

VICINITY MAP
SCALE: N.T.S.

SITE DATA

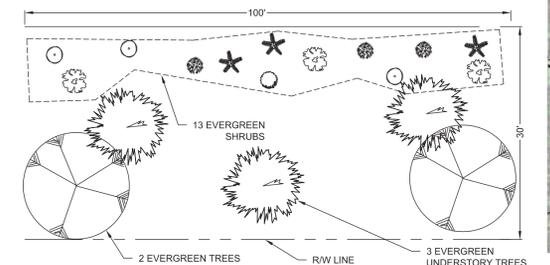
PIN #	OWNER	DB./PG.	ZONING	PARCEL ACREAGE	LEASED ACREAGE	CURRENT LAND USE
9748320786	WILLIAM J. & CAROL B. BYRON	4881/313	AR	19.8	N/A	WOODED

SITE ADDRESS: WHITECROSS ROAD, CHAPEL HILL, ORANGE COUNTY, NC
 PROPOSED USE: SOLAR ENERGY SYSTEM
 RIVER BASIN: CAPE FEAR
 WATERSHED CLASSIFICATION: NONE
 APPROXIMATE AREA OF PROPOSED SOLAR FARM*: 10.5 AC
 PRELIMINARY DISTURBED AREA: 18.0
 MIN. SETBACK REQUIREMENTS: PER ORANGE COUNTY ZONING ORDINANCE, SECTION 3.3

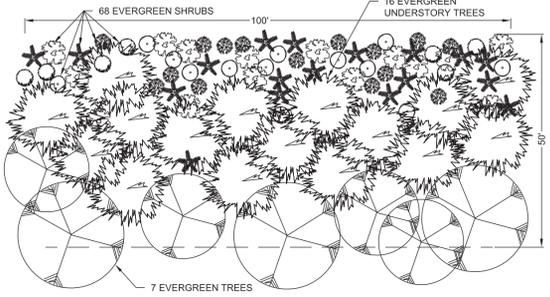
FRONT: 40 FT.
 SIDE: 20 FT.
 REAR: 20 FT.

SOLAR STRUCTURES SHALL MEET THE MINIMUM SETBACK FOR THE ZONING DISTRICT IN WHICH IT IS LOCATED OR BE SETBACK A MINIMUM OF 15 FEET FROM ALL PROPERTY LINES OR RIGHT(S)-OF-WAY, WHICH EVER IS GREATER.

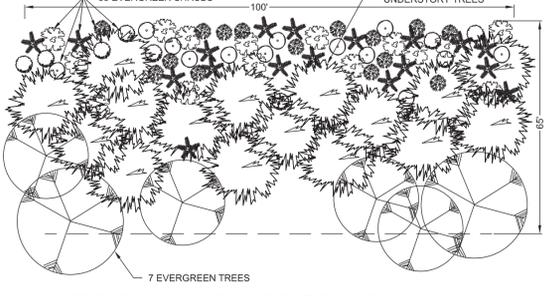
*LAYOUT WITHIN PERMANENT FENCE SUBJECT TO CHANGE WITH FINAL ELECTRICAL DESIGN.



TYPICAL 100' LONG SECTION OF 30' WIDE TYPE "B" LAND USE BUFFER/ OPTION 3
1" = 20'



TYPICAL 100' LONG SECTION OF 50' WIDE TYPE "D" LAND USE BUFFER/ OPTION 3
1" = 20'

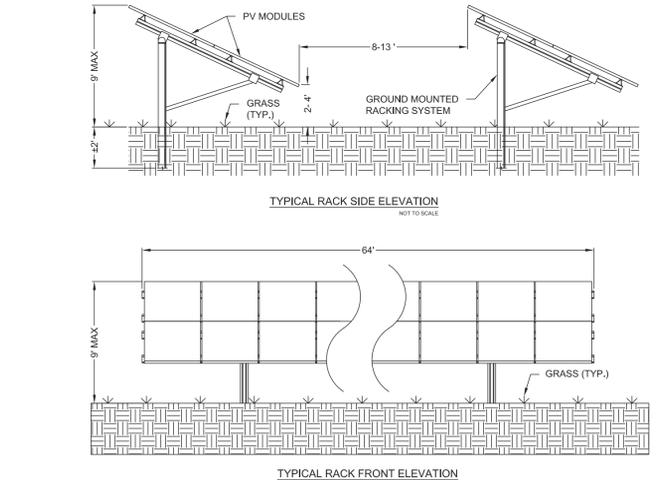


TYPICAL 100' LONG SECTION OF 65' WIDE TYPE "D" LAND USE BUFFER/ OPTION 3
1" = 20'

GENERAL PLANT LEGEND

PLAN SYMBOL	TYPE OF PLANT	MIN# PLANTS/ 100 LF*	
		TYPE B	TYPE D
	EVERGREEN SHRUB	13	68
	EVERGREEN UNDERSTORY TREE	3	16
	EVERGREEN TREE	2	7

*USING OPTION 3 FOR ALL BUFFER TYPES



TYPICAL RACK ELEVATIONS
N.T.S.

DRAWING LEGEND

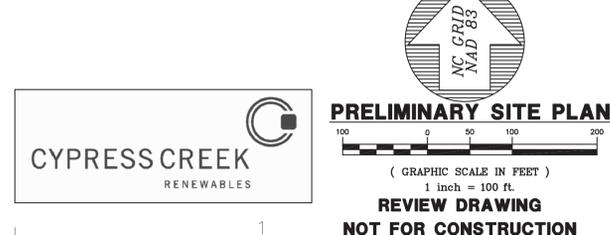
SYMBOL/ABBREVIATION	DESCRIPTION
	EXISTING FENCE LINE
	PROPOSED FENCE LINE
	TEMPORARY FENCE LINE
	PROPERTY LINE
	RIGHT-OF-WAY LINE**
	PROPERTY SETBACK
	TREE LINE
	JURISDICTIONAL STREAM
	SOILS TYPE**
	JURISDICTIONAL WETLAND
	OVERHEAD ELECTRIC LINE/POLE/GUY WIRE

** SHOWS WHITE ON THE SITE PLAN

- CONSTRUCTION WASTE NOTES**
- ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER IN SIZE SHALL BE ASSESSED PRIOR TO DEMOLITION TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) AND TO ASSESS THE POTENTIAL FOR DE-CONSTRUCTION AND/OR THE RE-USE OF SALVAGEABLE MATERIALS.
 - BY ORANGE COUNTY ORDINANCE, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED.
 - BY ORANGE COUNTY ORDINANCE, ALL HAZARDOUS MATERIALS IN CONSTRUCTION AND DEMOLITION WASTE THAT INCLUDES ANY REGULATED RECYCLABLE MATERIALS SHALL BE LICENSED BY ORANGE COUNTY.
 - PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE THE APPLICANT SHALL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH THE SOLID WASTE STAFF. THIS MAY BE THE SAME PRE-CONSTRUCTION MEETING HELD WITH OTHER DEVELOPMENT/ENFORCEMENT OFFICIALS.
 - THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ("ACM") AND/OR OTHER HAZARDOUS MATERIALS IN CONSTRUCTION AND DEMOLITION WASTE SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.

- EXISTING VEGETATION/ LANDSCAPE NOTES**
- EXISTING FOLIAGE TO REMAIN TO THE MAXIMUM EXTENT PRACTICAL. IF EXISTING PLANTINGS ARE NOT SUFFICIENT TO MEET THE BUFFER STANDARDS AS DETERMINED BY ORANGE COUNTY STAFF, ADDITIONAL PLANTINGS SHALL BE INSTALLED.
 - EVERGREEN UNDERSTORY TREES SHALL HAVE A MINIMUM HEIGHT OF NINE FEET AT THE TIME OF PLANTING.
 - ALL SHRUBS TO BE COLD HARDY AND HEAT TOLERANT.
 - UPRIGHT SHRUBS SHALL BE A MINIMUM OF 15 INCHES IN HEIGHT AT THE TIME OF PLANTING.
 - SHRUBS SHALL NOT BE PLANTED CLOSER THAN THREE FEET ON CENTER. SHRUBS SHALL NOT BE PLANTED CLOSER THAN THREE FEET TO PLANTED TREES, NOR WITHIN SIX FEET OF EXISTING PROTECTED TREES; HOWEVER, NO MORE THAN 25% OF THE ROOT PROTECTION ZONE OF AN EXISTING TREE MAY BE DISTURBED WITH NEW PLANTINGS.
 - EXISTING VEGETATION WITHIN THE PROPERTY AREA IS A MIX OF HARDWOOD (60%) AND EVERGREEN TREES (40%), RAGING IN HEIGHT FROM 6 FEET TO ±60 FEET AND IN DBH FROM 2 INCHES TO 36 INCHES.
 - EXISTING VEGETATION AND SUPPLEMENTAL PLANTINGS MAY BE PRESERVED/PROVIDED BETWEEN THE 65' BUFFER AND THE FENCE AREAS TO ACHIEVE AN OPAQUE SCREEN ALONG THE NORTHERN PROPERTY LINE.
 - BUFFER ALONG NORTHERN PROPERTY LINE WILL ACHIEVE AN OPAQUE HEIGHT OF APPROXIMATELY 10 FEET WITHIN 3-5 GROWING SEASONS.

- NOTES:**
- THE PURPOSE OF THIS PLAN IS FOR A SPECIAL USE PERMIT APPLICATION FOR REVIEW AND APPROVAL BY ORANGE COUNTY TO CONSTRUCT A SOLAR ELECTRIC POWER PLANT. ALL INFORMATION SHOWN IS FOR PLANNING PURPOSES ONLY.
 - THE PROPERTY SHOWN HEREON IS NOT TO BE CONSIDERED A BOUNDARY SURVEY AND HAS BEEN COMPILED FROM GIS INFORMATION, MAPS AND DEEDS OF RECORD FROM THE ADJACENT PROPERTIES, AMONG THE LAND RECORDS OF ORANGE COUNTY, NORTH CAROLINA. NO FIELD EVIDENCE OR PROPERTY MARKERS WERE LOCATED WITH THIS EXHIBIT.
 - EXISTING IMPROVEMENTS SHOWN ON THIS PLAN WERE TAKEN FROM ORANGE COUNTY GIS.
 - 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. 3710974800J EFFECTIVE DATE FEBRUARY 2, 2007.
 - 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 ORANGE 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). MINOR GRADING 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) OR GRAVEL WHICH WILL REMAIN AFTER CONSTRUCTION. SOIL CONDITIONS AND EQUIPMENT LOADS WILL DETERMINE FINAL DESIGN.
 - PROPOSED TEMPORARY LAYDOWN YARD/CONSTRUCTION STAGING AREA WILL BE COMPACTED BY A SMOOTH DRUM OR SHEEPSFOOT ROLLER TO REDUCE/PREVENT RUTTING. A PORTION OF THIS AREA (HATCHED) WILL BE COVERED WITH GRAVEL TO ALLOW DELIVERY OF CONSTRUCTION MATERIALS. FOLLOWING CONSTRUCTION, ANY GRAVEL PLACED IN THE LAYDOWN YARD WILL REMAIN.
 - ACCESS AISLES SHOWN ON THIS PLAN INDICATE CONSTRUCTION AND MAINTENANCE ACCESS POINTS FOR INGRESS/EGRESS PRIOR TO CONSTRUCTION. THESE AISLES ARE COMPACTED BY A SMOOTH DRUM OR SHEEPSFOOT ROLLER TO REDUCE/PREVENT RUTTING. LOGGING MATS OR GRAVEL MAY BE PLACED IN HIGH TRAFFIC OR POORLY DRAINING AREAS DURING CONSTRUCTION ACTIVITIES TO IMPROVE ACCESS. SOIL ACCESS AISLES WILL BE SCARIFIED, AERATED, AND RE-SEED AFTER CONSTRUCTION. ACCESS AISLES TO INVERTERS MAY REQUIRE GRAVEL TO SUPPORT DELIVERY EQUIPMENT LOADS. SOIL CONDITIONS AND FINAL EQUIPMENT SELECTION WILL DETERMINE IF GRAVEL ACCESS AISLES WILL BE REQUIRED TO INVERTER LOCATIONS.
 - PROPOSED 24" ACCESS GATE (TWO 12" SECTIONS) IS 8' TALL CHAIN LINK WITH 3 STRANDS OF BARBED WIRE. GATE WILL BE LOCKED WITH STANDARD KEYS OR COMBINATION LOCK. EMERGENCY PERSONNEL (AS DESIGNATED BY ORANGE 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.
 - NOISE LEVELS MEASURED AT THE PROPERTY LINE WILL NOT EXCEED FIFTY (50) DECIBELS WHEN LOCATED ADJACENT TO AN EXISTING RESIDENCE OR RESIDENTIAL DISTRICT.
 - PER SECTION 5.9.6 (C) (2) (G) OF THE ORANGE COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO) THE PROJECT SHALL OBSERVE A TYPE D LAND USE BUFFER, 50 FEET IN WIDTH, ADJACENT TO PROPERTY ZONED, OR OTHERWISE UTILIZED FOR, RESIDENTIAL USE. THIS LAND USE BUFFER SHALL INCORPORATE EXISTING FOLIAGE WHERE AVAILABLE. FINAL LANDSCAPE PLAN SHALL BE APPROVED BY STAFF PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES.
 - PER SECTION 5.9.6 (C) (2) (A) OF THE ORANGE COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO) ALL ON-SITE UTILITY AND TRANSMISSION LINES SHALL BE PLACED UNDERGROUND WHERE FEASIBLE.
 - PER SECTION 5.9.6 (C) (2) (C) OF THE ORANGE COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO) THE INDIVIDUAL AREAS TO BE DESIGNED AND LOCATED TO PREVENT CLARE TOWARDS INHABITED BUILDINGS ON ADJACENT PROPERTIES AND ADJACENT STREET RIGHT-OF-WAYS.
 - PER SECTION 5.9.6 (C) (3) OF THE ORANGE COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO) THE APPLICANT ACKNOWLEDGES ESTABLISHED PROCEDURES FOR THE DECOMMISSIONING OF THE SITE AND WILL COMPLY WITH THESE MENTIONED STANDARDS AT THE APPROPRIATE TIME.
 - THE 8' HIGH FENCE ALONG THE NORTHERN PROPERTY LINE SHALL INCLUDE GREEN WIND SCREEN FOR THE FULL HEIGHT OF THE CHAIN LINK PORTION.
 - THE SOLAR FARM RACKING AND PANEL COMPONENTS WILL BE CONSTRUCTED OF STEEL, ALUMINUM, AND GLASS AND WILL HAVE AN OVERALL GRAY APPEARANCE.



BALLENTINE ASSOCIATES, P.A.
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White Cross Farm Solar Energy System
CHAPEL HILL, ORANGE COUNTY, NORTH CAROLINA

SITE PLAN DRAWINGS

JOB NUMBER: 114052.03
DATE: 22 APR 15
SCALE: AS NOTED
DRAWN BY: L.R.E.
REVIEWED BY: G.J.R.

SHEET C1001