

# High Shoals Solar

Gaston County  
PCUP  
Public Hearing

April 23, 2019

The logo for Ecoplexus, Inc. features the word "ecoplexus" in a lowercase, sans-serif font. The letter "o" is replaced by a circular icon containing a stylized sun or solar panel pattern.

Ecoplexus, Inc.  
101 Second Street, Suite 1250  
San Francisco, CA 94105



# Request

## PCUP – Solar Farm

- Currently zoned R-1
- Total parcel acreage: 131.97
- Proposed acres to be used: 81.14
- 50' Setback Per Code
- 75' Setback in initial hearing
- 150' Setback in this application



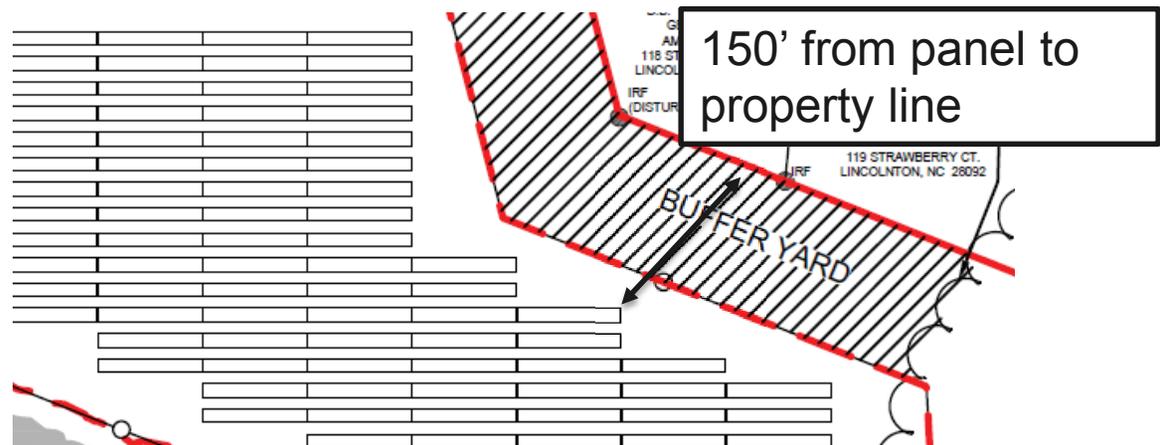
## About Ecoplexus

- Successfully developed, completed/in design construction phase over 400MWs in multiple countries
- Owns 200MWs+ of IPP assets in the US and Japan as of end of 2018
- Extensive experience with over 50 projects completed, and 3.5GW+ of projects currently in development in the USA and Internationally
- Complete range of Operations and Maintenance services, 325MWs+ under O&M globally



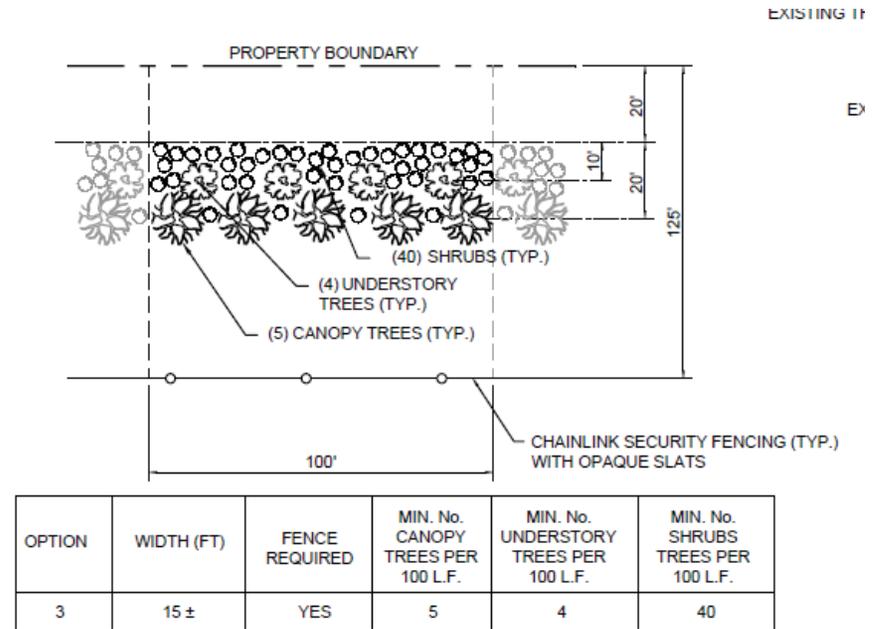
# Site Plan

- Moved setback from residential parcels to panels from 50' to 150'
- Secured access gate at property boundary at the end of Tennessee Trail
- Wetlands and Floodplains at southern boundary will be avoided with 25' additional setback to fence line
- Existing mature tree line along east and west will be maintained where there are no residences.



# Landscaping

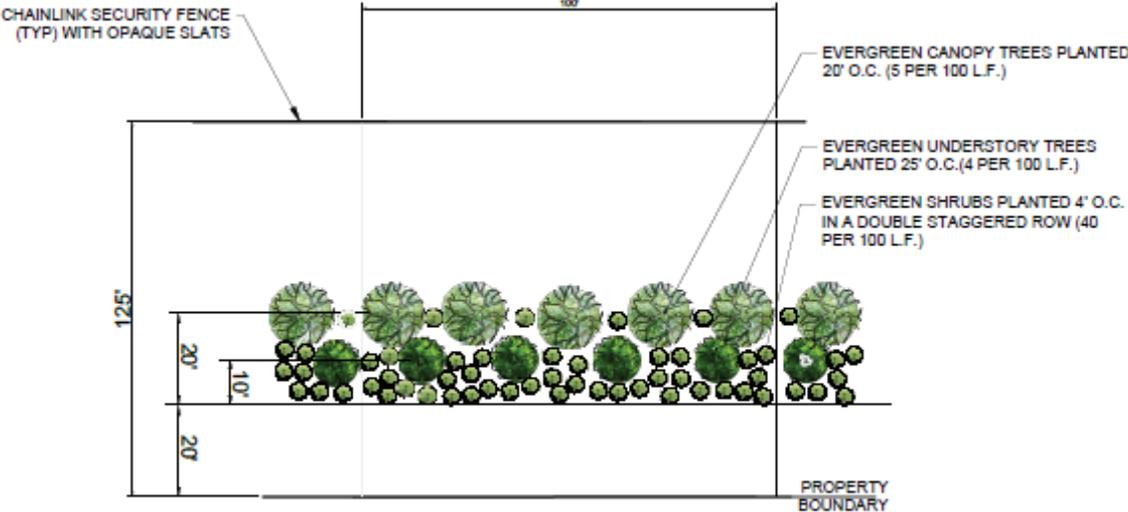
- Type D-3 landscape buffer proposed
- 8' Canopy Trees at Planting
- 100% Evergreen species to include:
  - Nelly Stevens Holly
  - Magnolia
  - American Holly
  - And others per the Gaston County Approved Tree and Shrub Species list
- Use of native grasses and pollinator mix for ground cover.



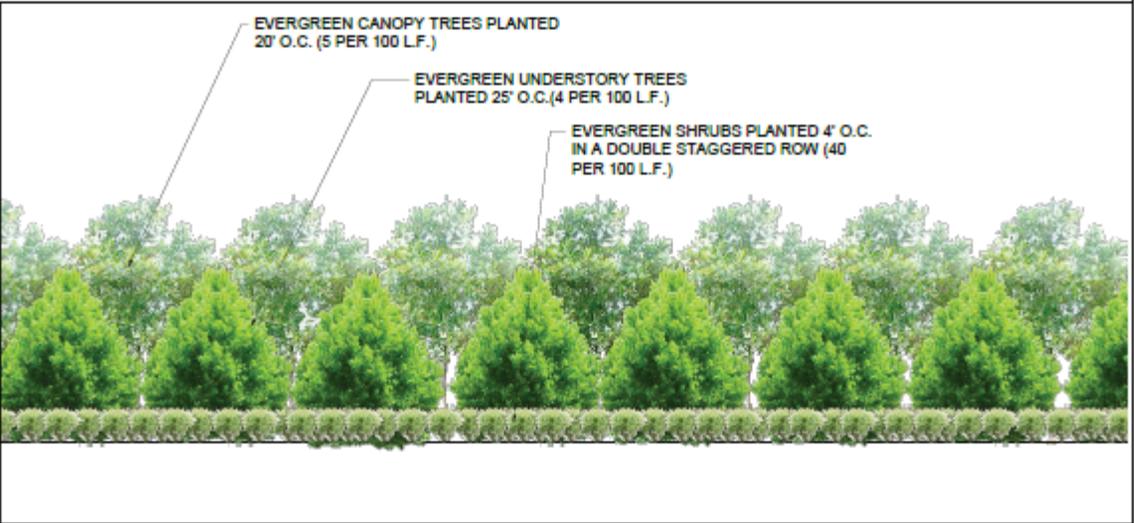
**DETAIL - 1**  
**TYPE "D" OPTION 3 - BUFFER YARD**

NOT TO SCALE  
 REF. GASTON COUNTY SECTION 11.3 BUFFER YARD  
 (ORD. No. 2008-155, 4-24-2008)

# Landscaping

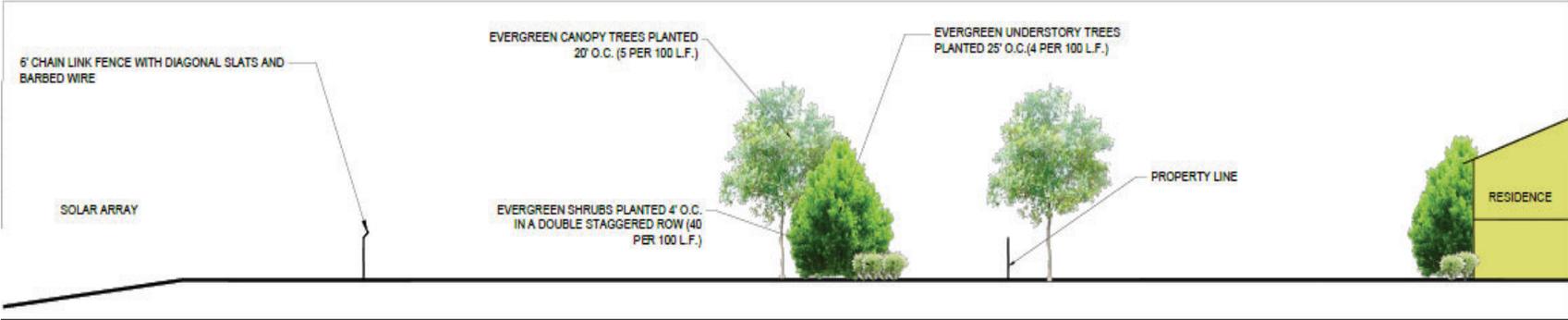


TYPE "D" OPTION 3 - BUFFER YARD  
PLAN VIEW (1"=10')

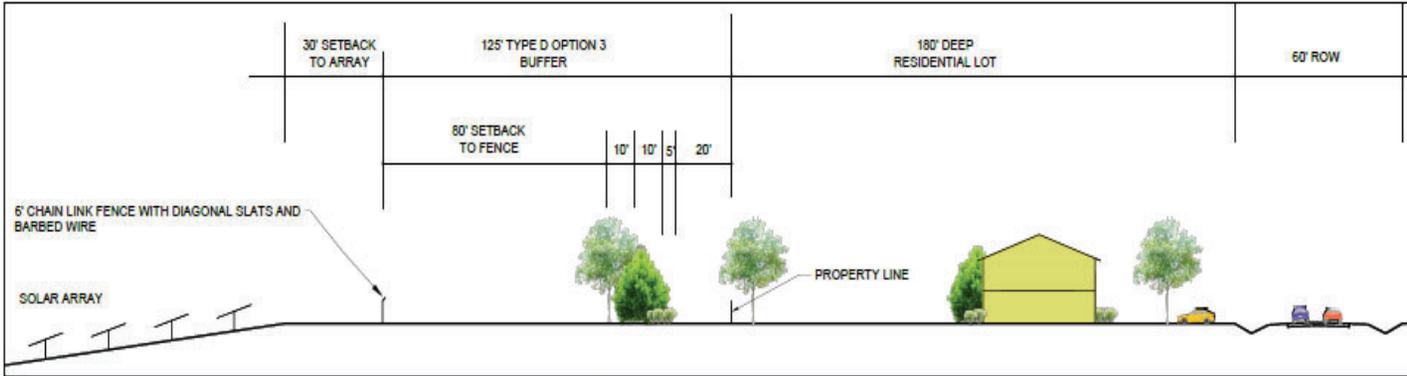


TYPE "D" OPTION 3 - BUFFER YARD  
ELEVATION (1"=10')

# Landscaping



TYPE "D" OPTION 3 - BUFFER YARD  
ENLARGED SECTION (1"=10')



TYPE "D" OPTION 3 - BUFFER YARD  
OVERALL SECTION (1"=20')

# Landscaping



Red clover is the first to bloom at our project in Elon using a pollinator friendly ground cover.

# Property Values

- Surveyed 550 solar farms over a 12 year period - over 90% adjoining uses are Ag/Res
- Identified 30 solar farms in Gaston and surrounding counties - similar mix of adjoining uses
- Identified 13 solar farms in NC with adjoining sales
- 20 residential homes next to solar farms show no impact on residential values
- 4 of those residential homes are in Gaston County
- 8 land sales next to solar farms show no impact on land value
- 3 of those land sales are in Gaston County

# Health and Safety of Solar

- Generate minimal-to-no traffic (site maintenance and routine property upkeep) once construction is complete
- Solar energy facilities produce electricity without and air, water, or ground emissions. The solar panels do not contain liquids and pose no toxicity risk.
- Site will meet all North Carolina and Gaston County Building codes.
- Completely enclosed by security fencing

# Local Public Safety

- Will secure this property and stop the nuisances occurring in this behind residences including; crime, illegal dumping, rodent issues, and late night ATV traffic
- Access codes are given to local fire, police, and County Planning in case of emergence and regular inspection
- In the Last 12 Months
  - 12 Calls specifically to this address
  - 34 other calls along addresses of 415-700 High Shoals Rd for suspicious activity, car break ins, shooting, etc.

# Benefits of Solar Energy

## Solar Energy

- Safe, clean, and abundant energy source
- Can help meet community economic development goals as well
- Provides jobs for system installers and manufacturers
- Generates electricity without the emissions and pollution associated with fossil fuels
- Tax revenue without additional burden on services.
- Duke announces adding 20% more solar that will save consumers approximately \$375 million over the next 20 years.

# Project Characteristics

- Hazardous material - no potential hazardous waste byproducts with solar farm operation
- Odor - no odor concerns
- Noise - no noise concerns
- Traffic - less traffic than a single family home
- Stigma - no known stigma
- Appearance - addressed by setbacks and landscaping



**Questions?**

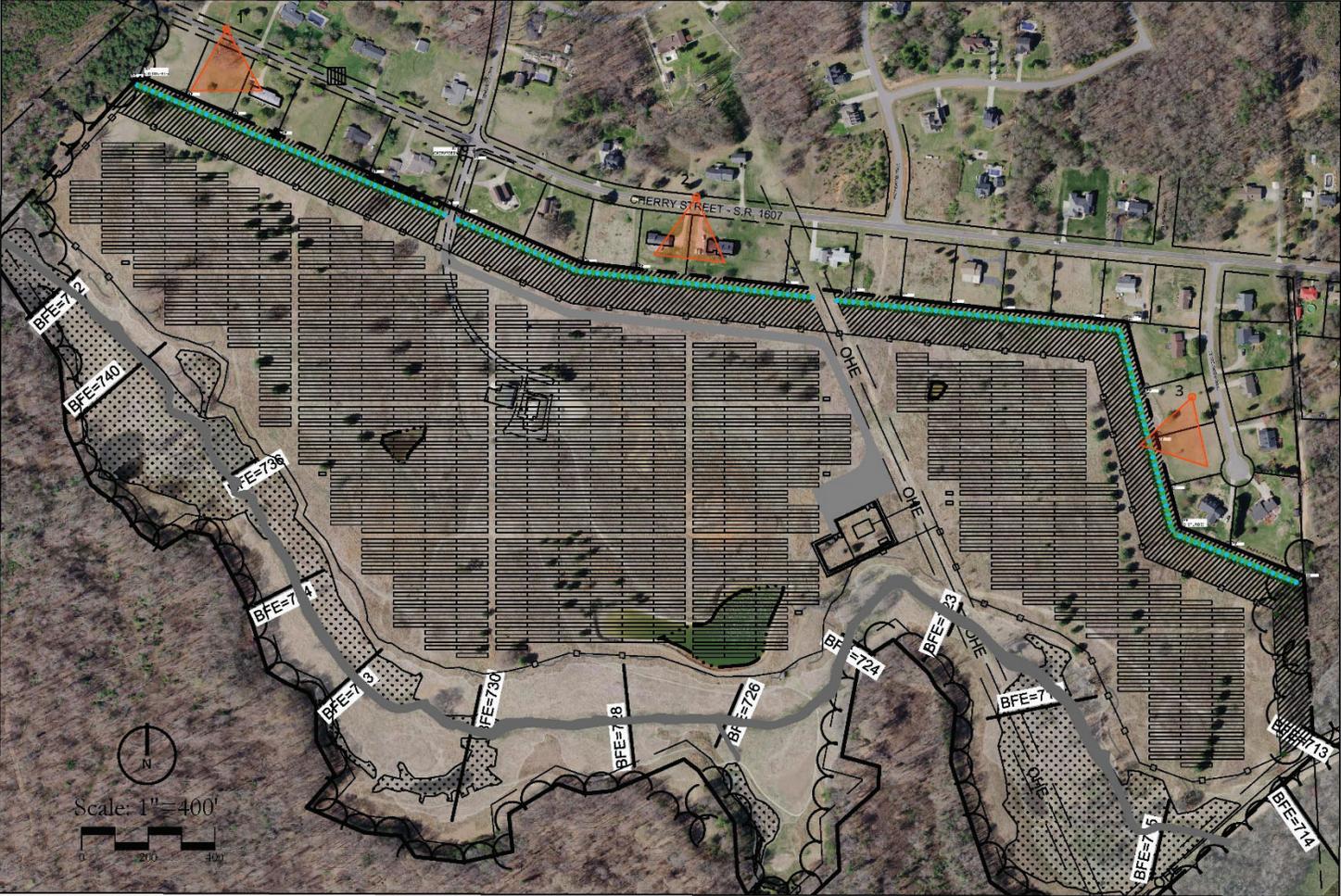
# Appendices

## Trees and Shrubs for Screening, Charlotte Area NC

<b><u>Canopy Tree Category</u></b>	<b>Mature height (feet)</b>	<b>Mature width (feet)</b>
Japanese Cedar Yoshino	30-40	15-25
Colorado Blue Spruce Fat Albert	30-40	15-20
Green Giant Thuja	35-40	15-20
<b><u>Understory Tree Category</u></b>	<b>Mature height (feet)</b>	<b>Mature width (feet)</b>
Nellie Stevens Holly	15-20	8-10
Emily Bruner Holly	15-20	8-10
Magnolia Teddy Bear	20-25	10-15
American Holly	30-40	15-25
<b><u>Shrub Category</u></b>	<b>Mature height (feet)</b>	<b>Mature width (feet)</b>
Loropetalum chinense	6-8	6-8
Chindo Viburnum	10-15	8-10
Osmanthus Fragrans	10-15	6-8
Camelia Japonica	15-20	6-10



# Landscaping



HIGH SHOALS ROAD PERSPECTIVE INDEX

# Landscaping



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PERSPECTIVE 1



April 15, 2019

ecoplexus

# Landscaping



PERSPECTIVE 2

# Landscaping



PERSPECTIVE 3