

REQUEST FOR COMMITTEE ACTION

HENDERSON COUNTY

TECHNICAL REVIEW COMMITTEE

MEETING DATE: June 2, 2015

SUBJECT: Major Site Plan Review

PRESENTER: Toby Linville

ATTACHMENTS: Staff Report

SUMMARY OF REQUEST: Major site plan review for a Solar Energy Generation Facility.

Suggested Motion: I move that the TRC approve the major site plan for Innovative Solar 16, LLC at Ridge Rd



Henderson County, North Carolina Code Enforcement Services

1. Board Request

- 1.1. **Applicant:** Innovative Solar 16, LLC
- 1.2. **Request:** Major Site Plan Review for a Solar Energy Generation Facility
- 1.3. **PIN:** Lease portions of 0600142053, 0600131672, 0600032617
- 1.4. **Size:** 15.47 acres +/-
- 1.5. **Location:** The subject area is located on Ridge Road and Auto Fixit Ln in Edneyville, NC
- 1.6. **Supplemental Requirements:**

SR 9.9. *Solar Energy Generation Facility*

(1) Site Plan. Major *Site Plan* required in accordance with §200A-299 (Major Site Plan Review). The site plan shall include ground level profile drawings of the typical structures proposed and the designed wind and ground snow loads.

(2) Dust Reduction. Unpaved *roads, travel ways* and/or parking areas shall be treated to prevent dust from adverse effects to adjacent properties.

(3) Perimeter Setback. All structures and components shall be a minimum of twenty (20) feet from property lines. Necessary ingress and egress for vehicles and utility & transmission lines may be located within the perimeter setback. Fences may be placed within the perimeter setback.

(4) Height. Systems, equipment and structures shall not exceed twenty-five (25) feet in height when ground mounted. Roof mounted systems shall not exceed the maximum height for the applicable zoning district.

(5) Screening. Screen Class One (1), Two (2), Three (3), or Four (4) shall be provided along sides of the facility which are adjacent to a residential use (as identified in Section 1 of 200A-62, Table of Permitted and Special Uses) on a separate parcel, consistent with 200A-182 (Screen Classification). Where screening is required, screening shall be placed on the exterior side of fencing. Buffer Requirements, as specified by Article V Subpart A, shall not apply to Solar Energy Generation Facilities unless the Solar Energy Generation Facility is not permitted in the zoning district adjacent to the site.

(6) Scenic Byways. Solar energy Generation Facilities shall not be permitted on sites visible from Scenic Byways as designated by the North Carolina Department of Transportation or Henderson County.

(7) Security. Solar Energy Generation Facilities shall be completely enclosed within:

- a. a woven wire fence; or
- b. a masonry wall; or

c. a wooden fence that contains spacing no greater than six (6) inches.
Such fences shall be at least six (6) feet in height.

(8) Power Transmission Lines. To the extent practical, all new power transmission lines to any building, structure or utility connection shall be located underground. Existing above ground utility lines shall be allowed to remain in their current location.

(9) Electrical Disconnection Switch. The electrical disconnect switch shall be clearly marked and unobstructed. Switches are permitted to be secured within a fenced area or building.

(10) Wind and Snow Loads. All equipment and structures shall comply with the N.C. State Building Code requirements for survival wind speeds and ground snow loads for buildings. Although the N.C. State Building Code may require such load designs for only buildings, all structures and equipment associated with this use shall meet those same wind and snow load requirements. Note that such requirements vary based on the elevation and location of the site. The Zoning Administrator shall require a certification from a structural engineer, licensed in North Carolina as a professional engineer, stating the designed wind and snow load standards for equipment and structures have been constructed according to the State Building Code and will meet the following:

a. Structures and buildings will meet a minimum wind survival speed of 90 m.p.h.; and

b. Structures and buildings will meet a minimum snow load of 15 lbs. per square foot.

(11) Principal Structure. A principal structure, other than the solar collectors, is permitted but not required.

(12) *Special Flood Hazard Area*. No structures, equipment, storage or buildings shall be located within the *Special Flood Hazard Area*.

(13) Lighting. *Lighting Mitigation* is required.

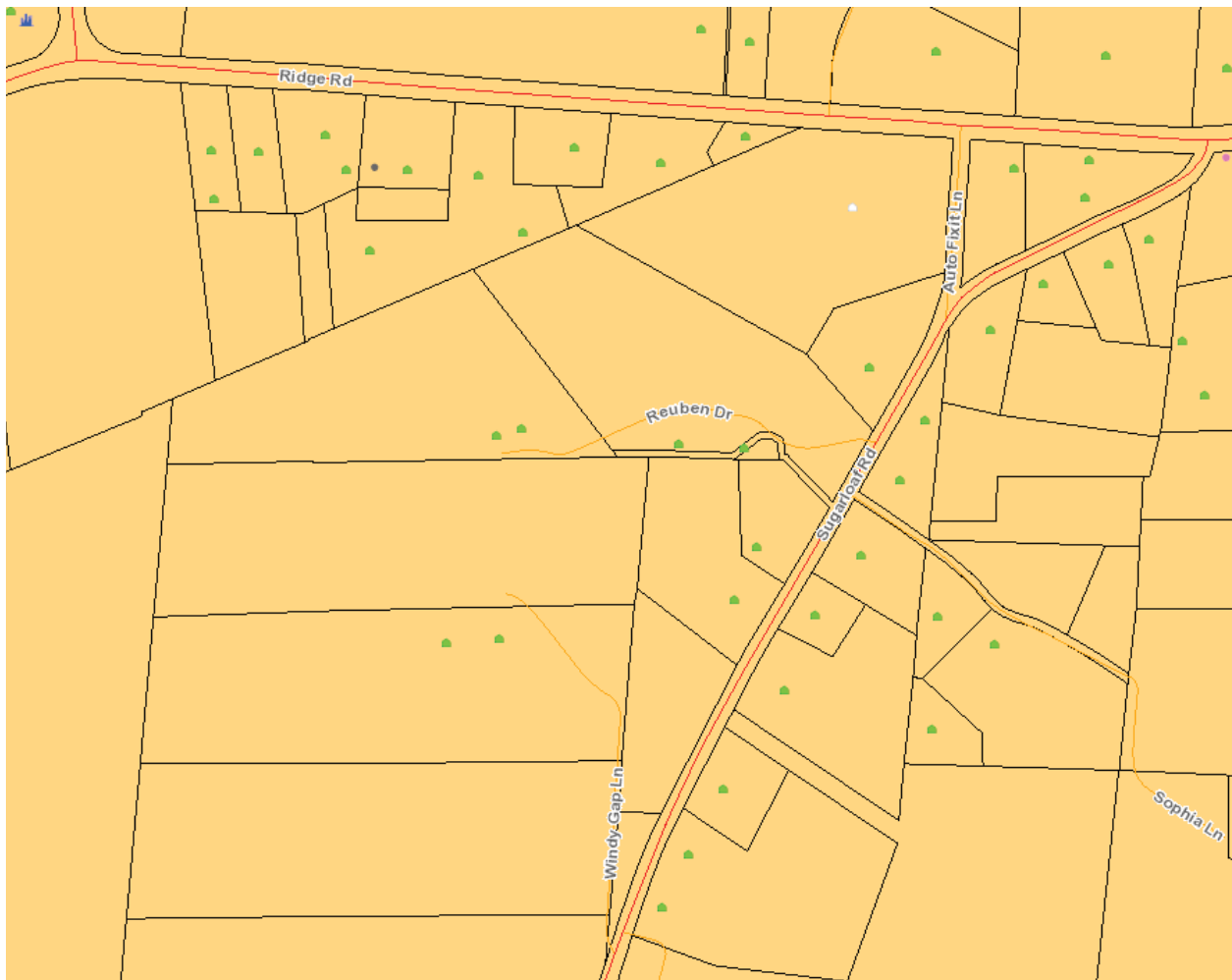
Map A: Aerial Photo/Pictometry



2. Current Conditions

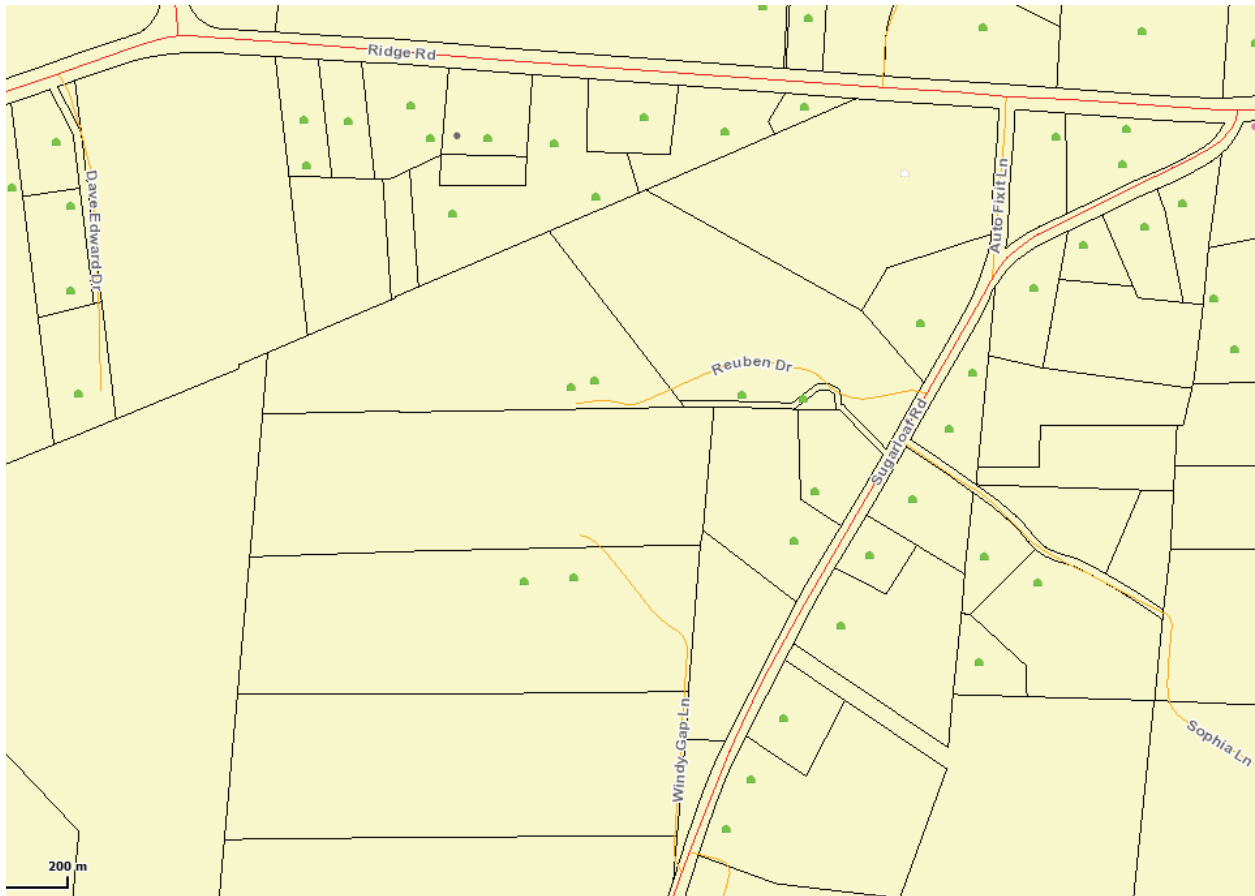
- 2.1. **Current Use:** The property is currently in agricultural use.
- 2.2. **Adjacent Area Uses:** The surrounding properties primarily consist of residential and agricultural uses.
- 2.3. **Zoning:** The current and surrounding property to the north, south, east, and west is Residential 2 Rural (R2R).

Map B: Current Zoning



- 3. Floodplain /Watershed Protection -The property is not located in a Special Flood Hazard Area. The property is not in a Water Supply Watershed district.
- 4. Water and Sewer
 - 4.1. **Public Water:** Utilities not required for this use.
 - 4.2. **Public Sewer:** Utilities not required for this use.

Map C: CCP Future land Use Map



5. Staff Comments

The 2020 CCP: The CCP Future Land Use Map places the Subject Area in the Rural/Urban Transition Area classification. The text and map of the 2020 CCP suggest that the Subject Area would be more suitable for the following:

1. The RTA is currently rural in character, with existing pockets of limited higher density residential and commercial development. Slopes vary across the RTA, although the area can be considered to be generally developable. The primary factor preventing urban development in the RTA is the absence of sewer and water service. The RTA will continue to experience extensive development over the operational timeframe of this Comprehensive Plan.

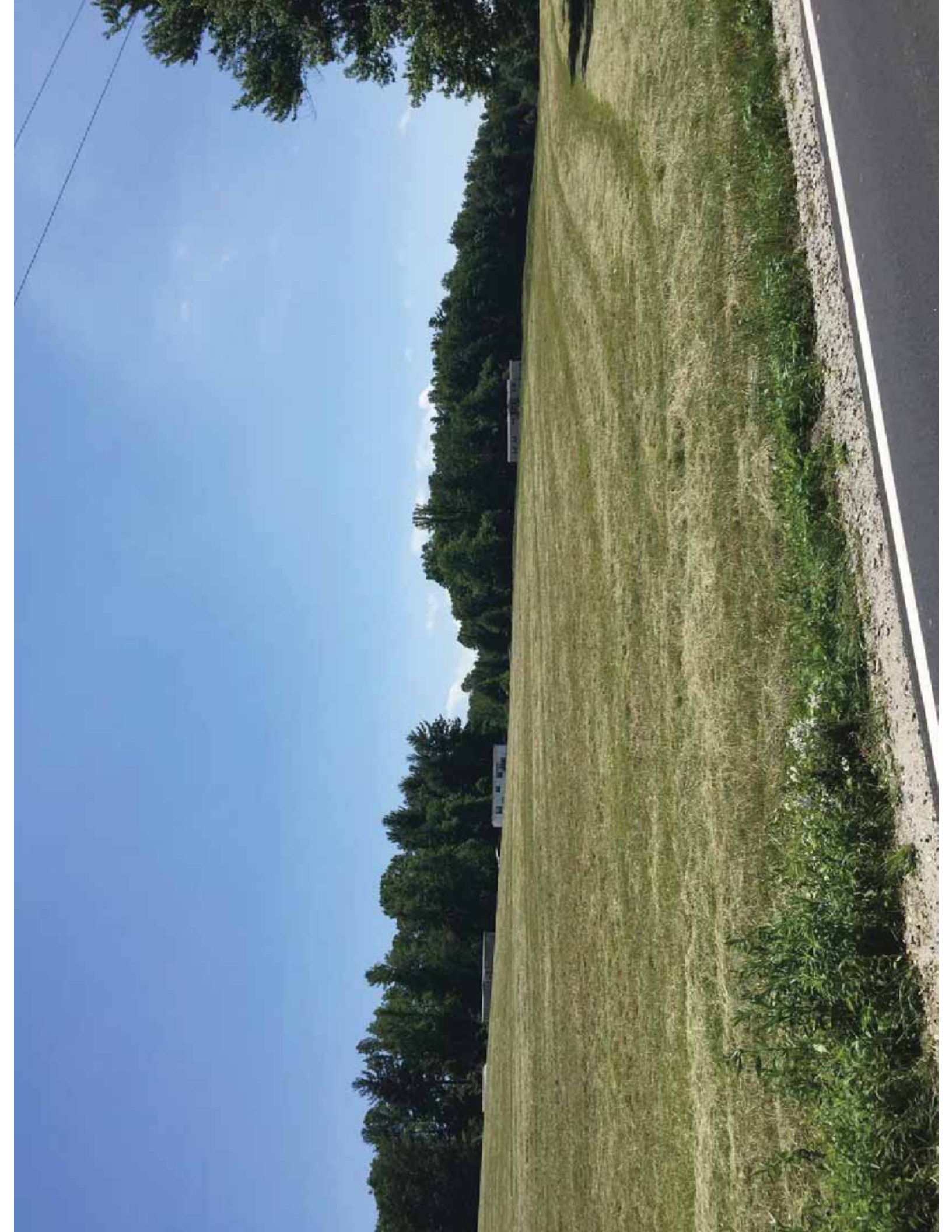
2. Population and residential densities should be generally lower than the more urban population densities found within the USA and should be generally in keeping with topography, septic limitations, and school and transportation capacities. Land development ordinances in the RTA should strive for a *general, average* density of 5 or fewer acres per residential dwelling unit. Actual densities as defined by zoning requirements should vary across the RTA according to constraints and community characteristics. As infrastructure is expanded and becomes available, the R2 and the R2R zoning district (if both water and sewer services are present) should have an average density no more than 2 units per acre.

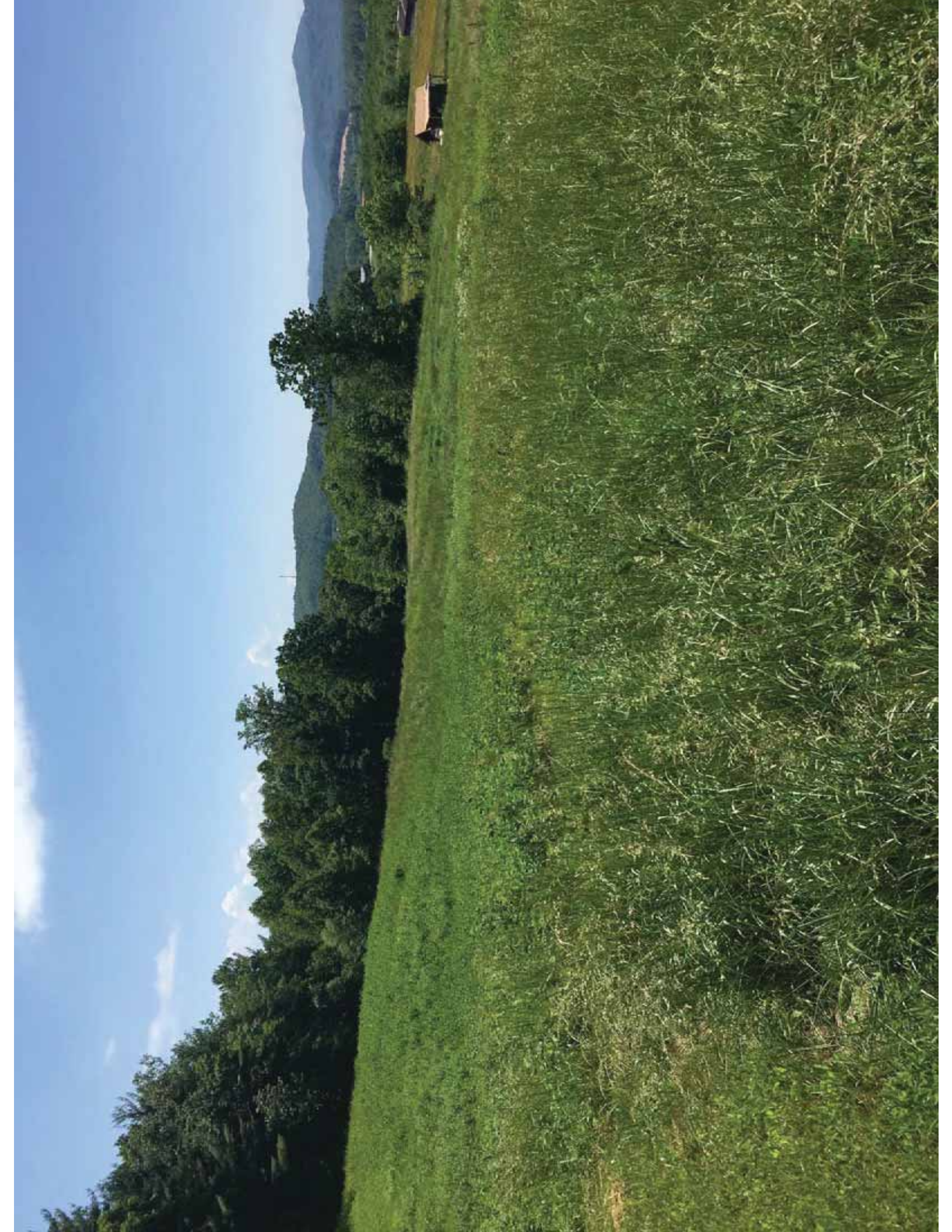
6. **Staff Recommendations**

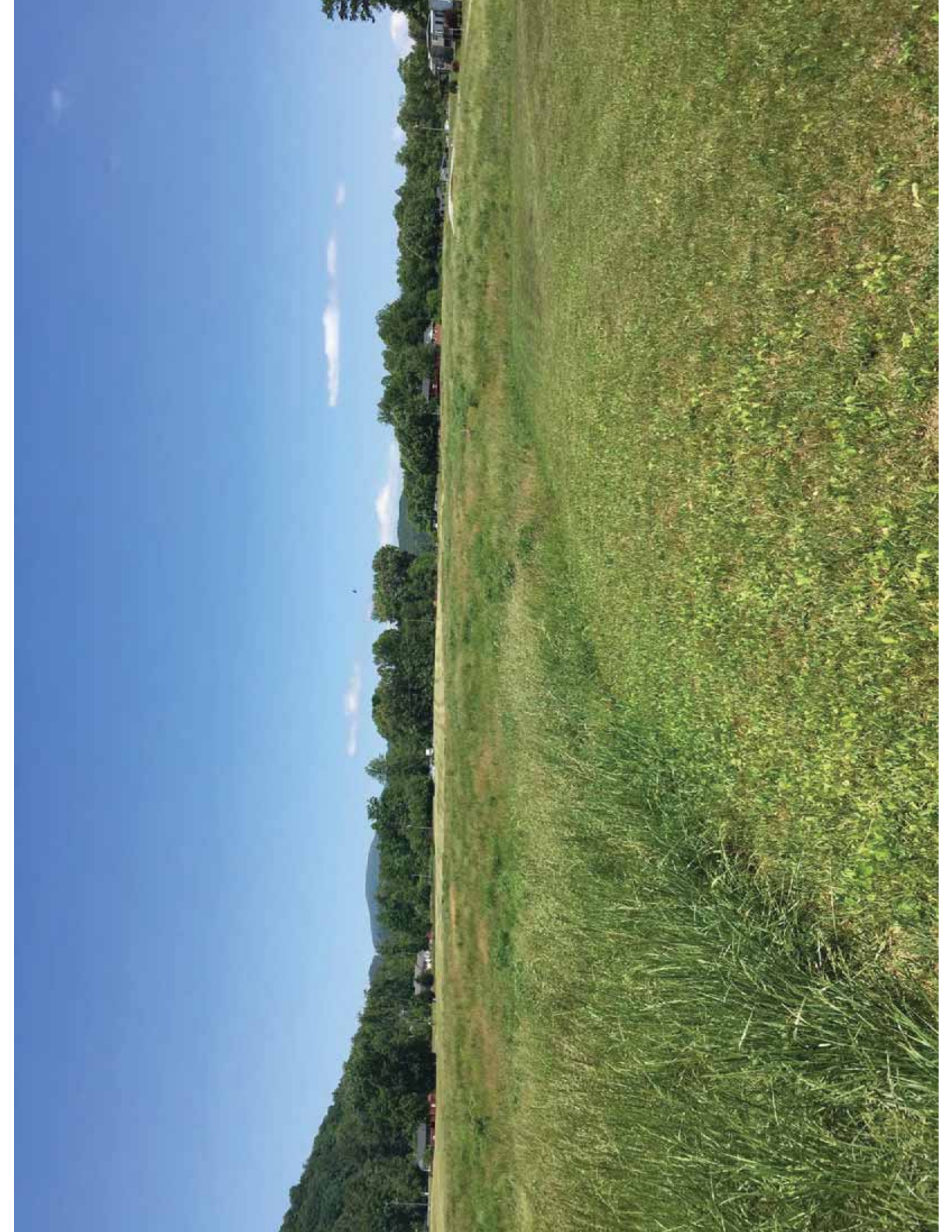
Staff's position at this time, under the guidelines of current plans, policies and studies, is to approve the major site plan because it is consistent with the current surrounding land uses and future land use recommendations.

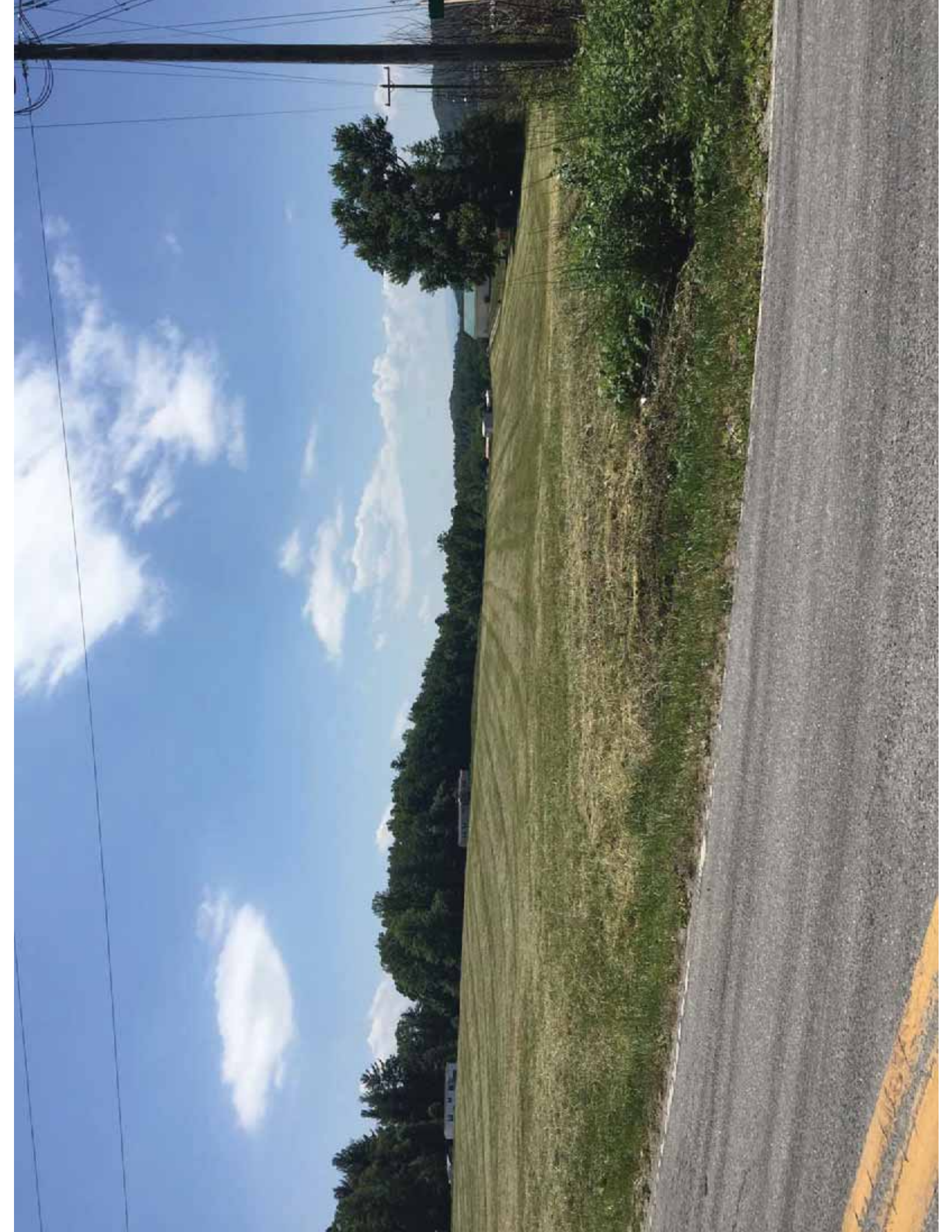
7. **Photographs**













SURVEYOR CERTIFICATES:

TO INNOVATIVE SOLAR SYSTEMS, LLC:
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARDS DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY THE NORTH CAROLINA REGISTERED PROFESSIONAL SURVEYORS THEREOF; THAT THE FIELD WORK WAS COMPLETED ON FEBRUARY 28, 2015.

WITNESS MY HAND AND SEAL THIS 26TH DAY OF FEBRUARY, A.D. 2015.

Thyone D. Cantrell
THYONE D. CANTRELL, PLS-4150

DATE: 2/26/14



VICINITY MAP - NOT TO SCALE

- LEGEND**
- PROPERTY LINE SURVEYED
 - PROPERTY LINE NOT SURVEYED
 - == RIGHT-OF-WAY LINE
 - EASEMENT LINE
 - OVERHEAD POWER LINE
 - FOUND PROPERTY CORNER
 - CALCULATED POINT
 - ⊙ UTILITY POLE
 - TELEPHONE PEDESTAL

JIMMY NIX AND MARK W. NIX
PARCEL # 9932437
DEED BOOK 1417 PAGE 332

J. HAROLD PACE AND WIFE NEEDA W. PACE
PARCEL # 9970719
DEED BOOK 1103 PAGE 390

KENNETH F. BURGESS AND WIFE SHEILA BURGESS
PARCEL # 9960762
DEED BOOK 1339 PAGE 128

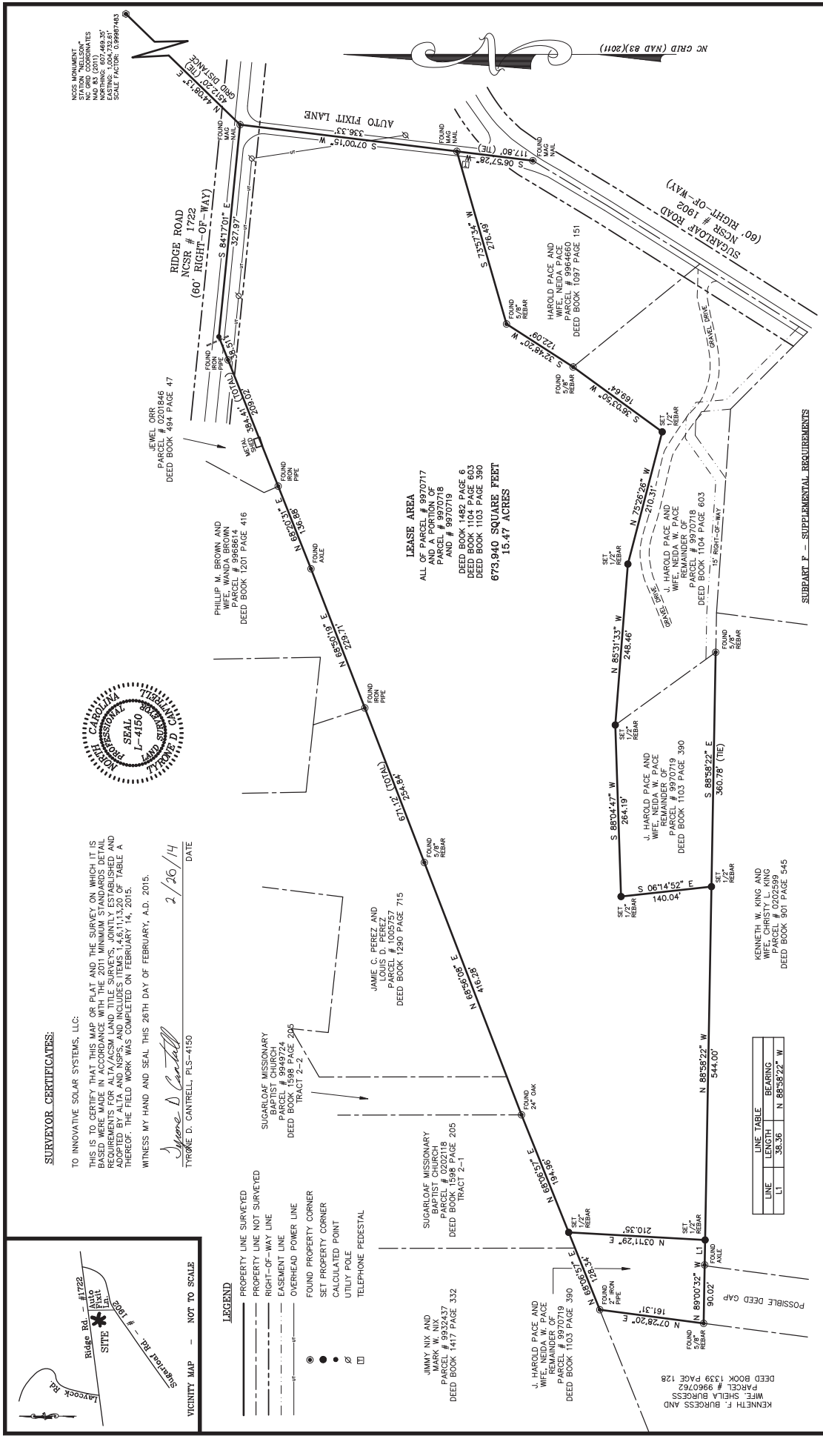
KENNETH W. KING AND WIFE CHRISTY L. KING
PARCEL # 0202599
DEED BOOK 901 PAGE 545

J. HAROLD PACE AND WIFE NEEDA W. PACE
PARCEL # 9970719
DEED BOOK 1103 PAGE 390

J. HAROLD PACE AND WIFE NEEDA W. PACE
PARCEL # 9970718
DEED BOOK 1104 PAGE 603

J. HAROLD PACE AND WIFE NEEDA W. PACE
PARCEL # 9970718
DEED BOOK 1104 PAGE 603

J. HAROLD PACE AND WIFE NEEDA W. PACE
PARCEL # 9970719
DEED BOOK 1103 PAGE 390



LEASE AREA
ALL OF PARCEL # 9970717 AND A PORTION OF PARCELS # 9970718 AND # 9970719
DEED BOOK 1482 PAGE 6
DEED BOOK 1104 PAGE 603
DEED BOOK 1103 PAGE 390
673,940 SQUARE FEET
15.47 ACRES

LINE	LENGTH	BEARING
L1	38.36	N 88°58'22" W



TRUE NORTH SURVEYING & MAPPING
ALTA/ACSM LAND TITLE SURVEY
A LEASE BOUNDARY SURVEY FOR:
INNOVATIVE SOLAR 16, LLC
BLUE RIDGE TOWNSHIP,
HENNDERSON COUNTY, NORTH CAROLINA

OWNER OF RECORD:
HAROLD PACE & HARRY BILLARD

OWNER OF RECORD:
INNOVATIVE SOLAR SYSTEMS, LLC

SCALE: 1" = 100'

DRAWN BY: T. CANTRELL
ISSUE DATE: FEBRUARY 28, 2015
JOB #: 1501-016
DRAWING FILE: IS16.dwg

REVISIONS:
450 WEBBER LANE
COLLETSVILLE, NC 28722
PHONE: 828-371-1000
FIRM LICENSE # P-0963

GENERAL NOTES:

- ALL DISTANCES ARE HORIZONTAL MEASUREMENTS UNLESS OTHERWISE NOTED.
- ALL AREAS ARE CALCULATED BY THE COORDINATE COMPUTATION METHOD.
- ALL PROPERTY CORNERS ARE MONUMENTED AS SHOWN HEREON.
- BASIS OF BEARING IS NC GRID (NAD 83)(2011) FROM GPS OBSERVATION.
- THE SUBJECT LEASE AREA DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS PER FEMIA FLOOD INSURANCE RATE MAP.
- AS PER THE LAND DEVELOPMENT CODE OF HENDERSON COUNTY DISTRICT 2 RURAL (R2R).
- AS PER THE LAND DEVELOPMENT CODE OF HENDERSON COUNTY ARTICLE II - SUBPART A - THE SUBJECT PROPERTY IS ZONED RESIDENTIAL DISTRICT 2 RURAL (R2R).
- AS PER THE LAND DEVELOPMENT CODE OF HENDERSON COUNTY ARTICLE II - SUBPART A - THE SUBJECT PROPERTY IS ZONED RESIDENTIAL DISTRICT 2 RURAL (R2R).
- ADDITIONAL REQUIREMENTS ARE REQUIRED AS FOUND IN ARTICLE II SUBPART F - SUPPLEMENTAL REQUIREMENTS TO THE TABLE OF PERMITTED AND SPECIAL USES.

SUPPLEMENTAL REQUIREMENTS

- SITE PLAN, MAJOR SITE PLAN REQUIRED IN ACCORDANCE WITH 842-299 (MAJOR SITE PLAN REVIEW). THE SITE PLAN SHALL INCLUDE GROUND LEVEL PROFILE DRAWINGS OF THE TYPICAL STRUCTURES PROPOSED AND THE DESIGNED WIND AND GROUND SNOW LOADS.
- DUST REDUCTION UNPAVED ROADS, TRAVELWAYS AND/OR PARKING AREAS SHALL BE TREATED TO PREVENT DUST FROM ADVERSE AFFECTS TO ADJACENT PROPERTIES.
- PERIMETER SEPARATION WALLS SHALL BE LOCATED WITHIN THE PERMETER SETBACK. FENCES MAY BE PLACED WITHIN THE PERMETER SETBACK.
- HEIGHT, SYSTEMS, EQUIPMENT AND STRUCTURES SHALL NOT EXCEED TWENTY-FIVE (25) FEET IN HEIGHT WHEN GROUND MOUNTED. ROOF MOUNTED SYSTEMS SHALL NOT EXCEED THE SPECIFIC SECTOR CLASS ONE (S) THE CLASS (S) OR FOUR (4) SHALL BE PROVIDED ALONG SIDES OF THE FIGHT WHICH ARE ADJACENT TO A RESIDENTIAL USE AS RESTRICTED IN SECTION I OF 200A-50, TABLE OF PERMITTED AND SPECIAL USES ON A SEPARATE PARCEL, CONSISTENT WITH 200A-102 (SCREEN CLASSIFICATION). WIND SCREENING IS REQUIRED FOR ALL UTILITIES AND STRUCTURES. SCREENING FACILITY IS NOT PERMITTED IN THE ZONING DISTRICT ADJACENT TO THE SITE.
- SCREENING BYWAYS: SOLAR ENERGY GENERATION FACILITIES SHALL NOT BE PERMITTED ON SITES VISIBLE FROM SCREENING BYWAYS AS DESIGNATED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND HENDERSON COUNTY.
- SECURITY: SOLAR ENERGY GENERATION FACILITIES SHALL BE COMPLETELY ENCLOSED WITHIN A WOODEN FENCE, OR (B) A MASONRY WALL OR (C) A WOODEN FENCE THAT CONTAINS SPACING NO GREATER THAN SIX (6) INCHES. SUCH FENCES SHALL BE AT LEAST SIX (6) FEET IN HEIGHT.
- POWER TRANSMISSION UTILITY: THE EVENT PRECEDING THE EVENT PRECEDING TO THE POWER TRANSMISSION UTILITY TO ANY BUILDING, STRUCTURE OR UTILITY CONNECTION SHALL BE LOCATED UNDERGROUND.
- ELECTRICAL DISCONNECT SWITCH: THE ELECTRICAL DISCONNECT SWITCH SHALL BE CLEARLY MARKED AND UNRESTRICTED. SWITCHES ARE PERMITTED TO BE SECURED WITHIN A FENCED AREA OR BUILDING.
- WIND AND SNOW LOADS: ALL EQUIPMENT AND STRUCTURES SHALL COMPLY WITH THE NC STATE BUILDING CODE REQUIREMENTS FOR SURVIVAL WIND SPEEDS AND GROUND SNOW LOADS. WIND AND SNOW LOADS SHALL BE DETERMINED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND HENDERSON COUNTY. THE DESIGN WIND SPEED SHALL MEET THOSE SAME WIND AND SNOW LOAD REQUIREMENTS. NOTE THAT SUCH REQUIREMENTS VARY BASED ON THE ELEVATION AND LOCATION OF THE SITE. THE ZONING ADMINISTRATOR FOR HENDERSON COUNTY SHALL BE CONTACTED FOR FURTHER INFORMATION. THE DESIGN WIND SPEED SHALL MEET THOSE SAME WIND AND SNOW LOAD REQUIREMENTS. NOTE THAT SUCH REQUIREMENTS VARY BASED ON THE ELEVATION AND LOCATION OF THE SITE. THE ZONING ADMINISTRATOR FOR HENDERSON COUNTY SHALL BE CONTACTED FOR FURTHER INFORMATION.
- MINIMUM WIND SURVIVAL SPEED OF 90 M.P.H. & B) STRUCTURES AND BUILDINGS SHALL MEET A MINIMUM SNOW LOAD OF 15 LBS. PER SQUARE FOOT.
- PRINCIPAL STRUCTURE: A PRINCIPAL STRUCTURE, OTHER THAN THE SOLAR COLLECTORS, IS PERMITTED BUT NOT REQUIRED.
- SPECIAL FLOOD HAZARD AREA: NO STRUCTURES, EQUIPMENT, STORAGE OR BUILDINGS SHALL BE LOCATED WITHIN THE SPECIAL FLOOD HAZARD AREA.
- LIGHTING: LIGHTING MITIGATION IS REQUIRED.



REV	DESCRIPTION	ISSN	CHK	DATE

SCALE VERIFICATION
THIS BASIS 1"=60' LENGTH
ON ORIGINAL DRAWING
IF IT'S NOT 1"=60' ON THIS
SHEET ADJUST YOUR
SCALES ACCORDINGLY

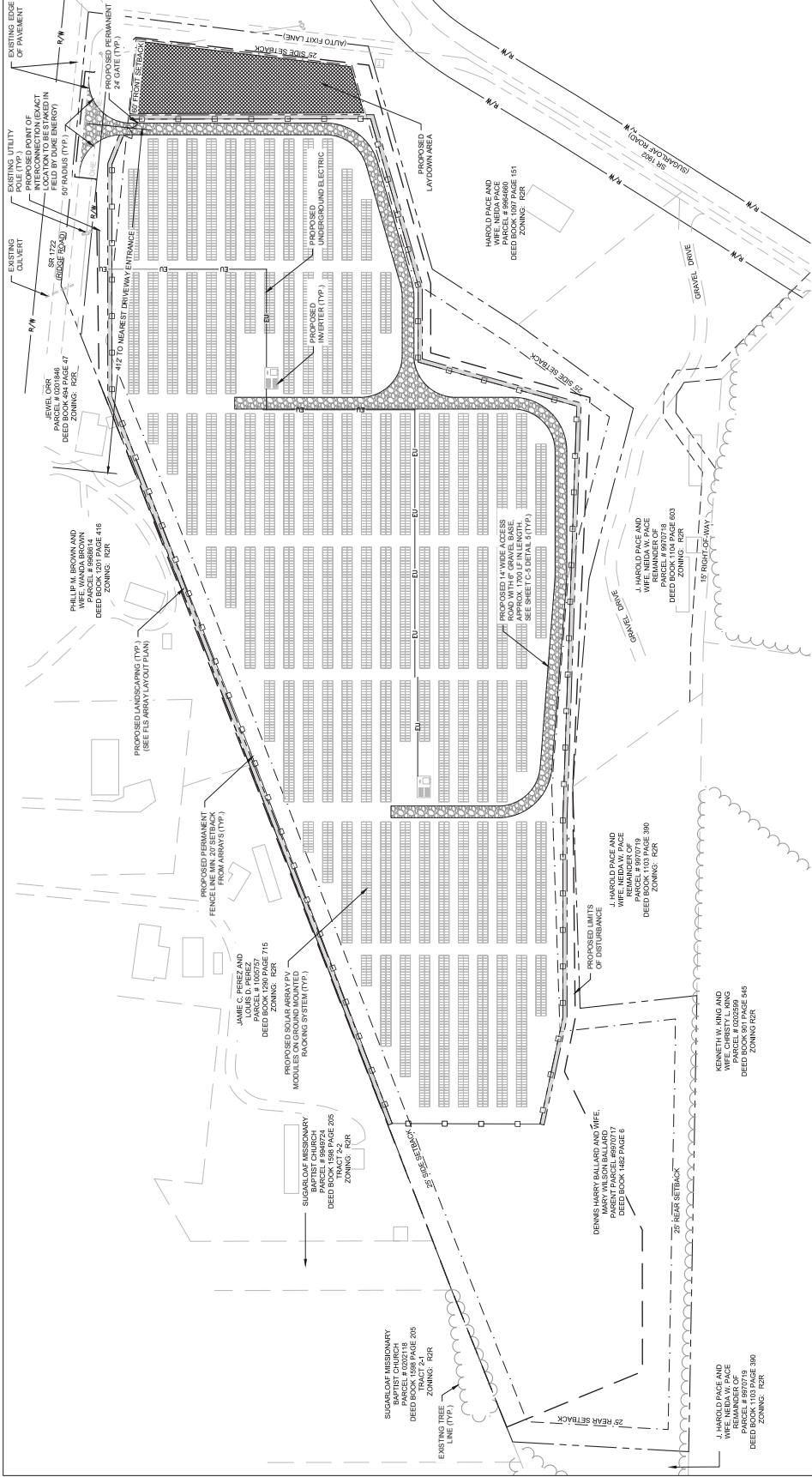
0 30 60
SCALE 1"=60' FEET
ORIGINAL DRAWING SIZE IS 24" x 36"

OVERALL SITE PLAN
INNOVATIVE 16 SOLAR FARM
RIDGE ROAD
HEIDERSOVILLE, NC 28792

FLS ENERGY
130 ROBERTS STREET
MORRISVILLE, NC 27560
828-233-8133

CONSTRUCTION

PROJECT NO.	20100304
ISSUE DATE	05-12-2015
ISSUE BY	JAC
CHECKED BY	JAC
DESIGNED BY	JAC
DRAWN BY	JAC
CHECKED BY	JAC
APPROVED BY	JAC



- NOTES**
- SURVEY PROVIDED BY TYLE NORTH SURVEYING ALMAPPING, DATED 02-20-2015.
 - CONTOURS PROVIDED BY CONNECT NCGOVT. CONNECT.NCGOVT.GOV
 - PARENT PARCEL INFORMATION:
PROPERTY OWNER: DENNIS HARRY BALLARD
TAX PARCEL ID: 8970716
DEED BOOK: 1104 PAGE 603
TAX PARCEL ID: 8970718
DEED BOOK: 1103 PAGE 390
TAX PARCEL ID: 8970719
 - NO ONSITE WETLANDS OR STREAMS WILL BE IMPACTED.
 - PROPERTY DOES NOT LIE IN A FEMA SPECIAL FLOOD HAZARD AREA. FLOOD INSURANCE DATED OCTOBER 02, 2008.
 - ALL ACCESS ROAD RADI TO BE 0'07"

- LEGEND**
- EXISTING MAJOR CONTOUR (10')
 - EXISTING MINOR CONTOUR (2')
 - LEASE BOUNDARY
 - PROPERTY SETBACK
 - EXISTING PARENT PROPERTY BOUNDARY
 - EXISTING ADJACENT PROPERTY BOUNDARY
 - EXISTING EASEMENT
 - EXISTING EDGE OF PAVEMENT
 - EXISTING ROAD
 - EXISTING RIGHT OF WAY
 - EXISTING BUILDING
 - EXISTING TREE LINE
 - EXISTING OVERHEAD POWER LINE
 - EXISTING UTILITY POLE
 - EXISTING TELEPHONE FENESTRAL
 - EXISTING GULCH
 - LIMITS OF DISTURBANCE
 - PROPOSED UNDERGROUND ELECTRICAL LINE
 - PROPOSED FENCE LINE
 - PROPOSED ACCESS ROAD
 - PROPOSED LANDSCAPING (SEE FLS LAYOUT PLAN)
 - PROPOSED TEMPORARY LAYDOWN AREA

SUMMARY INFORMATION

DEVELOPMENT NAME: Innovative 16 Solar Farm
 SITE REF. ADDRESS: Ridge Rd
 TAX PARCELS: 8970716, 8970718, and 8970719
 LEASE ACRES: 15.47 Acres
 TOTAL PARCEL ACREAGE: 18.5 Acres
 CURRENT ZONING: R2R (Residential District 2 Rural)
 MINIMUM SETBACKS:
 FRONT: 00'
 REAR: 25'

EXISTING USE: Misc. Vacant Land
 PROPOSED USE: Solar Energy Facility
 PROPOSED IMPERVIOUS AREA: 0.00 Acres
 IMPERVIOUS AREA PERCENTAGE: 3.25%

CONTRACTOR:
 KLEINFELDER, INC.
 130 ROBERTS STREET
 MORRISVILLE, NC 27560
 828-350-3993
 919-755-5011

ENGINEER:
 KLEINFELDER, INC.
 3100 CANTLAW CENTER BLVD.,
 SUITE 200,
 MORRISVILLE, NC 27560
 919-755-5011



REV	DESCRIPTION	ISSN	CHK	DATE

SCALE VERIFICATION
THIS BASIS 1"=10' LENGTH
ON ORIGINAL DRAWING
IF IT'S NOT 1"=10' ON THIS
SHEET ADJUST YOUR
SCALES ACCORDINGLY

SCALE: 1"=30' TYP.

EROSION CONTROL

INNOVATIVE 16 SOLAR FARM
RIDGE ROAD
HEIDERSOVILLE, NC 28792

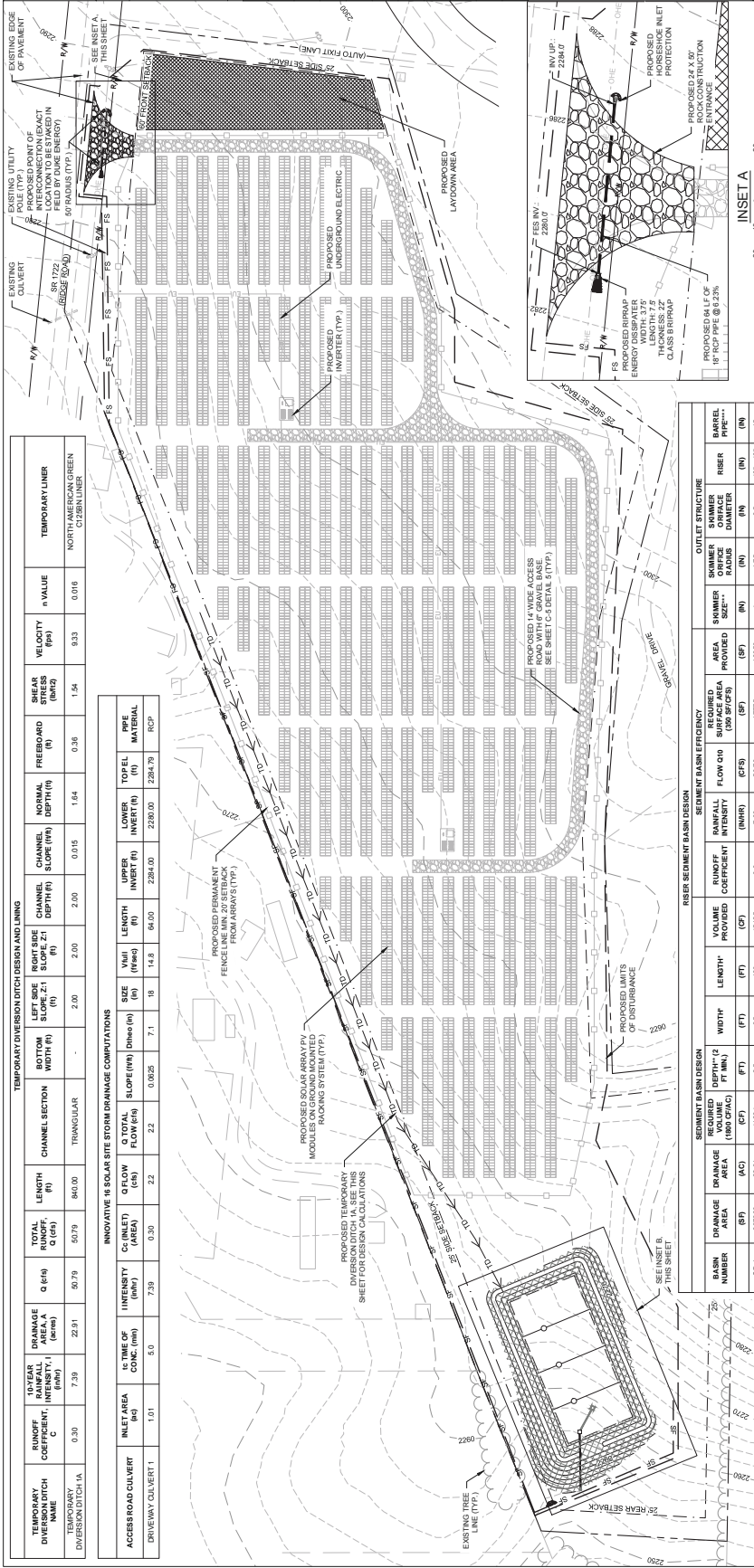
FLS ENERGY
130 ROBERTS STREET
HEIDERSOVILLE, NC 28791
828-233-8133

CONSTRUCTION

PROJECT NO: 20100324
ISSUE DATE: 05-16-2015
ISSUE REVISION: GUB
DESIGNED BY: GUB
DRAWN BY: MBI
CHECKED BY: JAC
APPROVED BY: JAC

C-4

4 of 7



TEMPORARY DIVERSION DITCH DESIGN AND Lining

TEMPORARY DIVERSION DITCH NAME	TEMPORARY LINER	n VALUE	VELOCITY (FPS)	WEAR STRESS (BM/2)	FREBOARD (ft)	NORMAL DEPTH (ft)	CHANNEL SLOPE (S/F)	CHANNEL SLOPE (S/F)	RIGHT SIDE SLOPE (S/F)	LEFT SIDE SLOPE (S/F)	BOTTOM WIDTH (ft)	LENGTH (ft)	SIZE (ft)	NO. OF JOINTS	LOWEST JOINT (ft)	TOP ELEVATION (ft)	PIPE MATERIAL	
TEMPORARY DIVERSION DITCH 1A	NORTH-AMERICAN GREEN CY28N LINER	0.016	9.33	1.54	0.38	1.64	0.015	2.00	2.00	2.00	2.00	2280.00	2284.00	64.00	1.8	2284.00	2284.79	PCP

INNOVATIVE 16 SOLAR SITE STORM DRAINAGE COMPUTATIONS

INLET AREA (SQ FT)	INLET COEFFICIENT	Q (CFS)	Q (MGD)	CHANNEL SECTION	LENGTH (ft)	CHANNEL SLOPE (S/F)	SIZE (ft)	NO. OF JOINTS	LOWEST JOINT (ft)	TOP ELEVATION (ft)	PIPE MATERIAL
1.91	0.9	7.39	0.33	TRIANGULAR	840.00	0.025	7.1	10	1.8	2284.00	PCP

SEDIMENT BASIN DESIGN

BASIN NUMBER	DRAINAGE AREA (AC)	REQUIRED VOLUME (CU YD)	PROVIDED VOLUME (CU YD)	DEPTH (ft)	WIDTH (ft)	LENGTH (ft)	VOLUME PROVIDED (CU YD)	SEDIMENTATION EFFICIENCY (%)	FLOW RATE (MGD)	INLET COEFFICIENT	REQUIRED SURFACE AREA (SQ FT)	BARBER SIZE (IN)	BARBER PITCH (IN)				
SB-1	90769	23.31	4124	2.3	95	160	46125	0.3	7.39	0.9	5073	17775	4	1.75	3.5	46" x 48"	15

OUTLET STRUCTURE

SHAMMER ORIFICE DIAMETER (IN)	SHAMMER ORIFICE LENGTH (IN)	SHAMMER ORIFICE AREA (SQ IN)	SHAMMER ORIFICE PERIMETER (IN)
15	1.75	1.75	3.5

LEGEND

- 250 --- EXISTING MAJOR CONTOUR
- --- EXISTING MINOR CONTOUR
- --- LEASE BOUNDARY
- --- PROPERTY SETBACK
- --- EXISTING ADJACENT PROPERTY BOUNDARY
- --- EXISTING ADJACENT PROPERTY BOUNDARY
- --- EXISTING EDGE OF PAVEMENT
- --- EXISTING GRAVEL ROAD
- --- EXISTING RIGHT OF WAY
- --- EXISTING BUILDING
- --- EXISTING TREE LINE
- --- EXISTING OVERHEAD POWER LINE
- --- EXISTING CULVERT
- --- EXISTING UTILITY POLE
- --- EXISTING UNDERGROUND ELECTRICAL LIMITS OF DISTURBANCE
- --- PROPOSED UNDERGROUND ELECTRICAL LINE
- --- PROPOSED FENCE LINE
- --- PROPOSED CURB WITH FLARED END SECTION
- --- PROPOSED ENERGY DISSIPATER
- --- PROPOSED TEMPORARY DIVERSION DITCH
- --- PROPOSED MAJOR CONTOUR
- --- PROPOSED MINOR CONTOUR
- --- PROPOSED SILT FENCE
- --- PROPOSED 24" FILTER SOCK

NOTES

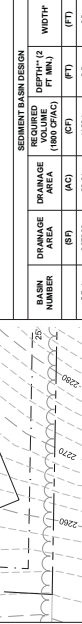
- SURVEY PROVIDED BY TRUE NORTH SURVEYING & MAPPING, DATED 02-26-2015.
- CONTOURS PROVIDED BY CONNECT NCOOT, CONNECT NCOOT.GOV
- PROPERTY OWNER: DENNIS HARRY BALARD
DEED BOOK: 180 PAGE 15
TAX PARCEL ID: 180718
PROPERTY OWNER: J. HAROLD PACE
TAX PARCEL ID: 180718
PROPERTY OWNER: J. HAROLD PACE
TAX PARCEL ID: 180719
- NO ON-SITE WETLANDS OR STREAMS WILL BE IMPACTED.
- PROPERTY DOES NOT LIE IN A F.E.M.A. SPECIAL FLOOD HAZARD AREA REF. PANEL 3710B000A, DATED OCTOBER 02, 2008.
- ALL ACCESS ROAD RADI TO BE 9'

CONSTRUCTION SEQUENCE

- INSTALL CONSTRUCTION ENTRANCE AND CULVERT WHEN COMPLETE. INSTALL TEMPORARY DIVERSION DITCH AND MAINTAIN PROPER WORKING CONDITION DURING THE PERIOD OF CONSTRUCTION.
- BEGAN CLEARING AND ROUGH GRADING OF SITE. ALL EXCAVATIONS PERFORMED SHALL BE BACKFILLED WITHIN THE SAME DAY, WITH SPOIL PLACEMENT ON UPSHORE SIDE.
- BEGAN FINISHED GRADING, FILLING, AND COMPACTION OF SITE.
- INVERTER PAD GRADING AND TRENCHING WILL HAVE TEMPORARY GROUND COVER AT THE END OF EACH WORK DAY.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISHED GRADE WITH PERMANENT VEGETATION COURSE, CONCRETE ETC. SEE SHEET C-5 DETAIL 9.
- AFTER ESTABLISHMENT OF PERMANENT VEGETATION, REMOVE SILT FENCE, FILTER SOCK, CONSTRUCTION ENTRANCE AND ANY REMAINING EROSION CONTROL MEASURES.

EROSION CONTROL NOTES

- ALL LAWS PERTAINING TO EROSION CONTROL SHALL BE CONDUCTED IN ACCORDANCE WITH LOCAL STANDARDS.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED IN PROPER WORKING CONDITION DURING THE PERIOD OF CONSTRUCTION.
- ADDITIONAL EROSION CONTROL MEASURES AND/OR MODIFICATIONS TO PROPOSED MEASURES MAY BE NECESSARY DEPENDING ON ACTUAL SITE CONDITIONS.
- THE TOTAL DISTURBED AREA IS 14 ACRES.
- SEE C-4 THROUGH C-7 FOR EROSION CONTROL MEASURE DETAILS.



3100 CANTONWAY DRIVE, SUITE 200
RICHMOND, VA 23260
WWW.KLEINFELDER.COM

SCALE VERIFICATION
THIS BASIS 1"=10' LENGTH
ON ORIGINAL DRAWING
IF IT'S NOT 1"=10' ON THIS
SHEET ADJUST YOUR
SCALES ACCORDINGLY

SCALE: 1"=30' TYP.

EROSION CONTROL

INNOVATIVE 16 SOLAR FARM
RIDGE ROAD
HEIDERSOVILLE, NC 28792

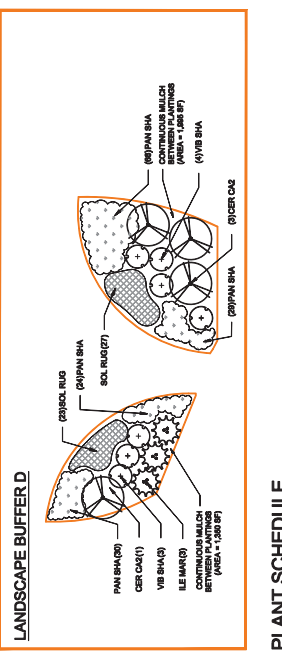
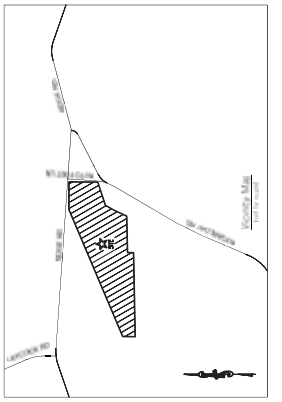
FLS ENERGY
130 ROBERTS STREET
HEIDERSOVILLE, NC 28791
828-233-8133

CONSTRUCTION

PROJECT NO: 20100324
ISSUE DATE: 05-16-2015
ISSUE REVISION: GUB
DESIGNED BY: GUB
DRAWN BY: MBI
CHECKED BY: JAC
APPROVED BY: JAC

C-4

4 of 7



PLANT SCHEDULE

SYMBOL	SYMBOL NAME	COMMON NAME	CONT.	SIZE	REMARKS
10	Black 'Candida Sentinel'	Carolina Shearwood Holly	10 gal	8' HT	
83	Mary Nell Holly	Mary Nell Holly	Container	8' HT	
88	Jupitera virginiana 'Black'	Bark Red Cedar	Container	8' HT	
87	Jupitera virginiana 'Yonkers'	Yonkers Red Cedar	Container	8' HT	
40	Magnolia grandiflora 'Little Gem'	Small Southern Magnolia	Container	4-5' HT	
15	Viburnum plicatum tomentosum 'Shawnee'	Shawnee Japanese Snowball	7 gal	4' HT	
149	Panicum virgatum 'ShawneeDew'	Burgundy Switch Grass	1 gal	39" O.A.	
20	Solidago rigida 'Thimbletop'	Whorlleaf Goldenrod	1 gal	39" O.A.	

