

REQUEST FOR COMMITTEE ACTION

HENDERSON COUNTY

TECHNICAL REVIEW COMMITTEE

MEETING DATE: March 19, 2013

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 14, LLC on Laycock Rd.



Henderson County, North Carolina Code Enforcement Services

1. **Board Request**

- 1.1. **Applicant:** Innovative Solar 14, LLC
- 1.2. **Request:** Major Site Plan Review for a Solar Energy Generation Facility
- 1.3. **PIN:** 9690-86-8047
- 1.4. **Size:** 13.51 acres +/-
- 1.5. **Location:** The subject area is located on Laycock Road and Clark Road 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 affects 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

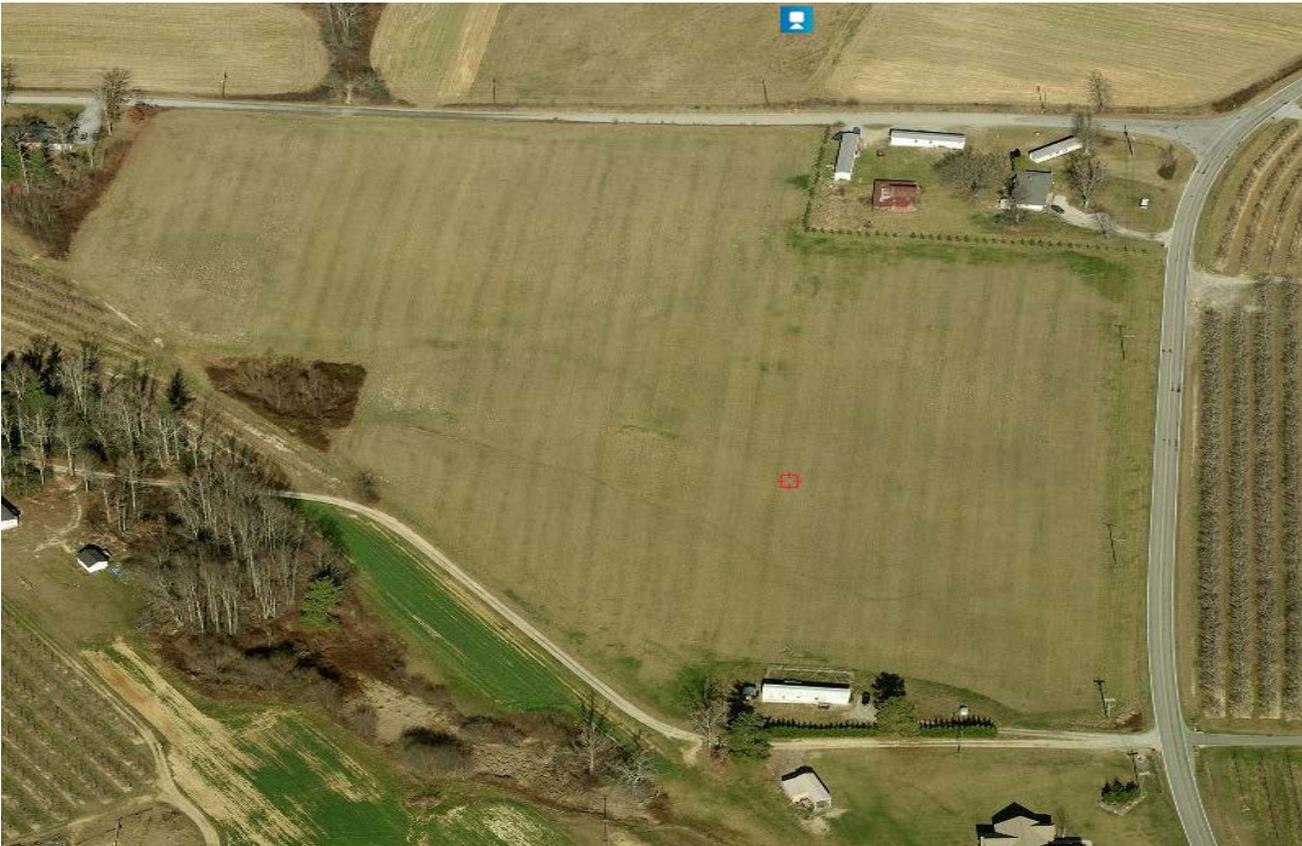
b. Structures and buildings will meet a minimum snow load of 15 lbs. per square foot.

(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.

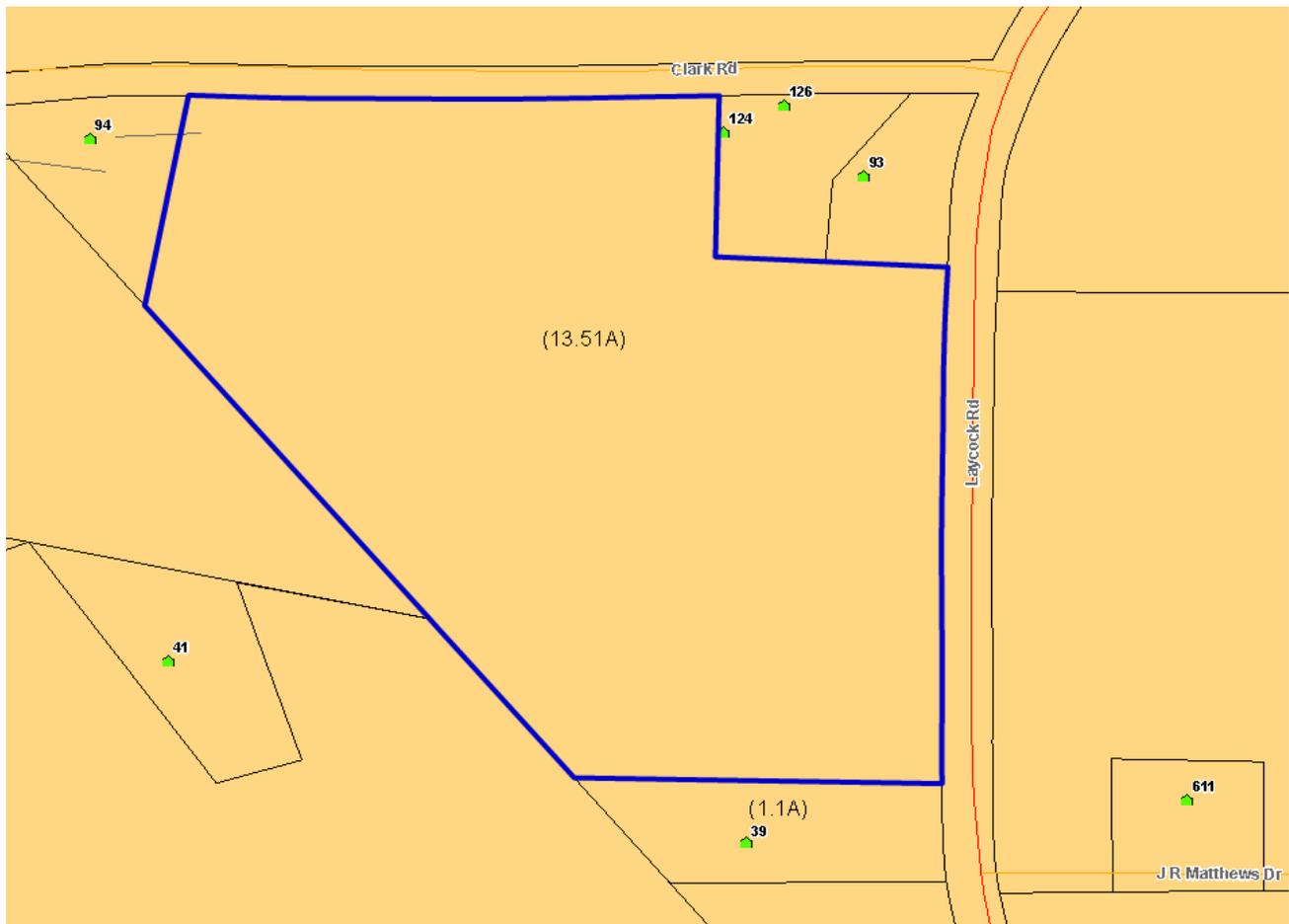
Map A: Aerial Photo/Pictometry



2. Current Conditions

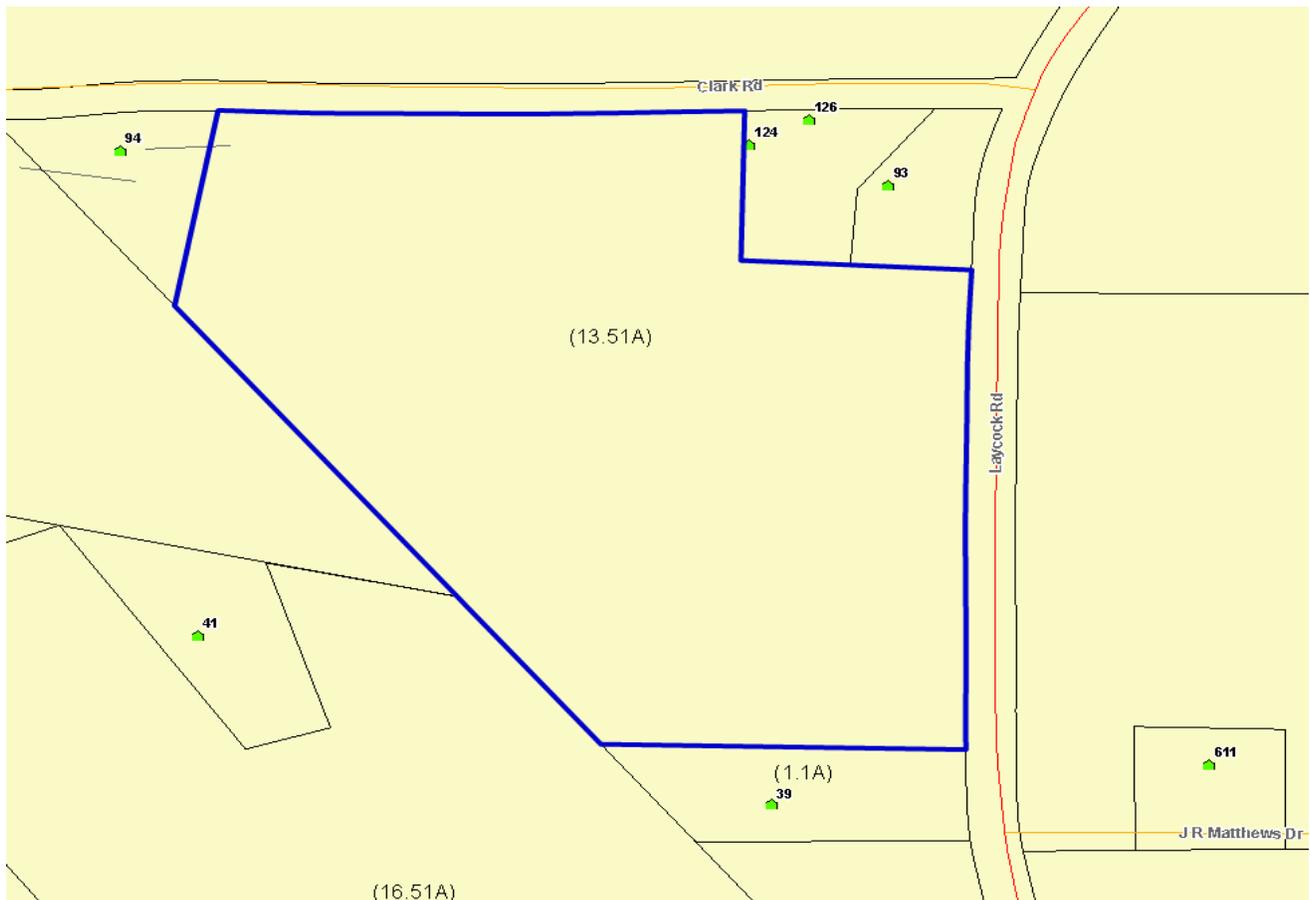
- 2.1. Current Use:** The property is currently in agricultural use.
- 2.2. Adjacent Area Uses:** The surrounding properties primarily consist of residential and agricultural uses.
- 2.3. Zoning:** The current and surrounding property to the north, south, east, and west is Residential 2 Rural (R2R).

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 R2MH 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

Looking Southeast



Looking South



Looking West



Looking Northwest



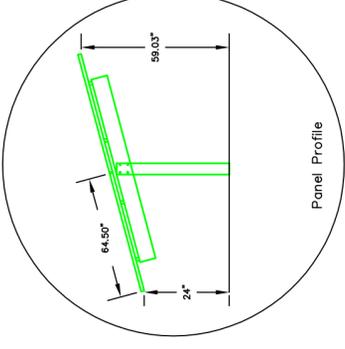
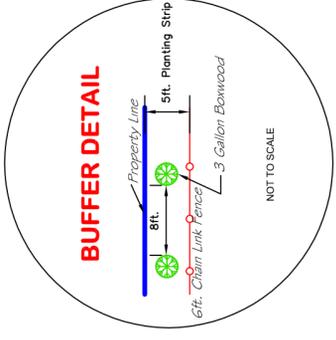
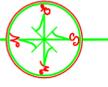
Looking North along Laycock Road



**INNOVATIVE SOLAR 14, LLC
PANEL LAYOUT**

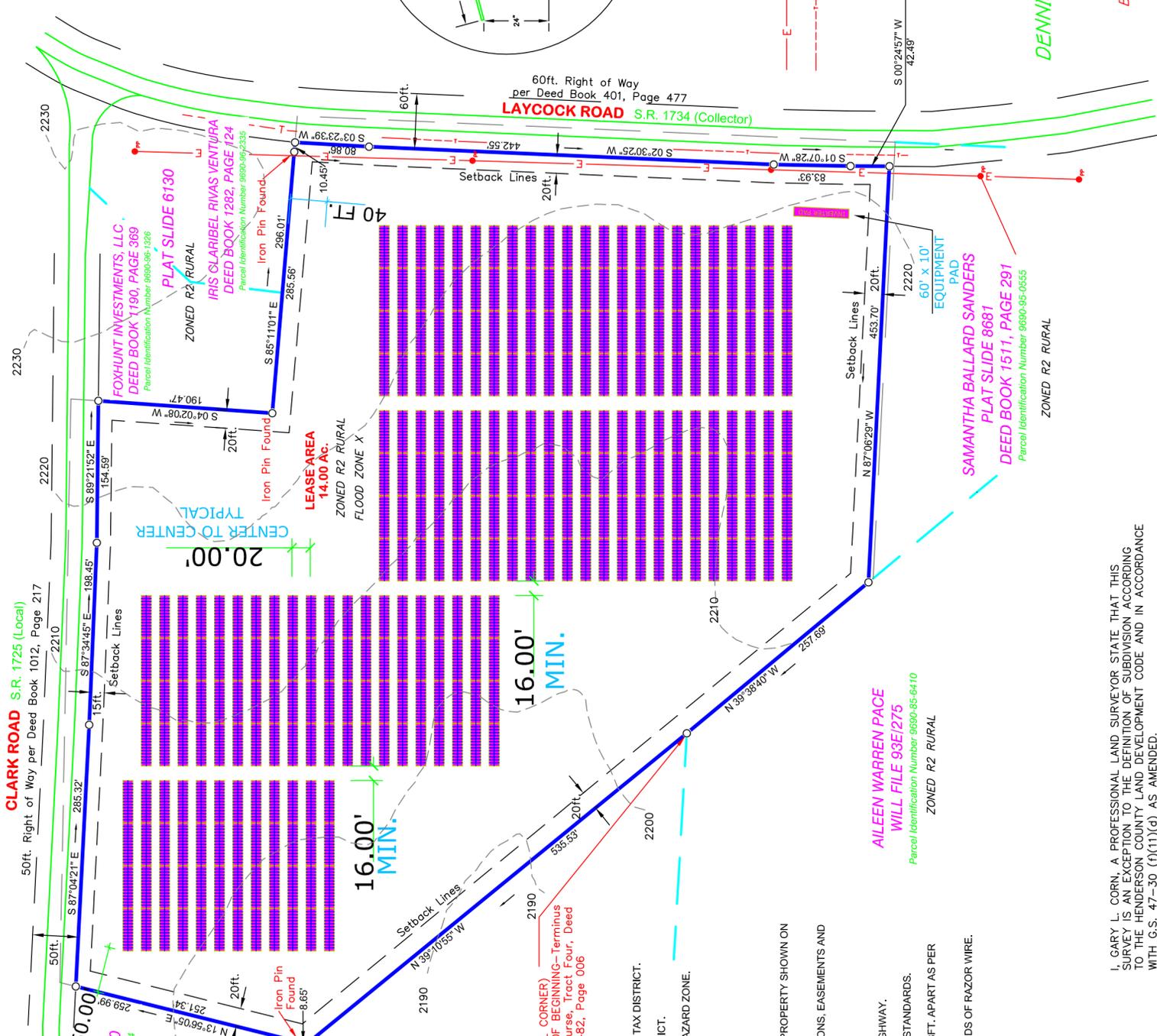
78 ROWS W/
4 RACKS / ROW
TOTAL 312 RACKS

PLAT NORTH
PLAT SLIDE 1123



LEGEND

- = Iron Pin Set
- = Unmarked Point (unless otherwise noted)
- = Power or Utility Pole
- = Overhead Utility Lines
- - - = Approximate Location Underground A.T.& T., Telephone Line



NOTES:

- * THE PROPERTY SHOWN ON THIS PLAT IS ZONED HENDERSON COUNTY RESIDENTIAL DISTRICT TWO RURAL.
- * THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN THE 03 EDNEYVILLE FIRE TAX DISTRICT.
- * THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN AN AGRICULTURAL DISTRICT.
- * THE PROPERTY SHOWN ON THIS PLAT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD ZONE.
- * THERE IS NO PARKING ON SITE.
- * THERE IS NO SEWER AND WATER LOCATED ON SITE.
- * LIGHTING MITIGATION IS REQUIRED.
- * NO NORTH CAROLINA GRID MONUMENTS ARE LOCATED WITHIN 2,000 FEET OF PROPERTY SHOWN ON THIS PLAT.
- * THE PROPERTY SHOWN ON THIS PLAT IS SUBJECT TO ANY AND ALL RESTRICTIONS, EASEMENTS AND RIGHT OF WAYS OF RECORD.
- * THE TOTAL NUMBER OF SOLAR PANELS IS 8680.
- * SOLAR FARM AREA WILL BE GRASSED AND MUD MAT WILL BE INSTALLED AT HIGHWAY.
- * BUFFERS WILL BE INSTALLED AS PER HENDERSON COUNTY MAJOR SITE PLAN STANDARDS.
- * BUFFER WILL BE A 5FT. PLANTING STRIP WITH 3 GALLON BOXWOODS PLACED 8FT. APART AS PER SCREEN CLASS 4.
- * SECURITY WILL BE PROVIDED BY A CHAIN LINK FENCE 6FT. HIGH WITH 3 STRANDS OF RAZOR WIRE.
- * CONTOURS WERE TAKEN FROM HENDERSON COUNTY GIS.

**MAJOR SITE PLAN FOR
INNOVATIVE SOLAR 14, LLC**

1095 HENDERSONVILLE ROAD
ARDEEN, N.C. 28704
(828)-215-9064



GARY L. CORN, INC.
PROFESSIONAL LAND SURVEYOR
522 FLEMING STREET
HENDERSONVILLE, N.C. 28739
PHONE: 828-696-9840



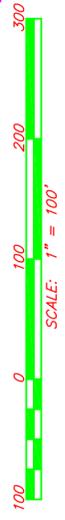
I, GARY L. CORN, A PROFESSIONAL LAND SURVEYOR STATE THAT THIS SURVEY IS AN EXCEPTION TO THE DEFINITION OF SUBDIVISION ACCORDING TO THE HENDERSON COUNTY LAND DEVELOPMENT CODE AND IN ACCORDANCE WITH G.S. 47-30 (f)(1)(c) AS AMENDED.

PROFESSIONAL LAND SURVEYOR L-2431 _____ DATE _____

**A PROPERTY LEASE SURVEY FOR
INNOVATIVE SOLAR 14, LLC
DENNIS HARRY BALLARD & wife, MARY WILSON BALLARD
(OWNERS)**

BEING A PORTION OF PLAT SLIDE 1123
AND ALSO
BEING A PORTION OF TRACT FOUR OF DEED BOOK 1482, PAGE 006
PARCEL IDENTIFICATION NUMBER 9690-86-8047

BLUE RIDGE TWP. HENDERSON COUNTY, N.C.



FEBRUARY 20, 2013