

# Moncure 115kV Sub Cambium Pole Special Use Permit

Chatham County

23-4888

AUGUST 21, 2023



BUILDING A SMARTER ENERGY FUTURE®

## Special Use Standards

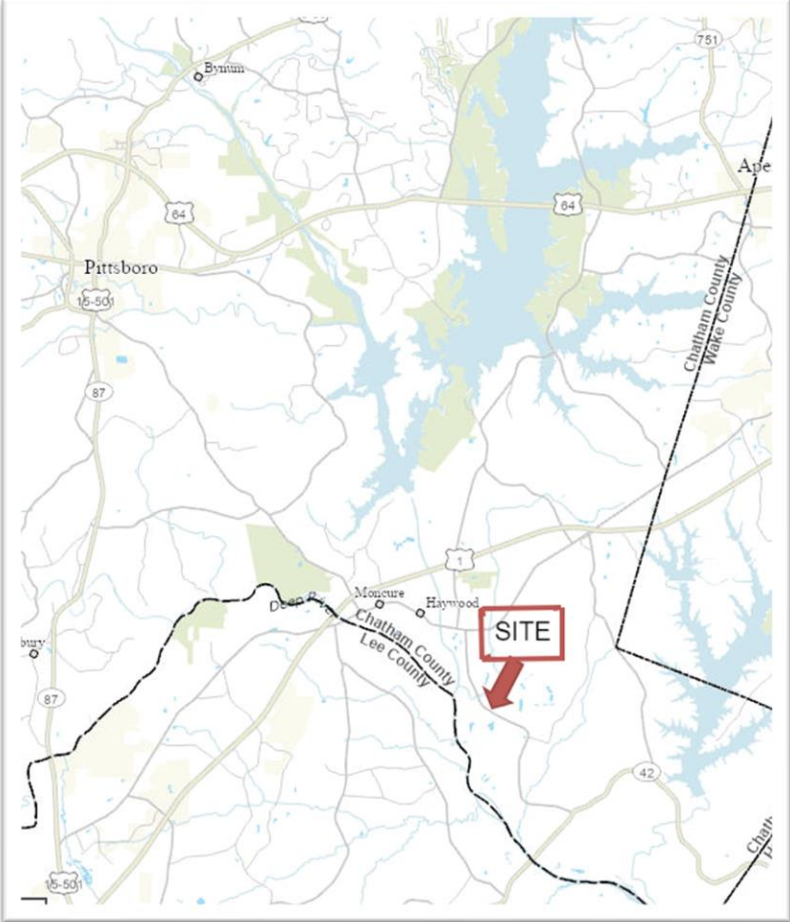
- 1) The use requested is among those listed as an eligible special use in the district in which the subject property is located or is to be located.
- 2) The requested special use permit is either essential or desirable for the public convenience or welfare.
- 3) The requested permit will not impair the integrity or character of the surrounding or adjoining areas, and will not be detrimental to the health, safety, welfare or environment of the community.
- 4) The requested permit will be consistent with the objectives of the Land Use Plan.
- 5) Adequate utilities, access roads, storm drainage, recreation, open space, and other necessary facilities have been or are being provided consistent with the County's plans, policies and regulations.

## What is a Cambium Pole & Why is it Necessary?

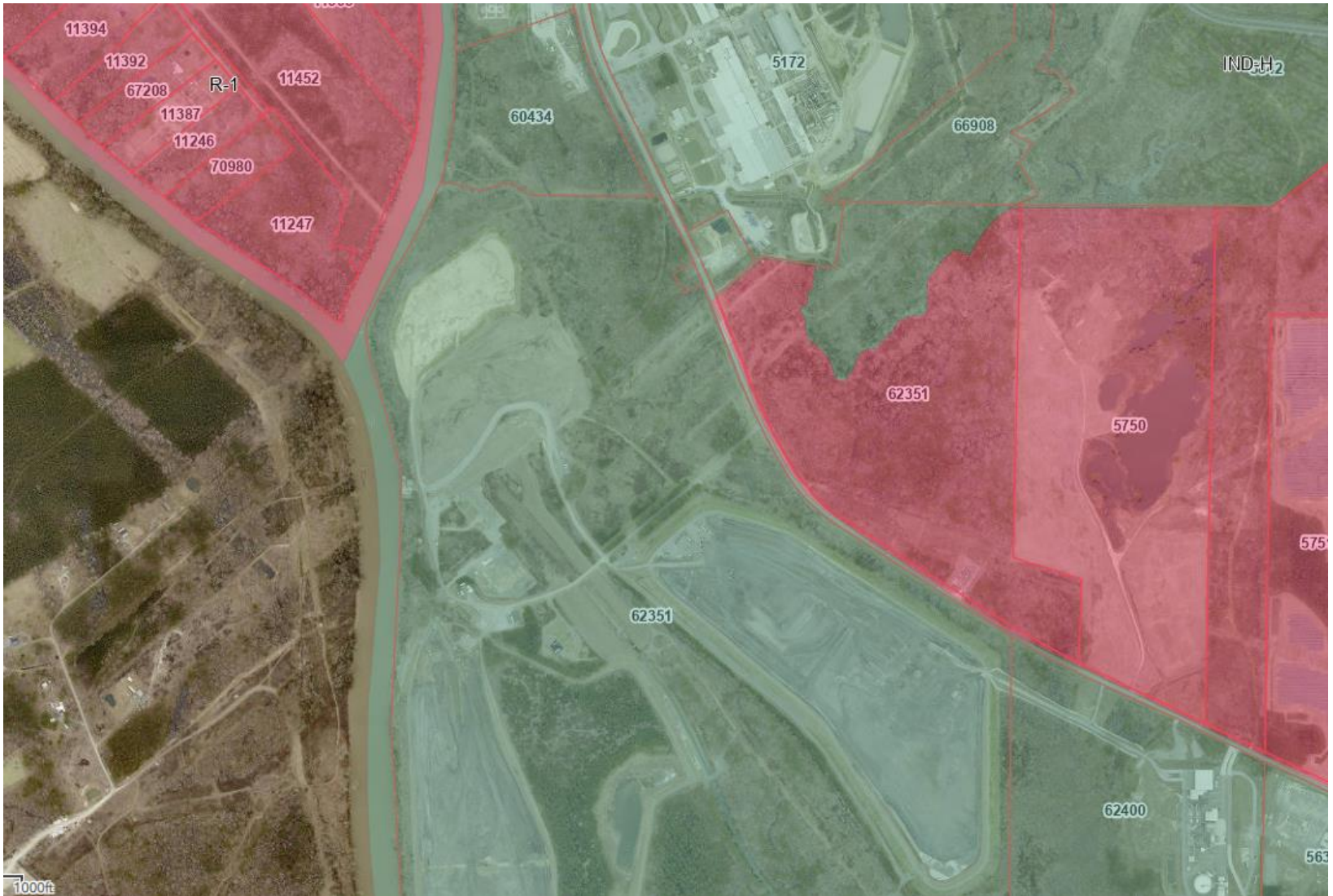


- The Proposed Cambium Pole is a 120' tall monopole and wireless network device that will be installed as part of Duke Energy's communication network to securely transmit data to and from substations.
- It provides high-speed data connection and operates by "line of sight" to other cambium poles (so height is necessary).
- Currently, information is being monitored over a leased copper T-1 circuit. This is outdated technology, and the lease is expiring.
- This project will enhance Duke Energy's ability to supply power efficiently and safely throughout the region and improve outage recovery times during storms with new smart technology.

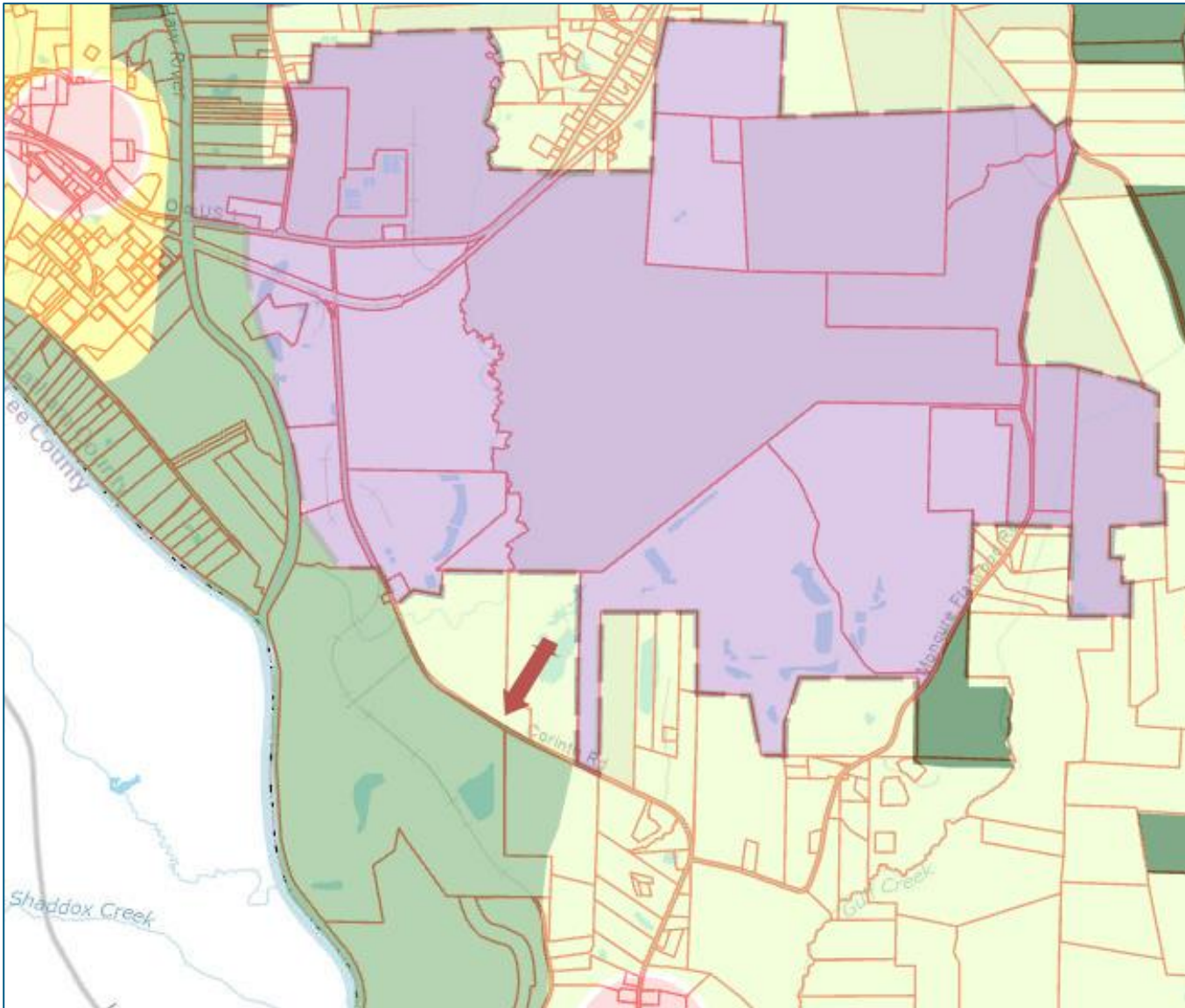
# Location & Aerial Map



# Current Zoning



# Future Land Use and Conservation Plan



# Site Plan & Pole Design

## NOTES

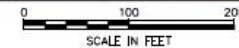
1. SITE PLAN SHOWN ON THIS PLAN IS TAKEN FROM CHATHAM COUNTY GIS IMAGERY AND INFORMATION. ALL INFORMATION SHOWN ON THIS PLAN IS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY THAT ALL EXISTING INFORMATION IS AS INDICATED ON SITE PLAN. CONTRACTOR TO ESTABLISH THE EXISTENCE AND LOCATION OF ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES. IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES.
2. TEP DID NOT SURVEY AND DOES NOT GUARANTEE, OR ENSURE THE PRECISION, ACCURACY, OR CORRECTNESS AND ASSUMES NO RESPONSIBILITY OR LIABILITY FOR DAMAGES, LOSS OF REVENUE OR INJURY THAT MIGHT OCCUR.
3. THE POLE IS LOCATED IN SHADED ZONE "X," AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #3710968700L, EFFECTIVE NOVEMBER 11, 2017.



## SITE PLAN

SCALE: 1" = 100'

LEGEND	
	EXIST. PROPERTY LINE
	EXIST. UTILITY POLE
	EXIST. LIGHT POLE
	EXIST. HYDRANT
	EXIST. TELCO PEDESTAL
	PROPERTY CORNER
	EXIST. CONTOUR LINE
	EDGE OF PAVEMENT
	OVERHEAD WIRE
	RIGHT-OF-WAY
	CHAIN LINK FENCE
	EXISTING TREE LINE



PLANS PREPARED FOR:

401 SOUTH WILMINGTON STREET  
RALEIGH, NC 27601  
OFFICE: (800) 452-2777

PROJECT INFORMATION:

**MONCURE 115 SUB  
T2225 (NCMUX014)**

1785 CORINTH RD  
MONCURE, NC 27559  
(CHATHAM COUNTY)

PLANS PREPARED BY:

**TOWER ENGINEERING PROFESSIONALS**  
326 TRYON ROAD  
RALEIGH, NC 27603  
OFFICE: (919) 661-6351  
[www.tepgroup.net](http://www.tepgroup.net)  
N.C. LICENSE # C-1794

SEAL:

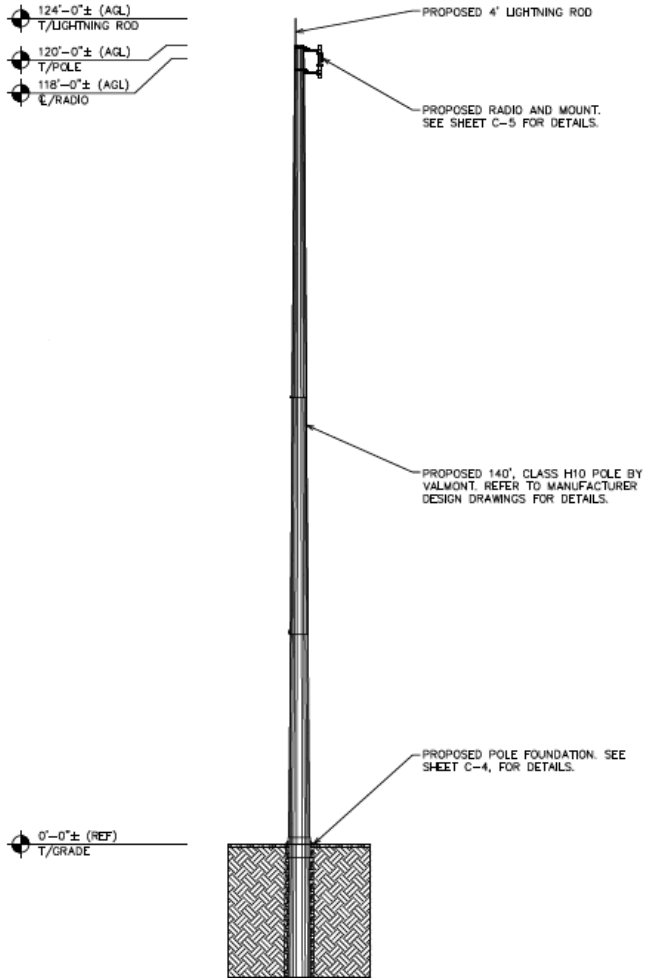
3	06-02-23	PERMITTING
2	10-31-22	CONSTRUCTION
1	09-15-22	CLIENT COMMENTS
0	07-06-22	PRELIMINARY CONSTRUCTION
REV	DATE	ISSUED FOR:
DRAWN BY: RCV		CHECKED BY: JBG

SHEET TITLE:

**SITE PLAN**

SHEET NUMBER:	REVISION:
<b>C-1</b>	<b>3</b>
TEP # 310697.6771.62	

# Site Plan & Pole Design





# Compound Detail

## NOTES

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3. THE POLE IS LOCATED IN SHADED ZONE "X," AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #3710968700L, EFFECTIVE NOVEMBER 11, 2017.
4. POLE INSTALLATION WILL ONLY INCLUDE A GALVANIZED STEEL POLE AND THE ASSOCIATED CABLE AND CONDUIT ROUTING. THERE WILL BE NO ADDITIONAL/EXCESS NOISE, VIBRATION, SMOKE/OTHER PARTICULATE MATTER, ODORS, HAZARDOUS MATTER, ELECTROMAGNETIC INTERFERENCE, FIRE/EXPLOSION HAZARDS, HUMIDITY, HEAT, GLARE OR LIGHT ASSOCIATED WITH THE INSTALLATION OF THIS POLE.

EXISTING CHAIN-LINK FENCED  
DUKE ENERGY SUB-STATION.

EXISTING GRAVEL THROUGHOUT  
SUBSTATION, TO REMAIN

EXISTING EQUIPMENT  
CABINET TO REMAIN

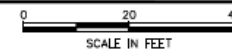
PROPOSED MONOPOLE TOWER.  
SEE SHEET C-3 FOR ELEVATION  
DETAILS.

EXISTING ACCESS GATE

EXISTING ACCESS DRIVE

## COMPOUND DETAIL

SCALE: 1" = 20'



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SEAL:

October 31, 2022

3	03-27-23	PERMITTING
2	10-31-22	CONSTRUCTION
1	09-15-22	CLIENT COMMENTS
0	07-06-22	PRELIMINARY CONSTRUCTION
REV	DATE	ISSUED FOR:

DRAWN BY: RCV | CHECKED BY: JBG

SHEET TITLE:  
**COMPOUND DETAIL**

SHEET NUMBER: <b>C-2</b>	REVISION: <b>3</b> TEP#310697.677162
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# Questions?

Amy Crout, Smith Anderson Law Firm

Indira Everett, Duke Energy

Aaron Cook, Duke Energy



BUILDING A *SMARTER* ENERGY FUTURE®