

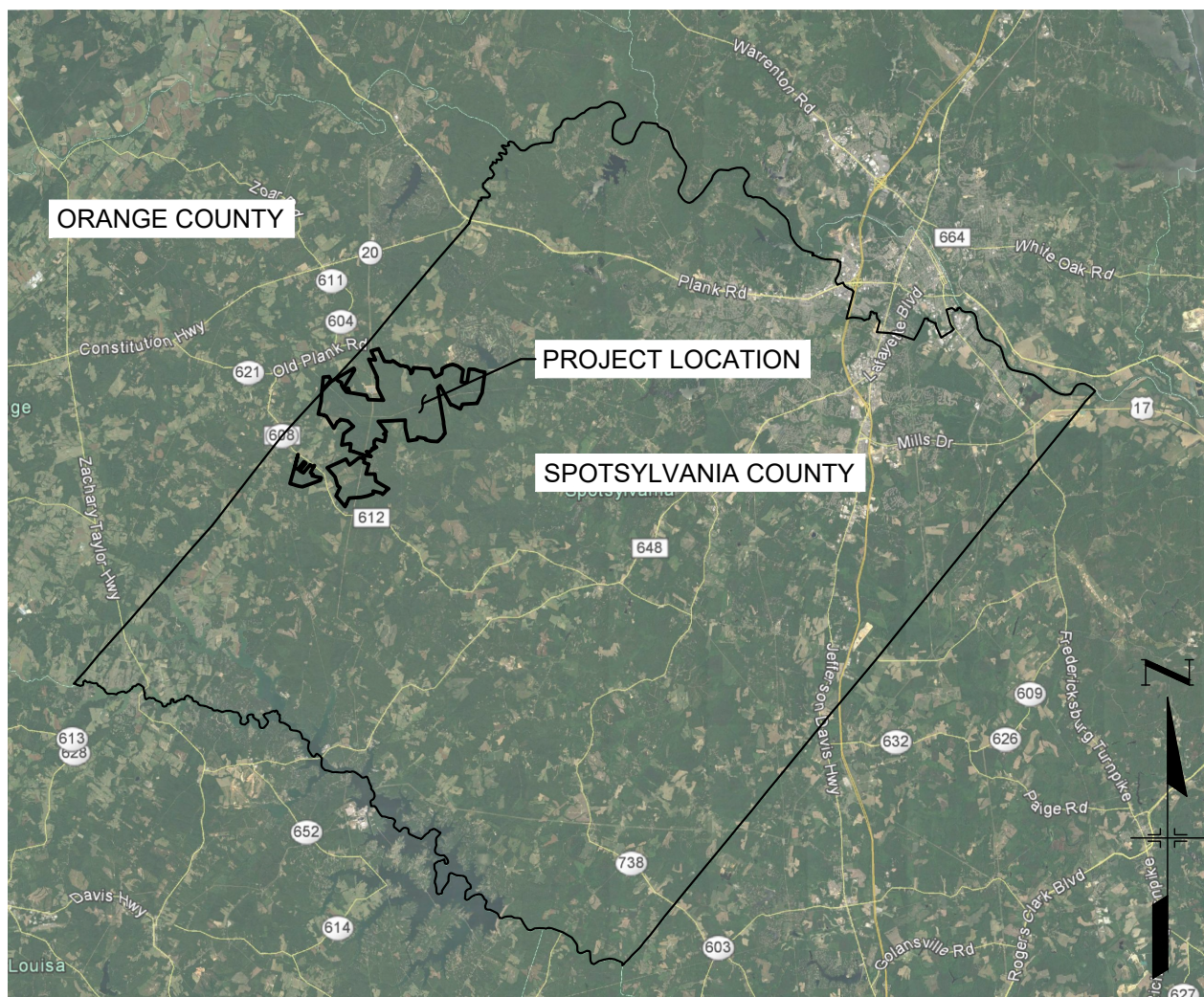
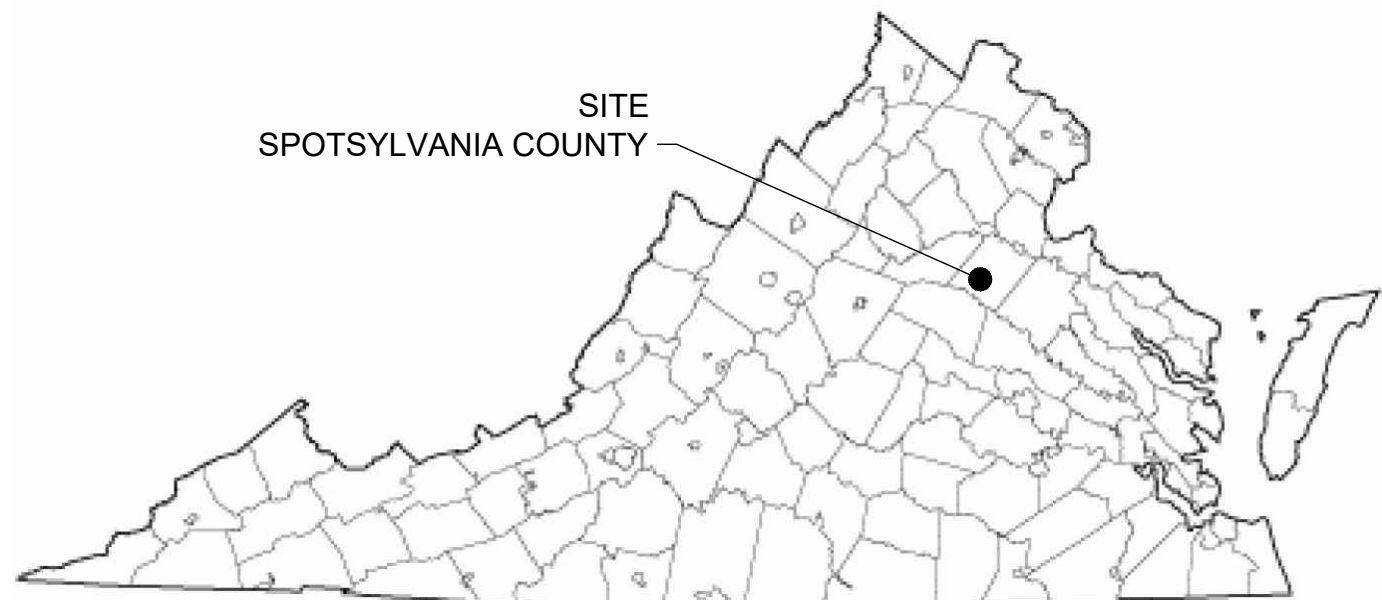
GENERALIZED DEVELOPMENT PLANS

SPOTSYLVANIA SOLAR ENERGY CENTER B

SPECIAL USE PERMIT - SUP 18-0002

LIVINGSTON MAGISTERIAL DISTRICT

SPOTSYLVANIA COUNTY, VA

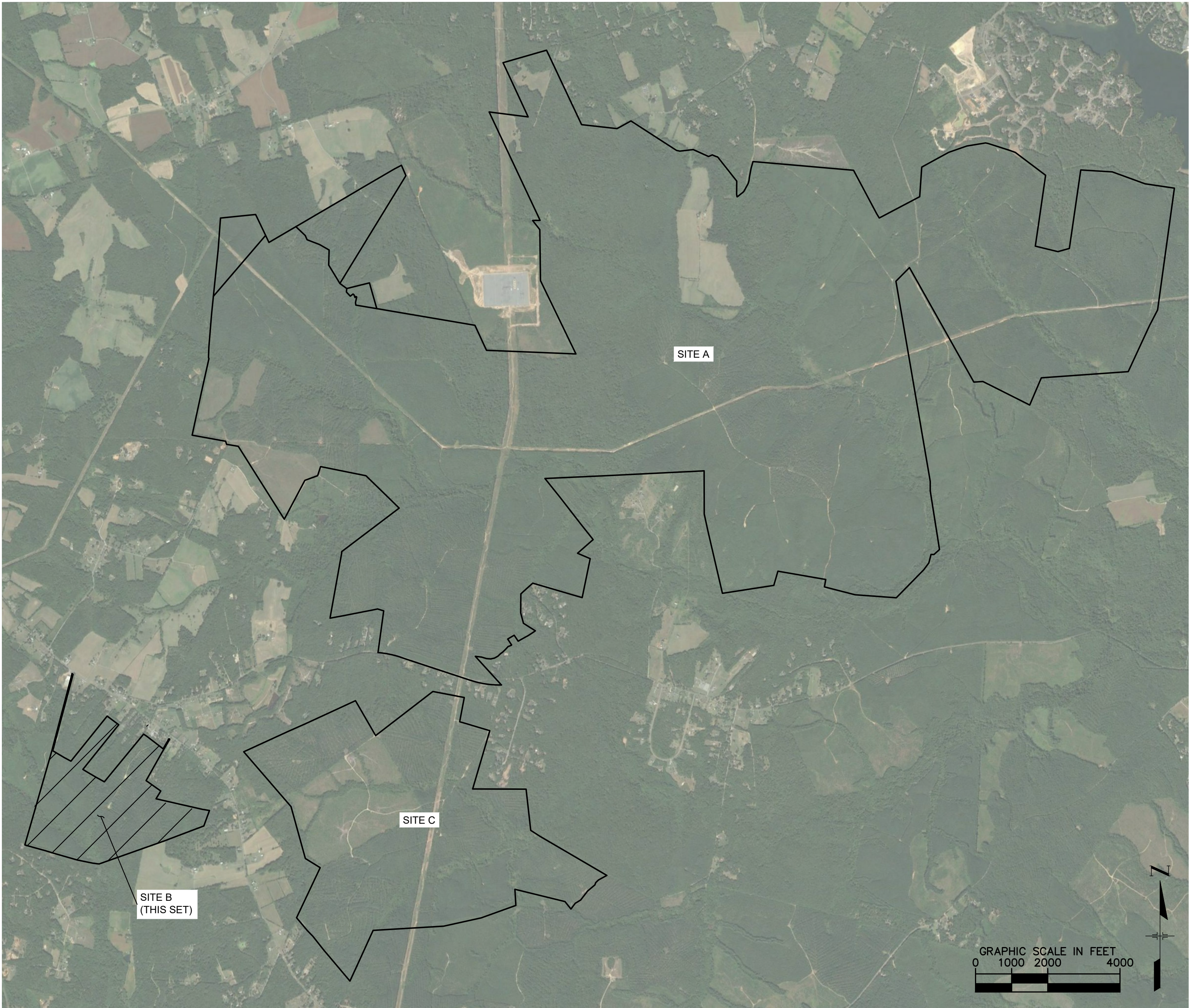


VICINITY MAP - SPOTSYLVANIA COUNTY, VA
1" = 30,000'

SPOTSYLVANIA SOLAR ENERGY CENTER	
OWNER	sPOWER
EXISTING AND PROPOSED ZONING	AGRICULTURE 3 (A-3)
EXISTING USE	SILVICULTURE
PROPOSED USE	SOLAR ENERGY FACILITY
TOTAL POWER TO BE GENERATED	500 MEGAWATTS AC (MWac)
OVERALL PROJECT SITE DATA:	
PROPERTY AREA	6,350 ACRES
DISTURBED AREA	3,500 ACRES
POWER GENERATED	500 MWac
SITE A DATA:	
PROPERTY AREA	5,200 ACRES
DISTURBED AREA	2,800 ACRES
POWER GENERATED	400 MWac
SITE B DATA:	
PROPERTY AREA	245 ACRES
DISTURBED AREA	200 ACRES
POWER GENERATED	30 MWac
SITE C DATA:	
PROPERTY AREA	905 ACRES
DISTURBED AREA	500 ACRES
POWER GENERATED	70 MWac

OWNER/APPLICANT
sPOWER
2180 SOUTH 1300 EAST, SUITE 600
SALT LAKE CITY, UT 84106
CONTACT: DANIEL MENAHEM
EMAIL: DMENAHEM@SPOWER.COM

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
11400 COMMERCE PARK DRIVE, SUITE 400
RESTON, VA 20191
PHONE: 703-674-1337
CONTACT: SEAN MILLOT, P.E.
EMAIL: SEAN.MILLOT@KIMLEY-HORN.COM



VICINITY MAP - PROJECT LIMITS
1" = 2,000'

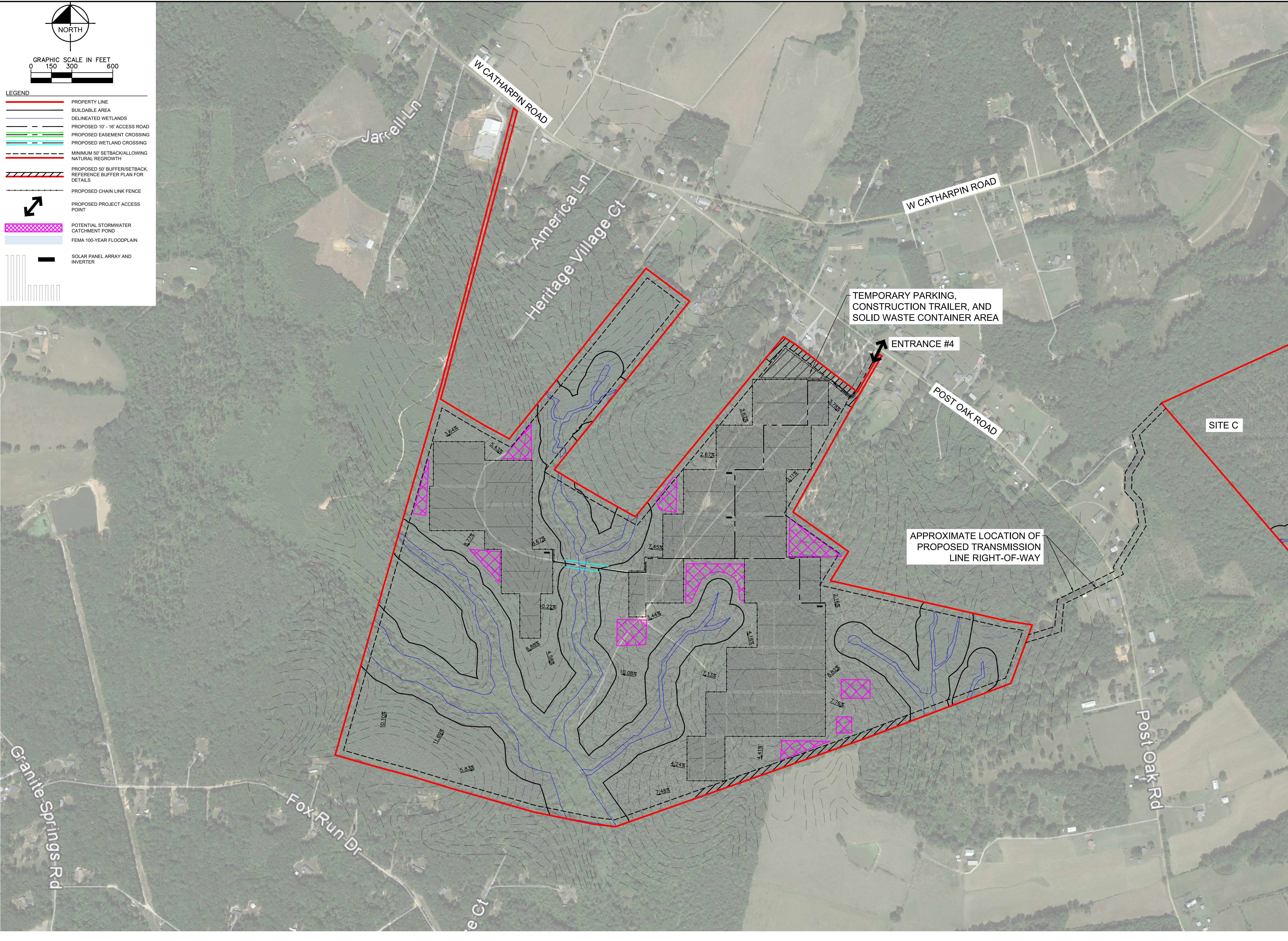
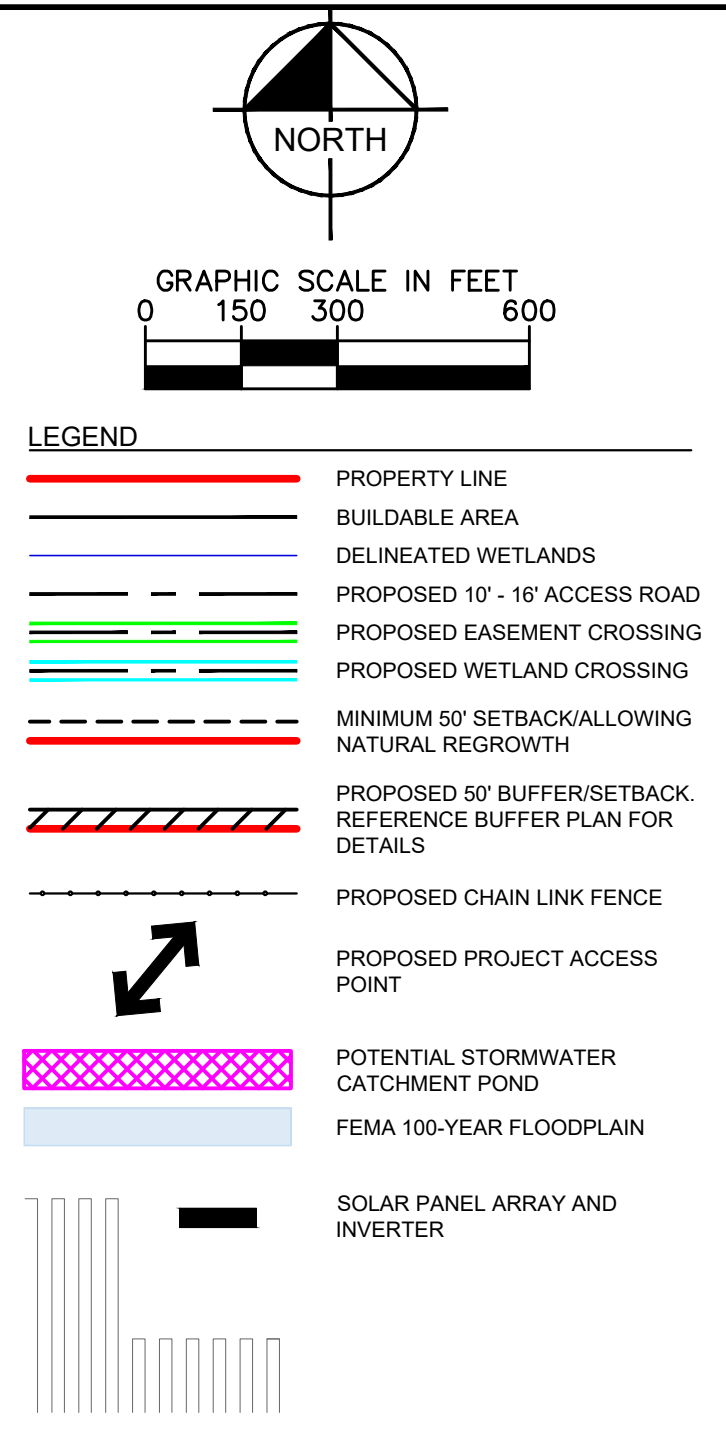
Sheet List Table	
Sheet No.	Sheet Title
C-01	GENERALIZED DEVELOPMENT PLAN COVER
EX-2-1	GENERALIZED DEVELOPMENT PLAN
EX-2-2	PRESERVATION AREA PLAN
EX-2-3	LANDSCAPE AND BUFFER AREA PLAN
EX-2-4	ACCESS ROAD SERVICE AREAS
CD-1	CIVIL DETAILS
SHEETS 1-17	ALTA SURVEY


PROJECT INFORMATION - SITE B	
OWNER INFORMATION	
OWNER	TAX MAP PARCEL NUMBER
RIVEROAK TIMBERLAND INVESTMENTS LLC	28-A-58
NO KNOWN AIRPORTS WITHIN 5-MILES RADIUS OF SITE B.	
CULTURAL RESOURCES	
NO KNOWN HISTORIC BUILDINGS OR FEATURES WITHIN PROXIMITY OF SITE.	
TRAFFIC INFORMATION	
• VOLUMES SUBJECT TO CHANGE BASED ON TRAFFIC IMPACT STUDY RESULTS • SEE TRAFFIC IMPACT ANALYSIS AND EXHIBITS FOR ADDITIONAL TRAFFIC DISTRIBUTION AND RECOMMENDATIONS • PROPOSED CONSTRUCTION TRAFFIC: 200 VEHICLES PER DAY	
IMPERVIOUS AREAS*	
	TOTAL
SOLAR PANEL POST** (0.11 SF EACH)	16326
INVERTER PAD (40' X 10')	4
GRAVEL DRIVES (12' WIDTH)	5074 LF
	1600
	60888
	1.40
	1.48
	0.60%
*IMPERVIOUS AREAS SHOWN FOR THE SITE ARE FOR PRELIMINARY USE ONLY. NOT TO BE USED FOR DESIGN PURPOSES. **PER DEQ REGULATIONS, ONLY POLE MOUNTINGS FOR THE SOLAR PANELS ARE TO BE USED TO CALCULATE IMPERVIOUS AREA. ASSUMED SPACING OF 15' SUBJECT TO FINAL ENGINEERING.	
WATER QUALITY (VRRM)**	
TP LOAD REDUCTION REQUIRED (LB/YR)	-29.56
ACRES PLACED IN CONSERVATION AREA	155.52
***WATER QUALITY VALUES SHOWN FOR THE SITE ARE FOR PRELIMINARY USE ONLY. NOT TO BE USED FOR DESIGN PURPOSES.	
NOTES: • ACCORDING TO THE SPOTSYLVANIA "TRAILWAYS MASTER PLAN", NO TRAILS ARE PLANNED WITHIN SITE B.	

SOLID WASTE DISPOSAL CALCULATIONS FOR CONSTRUCTION
FOR SITES A, B, AND C

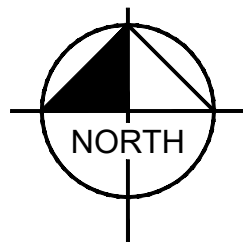
Step 1: Identification of Collection Method	
Container Type (Compactor, Roll Off, Dumpster, Carts)	Size (Cubic Yards)
Compactor	40 YD
Roll Off	40 YD
Number of Containers	2
Number of Pickups Per Week	1
Material (Trash or Recycle)	Trash
Combined Annual Waste Stream	8
Step 2: Determination of Minimum Storage Capacity	
Combined Annual Waste Stream	8
Cubic Yards Per Ton	4.44
Number of Containers (Minimum 2)	2
Minimum Size of Each Storage Container (Without Recycle Program)	0.54
Step 3: Identification of Collection Method	
Container Type (Compactor, Roll Off, Dumpster, Carts)	Size (Cubic Yards)
Compactor	40 YD
Roll Off	40 YD
Number of Containers	1
Number of Pickups Per Week	0.5
Material (Trash or Recycle)	Trash
Combined Annual Waste Stream	4

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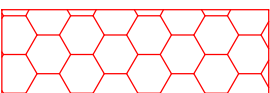
<p>SPOTSYLVANIA SOLAR ENERGY CENTER B</p> <p>PREPARED FOR S-POWER</p> <p>SPOTSYLVANIA COUNTY VIRGINIA</p>	<p>SUP 18-0002 GENERALIZED DEVELOPMENT PLAN</p>	<p>KHA PROJECT 116626000</p> <p>DATE 10/26/2018</p> <p>SCALE AS SHOWN</p> <p>DESIGNED BY JRB</p> <p>DRAWN BY JRB</p> <p>CHECKED BY SWM</p>	<p>Kimley»Horn</p> <p>© 2018 KIMLEY-HORN AND ASSOCIATES, INC. 11400 COMMERCE PARK DR., SUITE 400 DALLAS, TEXAS 75244-2098 PHONE: 703-674-1300 WWW.KIMLEY-HORN.COM</p> <p>APPROVAL</p> <p></p>	<p>S-POWER An AES and AEMco Company</p> <p>2180 SOUTH 1300 EAST, SUITE 600 SALT LAKE CITY, UT 84106 PHONE: 801-679-3500 FAX: 801-679-3501 WWW.S-POWER.COM</p>
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GRAPHIC SCALE IN FEET

A horizontal scale bar with tick marks at 0, 150, 300, and 600 feet. The bar is divided into three equal segments of 150 feet each. The first segment (0 to 150) is white, the second (150 to 300) is black, and the third (300 to 600) is white.



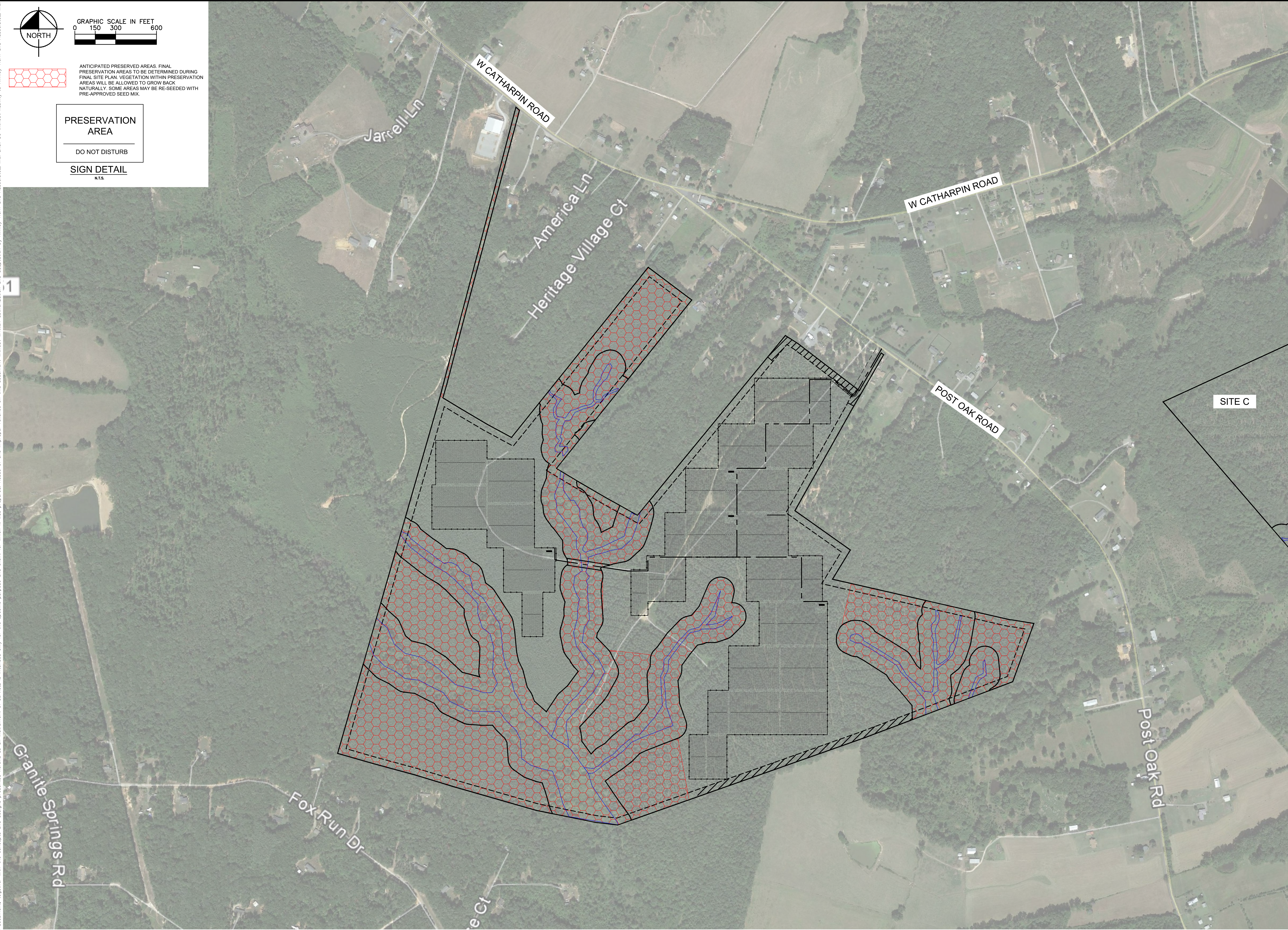
ANTICIPATED PRESERVED AREAS. FINAL PRESERVATION AREAS TO BE DETERMINED DURING FINAL SITE PLAN. VEGETATION WITHIN PRESERVATION AREAS WILL BE ALLOWED TO GROW BACK NATURALLY. SOME AREAS MAY BE RE-SEEDING WITH PRE-APPROVED SEED MIX.

PRESERVATION
AREA

DO NOT DISTURB

SIGN DETAIL

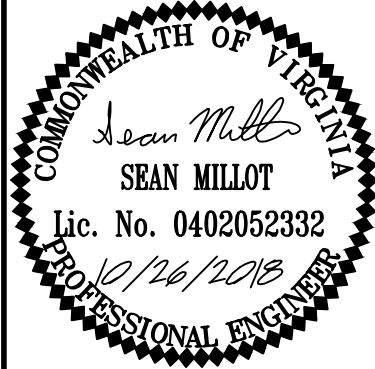
N.T.



SPOTSYLVANIA SOLAR
ENERGY CENTER B
PREPARED FOR
S-POWER

SUP 18-0002
PRESERVATION A
PLAN

KHA PROJECT	SCALE AS SHOWN	DESIGNED BY	JRRR	CHECKED BY	SMN
116626000		DRAWN BY	JRRR		
DATE					
10/26/2018					



APPROVAL

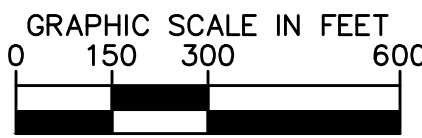
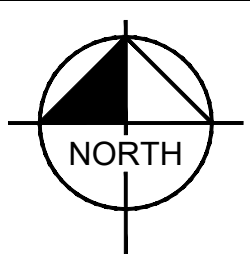
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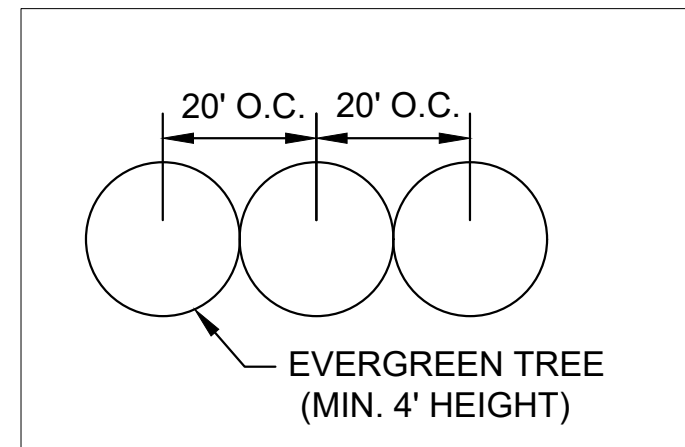
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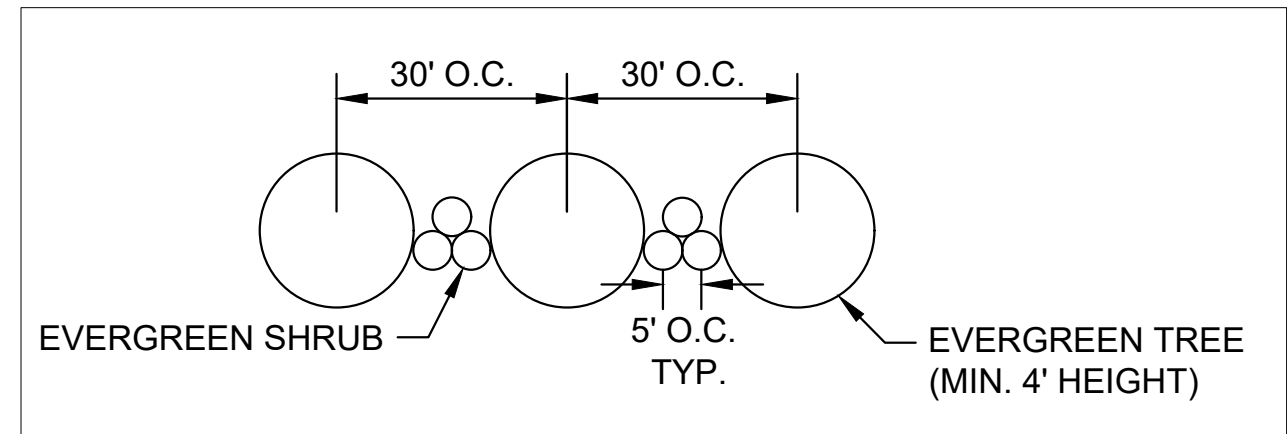


- PROPOSED RE-VEGETATION WITH PLANTINGS PER OPTION 1 OR OPTION 2 (SEE DETAIL THIS SHEET)
- PROPOSED RE-VEGETATION WITH SAPLINGS
- 50' MINIMUM SETBACK WITH PRESERVED VEGETATION
- 50' MINIMUM SETBACK ALLOWING VEGETATION TO GROW BACK NATURALLY
- BUILDING WITHIN 100' OF PARCEL BOUNDARY
- BUILDING WITHIN 200' OF PARCEL BOUNDARY
- BUILDING WITHIN 300' OF PARCEL BOUNDARY

- NOTES:
- BUFFER LOCATIONS SHOWN ARE APPROXIMATE AND ARE BASED ON INITIAL PANEL PROXIMITY TO ROADWAYS AND ADJACENT PROPERTIES.
 - PLANTINGS SHALL BE PER OPTION 1 AND/OR OPTION 2 DEPENDING ON PLANT AVAILABILITY AT TIME OF SITE PLAN AND DESIRE TO ADD VARIABILITY TO THE BUFFERS.

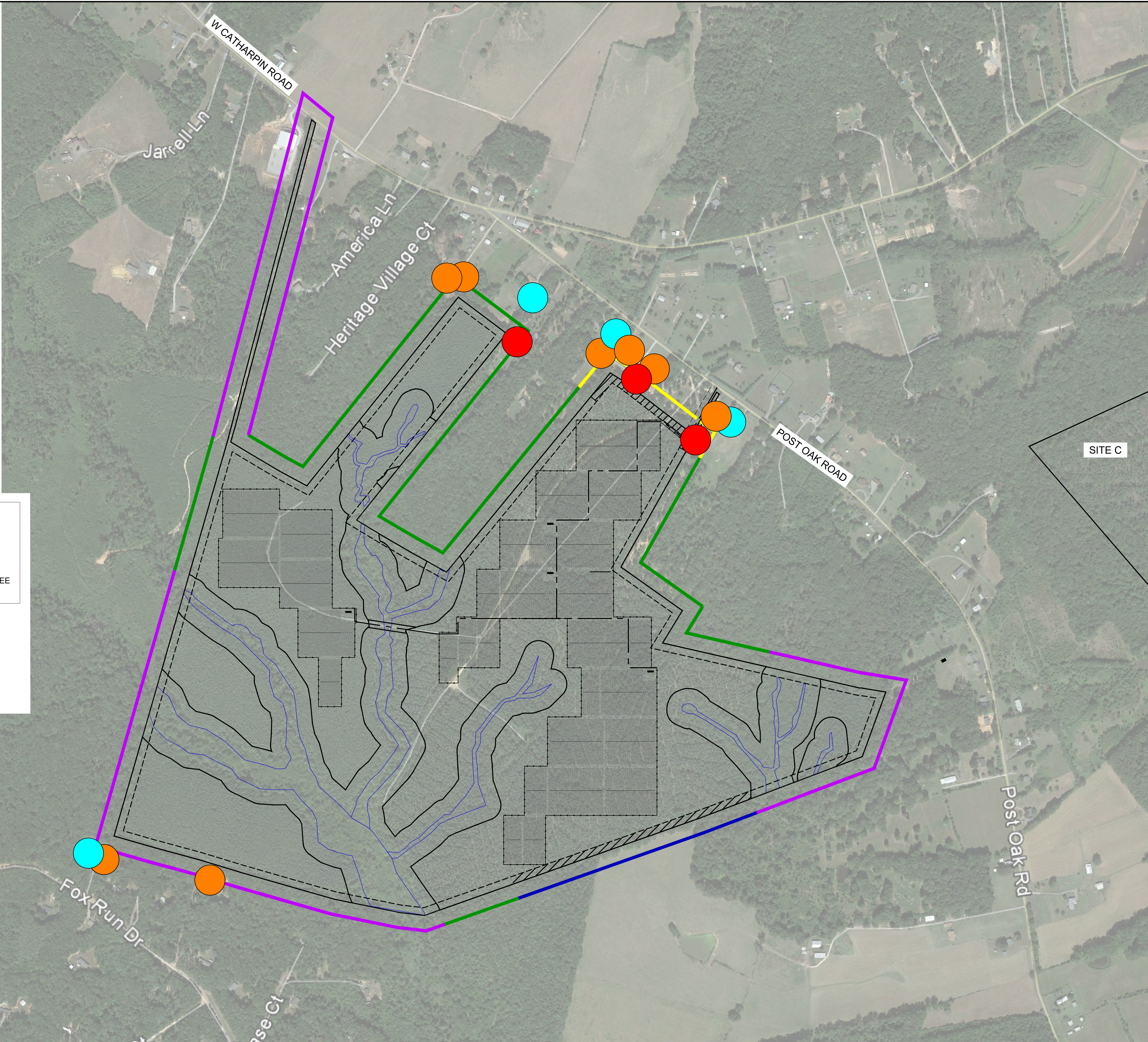


PLANTING OPTION 1
N.T.S.

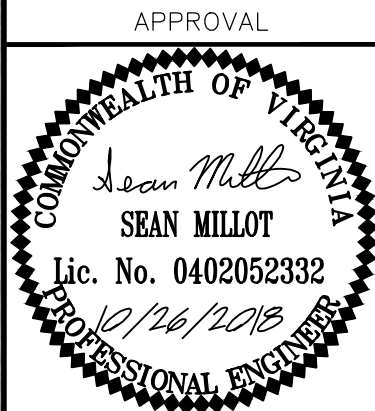


PLANTING OPTION 2
N.T.S.

BUFFER PLANTING LIST	
EVERGREEN TREES	PICEA ABIES: NORWAY SPRUCE PICEA GLUACA: WHITE SPRUCE ILEX x NELLIE R STEVENS: NELLIE R STEVENS HOLLY JUNIPERUS VIRGINIANA: EASTERN RED CEDAR ILEX OPACA: AMERICAN HOLLY
EVERGREEN SHRUBS	MYRICA CARIFERA: SOUTHERN WAX MYRTLE MYRICA HETEROPHYLLA: SOUTHERN BAYBERRY RHODODENDRON PRINOPHYLLUM: ROSE AZALEA RHODODENDRON VISCOSUM: SWAMP AZALEA



SITE C



KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY
116626000	10/26/2018	10/26/2018	JRE	JRE	JRE	SMM

SUP 18-0002
LANDSCAPE AND BUFFER
AREA PLAN

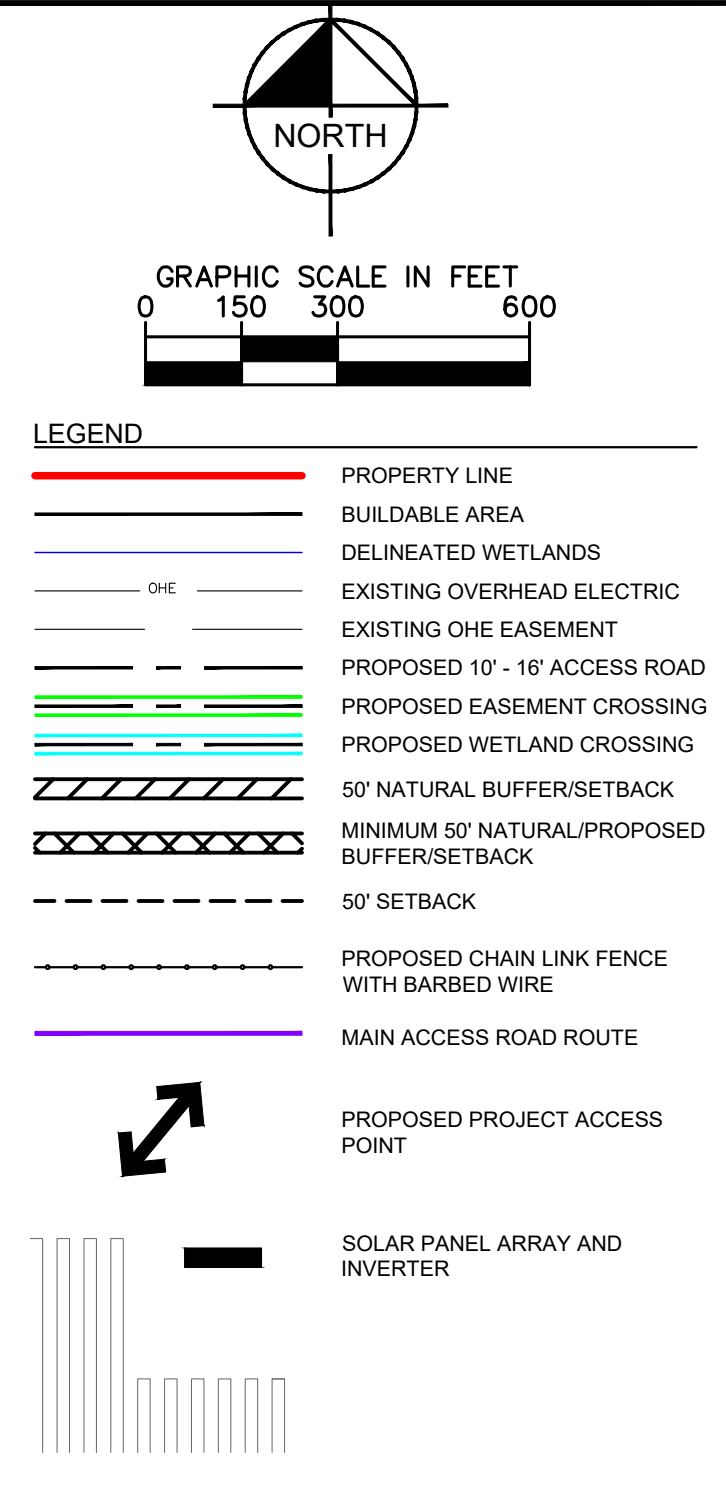
SPOTSYLVANIA SOLAR
ENERGY CENTER B
PREPARED FOR
S-POWER

SHEET NUMBER
EX-2-3

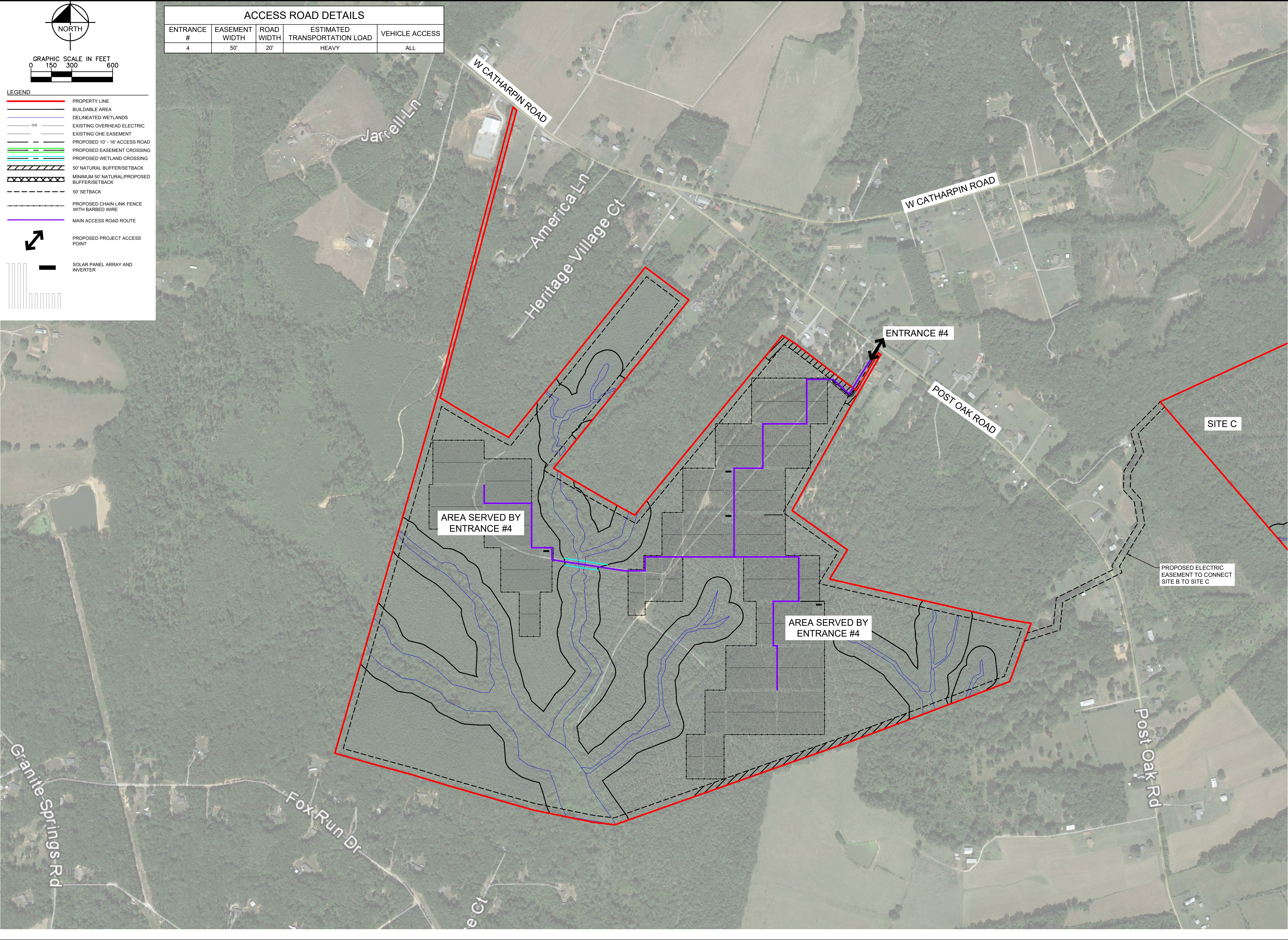


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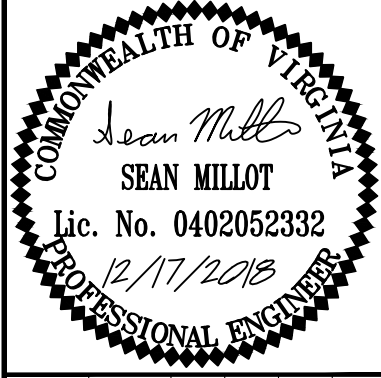
ACCESS ROAD DETAILS				
ENTRANCE #	EASEMENT WIDTH	ROAD WIDTH	ESTIMATED TRANSPORTATION LOAD	VEHICLE ACCESS
4	50'	20'	HEAVY	ALL



SPOTSYLVANIA SOLAR
ENERGY CENTER B
PREPARED FOR
S-POWER

SUP 18-0002
ACCESS ROAD SERVICE
AREAS

KHA PROJECT	SCALE	AS SHOWN	DESIGNED BY	JRB	DRAWN BY	JRB	CHECKED BY	SMM
116626000								
DATE								
12/17/2018								



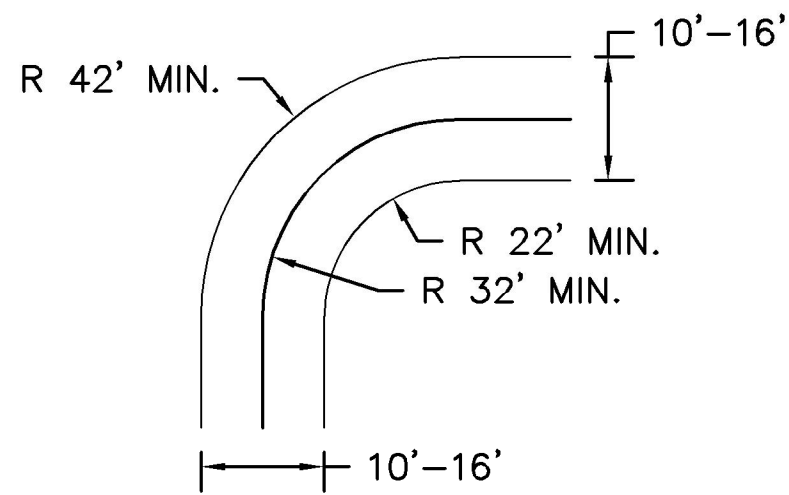
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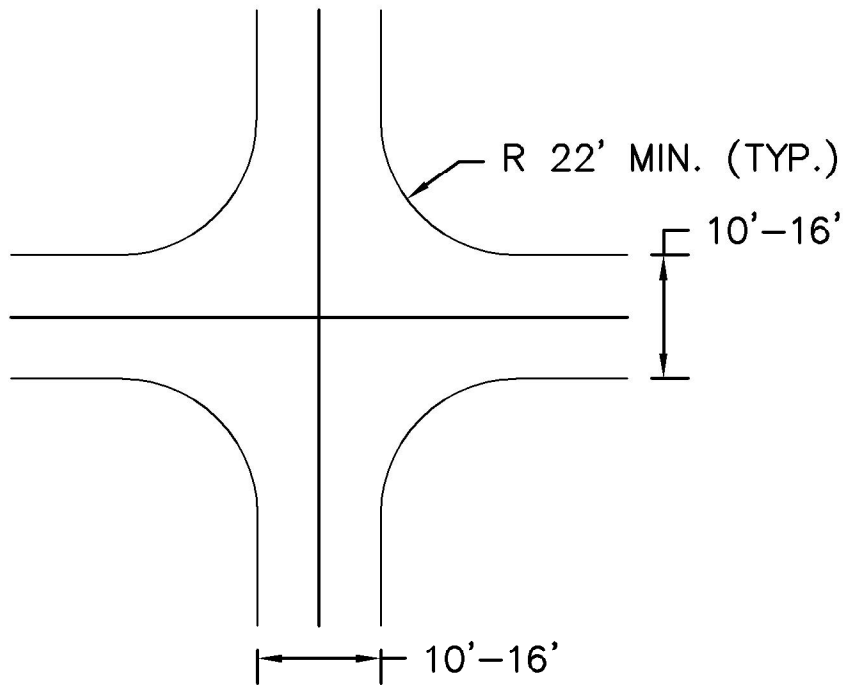


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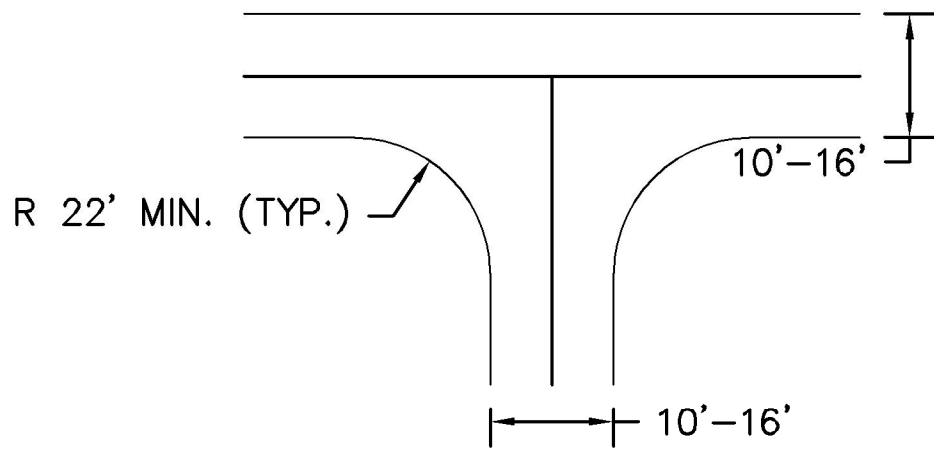
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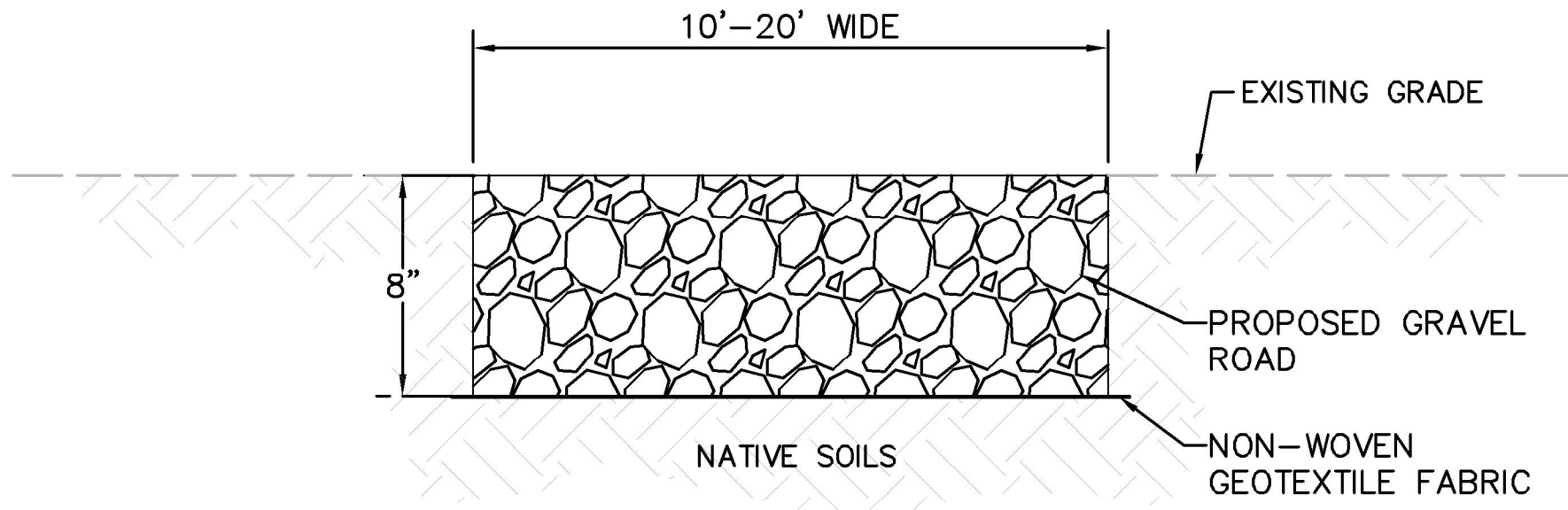
TYPICAL SITE ACCESS ROAD 90° TURN
N.T.S.



TYPICAL SITE ACCESS ROAD 4-WAY INTERSECTION
N.T.S.

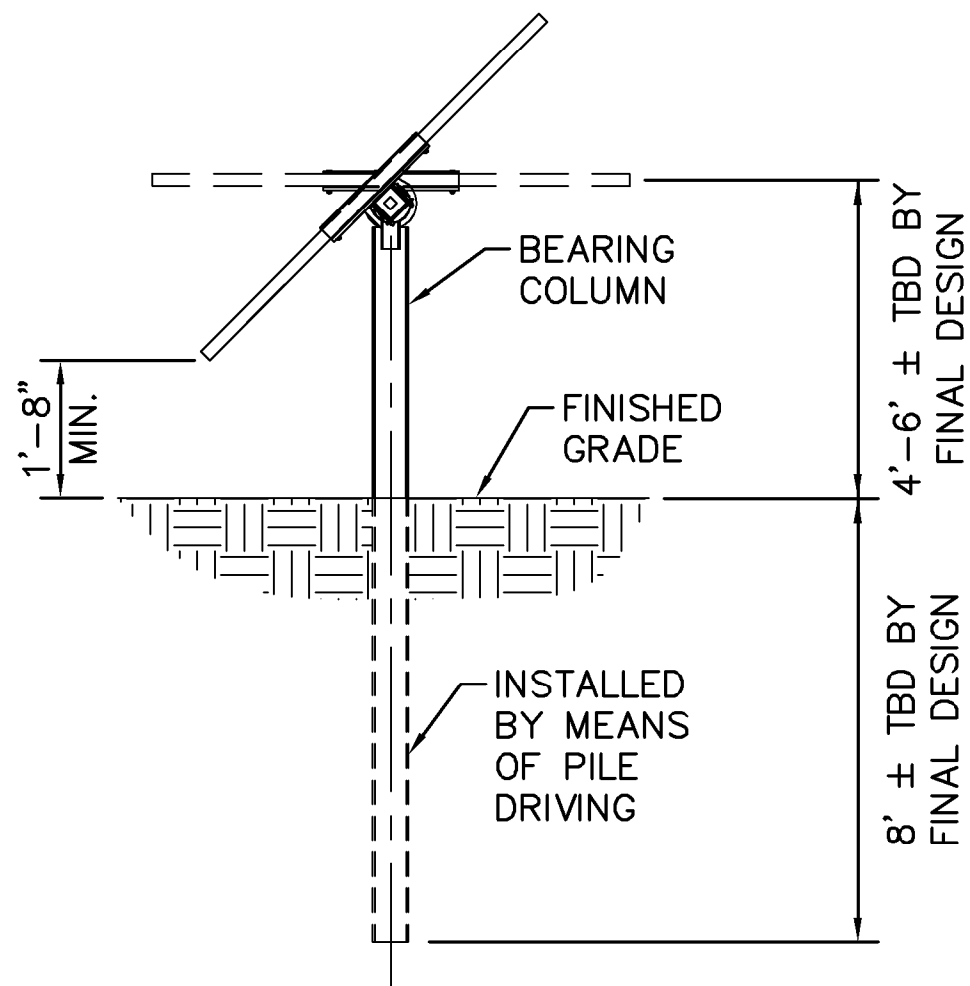


TYPICAL SITE ACCESS ROAD "T" - INTERSECTION
N.T.S.

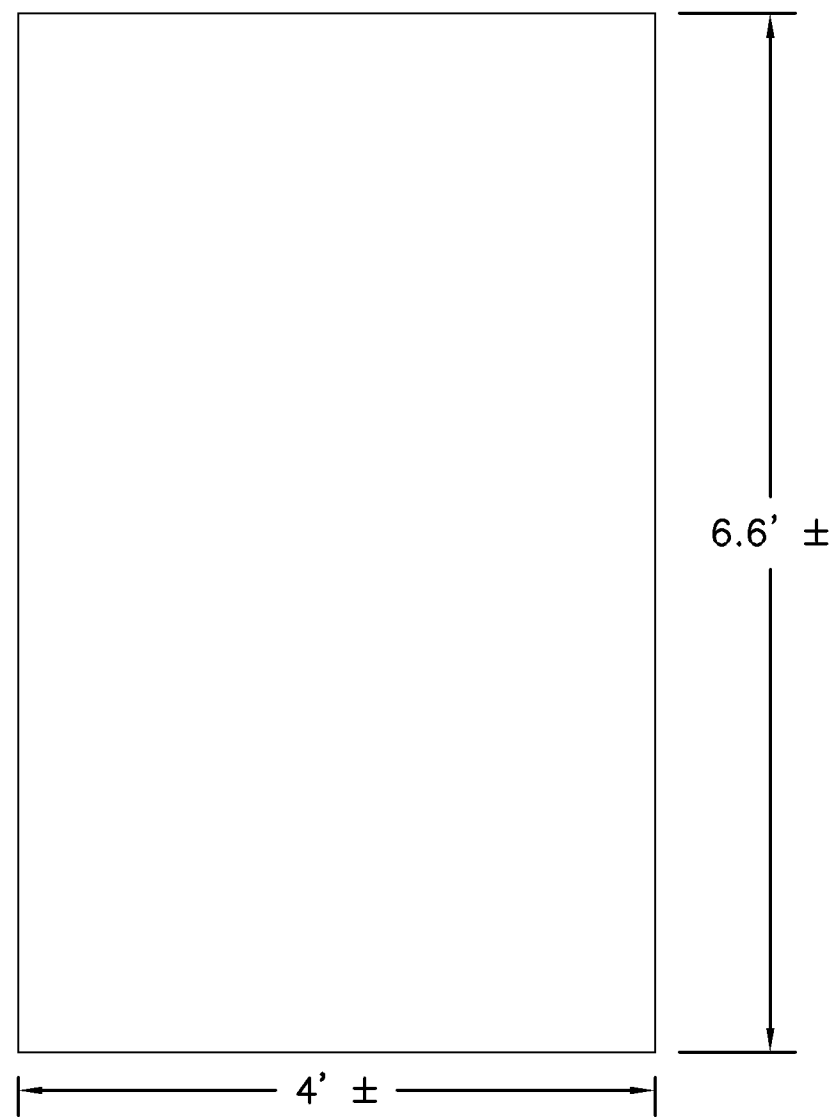


- NOTES:
1. REMOVE ALL GRASSES AND ORGANICS WITHIN ACCESS ROAD AREA.
 2. SCARIFY, MOISTURE CONDITION, AND RE-COMPACT EXISTING NATIVE SOILS TO 90% OF THE MATERIAL'S ASTM D-1557 MAXIMUM DRY DENSITY.
 3. COMPACTION SHALL BE VERIFIED BY TESTING BY THE GEOTECHNICAL CONSULTANT.

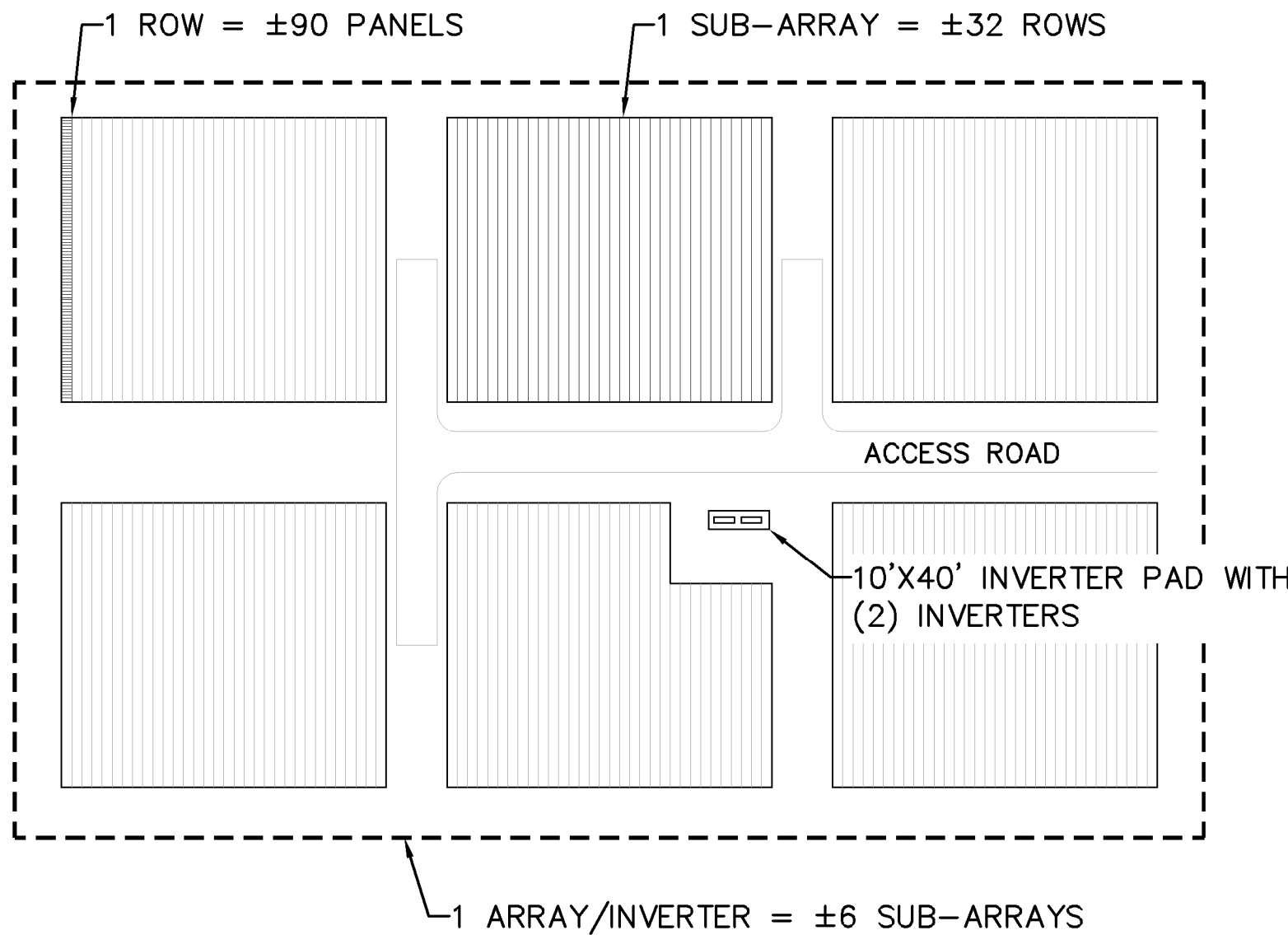
TYPICAL SITE ACCESS ROAD - GRAVEL ROAD SECTION
N.T.S.



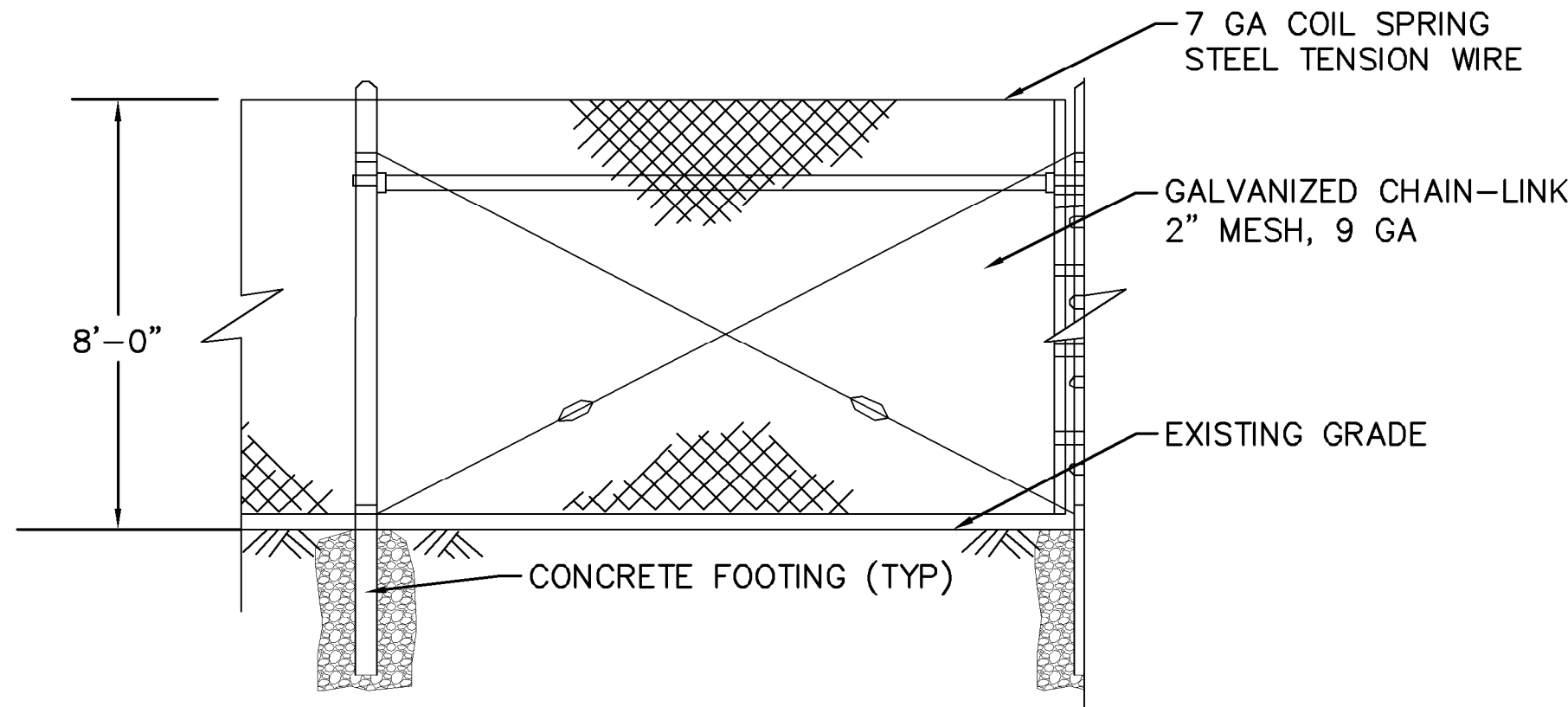
TRACKER RACK AND FOUNDATION DETAIL
N.T.S.
NOTE: ACTUAL CONSTRUCTION DETAIL OF TRACKER RACK AND FOUNDATION MAY VARY FROM THIS DETAIL.



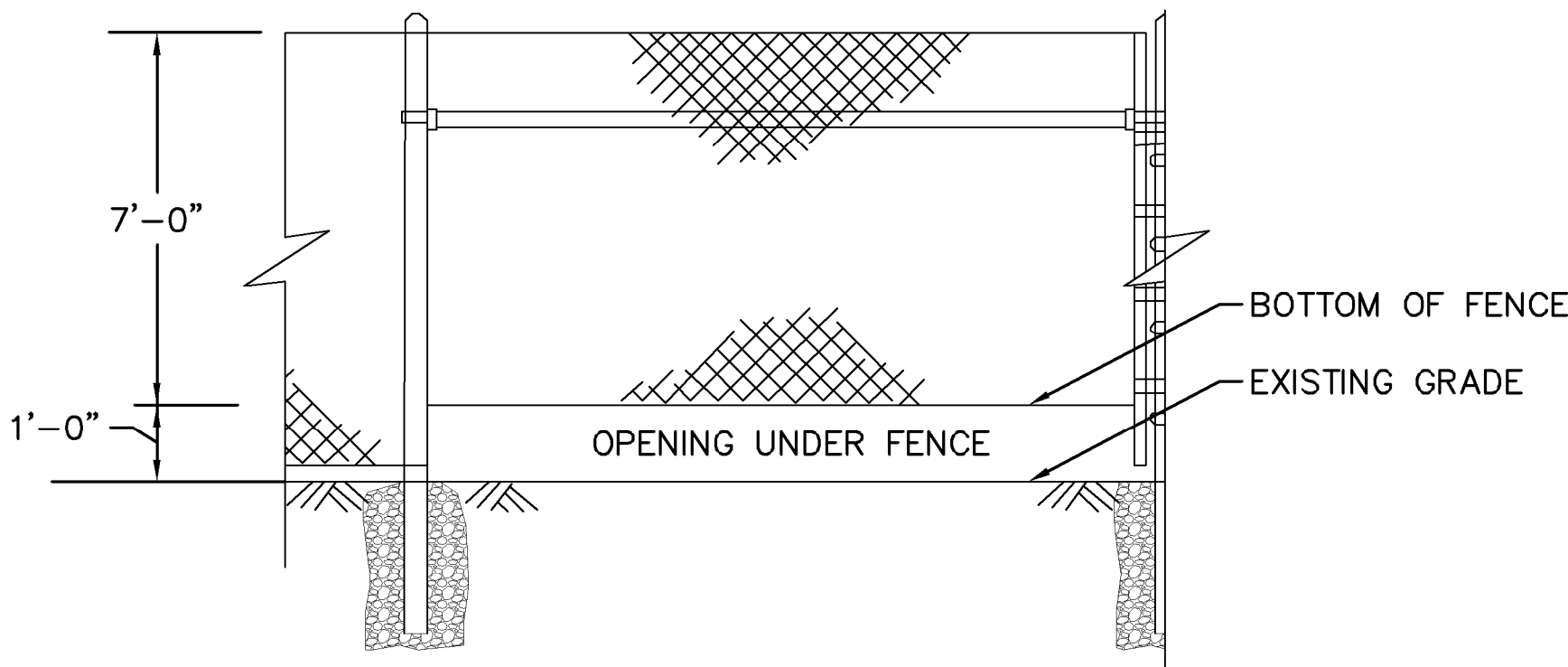
MODULE DETAIL
N.T.S.
NOTE: ACTUAL CONSTRUCTION DETAIL OF MODULE MAY VARY FROM THIS DETAIL.



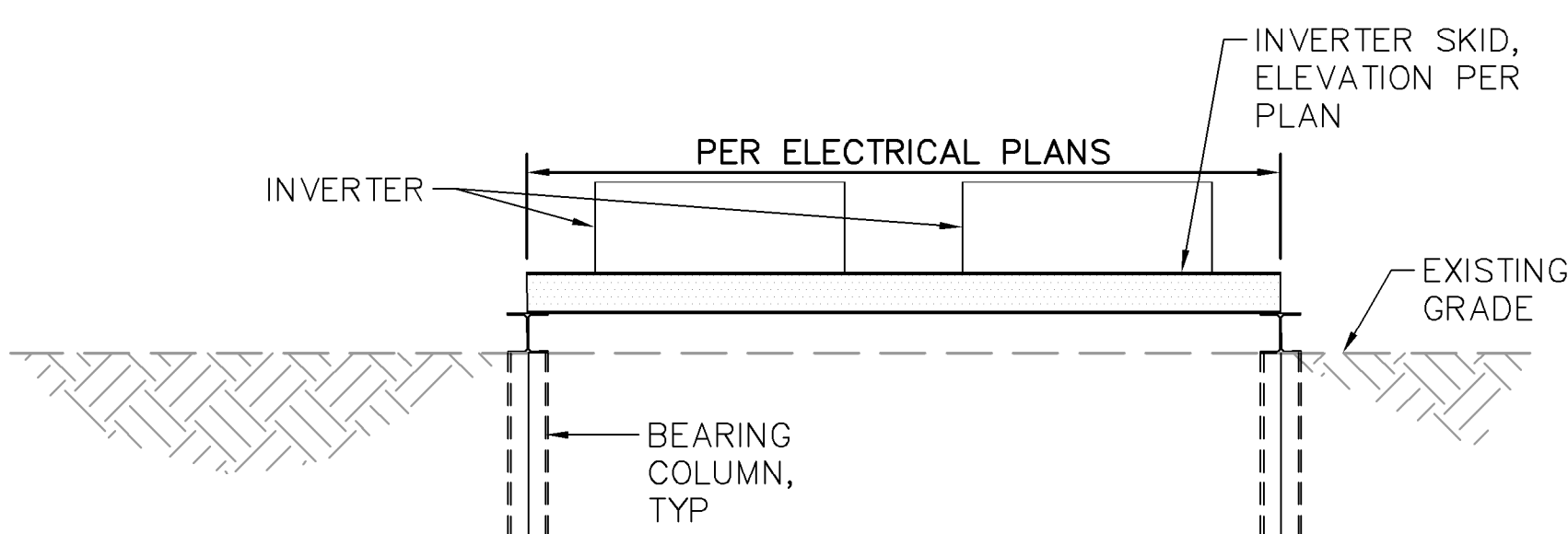
INVERTER BLOCK EXAMPLE
N.T.S.
NOTE: INVERTER PAD APPROXIMATELY 10'X40' WITH (2) 9'LX5.5'WX7.5'H INVERTERS SUBJECT TO FINAL ENGINEERING.



CHAIN LINK SECURITY FENCE
N.T.S.



WILDLIFE FENCE
N.T.S.
NOTE: WILDLIFE FENCE WILL SPACED EVERY 2000 FEET ALONG FENCE LINE SUBJECT TO ENGINEERING AND SITE DESIGN.




INVERTER DETAIL
N.T.S.
NOTE: INVERTER PAD APPROXIMATELY 10'X40' WITH (2) 9'LX5.5'WX7.5'H INVERTERS SUBJECT TO FINAL ENGINEERING.

**S-POWER**
An AES and AIMCo Company

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APPROVAL



SEAN MILLOT
Lic. No. 0402062332
11/20/2018
PROFESSIONAL ENGINEER

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
116626000	11/20/2018	AS SHOWN	JRB	JRB	SMM

SUP 18-0002
CIVIL DETAILS

SPOTSVYLVANIA SOLAR
ENERGY CENTER B
PREPARED FOR
S-POWER

VIRGINIA
SPOTSVYLVANIA COUNTY

SHEET NUMBER
CD-1