



Special Use Permit Application Form

Montgomery County, Virginia

755 Roanoke St. Suite 2A, Christiansburg, VA 24073

540-394-2148 | mcplan@montgomerycountyva.gov

Applicant Information: (PLEASE PRINT – if additional owners, please attach additional sheets)

Owner of Record (attach separate page for add'l owners): Montgomery County Board of Supervisors	Address: 755 Roanoke St, Christiansburg VA 24073
Telephone: 540-382-6954	Email: meadowsfc@montgomerycountyva.gov

Applicant Name: Owner Contract Purchaser/Lessee Jason Milburn, NRV Emerg Comm Reg Authority	Address: 1 East Main St, Suite 400, Christiansburg VA 24073
Telephone: 540-391-4461	Email: milburnjs@nrv911.org

Representative Name and Company:	Address:
Telephone:	Email:

Property Description:

Location or Address: <i>(Describe in relation to nearest intersection)</i> 2080 OILWELL RD BLACKSBURG VA 24060		
Parcel ID Number(s): 071091 (Tax Parcel 066-A55A)	Acreage: 1.008	Existing Zoning: A-1
Comprehensive Plan Designation: Residential Transition	Existing Use: Public Safety Telecommunications Tower Site	

Description of Request: (Please provide additional information on attached sheet if necessary)

Proposed Use(s) including acreage: Replacement of damaged existing 160 foot telecommunications guyed tower with new 190 foot self-support tower.

I certify that the information supplied on this application and on the attachments provided (maps or other information) is accurate and true to the best of my knowledge. In addition, I hereby grant permission to the agents and employees of Montgomery County and State of Virginia to enter the above property for the purposes of processing and reviewing the above application.

Craig Meadows County Administrator 9/1/2021
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Owner 1 Signature _____ Date _____

Owner 2 Signature (for add'l owners please attach separate sheet) _____ Date _____

Jason L. Milburn, Exec Director NRVE CRA 08/31/2021
Applicant Signature _____ Date _____

Representative/Agent Signature _____ Date _____

Attachment: 2080 Oilwell Rd Blacksburg VA Parcel ID 071091

Section 10-54(3)(g), Montgomery County Zoning Ordinance (g) Issues for Consideration. In considering a Special Use Permit application, the following factors shall be given reasonable consideration. The application shall address all the following in its statement of justification or Special Use Permit plat unless not applicable, in addition to any other standards imposed by this Ordinance:

History: Price Mountain public safety telecommunications tower came into existence around 1984 when the Montgomery County BOS purchased the 1 acre parcel and Sheriff Louis Barber had a 120 foot communication tower built to serve Montgomery County Sheriffs Office. The cement block equipment shelter on-site was built using inmate labor at the time. By 2006, the tower had gained equipment from numerous other public safety agencies and started experiencing interference and other issues. The 120 foot tower was removed and replaced with a 160 foot tower to allow additional equipment on the tower. In 2012, the SUP was amended to allow the addition of microwave transmission dishes to serve as the backhaul of the UHF simulcast radio system. In late 2020, Price Tower sustained non-repairable wind damage and consultants recommended total replacement of the tower with a Public safety grade tower to better suit the needs of Montgomery County emergency services now and into the future. The 1 acre lot is not large enough to fit the span of a larger lattice style guyed tower so a self-support tower was chosen. Price Mountain tower currently supports equipment for four law enforcement agencies, six EMS agencies, five fire departments, Blacksburg Transit, a private paging company that provides paging service to the Lewis Gale Hospital Emergency Department and physicians, and a wireless Internet Service Provider that furnishes internet service to the site. Price Tower currently supports equipment that transmits over 19 public safety radio frequencies. In summary, the site and the tower have become a critical component to Montgomery County Public Safety Agencies

1. Whether the proposed Special Use Permit is consistent with the Comprehensive Plan (Addressed under "3. Comprehensive Plan Justification"). **Co-location on an existing tower was examined but found not to be feasible. Two of the existing adjacent towers are either full and do not have room for all required equipment, or are too short to provide the necessary coverage needed for first responders. The other tower is not built to public safety grade standards and does not have the necessary vertical space to separate antennas to avoid interference between them. Land Mobile Radio antennas are much different than cellular antennas because LMR antennas require vertical separation from each other to avoid interference. The proposed increased tower height will provide additional vertical separation to mitigate interference issues that are already being experienced between some frequencies. Monopole towers are not recommended for LMR use because the monopole will block or reflect the RF signal. This leads to land areas that are "shadowed" and become dead spots where first responders have no radio coverage.**

2. Whether the proposed Special Use Permit will adequately provide for safety from fire hazards and have effective measures of fire control. **The fenced, secure compound enclosing the new tower and equipment shelter will be covered by a gravel base to prevent fire spread. The equipment shelter will be equipped with internal smoke/fire alarms with an alarm monitoring system and will be equipped with a portable fire extinguisher. The shelter will be constructed of non-combustible pre-cast concrete with a pebble surface.**

3. The level and impact of any noise emanating from the site, including that generated by the proposed use, in relation to the uses in the immediate area. **The site is already served by an emergency power**

generator which runs only during times of power outage or preventative maintenance. No additional noise will be generated after construction is complete.

4. The glare or light that may be generated by the proposed use in relation to uses in the immediate area. It is believed the tower will be required by the FAA to have marker lighting at the mid level and top of the tower even though the structure is less than 200 feet tall. This is due to the lateral distance and slope percentage in relation to the Virginia Tech Airport. The existing tower has the same mid and top lighting per FAA requirement. The proposed lighting is specified to be avian friendly and to not direct glare towards the ground. The tower will not have lighting if not required by the FAA study. The FAA study will also determine whether the tower must be painted orange/white aviation safety colors. The preferred option is that the tower will have a non-reflective galvanized steel finish. Two other towers on adjacent property are painted orange/white but were built under older FAA regulations. The equipment shelter exterior walls will have a neutral tone natural pebble finish. The shelter exterior entrance door will have a security light with shielding to prevent the direct glare of the bulb from being visible beyond the property line.

5. The proposed location, lighting and type of signs in relation to the proposed use, uses in the area, and the sign requirements of this Ordinance. The only signage for this site will be a flat, unlit sign hung on the security fence designating the Antenna Site Registry number as required by the FCC. No roadside signs are required. No sign lighting is required.

6. The compatibility of the proposed use with other existing or proposed uses in the neighborhood, and adjacent parcels. There are three existing telecommunications towers located within 500 feet on adjoining parcels. Tower A (ASR 1019011), to the south, is a 192 foot lattice style self-support tower that was built in 2000. Tower A is owned by Crown Castle and is 2,663 feet overall height above sea level. Tower B (ASR 1016168), also to the south, is a 140 foot lattice style self-support tower built in 1969 and owned by SBA Properties. Tower B has an overall height above sea level of 2,616 feet. Tower C (ASR 1238674), to the east, is a 116 foot lattice style guyed tower that was constructed in 2012 and has an overall height above sea level of 2,576 feet. Tower C is owned by Communications Facilities Inc. Existing damaged tower is a 160 foot lattice style guyed tower with an overall height above sea level of 2,620 feet. Proposed tower is a 190 foot lattice style self-support with an overall height above sea level of 2,650 feet. Proposed tower will be 13 feet shorter (height above sea level) than the tallest adjacent tower, exclusive of lightning rods.

7. The location and area footprint with dimensions (all drawn to scale), nature and height of existing or proposed buildings, structures, walls, and fences on the site and in the neighborhood. The replacement tower will be lattice style, self-support 190 feet tall with a 5 foot lightning rod at the top. The tower and shelter compound will be enclosed by a six foot chainlink security fence as it currently is. The tower will not have platforms like cellular towers but will instead have standoff style tubular mounts for antennas and microwave dishes which will minimize the visible width of the tower from a distance. The microwave dishes will need to sit above tree height in order to maintain an unobstructed signal year-round. A prefab 12x20 equipment shelter will be set on cement piers at the base of the tower to hold associated equipment.

8. The nature and extent of existing or proposed landscaping, screening and buffering on the site and in the neighborhood. The majority of existing natural vegetation consisting of a mixture of trees and shrubs will be preserved to serve as screening. No additional landscaping is planned.

9. The timing and phasing of the proposed development and the duration of the proposed use. **Due to the importance of the replacement tower to public safety, the tower will be constructed as quickly as practical, within six months. The tower has been sized to allow for future growth and is expected to remain in public safety service 30 plus years.**

10. Whether the proposed Special Use Permit will result in the preservation or destruction, loss or damage of any topographic or physical, natural, scenic, archaeological or historic feature of significant importance. **The proposed tower and shelter are a replacement to an existing damaged Public Safety telecommunication tower. No changes to the impact on any topographic, physical, natural, scenic, archeological, or historic feature of significant importance are anticipated. The new tower is expected to be slightly more visible than the existing tower due to differences in construction and height.**

11. Whether the proposed Special Use Permit at the specified location will contribute to or promote the welfare or convenience of the public. **The Price Mountain Public Safety Telecommunication Site is at a central geographic location and serves as a link between the towns of Blacksburg and Christiansburg as well as linking communications between northern Montgomery County and southern Montgomery County. Without the tower, there is no microwave backhaul connection between the Regional 911 Center and all emergency services communications in the Town of Blacksburg and surrounding unincorporated areas. The tower and shelter at this geographically central hub site are necessary to provide dependable public safety communications between Police/Sheriff, Fire, and EMS. Dependable communications are critical to public safety success. Public safety is a known critical component of public welfare and convenience.**

12. The traffic expected to be generated by the proposed use, the adequacy of access roads and the vehicular and pedestrian circulation elements (on and off-site) of the proposed use, all in relation to the public's interest in pedestrian and vehicular safety and efficient traffic movement. **After construction is complete, vehicular traffic is expected to be an average of two trips per week for maintenance activities. No public vehicular or pedestrian traffic will be permitted at the site for security reasons.**

13. Whether, in the case of existing structures proposed to be converted to uses requiring a Special Use Permit, the structures meet all code requirements of Montgomery County. **The existing tower and shelter are covered by a special use permit and meets the requirements of Montgomery County. The existing tower will be removed after completion of the new tower. The existing equipment shelter at the site will be maintained and used for storage.**

14. Whether the proposed Special Use Permit will be served adequately by essential public facilities and services. **The site is already served with electricity through AEP. No water or sewer service is required at the site. The site is already serviced by wireless internet service.**

15. The effect of the proposed Special Use Permit on groundwater supply. **The new tower and shelter will have no effect on groundwater supply. The site does not require a water supply.**

16. The effect of the proposed Special Use Permit on the structural capacity of the soils. **The addition of the new tower and shelter will have no effect on the structural capacity of the soils. A geotechnical survey and report will be conducted on site in order to design and engineer the tower foundation.**

17. Whether the proposed use will facilitate orderly and safe road development and transportation. **Proposed site will have no impact on road development and transportation.**

18. The effect of the proposed Special Use Permit on environmentally sensitive land or natural features, wildlife habitat and vegetation, water quality and air quality. **The proposed tower and shelter, sitting on part of a 1 acre total parcel will have no impact on environmentally sensitive land, features, wildlife habitat and vegetation, water quality, or air quality.**

19. Whether the proposed Special Use Permit use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan. **The site will have no impact on employment nor economic development.**

20. Whether the proposed Special Use Permit considers the needs of agriculture, industry, and businesses in future growth. **This site is critical to public safety communications and success. Public safety is necessary for agriculture, industry, and businesses to thrive and grow.**

21. The effect of the proposed Special Use Permit use in enhancing affordable shelter opportunities for residents of the County. **The site will have no impact on affordable shelter opportunities for residents.**

22. The location, character, and size of any outdoor storage. **No outdoor storage will be required.**

23. The proposed use of open space. **Existing open space will be maintained as much as possible. Some existing vegetation will need to be cleared to protect the new tower from damage. The rest of the parcel will remain wooded to provide screening of the tower base and equipment shelters.**

24. The location of any major floodplain and steep slopes. **There are no floodplains nor steep slopes in proximity to this site.**

25. The location and use of any existing non-conforming uses and structures. **All existing uses and structures are conforming.**

26. The location and type of any fuel and fuel storage. **The site is currently served by an above ground LP storage tank to power the emergency generator. The tank is located inside of the existing security fence. No additional fuel storage is required**

27. The location and use of any anticipated accessory uses and structures. **No new accessory structures are proposed.**

28. The area of each use; if appropriate.

29. The proposed days/hours of operation. **The site provides critical land mobile radio service to all law enforcement/Fire/EMS agencies in Montgomery County, Christiansburg, Blacksburg, and Virginia Tech and operates 24 hours every day of the year.**

30. The location and screening of parking and loading spaces and/or areas. **The site is served by an existing gravel access road and small parking area. The access road is screened by natural vegetation. Temporary slight widening of the access road may be required only during construction.**

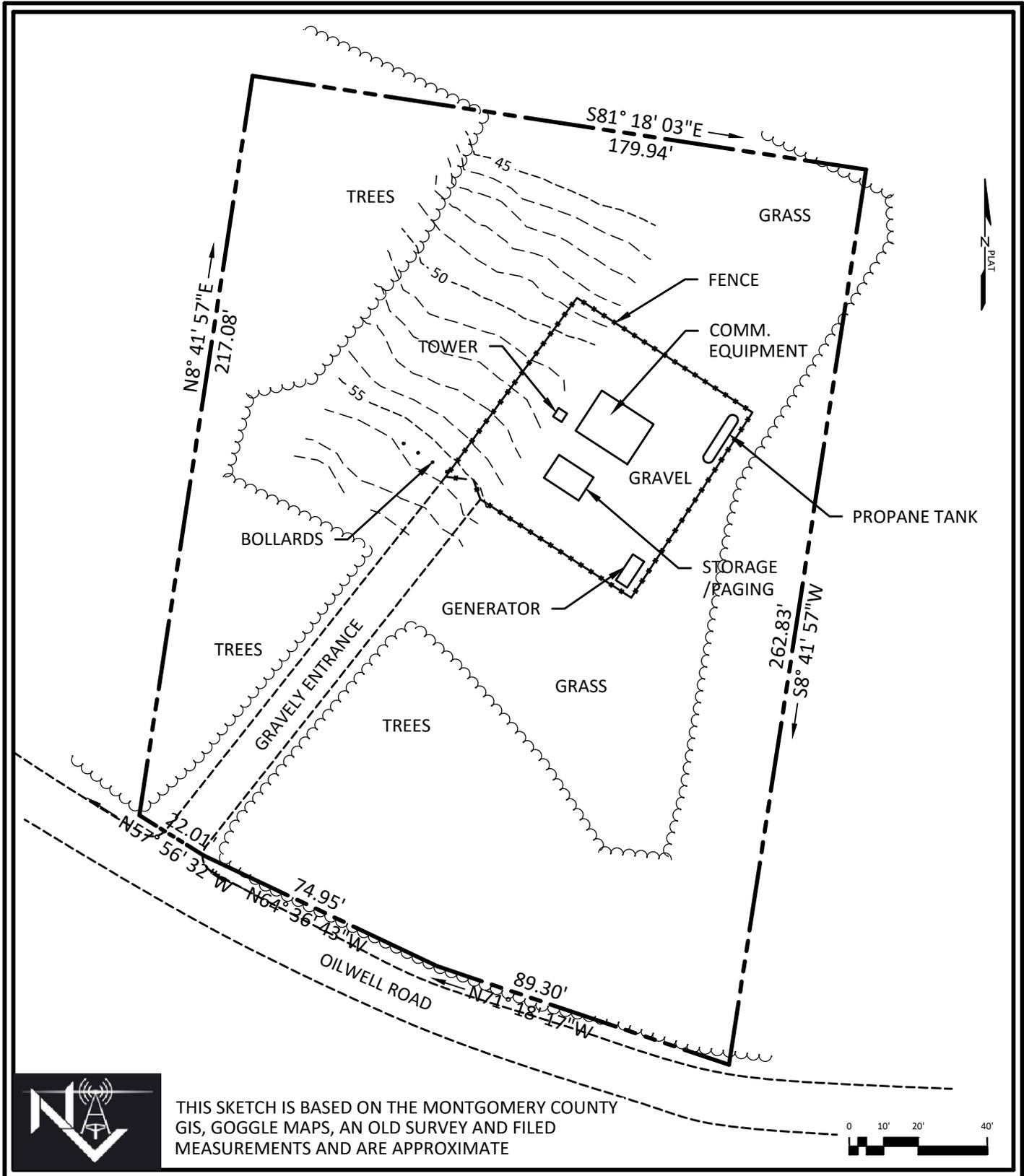
31. The location and nature of any proposed security features and provisions. **The site is currently enclosed by a 6 foot tall chainlink security fence. The fencing will be expanded to include the new tower and shelter. Security cameras will be added to the site and a silent door alarm will be added to the equipment shelter. The access road has a cable gate which can be closed to limit site access.**

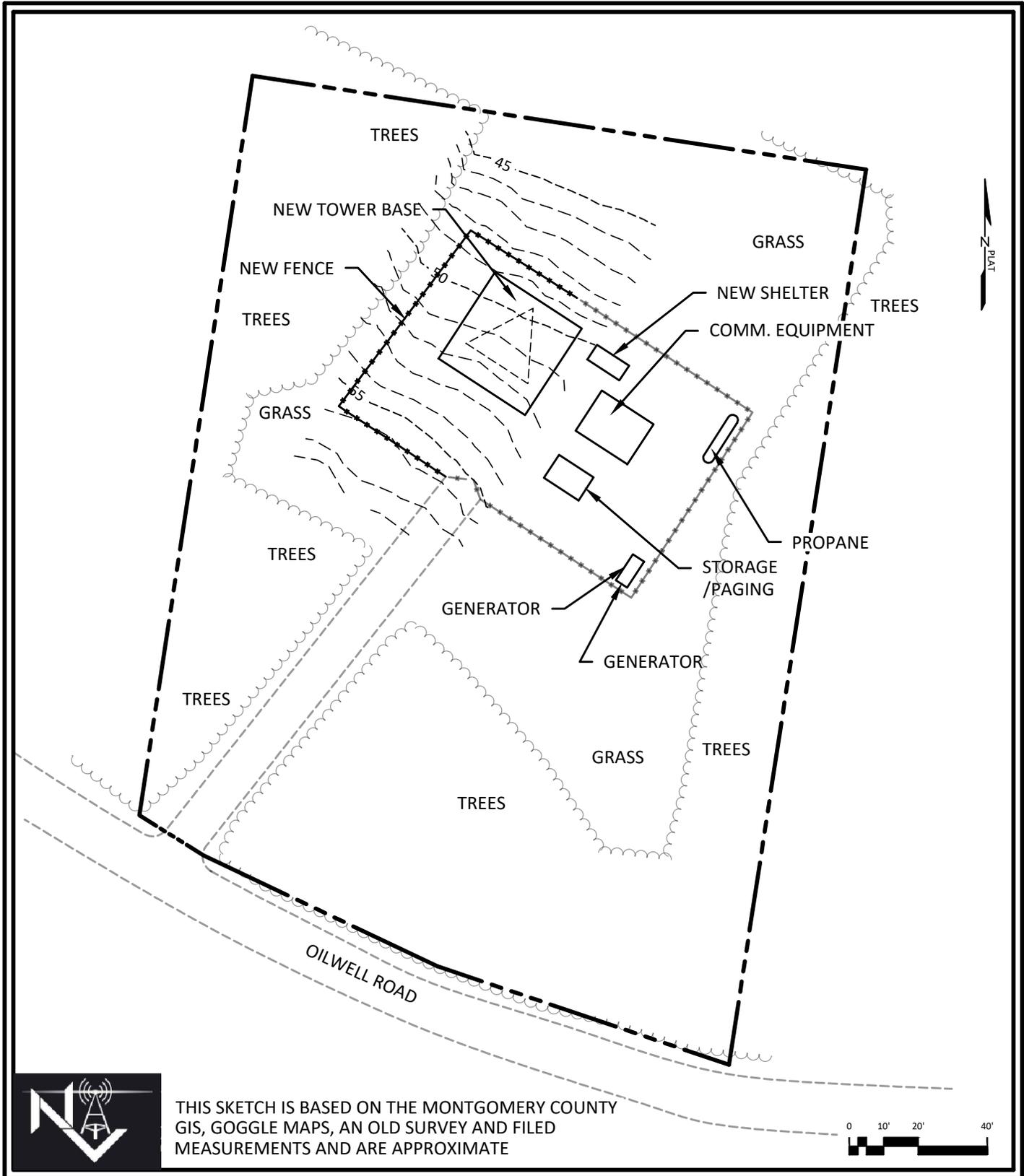
32. The number of employees. **This is a remote equipment site and does not require on-site employees except during rare maintenance/repair events.**

33. The location of any existing and/or proposed adequate on and off-site infrastructure. **No new infrastructure related to the site is proposed or needed. The site is currently served by everything needed.**

34. Any anticipated odors, which may be generated by the uses on site. **No odors are anticipated.**

35. Whether the proposed Special Use Permit uses have sufficient measures to mitigate the impact of construction traffic on existing neighborhoods and school areas. **There will be minimal traffic necessary for construction. Heavy construction including crane setup and cement mixer trucks will be limited to just a few days total during foundation construction and tower stacking.**





HUGHES ASSOCIATES
 ARCHITECTS & ENGINEERS
 656 ELM AVENUE SW | ROANOKE, VIRGINIA 24016
 540.342.4002 | www.HughesAE.com

PROJECT: Montgomery County Tower and Shelter
2080 Oilwell Road on Price Mountain
 COMM NO. 21304
 SUBJECT: Proposed Site
 DATE: August 27, 2021

SKETCH:
SK-02