

STRATA SOLAR LLC
 50101 Governors Drive, Suite 280
 Chapel Hill, NC 27517
 919-960-6015
 www.stratasolar.com
 NC License No. D-0298

DEVELOPER/CONSULTANTS

PROJECT NAME & ADDRESS

PIT 64 SOLAR ELECTRIC POWER PLANT
 U.S. 64 W., SILER CITY, NC
 CHATHAM COUNTY

DATE

08/01/2014

PROJECT NUMBER

C-322-P64

SYSTEM NAME

PIT 64

SYSTEM SIZE

5.00 MWp AC

ENGINEER

BTN

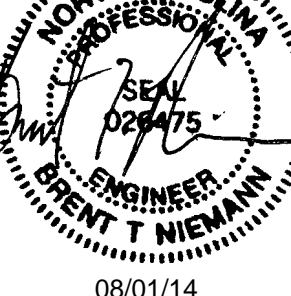
CHECKER

BTN

DRAWN BY

RBJ

SCALE



08/01/14

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REVISIONS

NO.	DATE	DESCRIPTION
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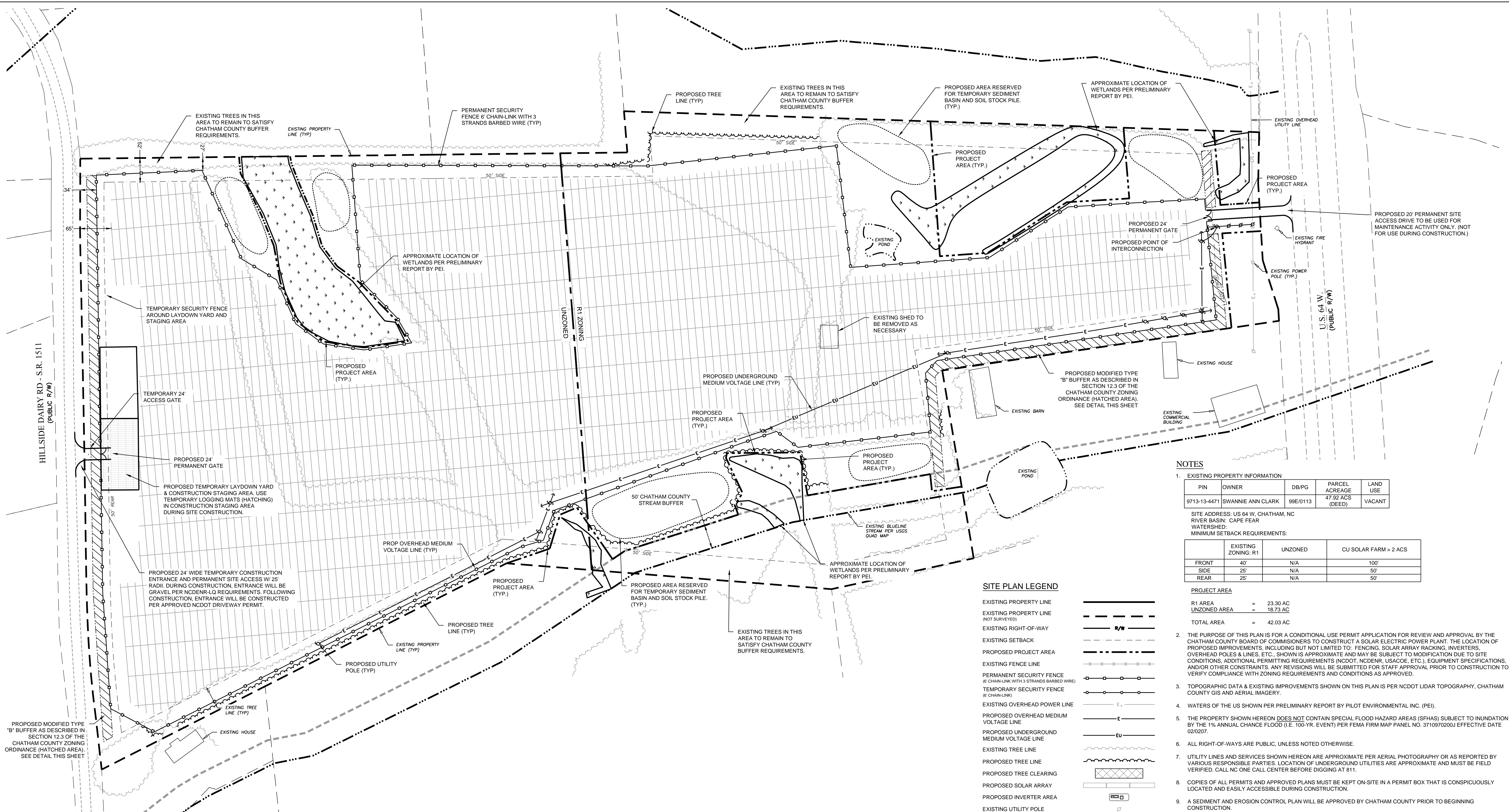
DRAWING DESCRIPTION

PRELIMINARY SITE PLAN

SCALE

1" = 100'

C 2.1



NOTES

- EXISTING PROPERTY INFORMATION

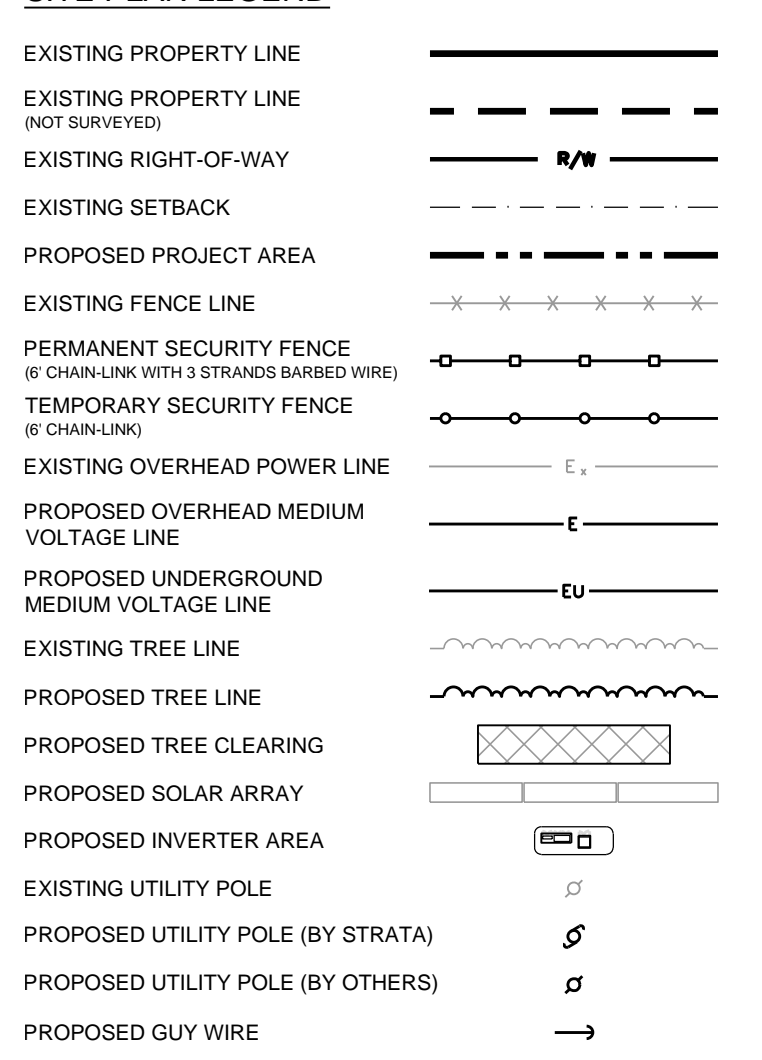
PIN	OWNER	DB/PG	PARCEL ACREAGE	LAND USE
9713-13-4471	SWANNIE ANN CLARK	99E/0113	47.92 ACS (DEED)	VACANT

SITE ADDRESS: US 64 W, CHATHAM, NC
 RIVER BASIN: CAPE FEAR
 WATERSHED:
 MINIMUM SETBACK REQUIREMENTS:

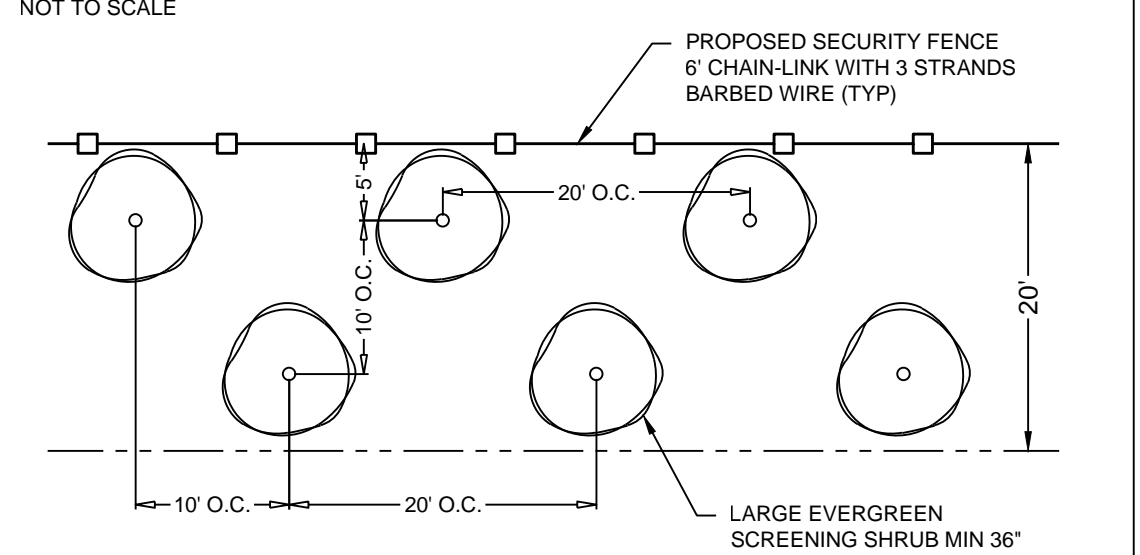
EXISTING ZONING: R1	UNZONED	CU SOLAR FARM > 2 ACS
FRONT 40'	N/A	100'
SIDE 25'	N/A	50'
REAR 25'	N/A	50'

PROJECT AREA
 R1 AREA = 23.30 AC
 UNZONED AREA = 18.73 AC
 TOTAL AREA = 42.03 AC
- THE PURPOSE OF THIS PLAN IS FOR A CONDITIONAL USE PERMIT APPLICATION FOR REVIEW AND APPROVAL BY THE CHATHAM COUNTY BOARD OF COMMISSIONERS TO CONSTRUCT A SOLAR ELECTRIC POWER PLANT. THE LOCATION OF PROPOSED IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO: FENCING, SOLAR ARRAY RACKING, INVERTERS, OVERHEAD POLES & LINES, ETC., SHOWN IS APPROXIMATE AND MAY BE SUBJECT TO MODIFICATION DUE TO SITE CONDITIONS, ADDITIONAL PERMITTING REQUIREMENTS (NCDOT, NCDENR, USACE, ETC.), EQUIPMENT SPECIFICATIONS, AND/OR OTHER CONSTRAINTS. ANY REVISIONS WILL BE SUBMITTED FOR STAFF APPROVAL PRIOR TO CONSTRUCTION TO VERIFY COMPLIANCE WITH ZONING REQUIREMENTS AND CONDITIONS AS APPROVED.
- TOPOGRAPHIC DATA & EXISTING IMPROVEMENTS SHOWN ON THIS PLAN IS PER NCDOT LIDAR TOPOGRAPHY, CHATHAM COUNTY GIS AND AERIAL IMAGERY.
- WATERS OF THE US SHOWN PER PRELIMINARY REPORT BY PILOT ENVIRONMENTAL INC. (PEI).
- THE PROPERTY SHOWN HEREON DOES NOT CONTAIN SPECIAL FLOOD HAZARD AREAS (SFHAS) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD (I.E. 100-YR. EVENT) PER FEMA FIRM MAP PANEL NO. 37109/0200J EFFECTIVE DATE 02/02/07.
- ALL RIGHT-OF-WAYS ARE PUBLIC, UNLESS NOTED OTHERWISE.
- UTILITY LINES AND SERVICES SHOWN HEREON ARE APPROXIMATE PER AERIAL PHOTOGRAPHY OR AS REPORTED BY VARIOUS RESPONSIBLE PARTIES. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. CALL NC ONE CALL CENTER BEFORE DIGGING AT 811.
- COPIES OF ALL PERMITS AND APPROVED PLANS MUST BE KEPT ON-SITE IN A PERMIT BOX THAT IS CONSPICUOUSLY LOCATED AND EASILY ACCESSIBLE DURING CONSTRUCTION.
- A SEDIMENT AND EROSION CONTROL PLAN WILL BE APPROVED BY CHATHAM COUNTY PRIOR TO BEGINNING CONSTRUCTION.
- A DRIVEWAY PERMIT WILL BE APPROVED BY NCDOT PRIOR TO BEGINNING CONSTRUCTION.
- PROJECT AREA, INCLUDING CONSTRUCTION STAGING AREAS, WILL BE CLEARED AND GRUBBED AS NECESSARY. RETAINING PRE-DEVELOPMENT DRAINAGE PATTERNS (I.E. NO MASS GRADING). A PORTION OF PROJECT AREAS MAY CONSIST OF TREE CLEARING ONLY (NO GRUBBING) TO ALLEVIATE SHADING OF THE ARRAY, AS INDICATED ON THE SITE PLAN. MINOR GRADING (APPROX. 545 SF) WILL OCCUR AROUND INVERTER AREAS TO DIVERT SURFACE DRAINAGE. CONSTRUCTION STAGING AND AREAS SUBJECT TO RUTTING DURING CONSTRUCTION WILL BE TEMPORARILY STABILIZED WITH LOGGING MATS, WHICH WILL BE REMOVED FOLLOWING CONSTRUCTION. THE ONLY PERMANENT IMPERVIOUS SURFACES WILL BE TWO CONCRETE SLABS, TOTALING LESS THAN 100 SF AT EACH INVERTER.
- PROPOSED TEMPORARY LAYDOWN YARD/CONSTRUCTION STAGING AREA TO BE USED DURING SITE CONSTRUCTION. A PORTION OF THIS AREA (HATCHED) WILL BE COVERED WITH LOGGING MATS TO ALLOW DELIVERY OF CONSTRUCTION MATERIALS. PRIOR TO CONSTRUCTION, THIS AREA WILL BE COMPACTED BY A SMOOTH DRUM ROLLER TO REDUCE/PREVENT RUTTING. FOLLOWING CONSTRUCTION, THE LOGGING MATS ARE REMOVED AND THE ENTIRE AREA IS RESTORED TO PRE-CONSTRUCTION CONDITIONS.
- ACCESS AISLES ARE COMPACTED BY A SMOOTH DRUM ROLLER TO REDUCE/PREVENT RUTTING. LOGGING MATS MAY BE PLACED IN HIGH TRAFFIC OR POORLY DRAINING AREAS DURING CONSTRUCTION ACTIVITIES TO IMPROVE ACCESS. NO PERMANENT IMPROVEMENTS OR IMPERVIOUS SURFACES (I.E. GRAVEL OR ASPHALT) WILL BE INSTALLED IN ACCESS AISLES FOR CONSTRUCTION OR MAINTENANCE ACTIVITIES.
- PROPOSED 24' ACCESS GATE (TWO 12' SECTIONS) IS 6' TALL CHAIN LINK WITH 3 STRANDS OF BARBED WIRE. GATE WILL BE LOCKED WITH STANDARD KEYS OR COMBINATION LOCK. EMERGENCY PERSONNEL (AS DESIGNATED BY CHATHAM COUNTY) WILL BE PROVIDED A KEY OR COMBINATION FOR ACCESS.
- NO LIGHTING IS PROPOSED FOR THIS SITE.
- ALUMINUM SIGNS ('DANGER - HIGH VOLTAGE' AND 'DANGER - NO TRESPASSING') MEASURING 14" X 10" IN SIZE, WILL BE PLACED ON PERMANENT SECURITY FENCING, ALTERNATING EVERY 100' AROUND THE ARRAY.
- SYSTEMS, EQUIPMENT AND STRUCTURES WILL NOT EXCEED FIFTEEN (15) FEET IN HEIGHT WHEN GROUND MOUNTED. EXCLUDED FROM THIS HEIGHT REQUIREMENT, HOWEVER, ARE ELECTRIC TRANSMISSION LINES AND UTILITY POLES.

SITE PLAN LEGEND



MODIFIED TYPE "B" BUFFER



NOTES

- PLANTING AREA WILL BE APPROXIMATELY 20' WIDE
- LARGE EVERGREEN SCREENING SHRUBS

Pit 64 - Impervious Percentage Calculation

Existing Conditions	Area (sf)	Area (ac)	% of Total
Impervious			
Drives (Cone/Asphalt)	0	0.000	0.000%
Structures	1,827	0.042	0.108%
Previous			
Wooded Areas	404,981	9,297	22.11%
Agricultural Fields/Lawns	1,424,075	32,692	77.781%
Total Area =	1,830,883	42,031	100.0%
Existing % Impervious =			0.1%
Proposed Conditions			
Impervious			
Existing Drives to Remain	0	0.000	0.000%
Existing Structures to Remain	0	0.000	0.000%
Proposed Drives (Cone/Asphalt)	0	0.000	0.000%
Switchgear Pads	# of Pads: 100 Area/Pad (sf): 100	0	0.000
Inverter Areas	# of Inverters: 6 Area/Inverter (sf): 545	3,270	0.077%
Accesses (entire graded area)	# of Racks: 5 Area/Post (sqft): 2.3	62	0.001%
Previous			
Wooded Areas	81,442	1,870	4.448%
Agricultural Fields/Lawns	1,748,109	40,085	95.570%
Total Area =	1,830,883	42,031	100.0%
Proposed % Impervious =			0.2%

