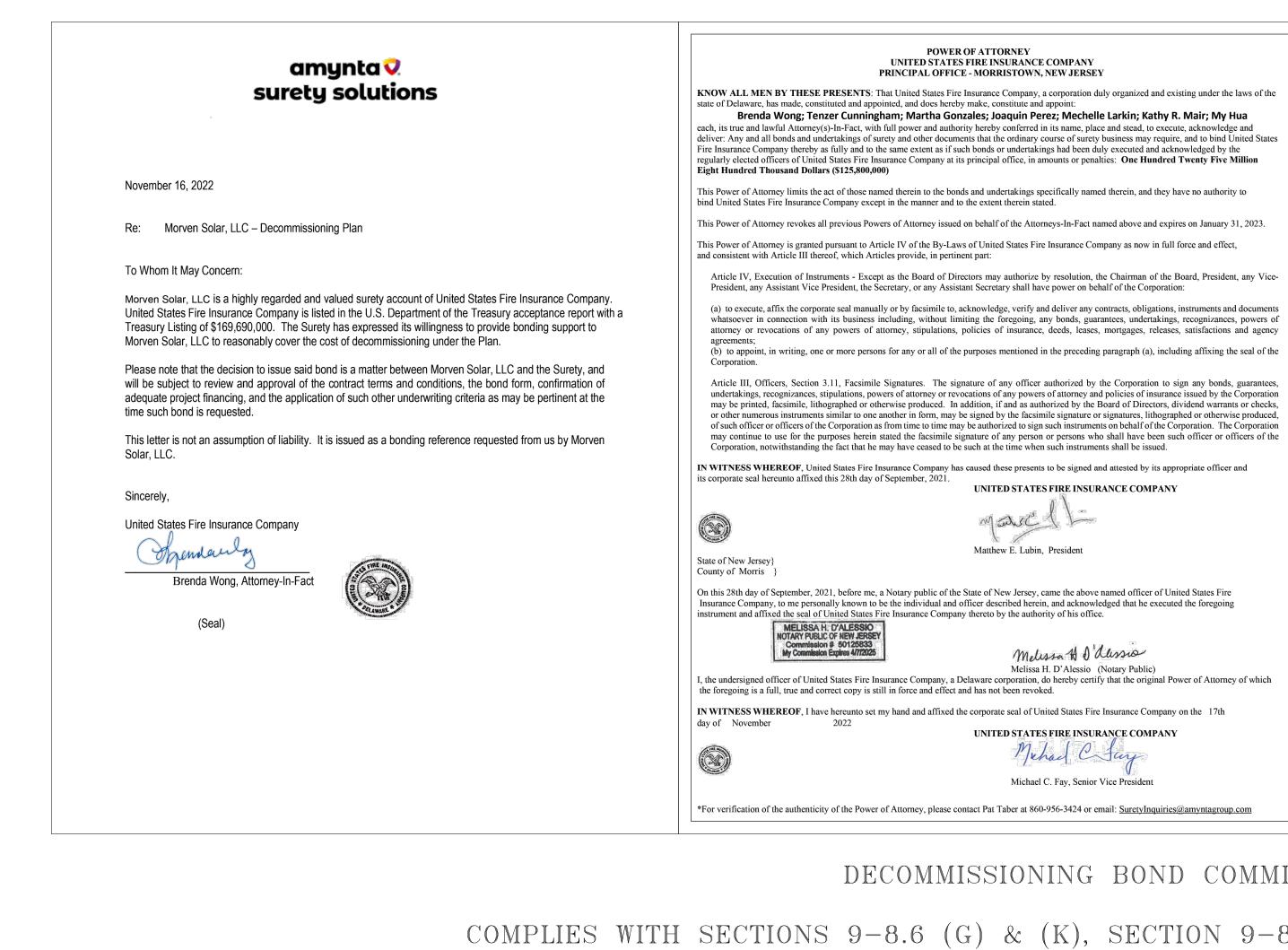
Sincerely, KIMLEY-HORN

and

Luke Lukas, Project Manager



Logan Clark, P.E.



# COMPLIES WITH SECTIONS 9-8.6 (G) & (K), SECTION 9-8.10 (E), AND SECTION 9-8.10 (C)(3) OF ORDINANCE

## DECOMMISSIONING BOND COMMITMENT LETTER (2 PAGES)

UNITED STATES FIRE INSURANCE COMPANY "Jehad C fary Michael C. Fay, Senior Vice President

Melissa H. D'Alessio (Notary Public)

Melissa A D'alussio

UNITED STATES FIRE INSURANCE COMPANY

Page 2

# DECOMMISSIONING ESTIMATE (4 PAGES)

llem	Cuantily	U nik	Unit Price	T	otal Salvaga	Total Price (Incl. markupe)		Total Price
Mobilization	1	LS	6	\$	1. P. 1	\$128,500.00	\$	(128,500.0
Supervision	610	HR	\$91.00	;		\$55,510.00	\$	(55,510.0
Temporary Fectilities	1	LS		3		\$15,900.00	\$	(15,900.0
Salaty		LS		1		\$10,770,00	\$	(10,770.0
Legal Expenses	1	LS		\$	-	\$2,820,00	\$	(2,820,0
General Liability insurance	1	L9		\$	-	\$11,540.00	\$	(11,540.0
Contractor's GBA	1	L8		\$	7.	\$21,790.00	\$	(21,790.0
SWPPP, Erosion Control Measures (Disturbed Area)	509	Aq	\$670,00		-	\$401,330,00		(401,380,0
Seading	20	Ac	\$2,440,53	\$	-	\$47,956,49	5	(47,958,4
Tiling 6" topsol/ecaritying access read and rough grading codeting coli	20	Ac	\$2,265.82	3		\$44,523.36	\$	(44,523.3
Remove and Recyls	45,604	LF	\$3.84	5	20,430.59	\$175,138.18	5	(154,705.5
Chainink Fence, 6 High Disconnection and Demolition of Switchyard/Substation Equipment	1	EA	\$108,010.34	5	21,602.07	\$108,010.34	\$	(88,408.2
Removal and Recycle AC Calaisa	47,273	LF	\$0.74	5	6,429.13	\$35,107.05	\$	(28,677.9
Removel and Recycle DC Cables	2,481,673	LF	\$0.14	\$	334,787,48	\$535,658.11		(868.6
Beokhii AC and DC tranches	47,273	LF	\$0.84	5	Ξ.	\$39,741.34	5	(39,741.3
Remove and Recycle Invertors	25	EA	\$369.76	5	45,000.00	\$9,244.50	5	35,755.5
Removed and Recycle Photovoltalo Modules	184,074	EA	\$4.87	\$	3,698,643,94	\$598,440,38	+	2,802,103.0
Remove and Recycle Plice (10' W8x7 plee @ 25' OC secured )	30,264	EA	<b>\$0.12</b>	5	271,165.44	\$276,007.68	\$	(4,842.2
Remove and Recycle Support Accembles	<b>8,172,94</b> 4	LB	\$0.03	3	493,835.52	\$193,819.68	5	300,015.8
Contaminated Solis Testing	1	L\$			1×	\$2,000.00		(2,000.0
Reclamation Monitaring and Maintanance	1	Lŝ		\$	-	\$5,000.00	•	(5,000.0
			Subtotal:	3	4,881,784.16	\$2,916,883.11 ation (1.8%/year):	1	2,874,891,8
Notanc 1. A artia of atmijor etca uses used to 2. Libbi productivity and Link nates 3. Metarial cubrego veluces ware be 4. Equipment rental rates ware det 9. Photovolski Micide material red	were derived from F sed off of current UK similated from local in	i Skienne Coline 6 selvage soche ontal facilities.	e City Cost Index (CCI) for Vald inge raise.	cesta,	annsjereites), Cp	Totat:	\$	2,794,712.0

Pine Gate Renewables Norven Solar

Pine Gate Re Turner Coun Decommissi	ty, GA	
Table 1. Mate		
Line Item	Quantity	Unit
Copper Wire Steel		
Piles	30264	ΕA
Racks	80	MW
Fence	45604	LF
0.0705407	45604	LF
Line Item	Quantity	
Modules	184074	02021202
Inverters	05	EA

ar Value	5							
ntity	ir	Unit	Unit Density (Lb/unit)	Weight (Lb)	Price/Lb	Unit Price		T otal Price
945.5	lf		0.05	125,447	\$ 2.72	\$ 0.14	\$	341,216.59
34224 15604			7 77161.8 5.6	3,389,568 6,172,944 255,382	\$0.08 \$0.08 \$0.08	\$0.56 \$6,172.94 \$0.45	\$ \$ \$	271,165.44 493,835.52 20,430.59
	Ori	ginal Total	Instant	End of Life		Age of Component		
Price 20.09	0.0	Cost 8,000,000.00	Depreciation \$ 20,000,000.00	Salvage Value		at Decommissioning		Resale Value
	\$ 2	5,000,000.00	⊉ ∠0,000,000,000	\$3,698,543.94	20	20	4	3,698,543.94

<u>er current steel and copper values</u> /Construction Cost Data, 29th Edition



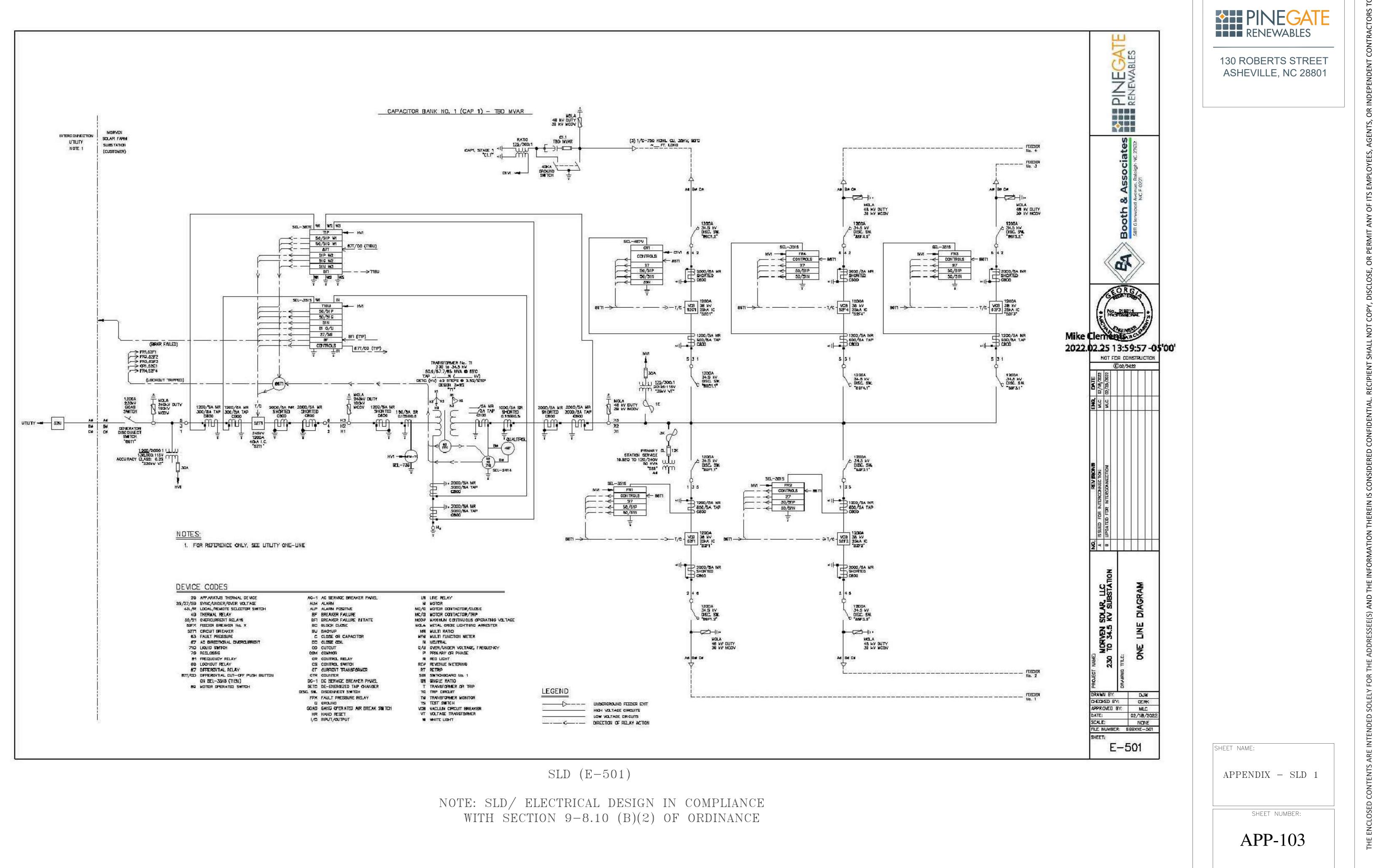
## **130 ROBERTS STREET** ASHEVILLE, NC 28801

APP-102

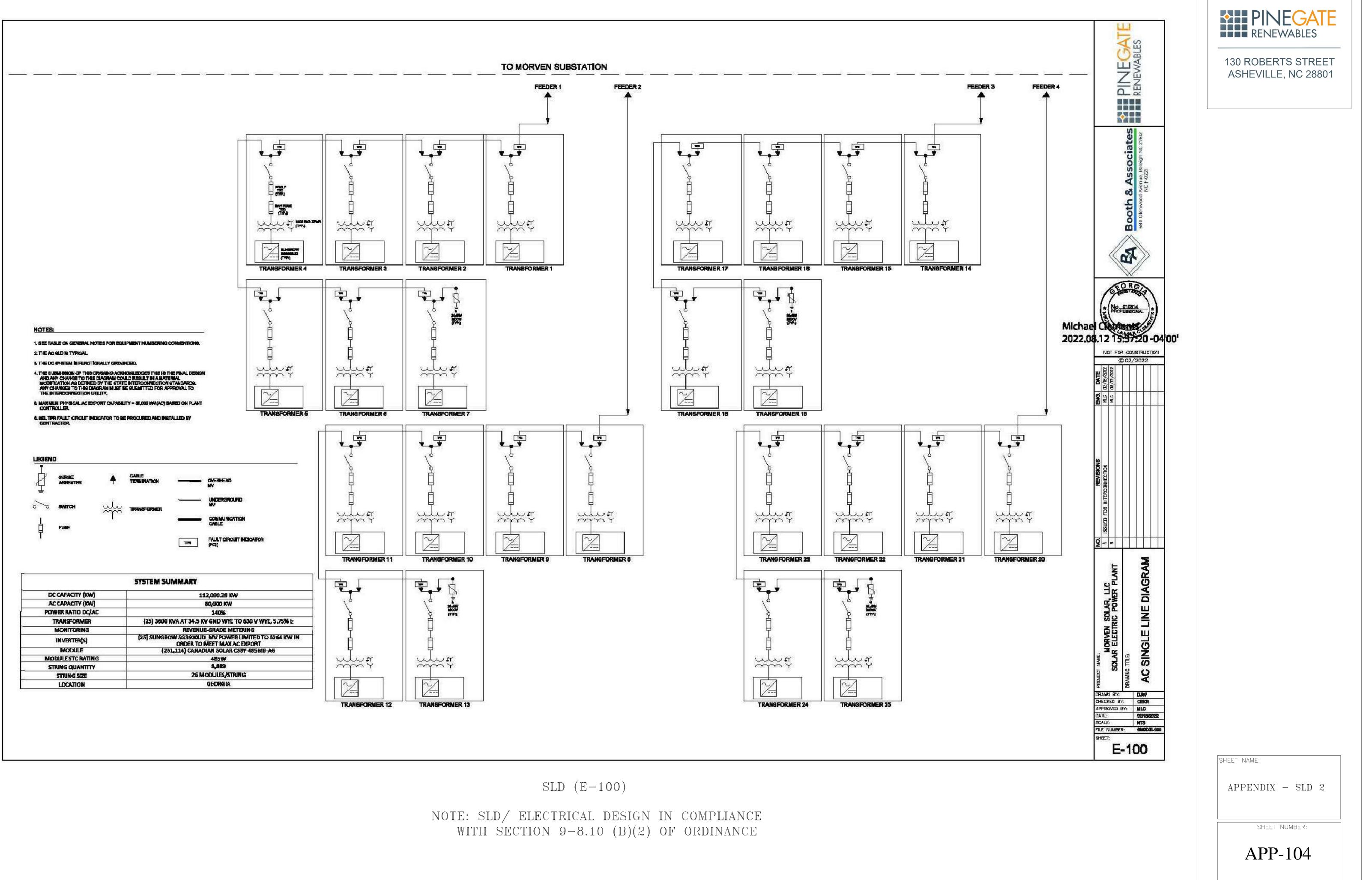
SHEET NUMBER:

APPENDIX -DECOMMISSIONING ESTIMATE AND BOND COMMITMENT LETTER

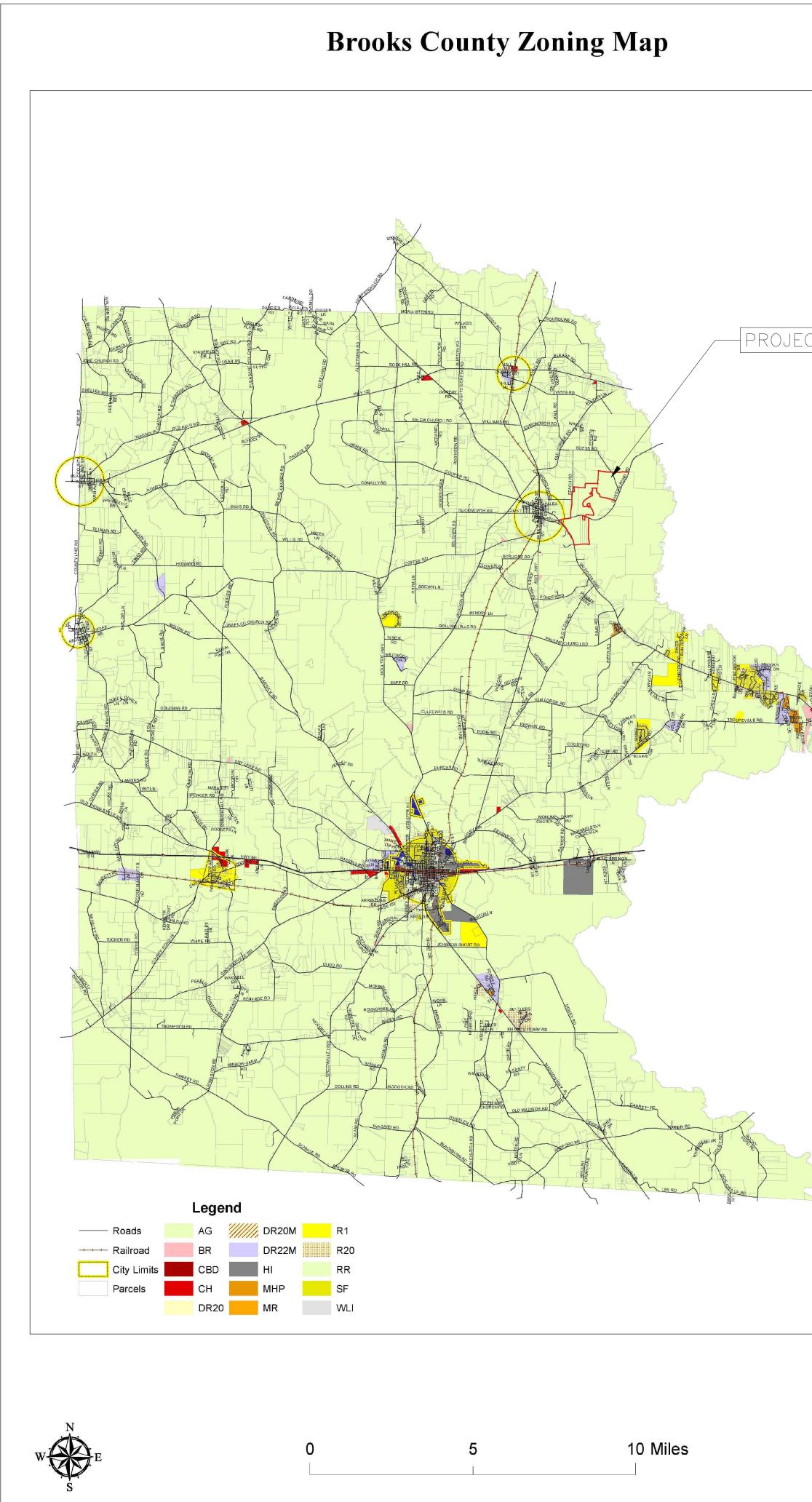
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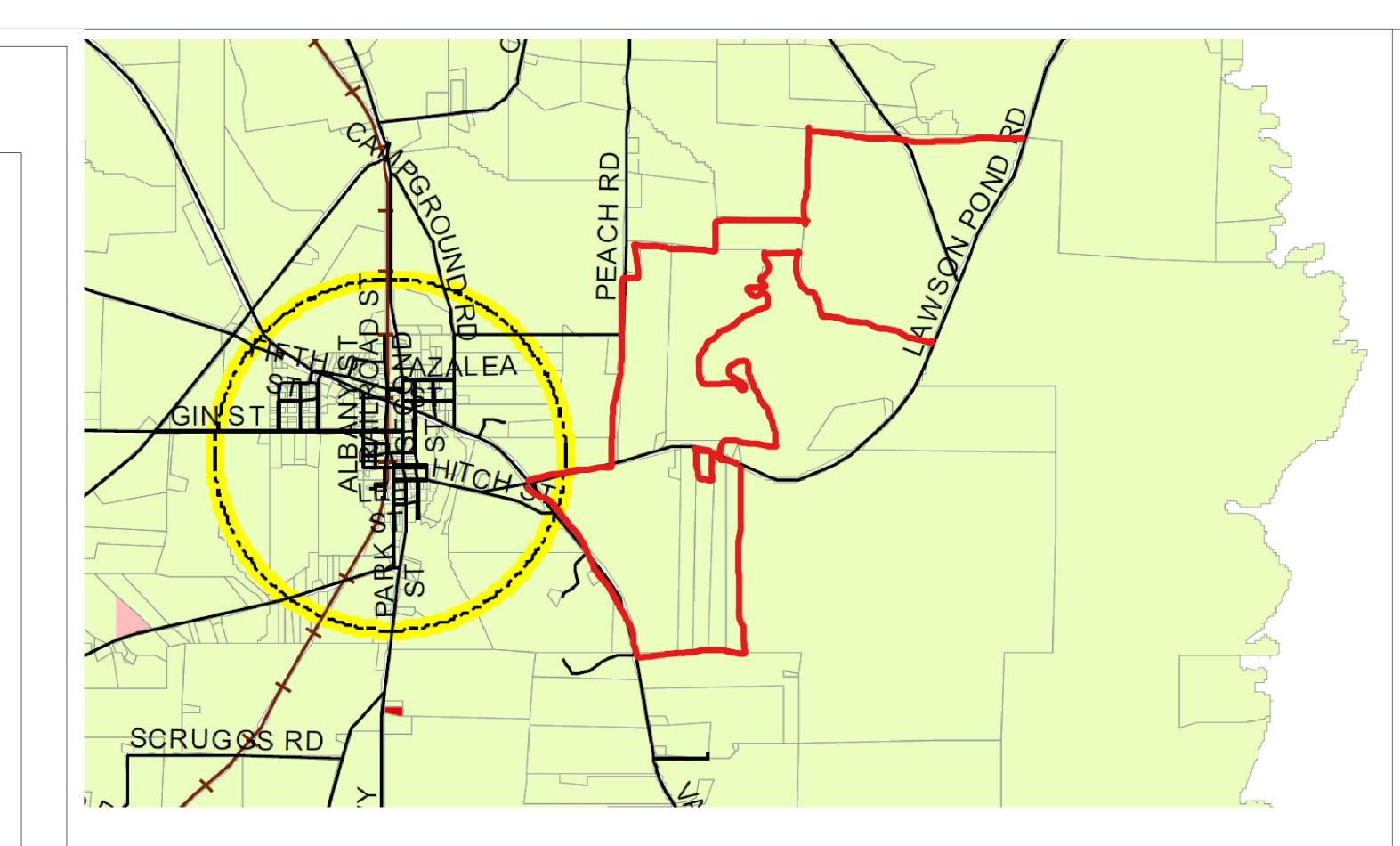


ED CONFIDENTIAL. TTEN CONSENT. THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND THE INFORMATION THEREIN IS CONSIDERE DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT PINE GATE RENEWABLES, LLC'S PRIOR WRI



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# BROOKS COUNTY ZONING MAP & PROJECT AREA (RED)

NOTE: PER SECTION 9-8.3 AND SECTION 9-8.9 (A) OF ORDINANCE, PROJECT IS ZONED AS AG AND NOT IN A HISTORICAL DISTRICT, SO PROJECT IS PERMITTED TO SUBMIT A SPECIAL EXCEPTION APPLICATION REQUESTING FOR LARGE SCALE SES TO BE AN ACCEPTED USE UNDER ITS CURRENT AG ZONING DESIGNATION

# -PROJECT LOCATION

Sg C Southern Georgia



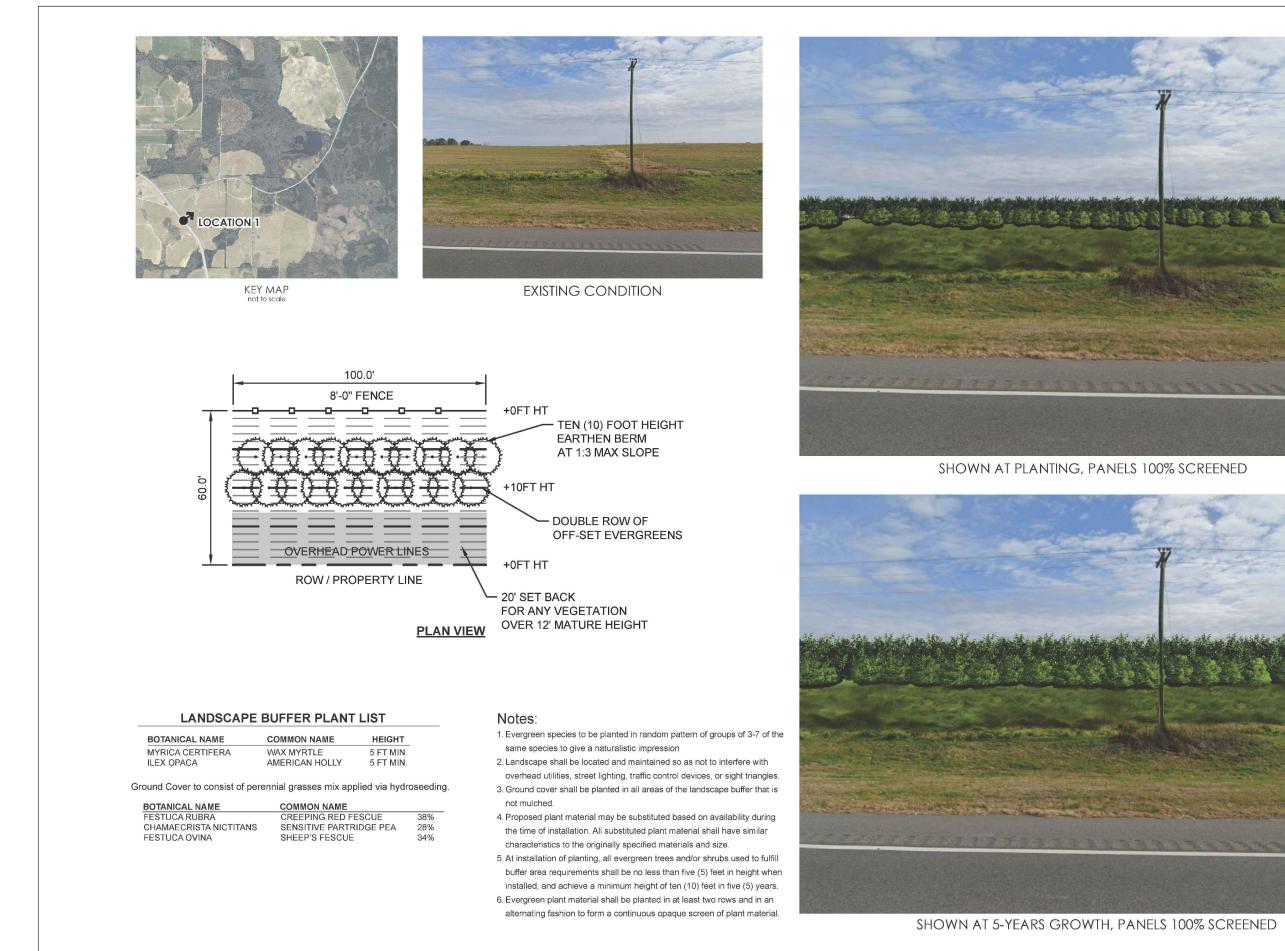
## 130 ROBERTS STREET ASHEVILLE, NC 28801

SHEET NAME:

APPENDIX - COUNTY ZONING

APP-105

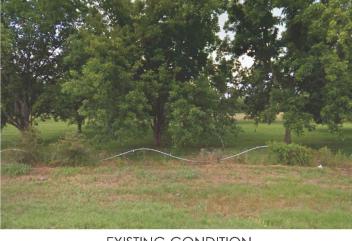
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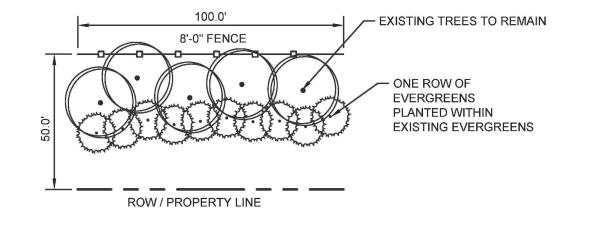
#### Morven Solar - Brooks County, GA



KEY MAP not to scale



EXISTING CONDITION



PLAN VIEW



COMMON NAME

SHEEP'S FESCUE

REEPING RED FESCUE

Ground Cover to consist of perennial grasses mix applied via hydroseeding

CHAMAECRISTA NICTITANS SENSITIVE PARTRIDGE PEA 28%

1. Evergreen species to be planted in random pattern of groups of 3-7 of the AMERICAN HOLLY 5 FT MIN.

Notes

- same species to give a naturalistic impression 2. Landscape shall be located and maintained so as not to interfere with overhead utilities, street lighting, traffic control devices, or sight triangles.
- 3. Ground cover shall be planted in all areas of the landscape buffer that is not mulched 4. Proposed plant material may be substituted based on availability during
- the time of installation. All substituted plant material shall have similar characteristics to the originally specified materials and size. 5. At installation of planting, all evergreen trees and/or shrubs used to fulfill
- buffer area requirements shall be no less than five (5) feet in height when installed, and achieve a minimum height of ten (10) feet in five (5) years. 6. Evergreen plant material shall be planted in one row to supplement

existing vegetation.



ILEX OPACA

BOTANICAL NAM

ESTUCA RUBRA

FESTUCA OVINA



SHOWN AT PLANTING, PANELS 100% SCREENED



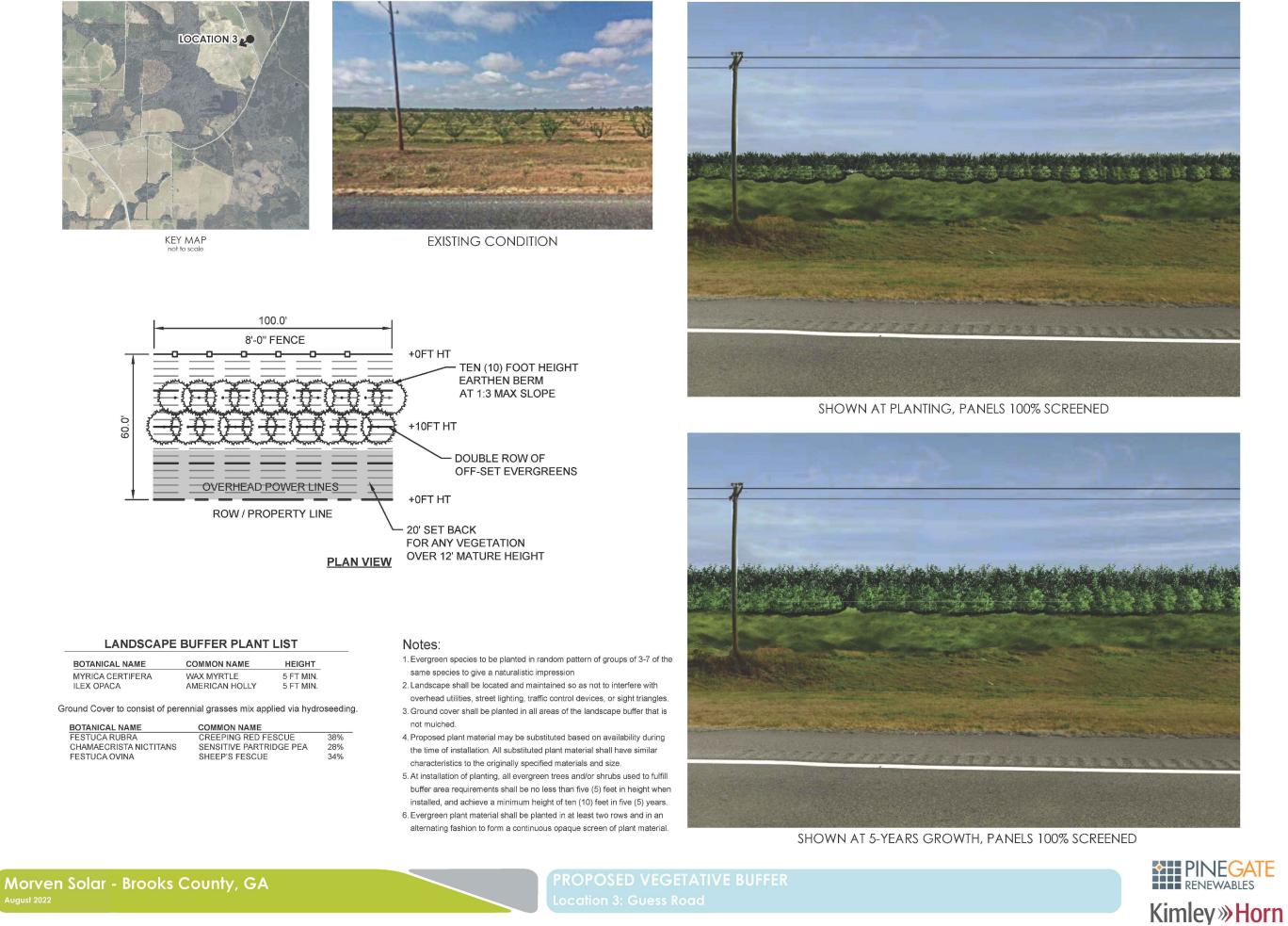
SHOWN AT 5-YEARS GROWTH, PANELS 100% SCREENED











# VISUAL RENDERING OF VEGETATIVE BUFFER & BERM

NOTE: DESIGN IS IN COMPLIANCE WITH SECTION 9-8.6 (B) OF ORDINANCE, OPTING FOR 1.a. A DOUBLE ROW OF OFFSET EVERGREENS ABSENT MATURE VEGETATION, INSTALLED AT A HEIGHT OF FIVE (5) FEET ACHIEVING OPAQUENESS AND A MINIMUM HEIGHT OF 10 FEET IN FIVE (5) YEARS AND 1.d. A TEN (10) FOOT EARTHEN BERM

RENDERING WORK PERFORMED BY KIMLEY HORN

CONFIDENTIAL THE INFORMATION THEREIN IS CONSIDE PINE GATE RENEWABLES, LLC'S PRIOR W THE ENCLOSED CONTENTS ARE INTENDED SOLELY FOR THE ADDRESSEE(S) AND DISCLOSE THE CONFIDENTIAL INFORMATION TO ANY THIRD PARTIES WITHOUT

APP-106

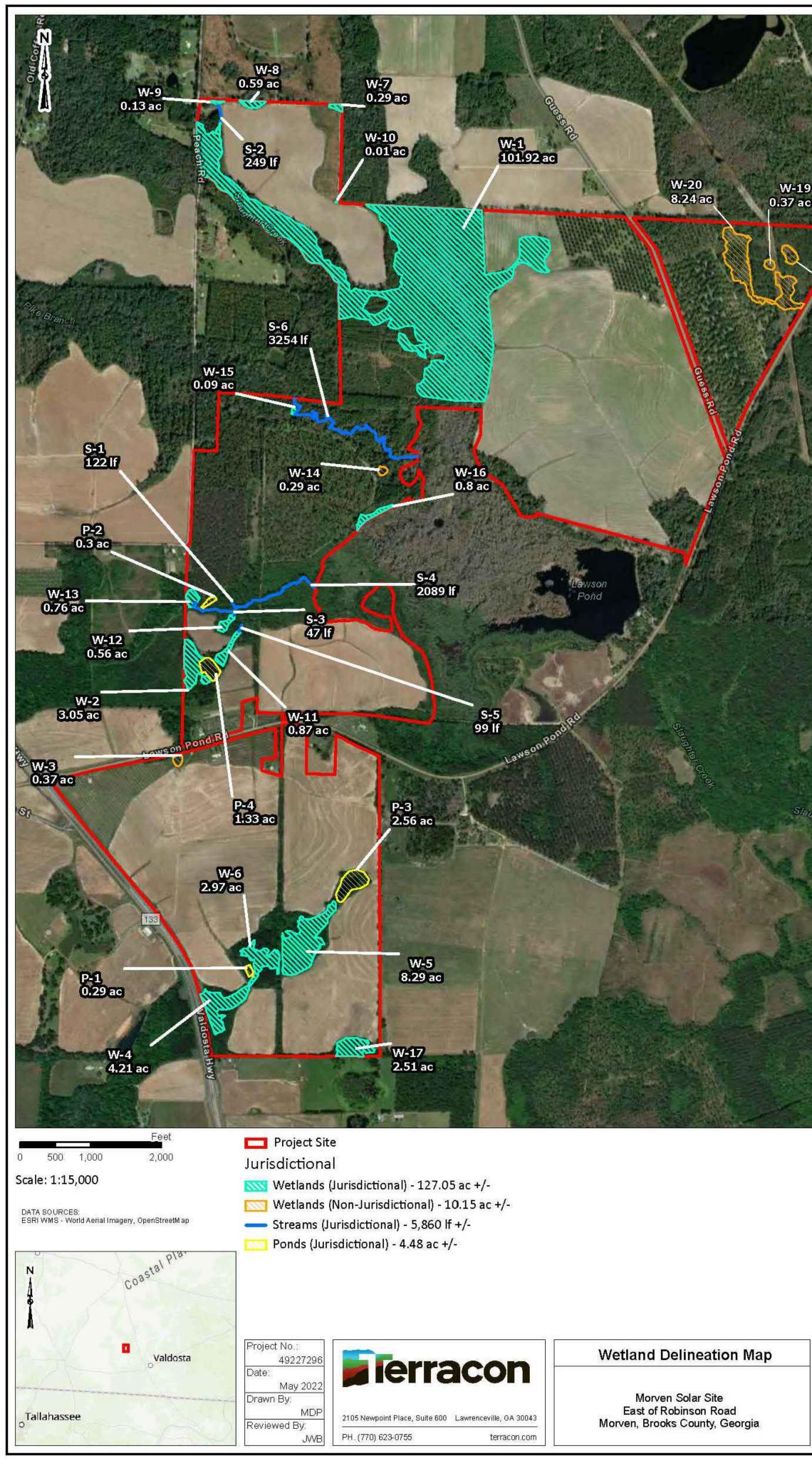
SHEET NUMBER:

APPENDIX -VEGETATIVE BUFFER BERM

SHEET NAME:







# WETLAND DELINEATION MAP

NOTE: DATA FOR DELINEATED WETLANDS ACQUIRED FROM WETLAND DELINEATION MAP (LEFT). DATA FOR FLOOD PLANES COMES FROM FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA). NON-DELINEATED WETLAND DATA ACQUIRED FROM US FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY (NWI).

WETLAND DELINEATION MAP PROVIDED BY TERRACON

3	Exhibit
	6

0.88 ac



## 130 ROBERTS STREET ASHEVILLE, NC 28801

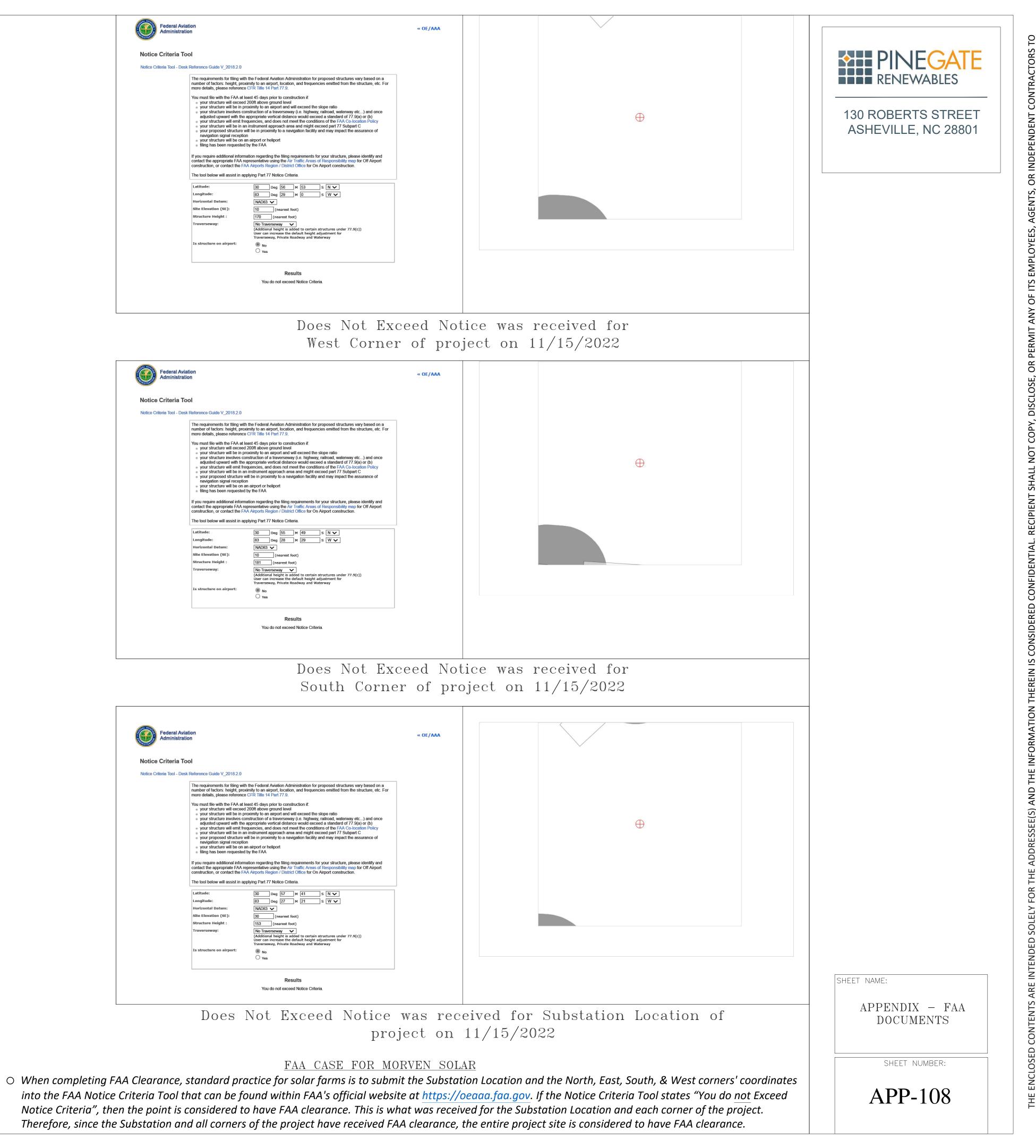
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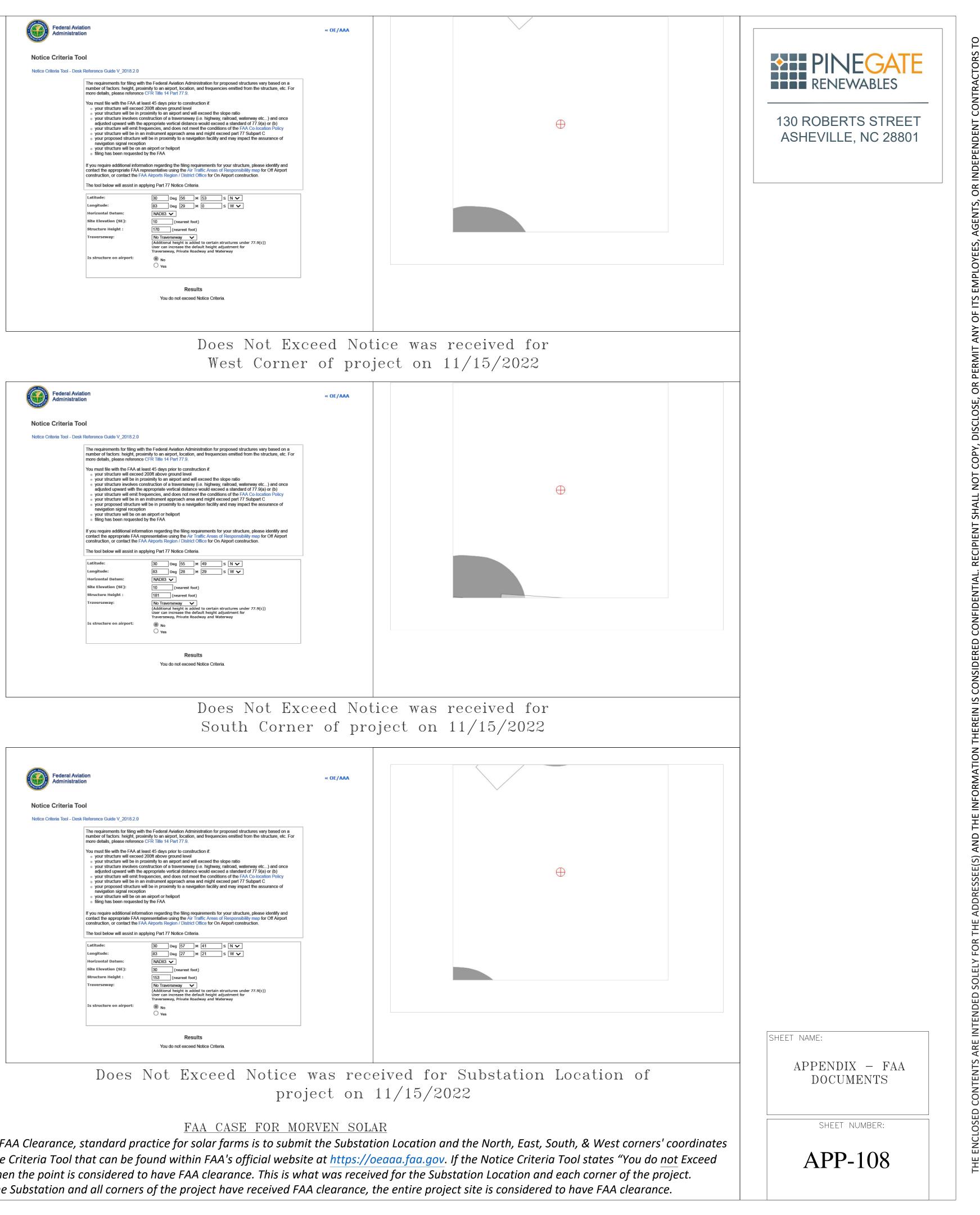
APPENDIX – WETLAND DELINEATION MAP AND SOURCE NOTE

SHEET NUMBER:

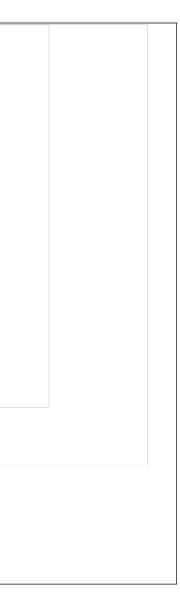
APP-107

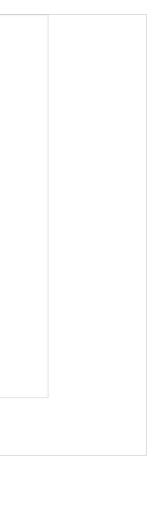
Federal A Administra		« OE/AAA	
Notice Criteria <sup>-</sup> Notice Criteria Tool - Di	Tool Jesk Reference Guide V_2018.2.0		
	<text><text><list-item><list-item><list-item><list-item><pre>retreme terme terme</pre></list-item></list-item></list-item></list-item></text></text>		
Federal A Administra	wiation		tice was received for oject on 11/15/2022
Notice Criteria <sup>-</sup> Notice Criteria Tool - D	<pre>Tool  sex Reference Guide V_2018.2.  The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a memory of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For memory of factors: height, proximity to an airport or construction.  The use file with the FAA eless 45 days prior to construct.  We use the with the GAA eless 45 days prior to construct.  We use the with the GAA eless 45 days prior to construct.  We use the with the GAA eless 45 days prior to construct.  We use the with the GAA eless 45 days prior to construct.  We use the with the GAA eless 45 days prior to construct.  We use the with the geopropriate vertical distance vould exceed a standard of 77.9(a) or (b).  We structure will be in a nistrument approach area and might exceed pat 77 Subpart (C).  We use structure will be in a nistrument approach area and might exceed pat 77 Subpart (C).  We use structure will be on an airport on helipox  We use the appropriate FAA represensel (i.e., tingfileAp, ringfileAp).  We use the appropriate FAA represensel (i.e., tingfileAp).  We use the appropriate FAA ariports Region / District Office for On Airport construction.  The to below will assist in applying Part 77 Notice Criteria.  Ketter the appropriate FAA ariports Region / District Office for On Airport construction.  The construct will be an an instruct on the trans.  Memory addition al information regarding the filing requirements for your structure, please identify and for a long of a long o</pre>		
	Results You do not exceed Notice Criteria.		
			tice was received for ject on 11/15/2022





Notice Criteria	Tool	
	Desk Reference Guide V_2018.2.0	
	The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9. You must file with the FAA at least 45 days prior to construction if:	
	<ul> <li>your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)</li> <li>your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy</li> <li>your structure will be in a instrument approach area and might exceed part 77 Subpart C</li> <li>your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception</li> <li>your structure will be on an airport or heliport</li> <li>filing has been requested by the FAA</li> </ul>	
	If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction. The tool below will assist in applying Part 77 Notice Criteria.	
	Latitude: 30 Deg 57 M 41 S N V	
	Longitude: 83 Deg 27 M 21 S W V Horizontal Datum: NAD83 V	
	Site Elevation (SE): 30 (nearest foot)	
	Structure Height : 153 (nearest foot) Traverseway: No Traverseway V	
	(Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for	
	Traverseway, Private Roadway and Waterway Is structure on airport:  No Yes	
	Results	
	You do not exceed Notice Criteria.	





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