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Ballentine Associates, P.A. CORPORATE SEAL C328 NORTH CAROLINA Chapel Hill

NORTH CAROLINA PROFESSIONAL SEAL 029127 ENGINEER GEORGE J. RETSCHLE 2 MAR 15

NUM	REVISIONS	DATE
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OWNER INFORMATION
CYPRESS CREEK RENEWABLES
3250 OCEAN PARK BLVD.
SANTA MONICA, CA 90405

OWNERS REPRESENTATIVE:
PAUL BRUCKE
PH. (919) 943–8451
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DATE	ISSUED
02 MAR 15	SUP SUBMITTAL

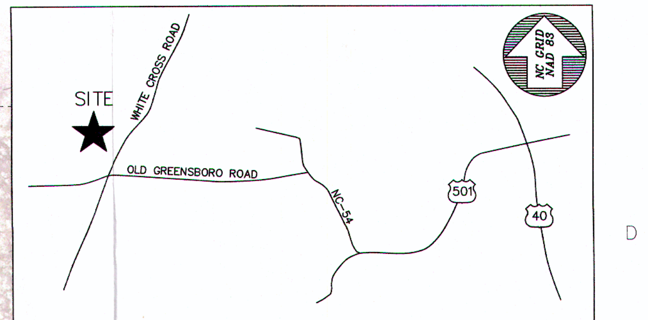
WHITE CROSS FARM SOLAR ENERGY SYSTEM

CHAPEL HILL, ORANGE COUNTY, NORTH CAROLINA

SITE PLAN DRAWINGS

JOB NUMBER: 114052.03
DATE: 02 MAR 15
SCALE: AS NOTED
DRAWN BY: L.R.E.
REVIEWED BY: G.J.R.

SHEET
C1001



DIRECTIONS: FROM I–40 W, TAKE EXIT 270 FOR US–15/US–501 TOWARD CHAPEL HILL/DURHAM. TURN LEFT ONTO US–15 S/US–501 S/DURHAM–CHAPEL HILL BLVD. CONTINUE TO FOLLOW US–15 S/US–501 S. CONTINUE STRAIGHT ONTO NC–54 W/FORDHAM BLVD S. CONTINUE TO FOLLOW NC–54 W. TAKE THE JONES FERRY RD EXIT TOWARD CARRBORO. TURN LEFT ONTO JONES FERRY RD. TURN RIGHT ONTO OLD GREENSBORO RD. TURN RIGHT ONTO WHITE CROSS RD. CONTINUE ON WHITE CROSS ROAD FOR APPROX. 0.3 MILES. SITE WILL BE ON THE LEFT.

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	35.8	N/A	WOODED

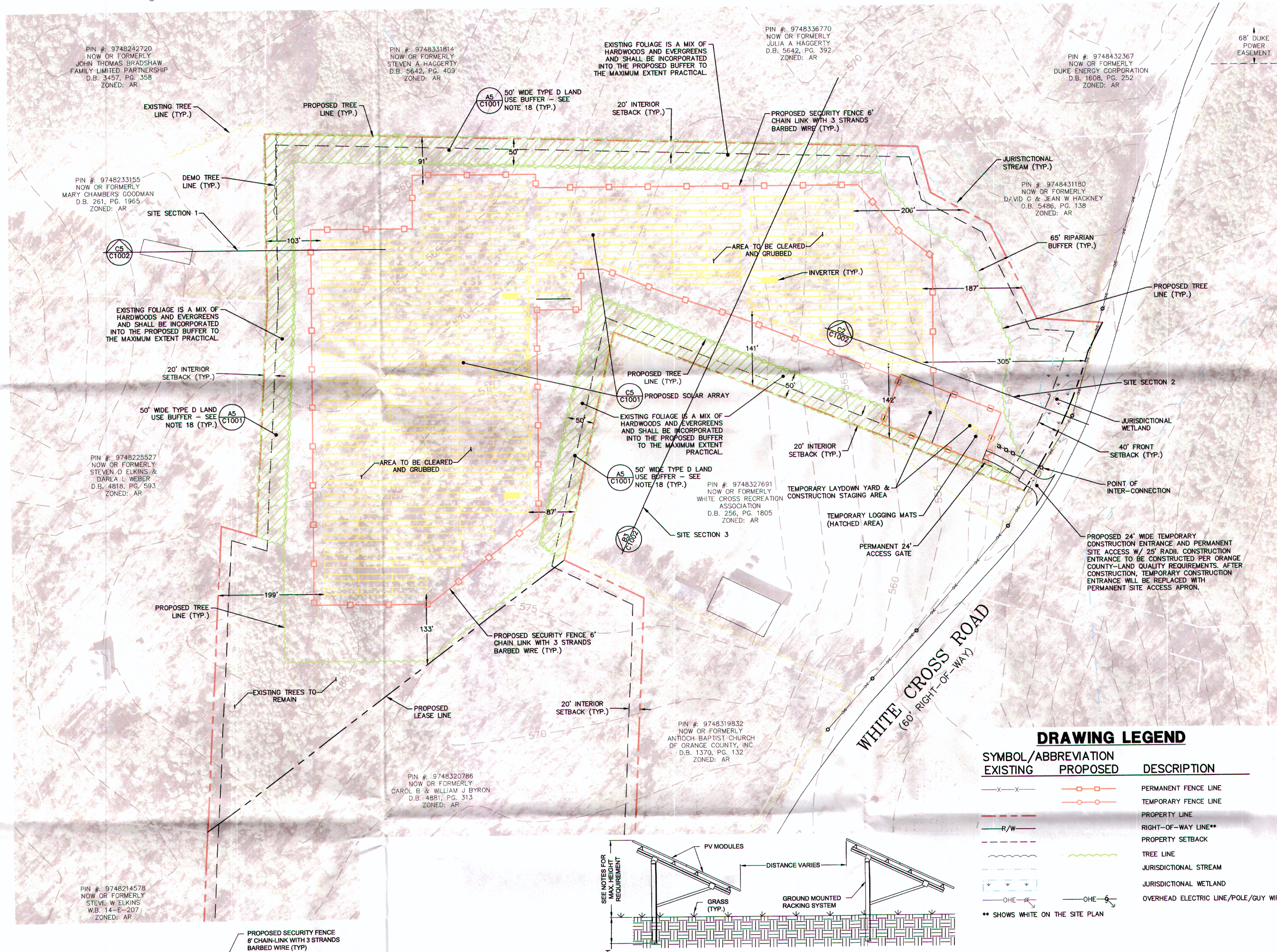
SITE ADDRESS:	WHITECROSS ROAD, CHAPEL HILL, NC
PROPOSED USE:	SOLAR ENERGY SYSTEM
RIVER BASIN:	CAPE FEAR
WATERSHED:	NONE
APPROXIMATE AREA OF PROPOSED ARRAY*:	11.5 AC
PRELIMINARY DISTURBED AREA:	22.0 AC
MIN. SETBACK REQUIREMENTS: PER ORANGE COUNTY ZONING ORDINANCE, SECTION 3.3	
FRONT:	40 FT.
SIDE:	20 FT.
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.

* SUBJECT TO CHANGE WITH FINAL ELECTRICAL DESIGN.

NOTES:

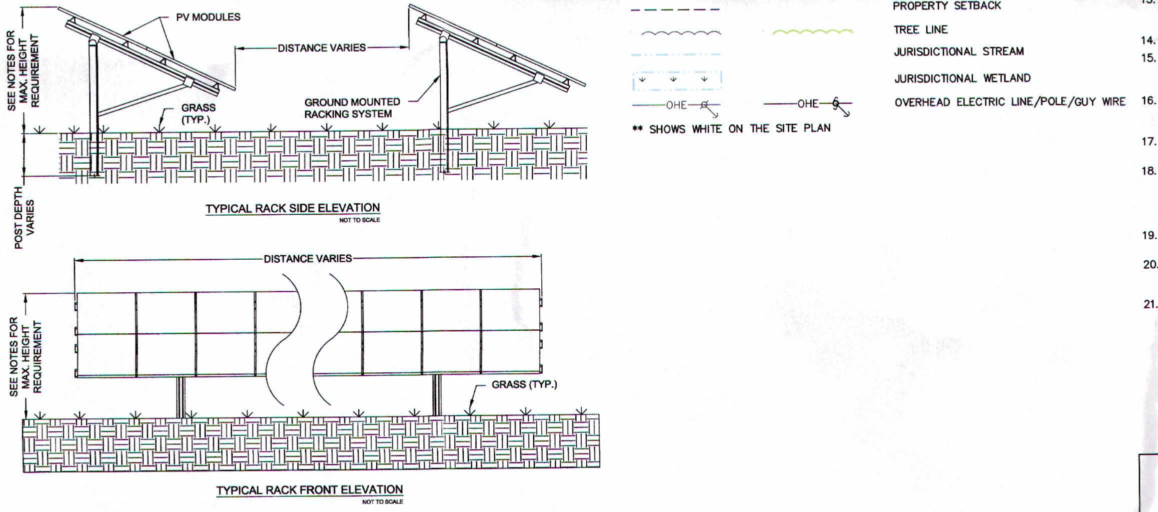
1. THE PURPOSE OF THIS PLAN IS FOR A SPECIAL USE PERMIT APPLICATION FOR REVIEW AND APPROVAL BY ORANGE COUNTY TO CONSTRUCT A SOLAR ELECTRIC POWER PLANT. ALL INFORMATION SHOWN IS FOR PLANNING PURPOSES ONLY.
2. THE PROPERTY SHOWN HEREON IS NOT TO BE CONSIDERED A BOUNDARY SURVEY AND HAS BEEN COMPILED FROM 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.
3. EXISTING IMPROVEMENTS SHOWN ON THIS PLAN WERE TAKEN FROM ORANGE COUNTY GIS.
4. 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.
5. ALL RIGHT–OF–WAYS ARE PUBLIC, UNLESS NOTED OTHERWISE.
6. 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.
7. 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.
8. A SEDIMENT AND EROSION CONTROL PLAN WILL BE APPROVED BY ORANGE COUNTY PRIOR TO BEGINNING CONSTRUCTION.
9. A DRIVEWAY PERMIT WILL BE APPROVED BY NCDOT PRIOR TO BEGINNING CONSTRUCTION.
10. 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.
11. 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 OR OTHER STABILIZED SURFACING (GRAVEL, ETC.) TO ALLOW DELIVERY OF CONSTRUCTION MATERIALS. PRIOR TO CONSTRUCTION, THIS AREA WILL BE COMPACTED BY A SMOOTH DRUM OR SHEEPSFOOT ROLLER TO REDUCE/PREVENT RUTTING. FOLLOWING CONSTRUCTION, THE LOGGING MATS WILL BE REMOVED AND THE AREA OCCUPIED BY THE LOGGING MATS WILL BE SCARIFIED, AERATED, AND RE–SEEDED. ANY GRAVEL PLACED IN THE LAYDOWN YARD WILL REMAIN.
12. 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 AISLE WILL BE SCARIFIED, AERATED, AND RE–SEEDED 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.
13. PROPOSED 24' ACCESS GATE (TWO 12' SECTIONS) IS 8' TALL CHAIN LINK WITH 3 STRANDS OF BARBED WIRE. GATE WILL BE LOCKED WITH STANDARD KEYED OR COMBINATION LOCK. EMERGENCY PERSONNEL (AS DESIGNATED BY ORANGE COUNTY) WILL BE PROVIDED A KEY OR COMBINATION FOR ACCESS.
14. NO LIGHTING IS PROPOSED FOR THIS SITE.
15. 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.
16. SYSTEMS, EQUIPMENT AND STRUCTURES WILL NOT EXCEED TWENTY–FIVE (25) FEET IN HEIGHT WHEN GROUND MOUNTED. EXCLUDED FROM THIS HEIGHT REQUIREMENT, HOWEVER, ARE ELECTRIC TRANSMISSION LINES AND UTILITY POLES.
17. NOISE LEVELS MEASURED AT THE PROPERTY LINE WILL NOT EXCEED FIFTY (50) DECIBELS WHEN LOCATED ADJACENT TO AN EXISTING RESIDENCE OR RESIDENTIAL DISTRICT.
18. 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.
19. 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.
20. PER SECTION 5.9.6 (C) (2) (C) OF THE ORANGE COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO) THE INDIVIDUAL ARRAYS SHALL BE DESIGNED AND LOCATED TO PREVENT GLARE TOWARDS INHABITED BUILDINGS ON ADJACENT PROPERTIES AND ADJACENT STREET RIGHT–OF–WAYS.
21. 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 AFOREMENTIONED STANDARDS AT THE APPROPRIATE TIME.



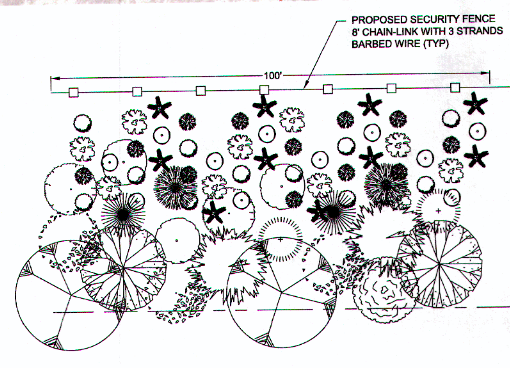
DRAWING LEGEND

SYMBOL/ABBREVIATION EXISTING	PROPOSED	DESCRIPTION
—x—x—	—□—□—	PERMANENT FENCE LINE
	—○—○—	TEMPORARY FENCE LINE
▬ ▬		PROPERTY LINE
—R/W—		RIGHT–OF–WAY LINE**
— — —		PROPERTY SETBACK
~~	~~~~	TREE LINE
- - - -		JURISDICTIONAL STREAM
		JURISDICTIONAL WETLAND
—OHE—	—OHE—	OVERHEAD ELECTRIC LINE/POLE/GUY WIRE

** SHOWS WHITE ON THE SITE PLAN



A4 C1001 TYPICAL RACK ELEVATIONS N.T.S.



A5 C1001 TYPICAL 100' LONG SECTION OF 50' WIDE TYPE "D" LAND USE BUFFER 1" = 20'

LANDSCAPE NOTES

1. EXISTING FOLIAGE TO REMAIN TO THE MAXIMUM EXTENT PRACTICAL. IF EXISTING PLANTINGS ARE NOT SUFFICIENT TO MEET THE BUFFER STANDARDS, ADDITIONAL PLANTINGS SHALL BE INSTALLED.
2. DECIDUOUS UNDERSTORY TREES WITH SINGLE STEMS SHALL HAVE AT A MINIMUM SIZE OF ONE-INCH CALIPER AND A MINIMUM HEIGHT OF EIGHT FEET AT THE TIME OF PLANTING.
3. MULTI-STEMMED DECIDUOUS UNDERSTORY TREES SHALL HAVE A MINIMUM HEIGHT OF EIGHT FEET AT THE TIME OF PLANTING.
4. DECIDUOUS UNDERSTORY TREES SHALL BE PLANTED AT LEAST 12 FEET APART.
5. EVERGREEN UNDERSTORY TREES SHALL HAVE A MINIMUM HEIGHT OF SIX FEET AT THE TIME OF PLANTING.
6. ALL SHRUBS TO BE COLD HARDY AND HEAT TOLERANT.
7. UPRIGHT SHRUBS SHALL BE A MINIMUM OF 15 INCHES IN HEIGHT AT THE TIME OF PLANTING.
8. 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.

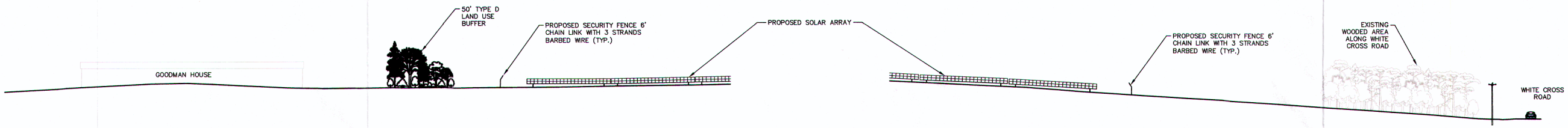
CYPRESS CREEK RENEWABLES

NC GRID NAD 83

PRELIMINARY SITE PLAN

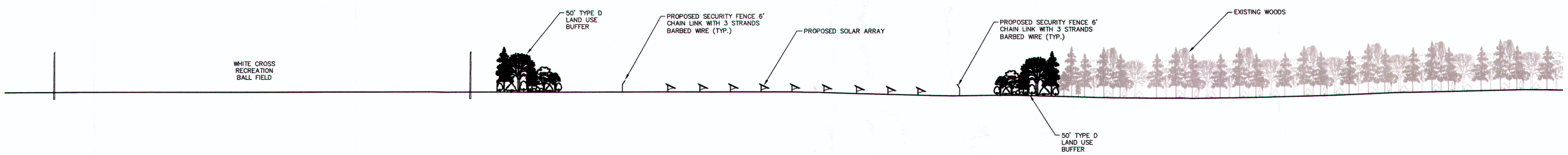
(GRAPHIC SCALE IN FEET)
1 inch = 100 ft.

REVIEW DRAWING
NOT FOR CONSTRUCTION

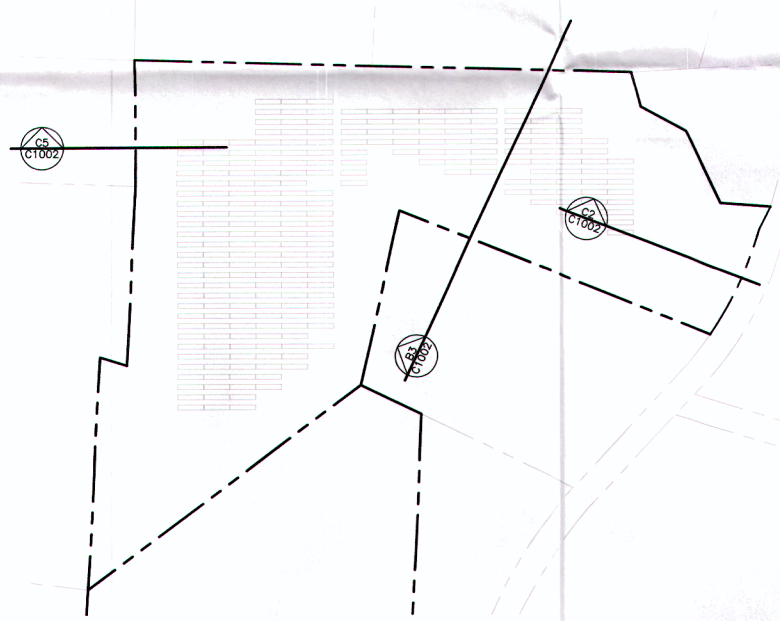


C5 / C1002 SITE SECTION 1
1" = 40'

C2 / C1002 SITE SECTION 2
1" = 40'



B3 / C1002 SITE SECTION 3
1" = 40'



SECTION KEY MAP
SCALE: N.T.S.

CYPRESS CREEK RENEWABLES

NC GRID NAD 83

SITE PLAN SECTIONS

40 0 20 40 80
(GRAPHIC SCALE IN FEET)
1 inch = 40 ft.

REVIEW DRAWING
NOT FOR CONSTRUCTION

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NORTH CAROLINA PROFESSIONAL SEAL 029127 ENGINEER GEORGE J. RETSCHLE 2 MAR 15

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SANTA MONICA, CA 90405

OWNERS REPRESENTATIVE:
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WHITE CROSS FARM SOLAR ENERGY SYSTEM
CHAPEL HILL, ORANGE COUNTY, NORTH CAROLINA

SITE PLAN DRAWINGS

JOB NUMBER: 114052.03
DATE: 02 MAR 15
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DRAWN BY: L.R.E.
REVIEWED BY: G.J.R.

SHEET
C1002