

**Subject: Site Name: Moncure 115kV Sub - Monopole
Proposed Duke Energy Monopole
1785 Corinth Rd, Moncure, NC 27559
Five Finding Report**

Five Findings Report:

Duke Energy is proposing to install a monopole on their existing substation 1785 Corinth Rd in Moncure, NC. We are installing a wireless network device and utility pole as part of Duke Energy’s communication network to securely transmit data to and from substations, and to support smart technology improvements we have made at these locations to increase reliability and quality of service to customers. Our previous communications provider will no longer be offering communication services to Duke Energy, so these upgrades are important to ensure our systems operate efficiently to meet customer needs.

Per Chatham County’s UDO we present the five finding report for our Special Use Application:

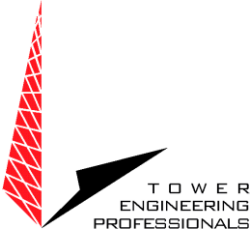
- 1. The use requested is among those listed as an eligible special use in the district in which the subject property is located or is to be located.**

Per Table 10.13 a Wireless Telecommunications Support Structure is a valid Special Use for our property’s zoning, R1.

- 2. The requested special use permit or revision to the existing permit is either essential or desirable for the public convenience or welfare.**

Duke is planning on installing a wireless network device and utility pole as part of Duke Energy’s communication network to securely transmit data to and from substations, and to support smart technology improvements we have made at these locations to increase reliability and quality of service to customers. Duke does not have secure fiberoptic internet service at the property, and so needs the requested monopole to establish a secure, high-speed, connection with the substation that will be used for remote monitoring of the substation. The upgraded facilities will help identify outages faster, helping to speed repairs of the grid for the public’s benefit.

The monopole will remain galvanized steel to match the surrounding substation equipment. The substation is unmanned and will stay that way with the addition of the monopole, no changes to traffic patterns or traffic density will stem from this addition. The monopole is only 120’, this does not require lighting by the FAA. Therefore, this tower will not be lit.



Finally, this monopole will only have Duke’s telecom equipment installed on the pole. There will be no audible noise from the tower and no chemicals, biological or radioactive agents will be used in its construction. There will be no hazards for the surrounding properties associated with this monopole.

3. The requested permit will not impair the integrity or character of the surrounding or adjoining districts, and will not be detrimental to the health, safety, or welfare of the community.

The proposed pole will be used to aid in the function of the existing electrical substation on the property. The pole has been certified by a licensed NC professional engineer and as such should not pose any risks to the surrounding properties.

The 120-foot-tall monopole will be setback more than 150’ from all adjoining property lines, ensuring the monopole will not be detrimental to the health and safety of the community. The monopole will be located within a fenced and secured substation, providing additional security.

4. The manner in which the proposed amendment will carry out the intent and purpose of any adopted plans or part thereof.

This pole will be installed on Duke Energy’s existing electrical substation. The pole will aid in the existing substation’s functionality. It will not hinder any future land development plans for the area.

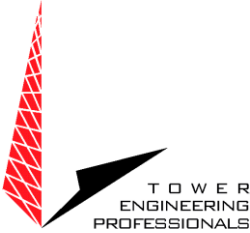
References to the Comprehensive Plan:

Chapter 2 – Issues and Opportunities

Land Use Suitability (p.21)

- *“Factors included **proximity to existing compatible uses**, access to adequate transportation infrastructure, proximity to utilities and environmental constraints.”*

As mentioned above, the proposed monopole tower will be installed on Duke Energy’s existing electrical substation, which will not hinder any future land development plans for the area.



Chapter 3 – Plan Chatham

Objectives (p.42)

- *“7. Provide infrastructure to support desired development and support economic and environmental objectives.*
 - *Focus the development of utilities and urban services to foster compact development and support economic development in defined areas.”*

The intent of the monopole installation is to aid in the strengthening of Duke Energy’s internal communication network. A stronger communications network will help improve overall service quality in terms of status monitoring and service response times.

Land Use Descriptions (p.49)

- *Agriculture*
 - *“Mix of uses include large-scale agriculture, related processing facilities, supporting commercial and service uses, single family homes.”*

As mentioned above, the proposed monopole tower will be installed on Duke Energy’s existing electrical substation.

Chapter 4 – Plan Elements

Economic Development; ED Policy 4; Strategy 4.4 (p.56)

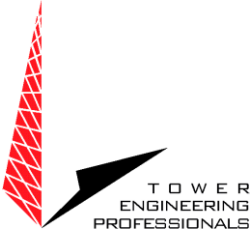
- *“Permit existing commercial and industrial uses that are appropriately zoned to continue to operate, and allow for reasonable expansion, contingent upon meeting environmental and transportation requirements.”*

Land Use

- The tower is being installed within an existing electrical substation. No change is being made to the existing land use.

Natural Resources

- The tower is being installed within an existing electrical substation. It will not have an impact on existing natural resources.



Parks and Recreation

- The tower is being installed within an existing electrical substation. It will not have an impact on parks, recreation, or open spaces.

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

This pole is being installed on Duke’s existing electrical substation. The facility is unmanned and has no need for utilities. There are already existing access roads, drainage, utilities, open space, etc. No changes to the site are proposed/required to accommodate the addition of the monopole.

Considering these factors and the significant impacts they have on reliability, Duke Energy would like to request relief regarding the opaque fencing and landscaping standards typically required for tower sites.

If you have any questions, feel free to contact me at my direct number: (919) 943-0397 or correspond at the email address shown below.

Sincerely,

Ryan Woods
rjwoods@tepgroup.net
Tower Engineering Professionals