



FAIRFAX COUNTY PLANNING COMMISSION

November 20, 2014

PUBLIC HEARING FOR PLANNING DETERMINATION

Pursuant to
Va. Code Sec. 15.2 - 2232

Public Hearing Date: Thursday, December 4, 2014 at 8:15 p.m.

Application Number: 2232-Y14-7

Applicant: Verizon Wireless and Milestone Communications, Inc.

Proposed Use: Telecommunications Facility – 150' monopole

Subject Property: Tax Map 52-2 ((1)) 11E
6309T Bull Run Post Office Road, Centreville, VA 20120

Supervisor District: Sully District

Application Received: June 20, 2014
Application Accepted: September 16, 2014
Application Amended: August 6, 2014 through November 14, 2014

Recommendation: In accordance with Va. Code Sec. 15.2-2232, staff recommends that the Planning Commission find the proposal by Verizon Wireless and Milestone Communications, Inc., to construct a 150 foot tall monopole at 6309T Bull Run Post Office Road, to be substantially in accord with provisions of the adopted Comprehensive Plan.

PLANNING DETERMINATION

Section 15.2 -2232 of the Code of Virginia



Number: 2232-Y14-7

Acreage: 5.08

District: Sully

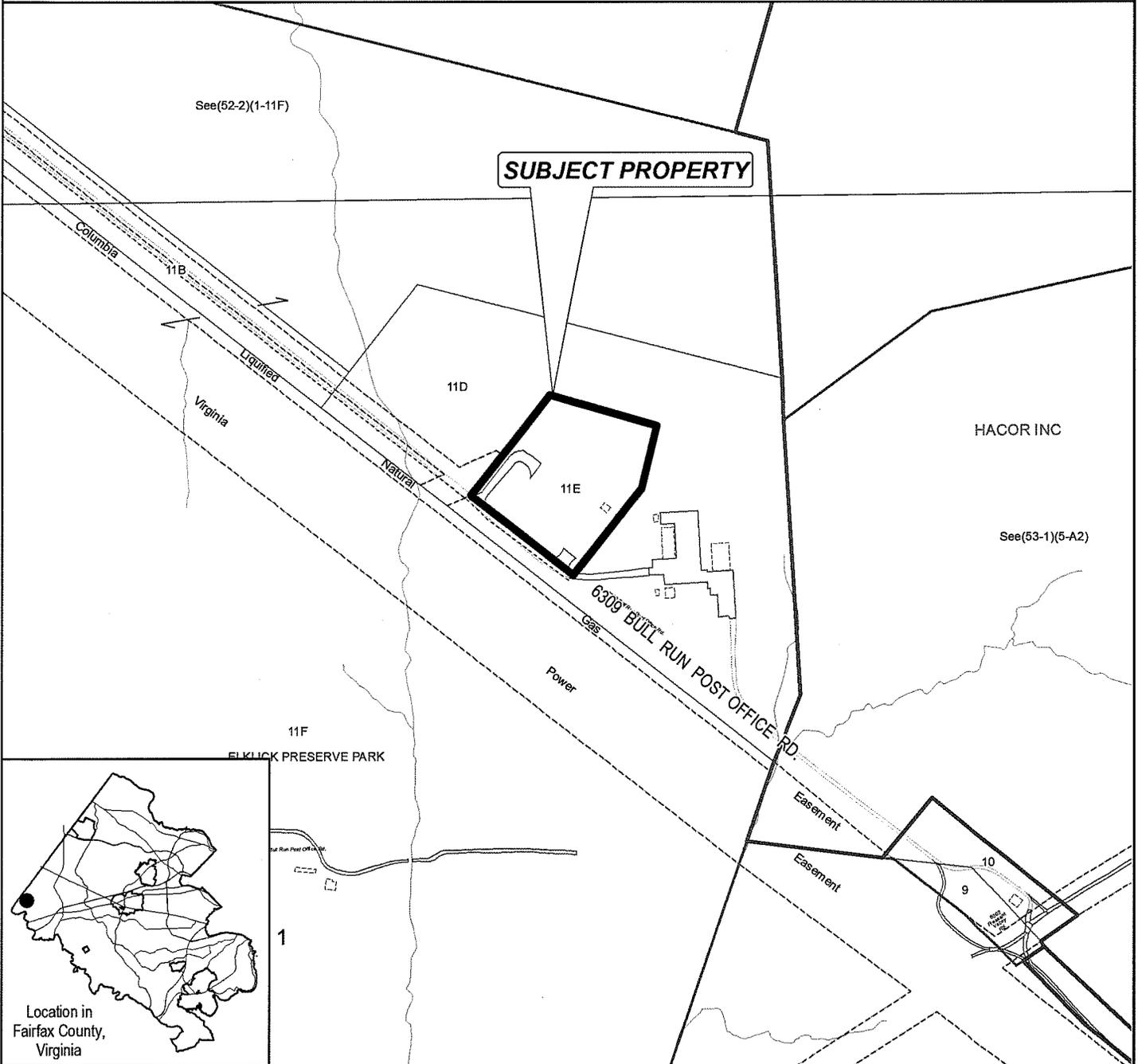
Tax Map ID Number: 52-2 ((1)) 11E

Address: 6309T Bull Run Post Office Rd.
Centreville, VA 20120

Planned Use: Residential @ .1-2 DU/AC

Applicant: Verizon Wireless and Milestone
Communications, Inc.

Proposed Use: Telecommunications



500 FEET

PREPARED BY THE DEPARTMENT OF PLANNING AND ZONING
USING FAIRFAX COUNTY GIS



APPLICATION*Attachment A***Proposal:**

Construct a 150 foot tall monopole adjacent to the Pleasant Valley Substation (PVS) of the Northern Virginia Electric Cooperative (NOVEC) property. The monopole supports 12 telecommunications panel antennas for Verizon Wireless (Verizon), and telecommunications antennas for up to 4 future carriers. An associated 2,775 square foot (SF) equipment cabinet compound adjacent to the monopole contains an equipment shelter for Verizon, a propane generator with separate propane tank for emergency back-up power for Verizon's operations, and equipment pads for up to 4 future carriers. The equipment compound is screened by an 8 foot tall chain link fence with black concealment slats. Landscape plantings are also provided.

Applicant:

Verizon Wireless and Milestone Communications, Inc.

Subject Property:

Tax Map: 52-2 ((1)) 11E

Location: 6309T Bull Run Post Office Road, Centreville, VA 20120

Site Size: 5.08 acres

Owner: Northern Virginia Electric Cooperative

Zoning District: RC

Existing Site Conditions:

The site is developed with the PVS operated by NOVEC.

STATEMENT OF JUSTIFICATION*(Included in Attachment A)***Project Justification:**

The applicant states that it is necessary to construct a 150 foot tall monopole adjacent to the PVS owned by NOVEC and install new telecommunications equipment, in order to rectify existing coverage gaps and provide enhanced service to residences and commuters in the neighborhoods between Pleasant Valley Road and Gum Springs Road to the west, and improve coverage in a wide area of western Fairfax County and southeastern Loudoun County. The proposed site not only fills gaps but enhances 4G-LTE data services to all users in the surrounding area. Since the primary benefit of a wireless telecommunications system is the ability to transfer calls seamlessly from location to location, a network of facilities is essential. Without a facility at or near this location, Verizon will be unable to provide reliable coverage. Also, in order to avoid the construction of a separate structure in the immediate vicinity for other telecommunications providers, the proposed monopole is designed to accommodate up to 4 future carriers.

Proposed Facility:

- **Structure:** 150 foot tall monopole with a galvanized finish. Antennas are naturally finished gray.

- Antennas: 12 antennas for Verizon, with additional antennas for up to 4 future carriers.
- Equipment Compound: 2,775 SF.
- Location: Northwest side of existing substation.
- Operations: Unmanned, 24 hours/day, 7 days/week; periodic site visits by maintenance personnel for repairs or modifications.

Impacts:

- Visual: The proposed telecommunications facility is located in an area of existing public utility and public facility properties and uses. The NOVEC PVS property is surrounded by property to the east owned by Dominion Cove Point, which is used for the storage, compression and transmission of natural gas. Immediately to the south of the substation property is a major utility easement running from southeast to northwest with 2 to 3 parallel rows of existing overhead utility lines supported by approximately 130 foot tall lattice towers. The easement also contains a Columbia liquefied natural gas line.
- Health: The applicant states that there will be no negative health impacts by placement of the proposed facility.
- Environmental: The telecommunications facility will not interfere with telephone, television, or radio communications. The proposed use does not impact any environmentally sensitive areas. No noise would be produced except when the back-up generator is operating during power outages or testing.
- Traffic: The volume of traffic generated will be minimal with only an occasional service vehicle traveling to the site for periodic maintenance.

Alternative Sites:

The applicant states that there are no existing tall buildings in the area for collocation of a telecommunications use. The adjacent public sites owned by the Fairfax County Park Authority offer no greater advantage for reducing impacts than the selected PVS site. Also, if the telecommunications structure is not located at the proposed site, the structure would have less visual context with the existing tall transmission structures in the adjacent electrical easement and would be further removed from the existing public utility uses in the area. As a result, the structure would appear to be a more solitary and prominent feature from other vantage points in the area.

SUBJECT PROPERTY AND ADJACENT LAND USES

- Subject Property: Zoned residential RC developed with the NOVEC PVS.
- North of Property: Zoned residential RC with undeveloped Public Parks.
- East of Property: Zoned residential RC developed with Dominion Cove Point natural gas compression plant.
- South of Property: Zoned residential RC developed with natural gas and electrical transmission easements, and further south with undeveloped Public Parks.
- West of Property: Zoned residential RC with undeveloped Public Parks and further west Private Open Space.

COMPREHENSIVE PLAN PROVISIONS

COMPREHENSIVE PLAN MAP:

Planning Area and District: Area III, Bull Run Planning District

Planning Sector: BR5 – Stone Bridge Community Planning Sector

Land Use Recommendations:

- Subject Property: Residential, .1-.2 dwelling units/acre (du/ac)
- North of Property: Residential, .1-.2 du/ac
- East of Property: Residential, .1-.2 du/ac
- South of Property: Residential, .1-.2 du/ac
- West of Property: Residential, .1-.2 du/ac

COMPREHENSIVE PLAN:

An assessment of this proposal for substantial conformance with recommendations of the Comprehensive Plan (“the Plan”) is guided by the following Plan citations:

Area Plan

FAIRFAX COUNTY COMPREHENSIVE PLAN, 2013 Edition, Area III, Bull Run Planning District, Amended through 4-29-2014, BR5-Stone Bridge Community Planning Sector, Pages 73, 74, 79

“BR5 STONE BRIDGE COMMUNITY PLANNING SECTOR

CHARACTER

The Stone Bridge Community Planning Sector is located in the far western portion of the county and is generally bounded by Loudoun County, Prince William County, Pleasant Valley Road, and Compton Road.

Much of the planning sector is undeveloped and includes forest and farmland, large portions of which are preserved as public parkland. A majority of the planning sector is outside of the county’s Approved Sewer Service Area and existing single-family residential units in this portion of the planning sector are widely scattered at very low densities. ...

.....

CONCEPT FOR FUTURE DEVELOPMENT

Consistent with its existing pattern of low intensity development, most of this sector is recommended under the Concept for Future Development as a Low Density Residential Area. ...

RECOMMENDATIONS

Land Use

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1. The land on the southwest perimeter of the county, adjacent to Loudoun County and Prince William County, lying generally along Bull Run and the public parkland associated with Bull Run has remained for the most part open and undeveloped and has a rural character. It is planned for residential development at .1-.2 dwelling unit per acre and public parkland. This is in conformance with the findings of the Occoquan Basin Study. The present very low density development which characterizes this area should remain intact to protect its natural wildlife and water quality.

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Heritage Resources

Any development or ground disturbance in this sector, both on private and public land, should be preceded by heritage resource studies, and alternatives should be explored for the avoidance, preservation or recovery of significant heritage resources that are found. In those areas where significant heritage resources have been recorded, an effort should be made to preserve them. If preservation is not feasible, then, in accordance with countywide objectives and policies as cited in the Heritage Resources section of the Policy Plan, the threatened resource should be thoroughly recorded and in the case of archaeological resources, the artifacts recovered.

Public Facilities

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2. Provide two substations for Northern Virginia Electric Cooperative in Sector BR5.”

Policy Plan

**FAIRFAX COUNTY COMPREHENSIVE PLAN, 2013 Edition, Policy Plan,
Public Facilities, Amended through 3-4-2014, Pages 37-40**

“MOBILE AND LAND-BASED TELECOMMUNICATION SERVICES

Mobile and land-based telecommunication services provide for the wireless transmission of voice and data and include cellular and personal communications services (PCS), paging and wireless Internet services and mobile radio communication. These services operate from wireless networks that depend on antenna devices and related equipment to transmit from a sender to one or more receivers. Such services are viewed as public utility service providers that benefit the community and its economic growth and

vitality.

.....

The 1996 Telecommunications Act, implemented by the Federal Communications Commission (FCC), and the federal courts defers to state and local governments (subject to certain exceptions) with respect to the placement, construction, and modification of facilities used to provide cellular, broadband, and other personal wireless services. State and local governments may not regulate these facilities based on the potential health or environmental effects of radio frequency (RF) emissions, to the extent that the facilities comply with established FCC regulations. Information on the FCC regulations is available for review on their Website.

GENERAL GUIDELINES

Objective 42: In order to provide for the mobile and land-based telecommunication network for wireless telecommunication systems licensed by the Federal Communications Commission, and to achieve opportunities for the co-location of related facilities and the reduction or elimination of their visual impact, locate the network's necessary support facilities which include any antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.

- Policy a. Avoid the construction of new structures by locating proposed telecommunication facilities on available existing structures such as rooftops, telecommunication and broadcast support structures, electrical utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with such existing structures. (See Figures 8, 9, 10.)
- Policy b. When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.
- Policy c. When new structures or co-locations are required to serve residential neighborhoods, consider minimizing visual impacts on the surrounding area by utilizing camouflage structure design and/or micro-cell technologies or similar miniaturization technologies, such as distributed antenna systems (DAS), if feasible.
- Policy d. When multiple sites provide similar or equal opportunity to minimize impacts, public lands shall be the preferred location.
- Policy e. Locate mobile and land-based telecommunication facilities on public property only after a lease agreement between the county, or related board or authority, and the service provider has been established.

- Policy f. Ensure that the use of public property by mobile and land-based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use and complies with adopted policies and plans to protect natural resources.
- Policy g. Co-locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property only when a co-location structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.
- Policy h. Ensure that the height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service area requirements while still mitigating the visual impact of the facility.
- Policy i. When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the residential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.
- Policy j. Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas.
- Policy k. Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.
- Policy l. A key concept in assessing telecommunication facilities is mitigation which is defined as actions taken to reduce or eliminate negative visual impacts. Mitigate the visual impact of proposed telecommunication facilities and their equipment, by using effective design options appropriate to the site such as:
- Design, site and/or landscape the proposed facility to minimize impacts on the character of the area;
 - Locate proposed telecommunication facilities near or within areas of mature vegetation and trees that effectively screen or provide an appropriate setting for the proposed structure provided such location does not adversely impact sensitive resources or cause fragmentation of forested communities. When viewed in context, consider perspective views, relative

topography and other factors, to mitigate the visual presence and prominence of the structure;

- Blend proposed telecommunication facilities with an existing pattern of tall structures;
- Obscure or block the views of proposed telecommunication facilities with other existing structures, vegetation, tree cover, or topographic features to the maximum extent feasible; and
- Replace existing telecommunication facilities with taller structures or extend their overall height to reduce the need for another structure when such height increases or structure replacements are visually appropriate to the site, including the surrounding area and are consistent with the type, style and pattern of the existing structure.

Policy m. Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.

Policy n. Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.

Policy o. Site proposed telecommunication facilities to allow for future expansion and with corresponding levels of screening to accommodate expansion.

Policy p. Design and site proposed telecommunication facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.

Policy q. Locate and construct antennas used for purposes other than mobile and land-based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-Based Telecommunications Services" section.

Objective 43: Design proposed telecommunication facilities to mitigate their visual presence and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area. (See Figures 11 and 12.)

Policy a. Disguise or camouflage the appearance of proposed telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in a similar context and belong to the setting where placed.

- Policy b. Design proposed telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.
- Policy c. Use other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunication facility and supports its design, location and appearance.”

PREVIOUS 2232 APPROVALS

None.

STAFF ANALYSIS

Department of Planning and Zoning

Zoning Administration Division (ZAD)

Attachment B

The proposed application meets those standards set forth in Par. 3 of Sect. 2-514 of the Zoning Ordinance. The Mesa cabinet has been added to Item D on Page 7 of the application.

Zoning Evaluation Division

Attachment C

The proposed monopole facility, to be located at the northwest portion of the site, outside of the fenced compound for the electric substation, is outside of the special exception area. As such, SE 2004-SU-039 is not applicable.

Planning Division – Environment and Development Review Branch

Attachment D

There are no environmental concerns with the application.

Planning Division – Historic Preservation

Attachment E

The proposed site is not located within a Fairfax County Historic Overlay District, and is not listed on the Fairfax County Inventory of Historic Sites or the National Register of Historic Places. There are no historic properties in the immediate vicinity that would be negatively impacted by the construction of the monopole. Compliance with Sec. 106 of the National Historic Preservation Act of 1966 has been attained.

Department of Public Works and Environmental Services (DPWES)

Urban Forest Management Division

Attachment F

All review comments have been adequately addressed.

Fairfax County Fire and Rescue Department*Attachment G*Strategic Planning Section

There are no issues regarding the proposal.

Fairfax Water*Attachment H*Planning Section

There are no issues regarding the proposal.

Fairfax County Department of Transportation*Attachment I*Transportation Planning Section

There appears to be no significant traffic impact resulting from the proposed use for the site.

Virginia Department of Transportation*Attachment J*Land Development Section

There is no objection to the proposed plan.

CONFORMANCE WITH THE COMPREHENSIVE PLANRequirement of Va. Code Sec. 15.2-2232*Attachment K*

Va. Code Sec. 15.2-2232, as amended, requires the Planning Commission to determine whether the general or approximate location, character and extent of the proposed facility are substantially in accord with the adopted Comprehensive Plan.

LOCATION

The entire property on which the proposed 150 foot tall monopole will be located is owned by a major public utility company (NOVEC), is used for electrical transmission and electrical substation purposes, and is associated with and part of a major utility easement over 100 feet in width. This meets the intent of Comprehensive Plan guidelines to consider new monopoles to be located in major utility transmission easements or rights-of-way. Also, the subject property chosen for the telecommunications facility is on relatively level ground not in a floodplain or a Resource Protection Area. This fulfills Plan guidelines to site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.

The applicant states that within the search area, existing and adjacent approximate 130 foot tall electrical transmission towers were evaluated for use. However, Dominion Virginia Power rejected co-location on these structures. The existing towers cannot structurally support or accommodate Verizon's proposed antennas. Therefore, the applicant chose the NOVEC PVS site for the 150 foot tall monopole as the monopole can still be located near these other tall transmission towers. This meets Comprehensive Plan objectives stipulating that when existing structures are not available for co-location, or co-location is not appropriate because of adverse service needs, new structures that are required to support telecommunications antennas be located on properties that provide the greatest opportunity to conceal the telecommunications facilities.

The Comprehensive Plan encourages public lands as a preferred location for telecommunications uses. However, in this case the nearby public parklands are unused with no firm master plan for development and location of uses. Also, they do not offer any greater opportunity to reduce visual impact than the selected site, as demonstrated above.

CHARACTER AND EXTENT

The proposed site for the 150 foot tall monopole and 2,775 SF equipment compound is adjacent to NOVEC's electrical substation servicing an electrical power corridor with approximate 130 foot tall transmission towers. Another public utility for natural gas compression (Dominion Cove Point) exists east of the site. Therefore, the subject property provides screening and context due to the existing pattern of tall transmission towers and public utilities in the immediate area. This accords with Comprehensive Plan guidelines to design and site proposed telecommunications facilities to minimize impacts on the character of the property and surrounding areas. In addition, the site is further surrounded by public parkland and wooded areas. This fulfills Plan objectives to obscure or block views of proposed telecommunications facilities with other existing tree cover or topographic features to the maximum extent feasible.

The Zoning Ordinance allows for monopoles up to 199 feet in height. The proposed monopole is only 150 feet tall, however, and will accommodate up to 5 possible carriers. Verizon proposes to place 12 panel antennas at a 150 foot height on the monopole, with future carriers' antennas located at 140, 130, 120, and 110 foot heights respectively. Therefore, Comprehensive Plan objectives are met ensuring that the height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunications facility based on its service area requirements while still mitigating the visual impact of the facility. It also meets Plan objectives to site proposed telecommunications facilities to allow for future expansion.

Photo-simulations (photosims) located at the end of Attachment A represent the monopole's appearance from the closest adjacent residential areas at least 2300 feet to the west. The majority of photosims reveal that the monopole is of minimal view due to distance or landscape features in this rural area or is in context with the existing tall electrical transmission towers. Therefore, Comprehensive Plan guidelines have been

achieved that demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites, and that analysis of potential impacts from other vantage points in the area, especially from residential properties, show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site. Related to this, since the proposed 150 foot tall monopole is on electrical substation property and is adjacent to an electrical transmission corridor with towers that are approximately 130 feet in height, this adheres to Plan objectives that other existing structures of comparable form and style establish a grouping that complements a camouflaged telecommunication facility and supports its design, location, and appearance.

An historic preservation review has confirmed that the proposed monopole does not impact other historically significant landscapes and cultural resources. Specifically, the views of and vistas from other architecturally and/or historically significant structures is not impaired or diminished by placement of this telecommunications facility, thereby meeting Comprehensive Plan guidelines.

Overall, the Comprehensive Plan objectives are achieved for designing, siting, and/or landscaping mobile and land-based telecommunication facilities to minimize impacts on the character of the property and surrounding areas.

CONCLUSIONS AND RECOMMENDATIONS

Department of Planning and Zoning staff concludes that the subject proposal by Verizon Wireless and Milestone Communications, Inc., to construct a 150 foot tall monopole at 6309T Bull Run Post Office Road, Centreville, VA, satisfies the criteria of location, character, and extent as specified in Va. Code Sec. 15.2-2232. Therefore, staff recommends that the Planning Commission find Application 2232-Y14-7 substantially in accord with provisions of the adopted Comprehensive Plan.



**COUNTY OF FAIRFAX, VIRGINIA
APPLICATION FOR DETERMINATION
PURSUANT TO VIRGINIA CODE SECTION 15.2-2232**

*** This area to be completed by staff ***

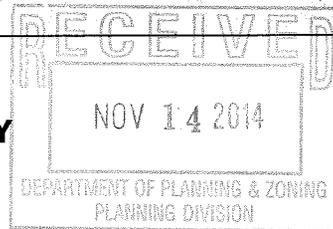
APPLICATION NUMBER 2232-Y14-7

Date application received 6/20/14 by DP2

Date(s) Revised 8/6/14 thru 11/14/14

Date application accepted 9/16/14 by DH

(Please Type or Clearly Print)



PART I: APPLICATION SUMMARY

LOCATION OF PROPOSED USE

Address 6309T Bull Run Post Office Road

City/Town Centreville Zip Code 20120

Place Name (example: Dale High School) Pleasant Valley Substation

Tax Map I.D. Number(s) 0522 01 0011E

Fairfax County Supervisor District Sully

APPLICANT(S)

Name (Company or Agency) Verizon Wireless and Milestone Communications

Agent Name Frank W. Stearns, Donohue and Stearns PLC

(Note: Failure to notify County of a change in agent may result in application processing delays)

Agent's Mailing Address 201 Liberty Street

City/Town Leesburg State VA Zip Code 20175

Telephone Number (703) 726-2547 Fax (703) 549-5385

E-mail fwstearns@donohuestearns.com

Secondary Contact Cristian Hernandez, Milestone Communications

Telephone Number (703) 620-2555 E-mail cris@milestonecorp.com

BRIEF DESCRIPTION OF PROPOSED USE

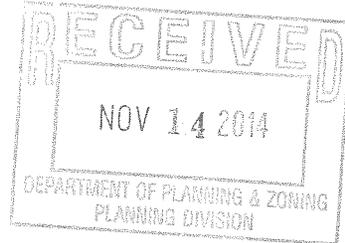
Installation of a 150 feet tall monopole structure, equipment shelter, and propane generator. Verizon Wireless will be the initial carrier with 12 panel antennas. Provision is made for up to four future additional carriers.

Total Area of Subject Parcel(s) 5.08 Acres

Zoning District R-C / WS

Applicant's previous Zoning Approvals for all uses on site (proffered conditions, special permits, special exceptions, variances, development plans)

None by applicant



PROPERTY OWNER(S) OF RECORD

Owner Northern Virginia Electric Cooperative

Street Address 5399 Wellington road

City/Town Gainesville State VA Zip Code 22065

Has property owner been contacted about this proposed use? YES NO

SIGNATURE

The undersigned acknowledges that additional Fairfax County land use review requirements may be identified during the review of this 2232 Review application and the fulfillment of such requirements is the responsibility of the applicant. The undersigned also acknowledges that all Fairfax County Zoning Ordinance requirements pertaining to this project shall be fulfilled.

In the event a new agent is assigned responsibility for this application, the applicant agrees to provide a letter to the Department of Planning and Zoning authorizing the transfer of responsibility for the application and providing all new contact information. In the event the applicant fails to notify County staff of a change in agent, the application may be subject to processing delays.

Signature of Applicant or Agent *Frank W. Steen*

Date June 20, 2014; with revisions October 16, 2014 and November 12, 2014

Submit completed application to:

**Chris Caperton, Chief, Facilities Planning Branch
Fairfax County Department of Planning and Zoning
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5507
(703) 324-1380**

PART II: STATEMENT OF JUSTIFICATION

PART IV: TELECOMMUNICATION USES
(Do not submit for non-telecommunications public facility uses)

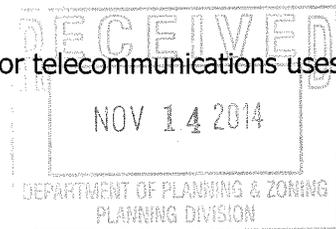
A. TYPE OF PROPOSED FACILITY Check the appropriate box(es) and provide the required information

	Yes	No
New monopole* or tower	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Collocation on existing monopole or tower	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Collocation on building facade or rooftop	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Collocation on replacement light pole or utility pole	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Located in utility or transportation easement and/or right-of-way	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Modification to approved telecommunications facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Collocation on other structure _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Including treepoles, flagpoles and other freestanding stealth structures.*

B. CALCULATION OF FACILITY MODIFICATIONS for modifications to an approved telecommunications facility, provide the following:

1. Application number(s) (456-, 2232-, FS-, FSA-) for all applicant's prior telecommunications uses on site:

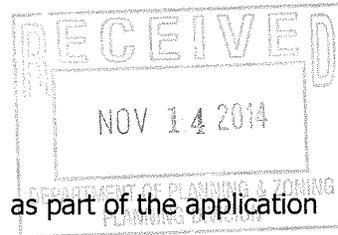


2. Calculate the surface area, in square inches (height x width **or** height x diameter), of the applicant's antennas organized in the following categories:

- a. approved _____
- b. existing _____
- c. proposed _____

3. Calculate the volume (height x width x depth) of the applicant's equipment cabinets (in cubic inches) and/or shelter (in cubic feet) organized in the following categories:

- a. approved _____
- b. existing _____
- c. proposed _____



C. ANTENNA(S) Provide a separate page for each provider listed as part of the application

Provider Verizon Wireless

Model # or name	Type Panel, Dish, Omni	Quantity	Height	Width	Diameter	Location height on the structure
BXA-70063-8CF	Panel	6	94.6"	11.2"		150' rad center
BXA-171063-12CF	Panel	6	72.4"	6.1"		150' rad center

Existing structure color: _____ Antenna color: gray

Is antenna painted to match existing structure? Yes No

If No, please explain: This is a new structure. The antenna are a natural gray finish per catalog cuts supplied.

Will the antennas be screened? Yes No If Yes, describe the screening to be provided:

Will the antennas be flush-mounted to the structure on which they are located? Yes No

If No, please explain: _____

Additional information:

Antennas will be light gray in color and mounted on a low profile platform at the 150' level of a galvanized steel monopole.

D. EQUIPMENT

Model # or name	Type cabinet or shelter	Quantity	Height	Width	Depth	Location
Equipment Shelter	Shelter	1	10'-5"	16'-10.5"	11'-6"	Inside compound
Propane Generator	Generator	1	5'-6"	9'-2"	3'-4"	Inside compound
Propane Cylindrical Tank	Fuel Storage	1	3'-1"	9'-11"	3'-1"	Inside Compound
Mesa Cabinet	Cabinet	1	3'-10"	3'-0"	3'-3"	Inside Compound

How will the equipment cabinet or shelter be screened? 8' tall chain link fence with slats and landscaping

Screen material: fencing w/black slats and landscape plants Screen color: black slats

Additional information:

**Application for Determination
Pursuant to
Section 15.2-2232, Code of Virginia**

Part II: Statement of Justification

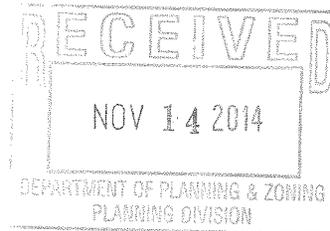
Applicants:

Cellco Partnership d/b/a Verizon Wireless
9000 Junction Drive
Annapolis Junction, Maryland 20701

Milestone Communications, Inc.
12110 Sunset Hills Road, Suite 100
Reston, Virginia 20190

Site Location

Pleasant Valley Substation
6309T Bull Run Post Office Road
Centreville, Virginia 20120
Parcel Number: 0522 01 0011E
Zoning District: Residential Conservation R-C (WS)
Planned Use: Residential at .1 - .2 du/ac
Supervisor District: Sully



Description of Proposed Use

Pursuant to Section 15.2-2232 of the Code of Virginia, Cellco Partnership d/b/a Verizon Wireless and Milestone Communications (“Applicant”) respectively requests that a proposed 150 feet tall telecommunications monopole structure with a supporting equipment compound be approved at the Pleasant Valley Substation, 6309T Bull Run Post Office Road, Centreville, Virginia 20120 (the Property has no fixed address assigned by the Department of Tax Administration but is adjacent to 6309 Bull Run Post Office Road).

The Property is owned by the Northern Virginia Electric Cooperative (“NOVEC”) (“Owner”) and is located just north of a major Virginia Power electrical transmission corridor with large transmission poles and towers that runs from southeast to northwest across property owned by the Fairfax County Park Authority. A major natural gas easement also is just south of the property. The existing use of the property consists of an electrical substation that is a power source for a natural gas compressor station owned by Dominion Cove Point located on neighboring property to the southeast (0522 01 0011D), as well as an additional electrical substation owned by NOVEC that is a delivery point to back-feed the existing NOVEC Cub Run substation serving part of western Fairfax County.

The neighboring gas compressor substation as well as the related electrical substation on this subject property that serves it were authorized by the Federal Energy Regulatory Commission (FERC) under the Natural Gas Act and the US Department of Transportation and

were not subject to Fairfax County 2232 Review and Special Exception requirements. The other electrical substation was collocated by NOVEC on a 15,600 square foot portion of the original substation area under SE 2004-SU-039 granted by the Board of Supervisors on March 21, 2005 and by 2232 Review 2232-Y04-18.

As per Section 2-514, part 3A (2), of the Fairfax County Zoning Ordinance, “monopoles, with related unmanned equipment cabinets and/or structures” are a permitted use (subject to Paragraphs 3B through 3K) “in any zoning district in a utility transmission easement which is ninety (90) feet or more in width.” As stated in the Statement of Justification, the telecommunications use will be constructed on a major electrical substation property that is adjacent to and associated with a major transmission power easement greater than 90 feet in width. In similar instances, the Department’s interpretation and administration of this Section consistently has included electrical substation property associated with an easement ninety feet or greater in width as part of that transmission easement. In addition, except for the small 15,600 square foot portion of the property used for a NOVEC electrical area-wide substation, the utility uses on the subject property were authorized by the Federal Energy Regulatory Commission (FERC) and not subject to Fairfax County Special Exception approval. As the monopole meets the requirements of 2-514 and will be located on the portion of the property not subject to prior SE approval and conditions, the applicant respectfully maintains that the proposed telecommunications use is permitted on the property only with 2232 Review approval and without Zoning Ordinance Special Exception.

The proposed telecommunications facility is designed for up to five telecommunications carriers. Verizon Wireless will be located at the top position on the 150 feet monopole and the facility will accommodate up to four additional future carriers. A detailed description of the telecommunications facility is provided on the Site Plan entitled “Pleasant Valley Substation” prepared by Entrex Communications Services, Inc. dated April 28, 2014 and amended through September 22, 2014 and included as part of this application. The Property consists of 5.08 acres, is zoned R-C (WS) (Residential Conservation, Water Supply), and is planned at .1 to .2 dwelling units per acre.

Verizon Wireless will have 12 panel antennas at a rad center of 150 feet above ground level. Space for the antennas of four future carriers is available at rad centers of 140 feet, 130 feet, 120 feet and 110 feet above ground level. The types and sizes of the Verizon antennas are detailed on Page 7 of the application form and on the engineering drawings, Sheet Z-8. An elevation of the monopole showing the location of Verizon’s antenna platforms and those of the other future carriers is shown on Sheet Z-4.

At the base of the proposed monopole will be a lease area for the equipment compound measuring 75 feet long and 37 feet wide with a total area of 2,775 square feet. An eight (8) foot high chain link fence with black slats and landscape screening will enclose the compound area. The compound area will contain all equipment and shelters of Verizon and of all future carriers as well as the telecommunications monopole. The Verizon equipment will consist of a shelter building measuring 16 feet 10.5 inches wide by 11 feet 6 inches deep by 10 feet 5 inches tall located within the compound adjacent to the monopole. Verizon will also locate a propane generator and related propane tank in the compound area. Full details of the compound area are

detailed on the Compound Plan, Sheet Z-3 of the Zoning Drawings. The dimensions of Verizon's shelter, generator and propane tank are detailed on Sheet Z-10, Z-11 and Z-12 of the engineering drawings and can also be found on page 7 of the 2232 Review application forms. A compound landscape plan is included on Sheet Z-13.

The proposed equipment structure and equipment cabinets will be unmanned and will operate around the clock 365 days per year. All facilities are monitored off site by the providers 24-hours a day 7-days a week in order to ensure that they are operating properly and that there is no unauthorized tampering with the facilities. Routine maintenance occurs for each of the equipment structures or cabinets approximately once or twice a month as performed by a service technician driving a standard size vehicle to the site. There are no customers, employees or other personnel at the site except at the time of the routine maintenance.

The facility will operate as a cellular base station in the wireless telecommunications networks of Verizon and up to four additional providers. The proposed use is benign and will not generate noise, lights, dust, glare, vibrations, fumes or odors. Minimum noise will be generated when the back-up generator is tested or there is an outage. The traffic generated will be minimal. The proposed use does not present a threat to the public health, safety or welfare and will not impact radio, television or telephone reception. It will have no negative impact upon the air and water quality, nor will it impact any existing environmental features on the subject property.

Requirement of Proposed Use

Attached to the application are Verizon's propagation maps that show the area to be covered by the new facility and the existing network coverage in the area provided by other existing and pending Verizon Wireless sites. The maps show the existing and pending Verizon sites in the vicinity as identified on the maps as Sully Station, Stone, Club Rub, Cedar Springs, Catharpin, Gum Springs and South Riding, and the projected improvement anticipated after installation of the proposed telecommunications use at the Pleasant Valley Substation site. Verizon Wireless' objective for this site is to fill existing service gaps and provide services to residences and commuters in the neighborhoods between Pleasant Valley Road and Gum Springs Road to the west. The site will serve a wide area of Western Fairfax County and Southeastern Loudoun County. The site will not only fill gaps but will enhance 4G-LTE data service to all users in the surrounding area.

To achieve the desired coverage and capacity within the intended geographical area, each antenna facility must be strategically located so as to ensure maximum coverage and a minimum overlap with each other facility. Because of the low power of the system, the antennas are effective only within a limited geographical area. Thus, each facility site is subject to technical and geographical constraints in order to provide reliable and efficient service. The proposed facility is necessary to meet Verizon Wireless' objectives for the area and will further satisfy similar needs of other wireless telecommunications carriers in the future. Moreover, the proposed height of the structure allows placement of the antennas at a sufficient height so as to permit radio signals to clear any obstructions such as trees and structures while simultaneously

providing coverage to the intended service area and allowing for the collocation of up to four (4) additional wireless carriers at the site.

Verizon Wireless chose this proposed location as it meets coverage objectives and will improve telecommunications coverage to clients. The construction of a telecommunications monopole facility at this location will serve additional carriers and is suitable to the site, its setting, and the nature of the existing public use on the property.

Since one of the primary benefits of the wireless communication system is the ability to communicate to and from any location, a network of facilities that provide seamless coverage is essential. The location and design of each facility in the network is therefore critical to the overall functioning of the entire network. Without a facility at or near this location, Verizon Wireless will be unable to provide reliable coverage to its users in the area.

Anticipated Impacts On Adjoining Properties

The monopole structure will be located in an area of existing public utility and public facility properties and uses. The 5.08 acres NOVEC electrical substation property is surrounded by property owned by Dominion Cove Point and used for the storage, compression and transmission of natural gas. Immediately to the south of the substation property is a major utility easement running from southeast to northwest with two to three parallel rows of overhead utility lines supported by existing tall lattice towers and poles. The easement also contains a Columbia liquefied natural gas line. These utility easements run across a 220-acre Fairfax County Park Authority property (0522 01 11F) south of the NOVEC property adjacent to and south of the Cove Point property. The Fairfax County Park Authority also owns a 246-acre property (0531 05 A2) south and east of the Cove Point property. Further to the southeast of the Dominion Cove Point property is a 170-acre vacant parcel in private ownership (0524 01 0006E).

The large lot, mostly public and vacant land use pattern surrounding the property isolates it from residential uses and roadways. The nearest residential parcels are approximately 1,900 feet to the west on the west side of Bull Run Post Office Road. The access entrance to the NOVEC property at Bull Run Post Office Road is approximately 2,500 feet to the west.

Extensive tree cover in the area as well as its relationship to other tall utility structure in the area will serve to buffer and screen the proposed facility. The use proposed in the application will have no impact on traffic or parking as it will be unmanned and will not generate vehicular traffic other than the once or twice a month for a technician to visit to ensure everything is in proper working order. The technician uses a standard vehicle and will have access to the structure and compound via the paved access driveway. There will be two parking spaces on the property adjacent to the compound area to accommodate the service vehicles. There will be no perceptible noise generated by the facility unless the backup generator is operating during testing or power outages. In addition, there will be no interference with electronic equipment for telephone, television, radio or other electronic uses.

Alternative Sites Considered for the Proposal

The proposed monopole structure will be located to fill an existing service void and address capacity issues. The overall area is characterized by large properties in public or public utility ownership and use, and large lot single-family residential development. The Virginia Power Easement contains large structures but which were rejected for collocation due to size of the antenna mount and the fact that the structures support a 500kV transmission line. There are no existing tall buildings in the area for collocation of a telecommunication use. The public sites owned by the Fairfax County Park Authority offer no greater advantage for reducing impacts than the selected substation site. On most areas of the park properties, the proposed telecommunications structure would have less visual context with the existing tall transmission structures and farther removed from the existing public utility uses in the area. As a result from many vantage points the structure would also more likely appear to be a more solitary and prominent feature on the landscape.

Other than the public utility sites and the large Fairfax County Park Authority properties in the area, there are no other non-residential properties suitable for the proposed structure. The selected public utility electrical substation is already impacted by industrial type development and is well isolated from other uses. It is a well-buffered site that provides the opportunity to visually mix the new monopole structure with other existing tall tower and poles used for the transmission of electrical power, reducing its prominence and visual presence.

Relationship of the Proposed Facility to the Comprehensive Plan

Mobile and Land-Based Telecommunication Services provide for the wireless transmission of voice and data and include cellular and personal communications services (PCS), paging and wireless internet services and mobile radio. These services operate from wireless networks that are dependent on antenna devices and related equipment to transmit from a sender to one or more receivers. Such services are viewed as a public necessity that benefits the community and its economic growth and vitality.

The property is located in the Bull Run Planning District, Stone Bridge Community Planning Sector (BR5), Planning Area III, and is planned for residential use at .1 - .2 dwelling units per acre. On Figure 6, "Existing Public Facilities", page 17 of the "Overview: Bull Run Planning District", the "NOVEC Substation" is identified in Sector BR5 under the "Public Utilities" Column. On page 79 of the Bull Run Planning District, Stone Bridge Community Planning Sector (BR5), under "Recommendations: Public Facilities," Recommendation 2 states: "Provide two substations for the Northern Virginia Electric Cooperative in Sector BR5."

The property contains a public utility use. The structure will blend with the existing use of the site, will be well screened and distant from residential uses, and will accommodate multiple carriers. The proposed facility is consistent with and furthers the goals of the Fairfax County Comprehensive Plan ("Comprehensive Plan") and fulfills Objective 44, Policy D under

“Feature Shown Guidelines”, Mobile and Land Based Telecommunication Services, as described below:

Feature Shown Guidelines

Objective 44: With Planning Commission approval, consider mobile and land-based telecommunication facilities to be located on existing or replacement structures a “feature shown” of the Comprehensive Plan to be processed without a public hearing when placed in conformance with the following policies:

. . . .

Policy d. Consider new monopoles or towers to be located in major utility transmission easements or rights-of-way, which are at least 100 feet in width and not used for underground gas transmission lines, to be a feature shown of the Comprehensive Plan if it is demonstrated that the telecommunication facilities cannot be accommodated on existing utility structures and the following guidelines are met:

- **the monopole or tower is placed at least 35 feet inside the transmission easement;**
- **the monopole or tower is placed a minimum of 200 feet from any existing residence;**
- **the monopole or tower is placed a minimum of 200 feet from the right-of-way of any existing public roadway or street.**

The entire property on which the proposed monopole will be located is owned by a major public utility company, is used for electrical transmission and electrical sub-station purposes, and is associated with and part of a major utility transmission easement over 100 feet in width. There are no underground gas transmission lines on the substation property. The monopole will be located in the northwest quadrant of the property at a location more than 35 feet from any property or easement line, over 200 feet from any existing residence, over 200 feet from the nearest right-of-way of an existing public roadway or street. Further, the telecommunication facility cannot be accommodated on existing utility structures as most other poles in the search area cannot structurally support or accommodate Verizon’s antennas and were rejected for collocation.

The proposed facility is also consistent with the other stated Objectives of the Policy Plan of the Fairfax County Comprehensive Plan concerning Mobile and Land-Based Telecommunication Services, “General Guidelines”, as described in the following:

General Guidelines

Objective 42: In order to provide for the mobile and land-based telecommunication network for wireless telecommunication systems licensed by the Federal Communications Commission, and to achieve opportunities for the collocation of related facilities and the reduction or elimination of their visual impact, locate the network’s necessary support facilities which include antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.

***Policy a.* Avoid the construction of new structures by locating proposed telecommunication facilities on available existing structures such as rooftops, telecommunication and broadcast support structures, electrical utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with such existing structures. (See Figures 8, 9, 10.)**

Applicants' Response: There are no existing structures in the vicinity of the property that can structurally accommodate the proposed telecommunications use. The applicant explored the use of existing Virginia Power transmission towers in the transmission easement just to the south of the property but Virginia Power rejected collocation on these structures due to the number of antennas required on the antenna mounts and the fact that the transmission towers support a major 500kV transmission line. Construction of a new structure is, therefore, needed to respond to the growing need in the area.

***Policy b.* When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.**

Applicants' Response: The proposed monopole and compound will be located on property developed with an electrical power substation and that is adjacent to existing major utility transmission corridors. The proposed monopole will be compatible and visually blend with existing tall electrical transmission structures in the area that are approximately 130 feet in overall height and will have minimal visual impact on surrounding areas. In addition, the property adjoins large land holdings of the Fairfax County Park Authority, much of which is undeveloped and wooded and will serve to buffer and screen the proposed use from roadways and residential areas.

***Policy c.* When new structures or co-locations are required to serve residential neighborhoods, consider minimizing visual impacts on the surrounding area by utilizing camouflage structure design and/or micro-cell technologies or similar miniaturization technologies, such as distributed antenna systems (DAS), if feasible.**

Applicants' Response: The proposed structure will not have a camouflaged design but will be located on a public utility site and will visually blend with the existing tall electrical transmission structures in the area that are approximately 130 feet in overall height. The property is well isolated and surrounded by public parkland and public utility uses and is far removed from existing residences and roadways.

***Policy d.* When multiple sites provide similar or equal opportunity to minimize impacts, public lands shall be the preferred location.**

Applicants Response: While there are nearby public parklands, they are unused with no firm master plan for development and location of uses. They offer no greater advantage than the selected site for locating the telecommunications structure to reduce visual impacts than the selected site.

***Policy e.* Locate mobile and land-based telecommunication facilities on public property only after a lease agreement between the County, or related board or authority, and the service provider has been established.**

Applicants Response: The structure will not be located on a public use site.

***Policy f.* Ensure that the use of public property by mobile and land-based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use and complies with adopted policies and plans to protect natural resources.**

Applicants Response: The proposed structure will not be located on a public use site.

***Policy g.* Co-locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property only when a co-location structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.**

Applicants' Response: The proposed 150 feet tall monopole will accommodate up to five telecommunication providers, including the co-applicant Verizon Wireless.

***Policy h.* Ensure that the height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service area requirements while still mitigating the visual impact of the facility.**

Applicants' Response: The 150 feet height of the proposed monopole is the minimum extent feasible to meet wireless coverage objectives and accommodate up to five telecommunication carriers. The height is consistent with adjacent utility transmission structures and will not have a visual impact on surrounding areas.

***Policy i.* When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the residential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.**

Applicants' Response: The height of the proposed structure is in keeping with other large poles and towers on the adjacent power transmission easement that are approximately 130 feet in overall height and is designed to accommodate up to five telecommunication carriers in an integrated placement of antennas at ten-foot intervals.

***Policy j.* Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas.**

Applicants' Response: The 150 feet tall monopole is of similar height, mass and relative extent as the nearby approximately 130 feet tall lattice towers used to support the 3 major electrical transmission towers, that cross on adjoining property. The monopole is consistent with the public utility use of the electrical substation site and the adjoining site to the east used for a gas compression facility. The new structure will be in context with its immediate surroundings; established wooded areas and distance will serve to screen it from the nearest residential areas along Bull Run Post Office Road. Landscape planting will be added to the site to further screen the equipment compound area. The appropriateness of the design and site and elevation of the structure are provided on Zoning Drawing sheets Z-1 and Z-4. The appropriateness of the design and the relationship to the site and surrounding community are demonstrated by the attached photo-simulations of the structure taken from 7 vantage points throughout the area.

***Policy k.* Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.**

Applicants' Response: The selected site is located in a residential conservation (RC) zoned area and is used for non-residential / electrical substation purposes. Adjoining properties are either in public utility or public park use. Part of the public park area immediately to the south is impacted by a public utility corridor with large electrical transmission towers and poles. In addition, extensive woodland areas border the northern and western edge of the property. The site's relationship to an existing pattern of large electrical transmission structures and public utilities in the immediate area, as well as its proximity to public parkland and wooded areas, mitigates visual impacts by providing screening, context and the opportunity to visually blend the new structure with other existing tall transmission structures in the area that are approximately 130 feet in height. Other properties in the search area used for non-residential purposes provide no greater opportunity for concealment or visual mitigation. The photo-simulations included in the application package demonstrate the appropriateness of the design and any visual impacts on surrounding areas.

***Policy l.* A key concept in assessing telecommunication facilities is mitigation which is defined as actions taken to reduce or eliminate negative visual impacts. Mitigate the visual impact of proposed telecommunication facilities and their equipment, by using effective**

design options appropriate to the site such as:

- Design, site and/or landscape the proposed facility to minimize impacts on the character of the area;
- Locate proposed telecommunication facilities near or within areas of mature vegetation and trees that effectively screen or provide an appropriate setting for the proposed structure provided such location does not adversely impact sensitive resources or cause fragmentation of forested communities. When viewed in context, consider perspective views, relative topography and other factors, to mitigate the visual presence and prominence of the structure;
- Blend proposed telecommunication facilities with an existing pattern of tall structures;
- Obscure or block the views of proposed telecommunication facilities with other existing structures, vegetation, tree cover, or topographic features to the maximum extent feasible; and
- Replace existing telecommunication facilities with taller structures or extend their overall height to reduce the need for another structure when such height increases or structure replacements are visually appropriate to the site, including the surrounding area and are consistent with the type, style and pattern of the existing structure.

Applicants' Response: The structure is located near mature vegetation on the adjacent property to the immediate north and in the larger area to the north and west on property owned by the Fairfax County Park Authority. To the south, west and southwest, property also is owned by the Fairfax County Park Authority and is impacted by the existing electrical transmission corridor and while not extensively wooded, provides considerable distance and buffer between the proposed use and any residences in those directions. In addition, the proposed monopole will be of a consistent height and design and visually blend with the existing pattern of tall structures approximately 130 feet in height in the existing transmission corridor to the south.

Policy m. Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.

Applicants' Response: The proposed facility will not adversely impact historically significant landscapes and cultural resources nor impair or diminish views and vistas from such resources.

Policy n. Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.

Applicants' Response: The facility will avoid areas of environmental sensitivity.

Policy o. Site proposed telecommunication facilities to allow for future expansion and with corresponding levels of screening to accommodate expansion.

Applicants' Response: Both the monopole and equipment compound area will be designed to accommodate up to five telecommunication providers while maintaining current levels of screening.

Policy p. Design and site proposed telecommunication facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.

Applicants' Response: The facility will be located so as not to impede on any areas necessary for future right-of-way or road improvements

Policy q. Locate and construct antennas used for purposes other than mobile and land-based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-Based Telecommunications Services" section.

Applicants' Response: The proposed facility is for mobile and land based purposes.

Objective 43: Design proposed telecommunication facilities to mitigate their visual presence and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area. (See Figures 11 and 12.)

Policy a. Disguise or camouflage the appearance of proposed telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in a similar context and belong to the setting where placed.

Applicants' Response: The proposed monopole structure will not be of a camouflaged design but will be consistent and in context with the other structures on the substation property and the adjoining major electrical transmission line corridor.

Policy b. Design proposed telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.

Applicants' Response: The proposed 150 feet tall structure will be of a mass and height similar to other large steel towers and poles with an overall height of approximately 130 feet used for electric transmission purposes on the property and the adjacent power line corridor.

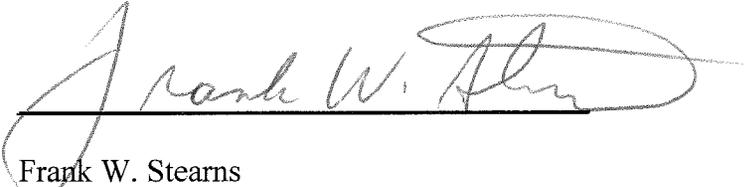
Policy c. Use other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunication facility and supports its design, location and appearance.

Applicants' Response: The design and height of the 150 feet tall monopole is of comparable form and style as the towers and poles in the electrical transmission corridor that are

approximately 130 feet in height. The new structure will visually blend and be consistent with the other existing towers and poles in the immediate area.

Conclusions

In light of the foregoing and the reasons stated, Verizon Wireless and Milestone Communications, Inc. hereby submit that this proposal is in compliance with the Fairfax County Comprehensive Plan and respectfully requests that the 2232 Review Application be approved.

A handwritten signature in black ink, reading "Frank W. Stearns". The signature is written in a cursive style with a large initial "F" and a long horizontal stroke at the end.

Frank W. Stearns
Donohue and Stearns, PLC
Agent for Applicant

Submitted June 20, 2014; with revisions made October 16, 2014 & November 12, 2014



Aerial Imagery Copyright 2007 Commonwealth of Virginia



**Statement of Certified Engineer
Site Selection and Performance Standards**

Site Name: Centre Heights
Site Address: 6309T Bull Run Post Office Road, Centreville, VA

The NOVEC substation parcel located at 6309T Bull Run Post Road, was selected by Verizon Wireless to provide and improve 4G LTE wireless coverage to the neighborhoods between Gum Springs and Pleasant Valley Road in Centreville. The site will also enhance in-building coverage to the neighboring residential communities.

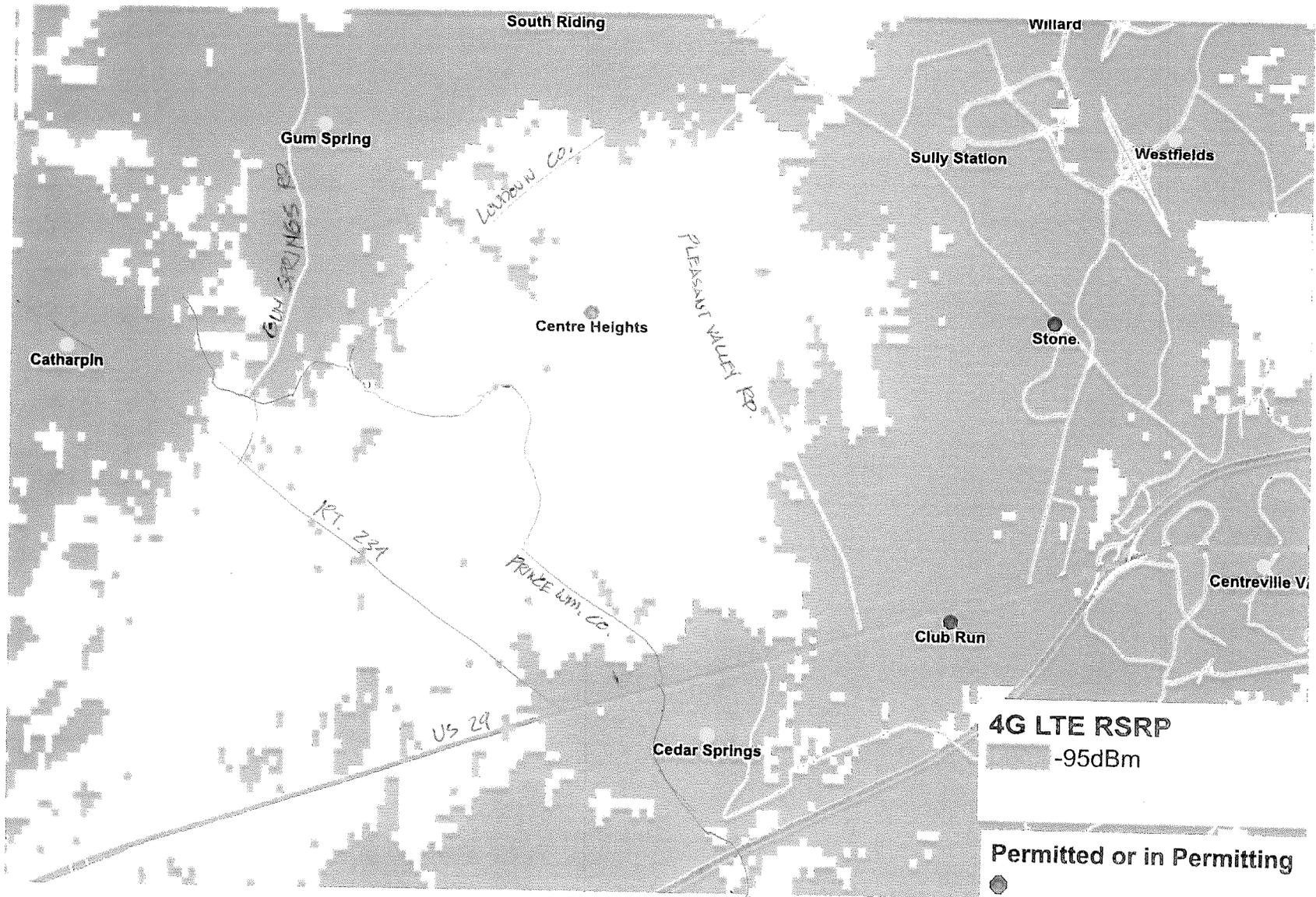
The applicant identified existing structures of sufficient height in the area. However, each of the existing Dominion Virginia Power (DVP) transmission towers that were of sufficient height and structurally capable were already occupied by other carriers. By adding Verizon Wireless equipment, these transmission towers would fail structurally.

The proposed Milestone facility will resolve the need for adequate coverage in the area surrounding the proposed site and also ensure adequate overlapping coverage between and among existing Verizon sites. Ultimately, the proposed site will allow residents and commuters to experience better quality and diminished drop calls. The propagation maps attached to the application and prepared by an RF Engineer illustrate the improved coverage that will result with the addition of the new telecommunications site.

Mercy Luhanga
Radio Frequency Engineer
9000 Junction Drive
Annapolis Junction, MD 20701

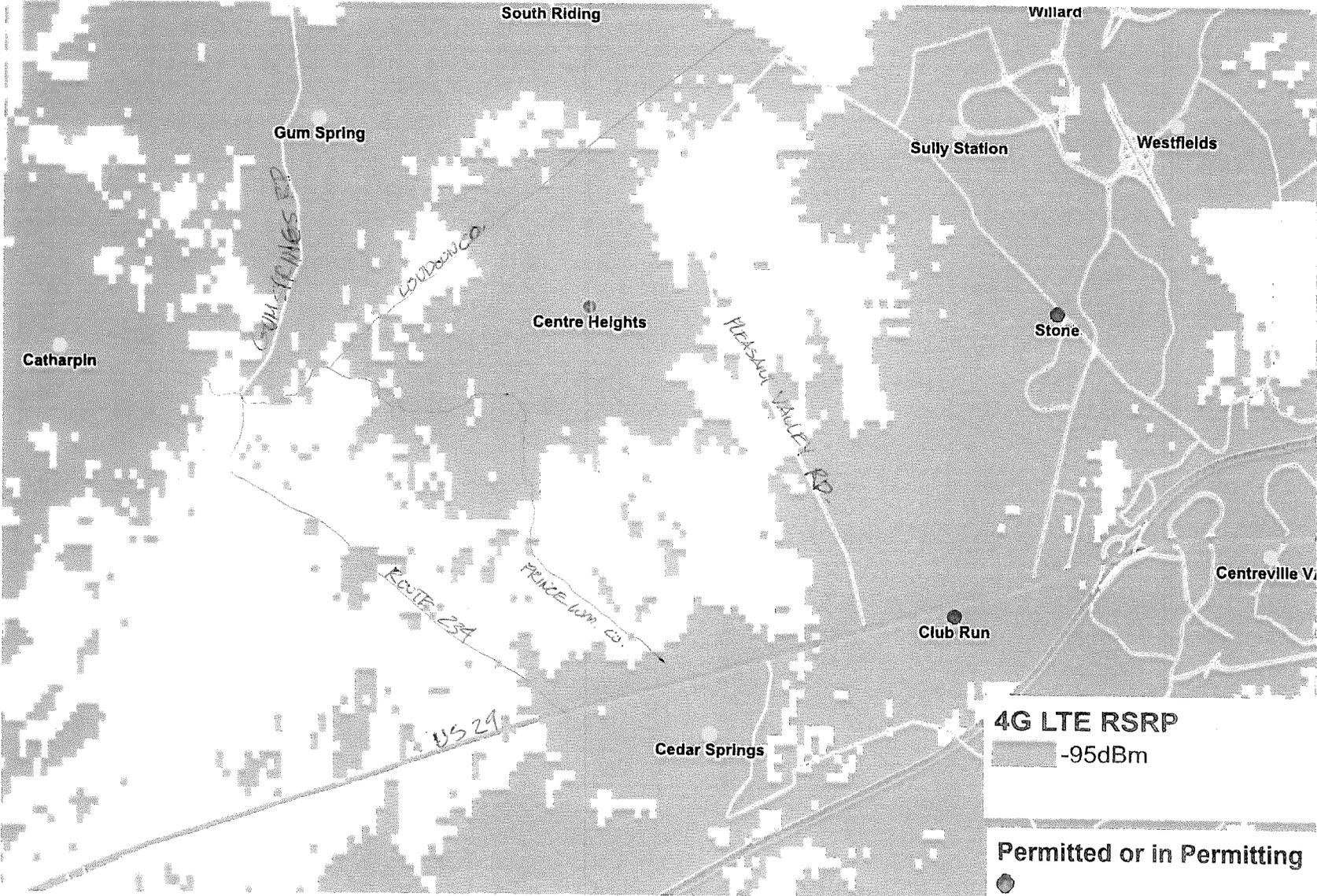
VERIZON WIRELESS

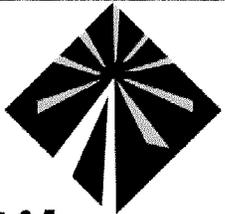
VZW - 4G LTE Coverage - Without the Centre Heights Site



VERIZON WIRELESS

VZW - 4G LTE Coverage - With the Centre Heights Site





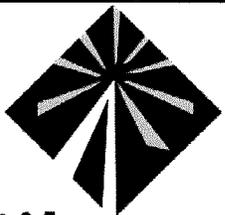
Milestone
COMMUNICATIONS

**Pleasant Valley Substation
6309T Bull Run Post Office Road
Centreville, VA 20120
P-1 Looking from Site to the North**



Milestone
COMMUNICATIONS

**Pleasant Valley Substation
6309T Bull Run Post Office Road
Centreville, VA 20120
P-2 Looking from Site to the South**



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**Pleasant Valley Substation
6309T Bull Run Post Office Road
Centreville, VA 20120
P-3 Looking from Site to the West**



Milestone
COMMUNICATIONS

**Pleasant Valley Substation
6309T Bull Run Post Office Road
Centreville, VA 20120
P-4 Looking to Site from the South**

Overview Map

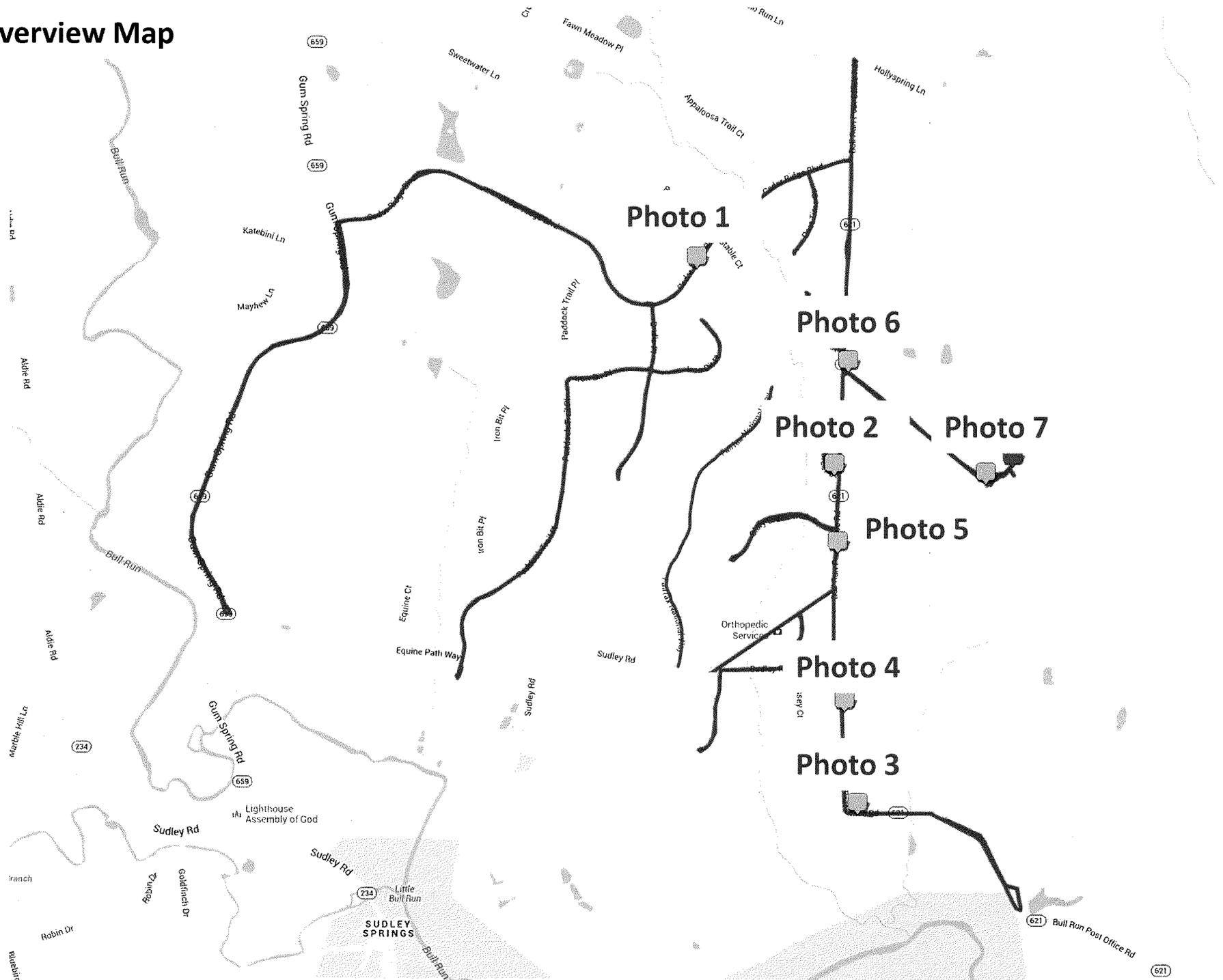
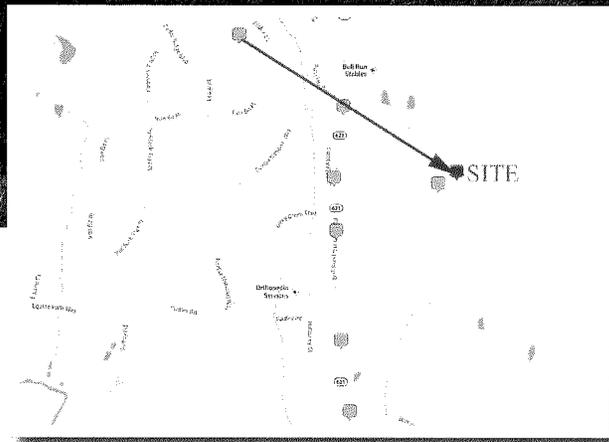
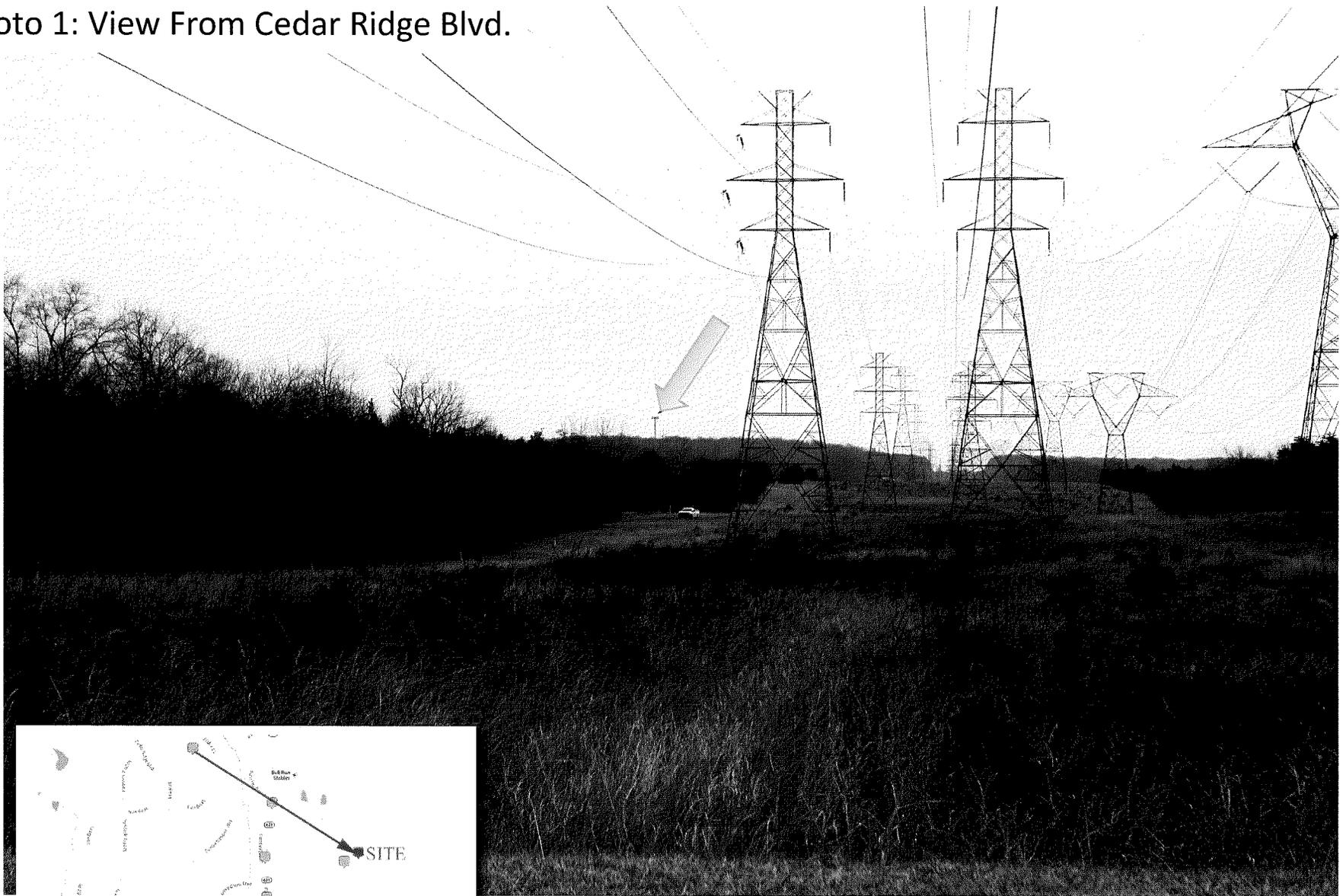
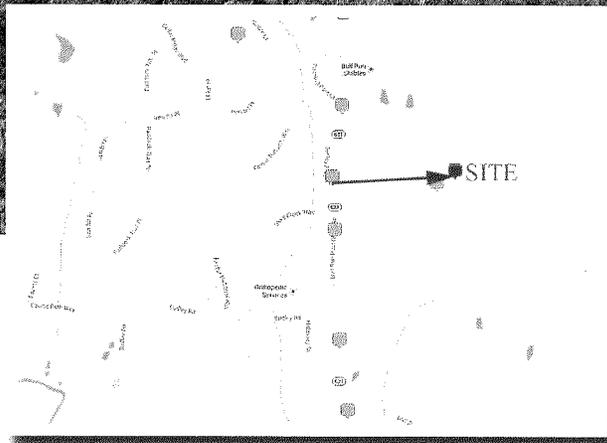


Photo 1: View From Cedar Ridge Blvd.



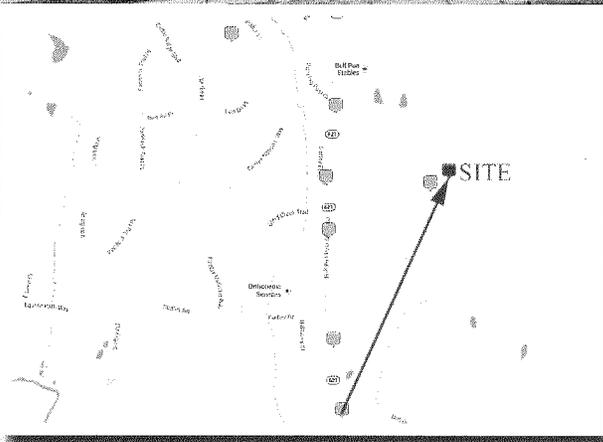
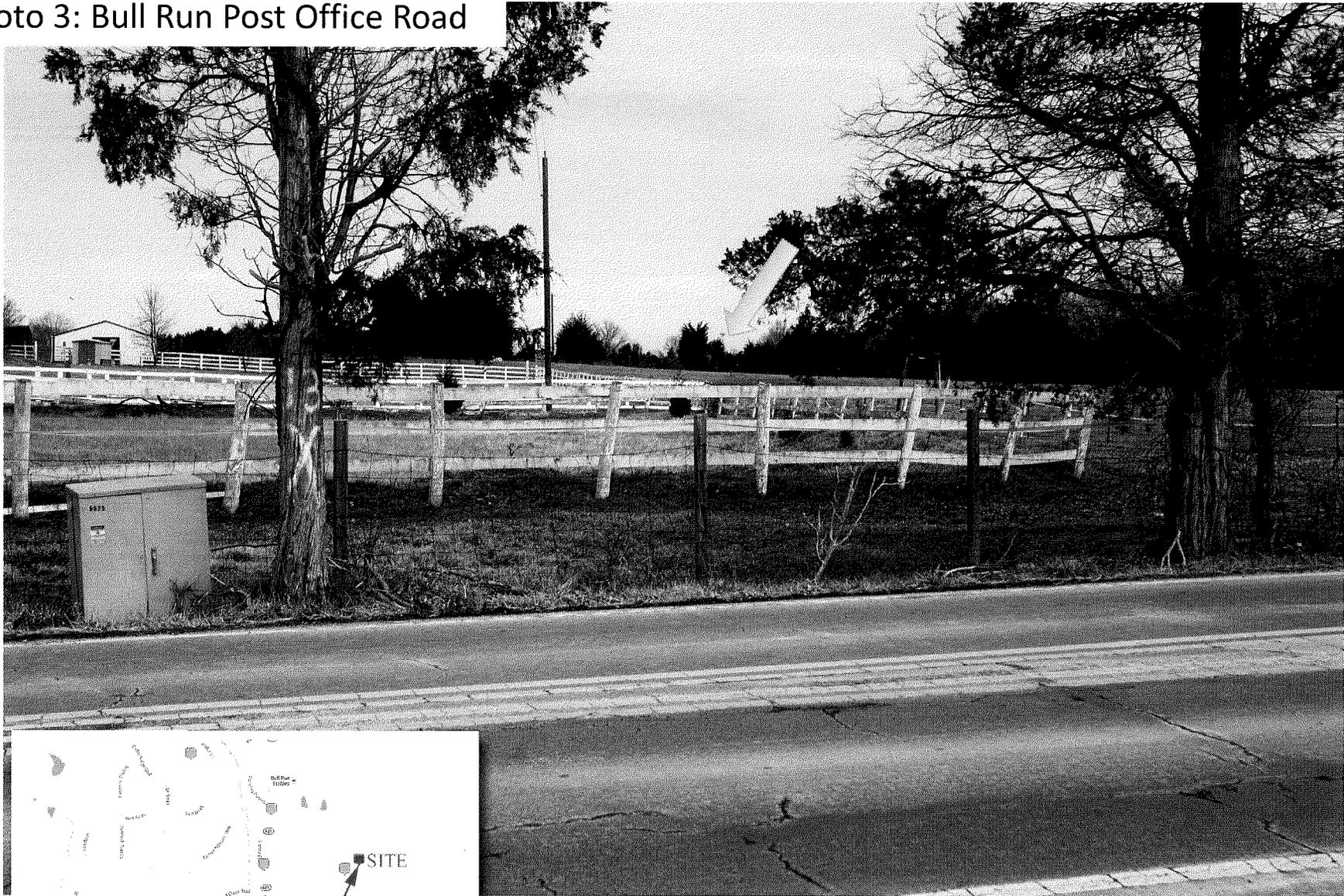
**PLEASANT VALLEY
SUBSTATION
PROPOSED MONOPOLE**

Photo 2: View from the intersection Bull Run Post Office Road and Sudley Forest Court



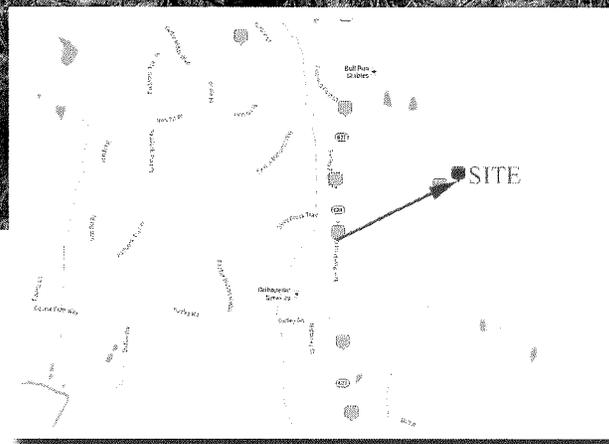
**PLEASANT VALLEY
SUBSTATION
PROPOSED MONOPOLE**

Photo 3: Bull Run Post Office Road



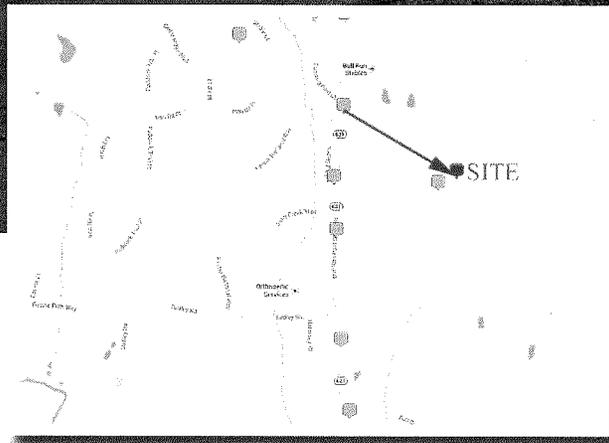
**PLEASANT VALLEY
SUBSTATION
PROPOSED MONOPOLE**

Photo 5: Bull Run Post Office Road



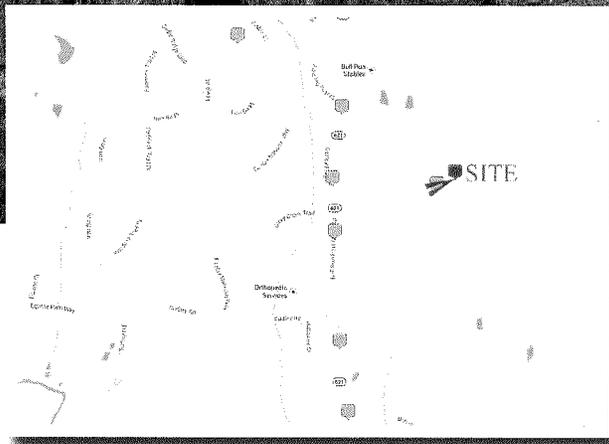
**PLEASANT VALLEY
SUBSTATION
PROPOSED MONOPOLE**

Photo 6: View from Bull Run Post Office Road and Pleasant Valley Substation access road



**PLEASANT VALLEY
SUBSTATION
PROPOSED MONOPOLE**

Photo 7: The Pleasant Valley Substation Access Road



PLEASANT VALLEY
SUBSTATION
PROPOSED MONOPOLE

Mechanical specifications

Length	2405 mm	94.6 in
Width	285 mm	11.2 in
Depth	114 mm	4.5 in
Depth with z-bracket	154 mm	6.1 in
Weight ⁴⁾	10.9 kg	24.0 lbs
Wind Area Fore/Aft	0.69 m ²	7.4 ft ²
Wind Area Side	0.27 m ²	3.0 ft ²
Max Wind Survivability	>201 km/hr	>125 mph
Wind Load @ 100 mph (161 km/hr)		
Fore/Aft	1038 N	233 lbf
Side	502 N	113 lbf

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiber-glass radome.

Mounting & Downtilting

Mounting hardware attaches to pipe diameter $\varnothing 50$ -160 mm; $\varnothing 2.0$ -6.3 in

Mechanical downtilt angle	0-17°
Mounting Bracket Kit	36210002
Downtilt Bracket Kit	36114003

Electrical specifications

Frequency Range	696-900 MHz
Impedance	50 Ω
Connector ³⁾	NE or E-DIN Female 2 ports / Center
VSWR ¹⁾	$\leq 1.35:1$
Polarization	Slant $\pm 45^\circ$
Isolation Between Ports ¹⁾	< -30 dB
Gain ¹⁾	16 dBd 18 dBi
Power Rating ²⁾	500 W
Half Power Angle ¹⁾	
Horizontal Beamwidth	63°
Vertical Beamwidth	7°
Electrical downtilt ⁵⁾	0°
Null fill ¹⁾	5%
Lightning protection	Direct ground
Patented Dipole Design: U.S. Patent No. 6,608,600 B2	

- 1) Typical values.
- 2) Power rating limited by connector only.
- 3) NE indicates an elongated N connector.
E-DIN indicates an elongated DIN connector.
- 4) Antenna weight does not include brackets.
- 5) Add'l downtilts may be available. Check website for details.

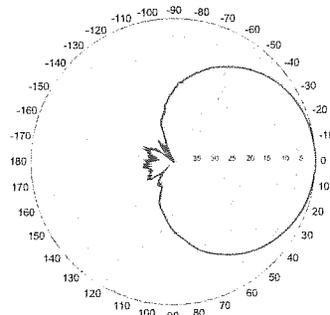
Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

815.399.0001 • antel@antelinc.com • www.antelinc.com

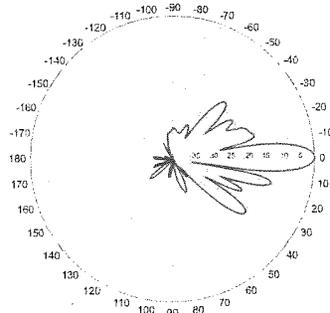
BXA-70063/8CF ____

When ordering replace " ____ " with connector type.

Radiation-pattern¹⁾
750 MHz

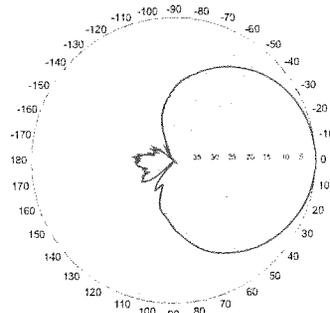


Horizontal

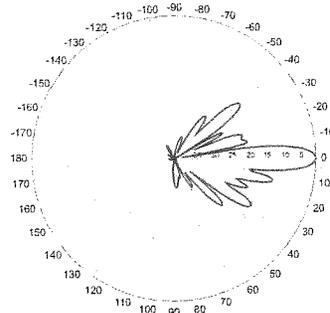


Vertical

850 MHz

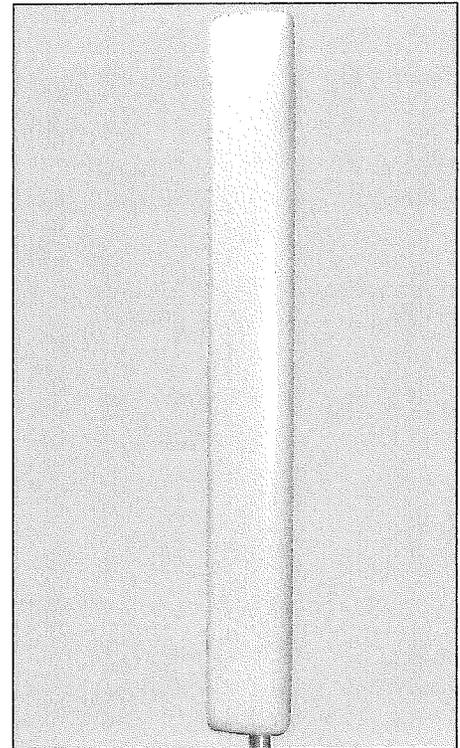


Horizontal



Vertical

696-900 MHz



Featuring our Exclusive
3T Technology™
Antenna Design:

- Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

Warranty:

This antenna is under a five-year limited warranty for repair or replacement.

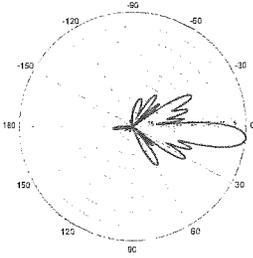
Revision Date: 01/08/09



BXA-70063-8CF-EDIN-X

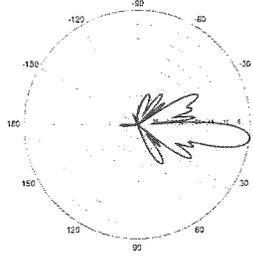
X-Pol | FET Panel | 63° | 16.0 dBd

BXA-70063-8CF-EDIN-6



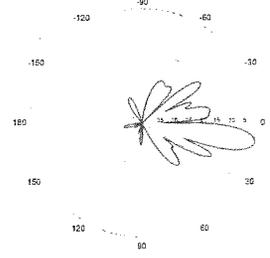
6° | Vertical | 750 MHz

BXA-70063-8CF-EDIN-7

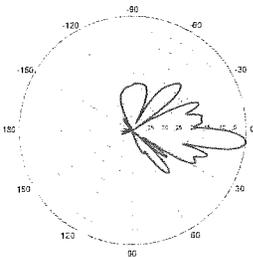


7° | Vertical | 750 MHz

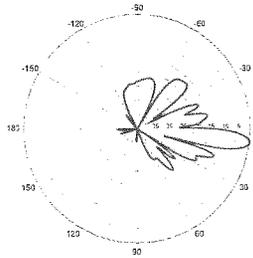
BXA-70063-8CF-EDIN-10



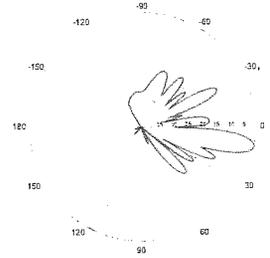
10° | Vertical | 750 MHz



6° | Vertical | 850 MHz



7° | Vertical | 850 MHz



10° | Vertical | 850 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

Slant +/- 45° Dual Polarized, Panel 63° / 19-19.5 dBi

BXA-171063/12CF

When ordering replace "___" with connector type.

Mechanical specifications

Length	1840 mm	72.4 in
Width	154 mm	6.1 in
Depth	105 mm	4.1 in
Depth with t-bracket	133 mm	5.2 in
4) Weight	6.8 kg	15.0 lbs
Wind Area		
Fore/Aft	0.28 m ²	3.1 ft ²
Side	0.19 m ²	2.1 ft ²
Rated Wind Velocity (Safety factor 2.0)		
	>201 km/hr	>125 mph
Wind Load @ 100 mph (161 km/hr)		
Fore/Aft	460 N	103.4 lbs
Side	304 N	68.3 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in).

Mounting bracket kit #26799997

Downtilt bracket kit #26799999

The downtilt bracket kit includes the mounting bracket kit.

Electrical specifications

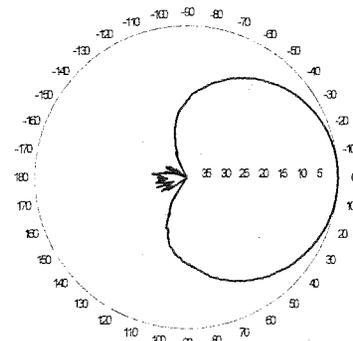
Frequency Range	1710-2170 MHz
Impedance	50Ω
3) Connector(s)	NE or E-DIN 2 ports / center
1) VSWR	≤ 1.5:1
Polarization	Slant ± 45°
1) Isolation Between Ports	< -25 dB
1) Gain:	1710-1880 MHz 19.5dBi 1850-1990 MHz 19.5 dBi 2110-2155 MHz 19.0 dBi
2) Power Rating	250 W
1) Half Power Angle	
H-Plane	63°
E-Plane	5°
1) Electrical Downtilt	0°
1) Null Fill	5%
Lightning Protection	Direct Ground

Patented Dipole Design: U.S. Patent No. 6,597,324 B2

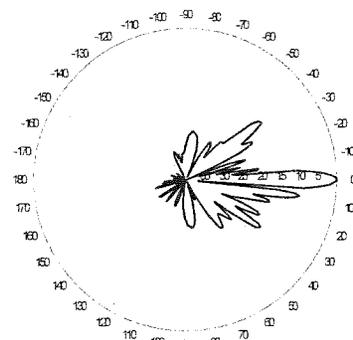
- 1) Typical values.
- 2) Power rating limited by connector only.
- 3) NE indicates an elongated N connector.
E-DIN indicates an elongated DIN connector.
- 4) The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation pattern¹⁾



Horizontal



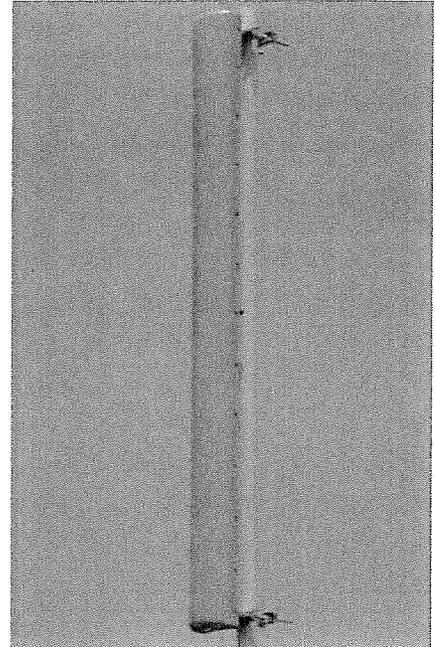
Vertical

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.

CF Denotes a Center-Fed Connector.

1710-2170 MHz



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

This Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna available with center-fed connectors only.



Revision Date: 10/4/07

BXA Bracket Kits

Part Number Bracket Type

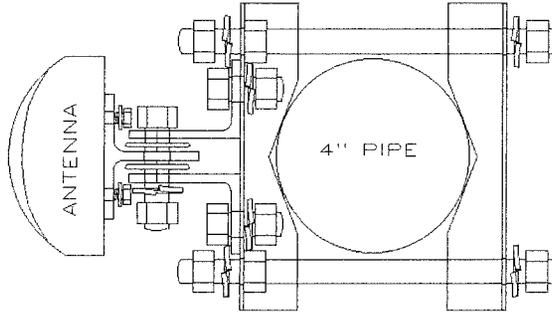
26799997 **Standard BXA
Mounting Bracket
Kit for:**

BXA-171063/8CF

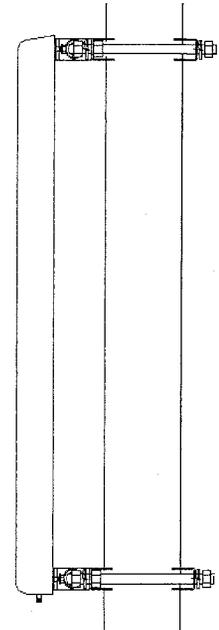
26799999 **Standard BXA
*Downtilt Bracket
Kit for:**

BXA-171063/8CF

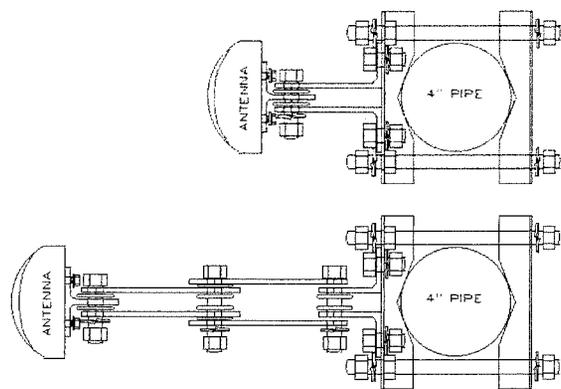
26799997 **Top View**



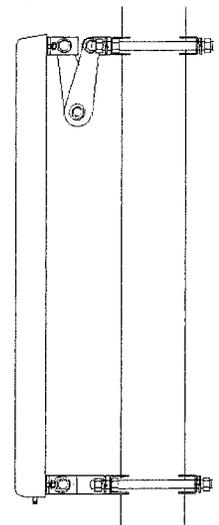
Side View



26799999 **Top View**



Side View



*The BXQ downtilt bracket kit includes the standard mounting bracket kit.

Mounting Bracket Kits are sold separately and not included in the price of antennas.





New Services and Technology Support

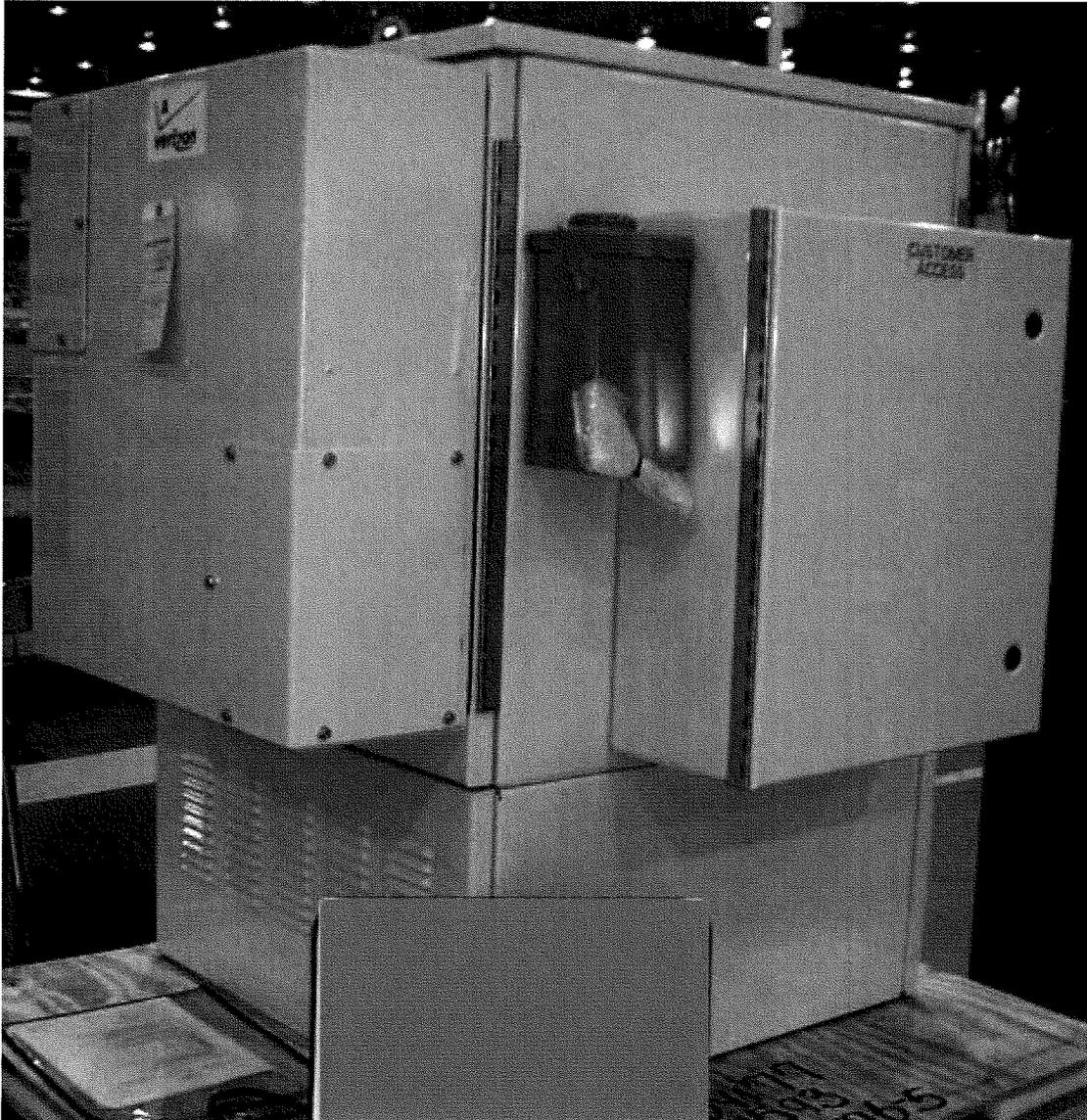


Figure 3 - Mesa Span XL

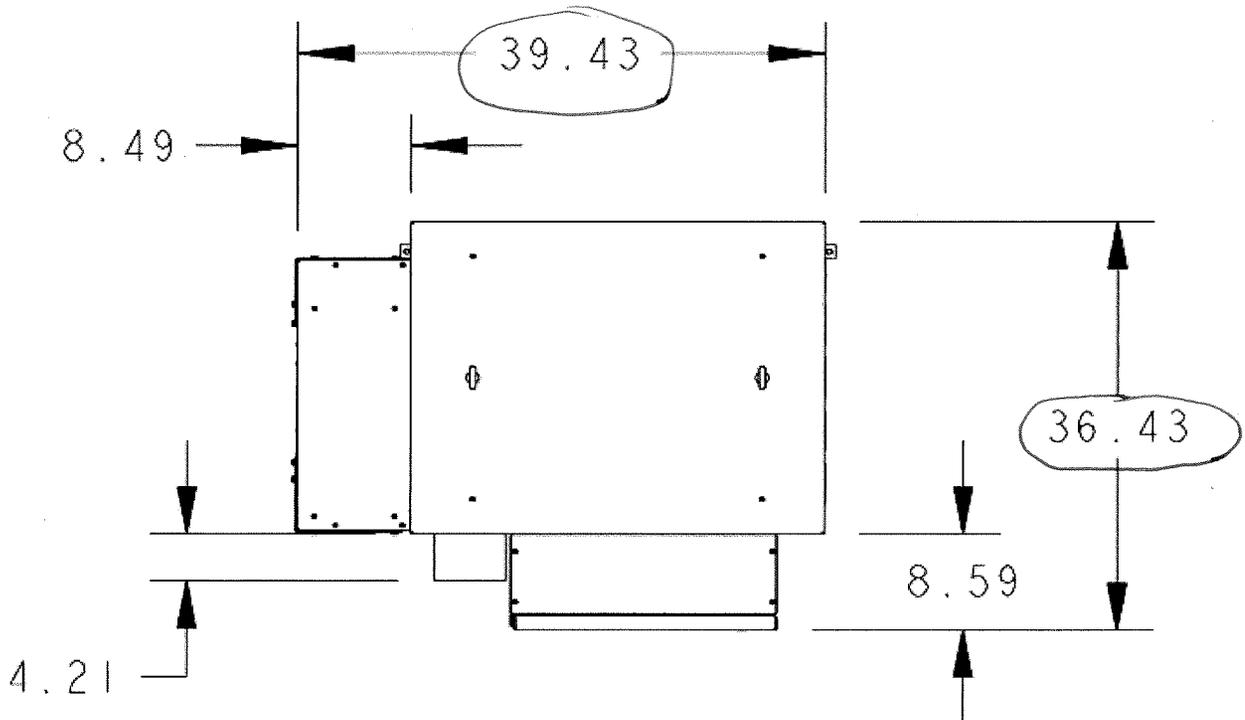
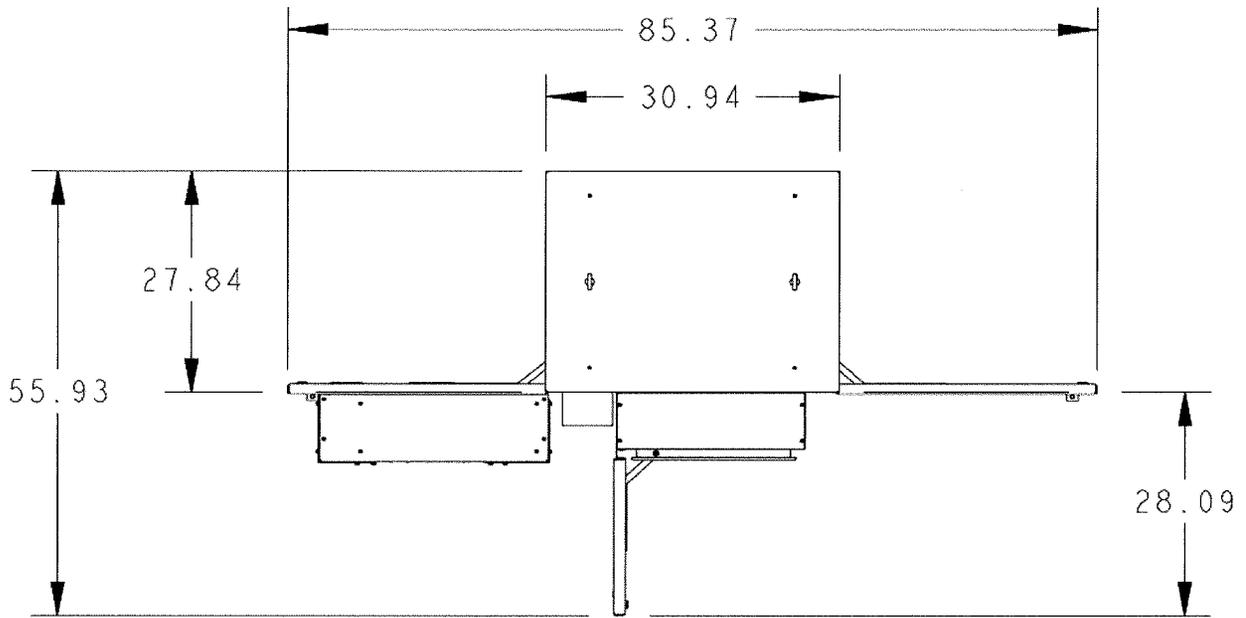


Figure 12 - Dimensions Top

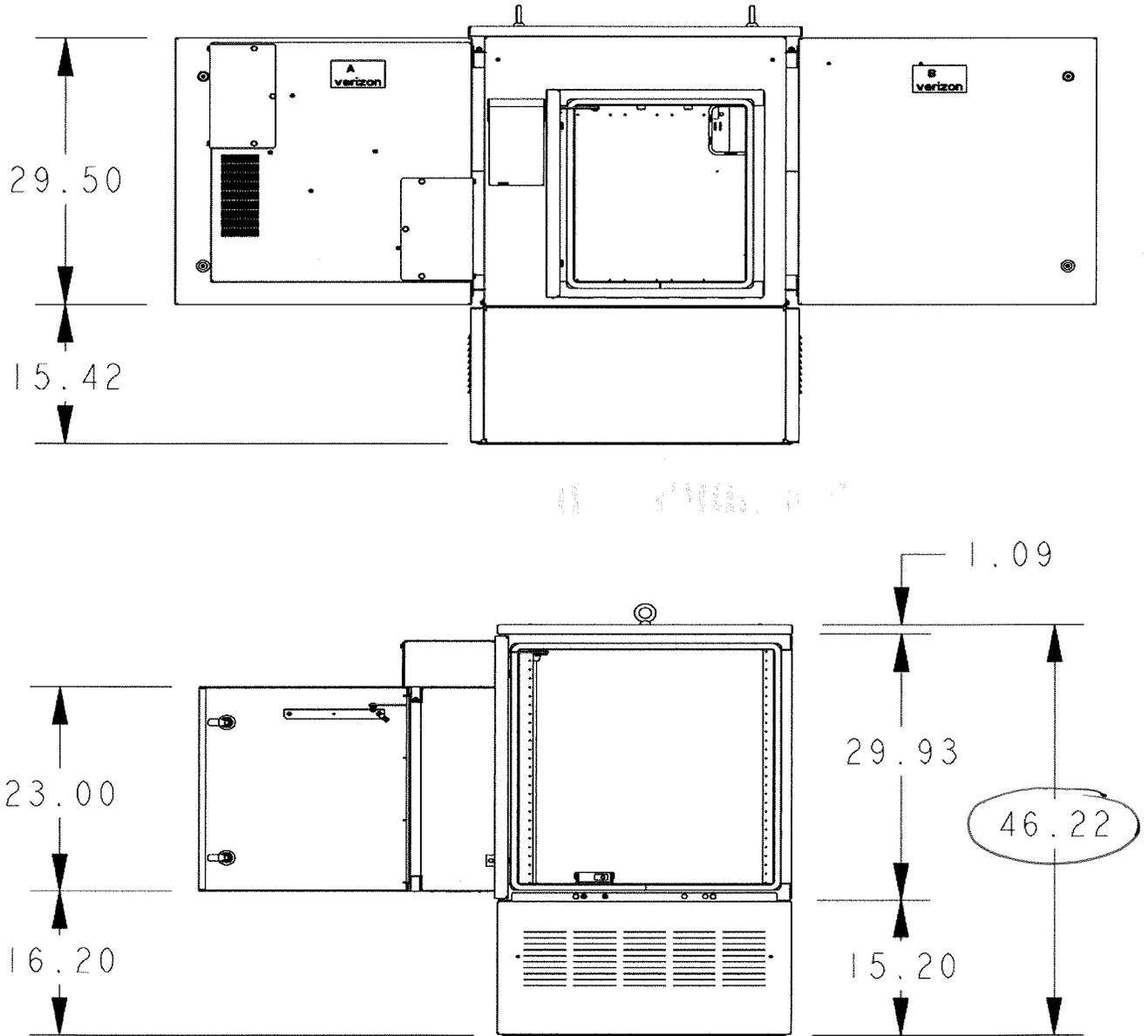


Figure 13 – Side Dimensions

GAS ENGINE-GENERATOR SET 40-GC6NLT1

40 kWe / 60 Hz / Standby
208 - 600V



SYSTEM RATINGS

Standby

Voltage (L-L)	240V**	240V**	208V**	240V**	480V**	600V**
Phase	1	1	3	3	3	3
PF	1.0	1.0	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60	60
Natural Gas						
Ratings: Amps	167	167	139	120	60	48
Natural Gas						
Ratings: kW/kVA	40/40	40/40	40/50	40/50	40/50	40/50
LP Gas						
Ratings: Amps	167	167	139	120	60	48
LP Gas						
Ratings: kW/kVA	40/40	40/40	40/50	40/50	40/50	40/50
skVA@30%						
Voltage Dip	128	116	125	125	167	92
Generator Model*	362CSL1604	361CSL1612	284PSL1742	284PSL1742	284PSL1742	361PSL1632
Temp Rise	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C
Connection	12 LEAD ZIG-ZAG	4 LEAD	12 LEAD LOW WYE	12 LEAD HI DELTA	12 LEAD HI WYE	4 LEAD WYE

* The Generator Model Number identified in the table is for standard C Series Configuration. Consult the factory for alternate configuration.

** UL 2200 Offered

CERTIFICATIONS AND STANDARDS

// **Engine-generator set is designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004**

// **Power Rating**
- Accepts Rated Load in One Step Per NFPA 110

// **UL 2200 / CSA – Optional**
- UL 2200 Listed
- CSA Certified

// **Performance Assurance Certification (PAC)**
- Engine-Generator Set Tested to ISO 8528-5 for Transient Response
- Verified product design, quality and performance integrity
- All engine systems are prototype and factory tested

STANDARD FEATURES*

- // MTU Onsite Energy is a single source supplier
- // Global Product Support
- // 2 Year Standard Warranty
- // 4.3 L Engine
 - 4.3 Liter Displacement
 - 4-Cycle
- // Engine-generator resilient mounted
- // Complete Range of Accessories
- // Generator
 - Brushless, Rotating Field Generator
 - 2/3 Pitch Windings
 - 300% Short Circuit Capability with Optional PMG
- // Digital Control Panel(s)
 - UL Recognized, CSA Certified, NFPA 110
 - Complete System Metering
 - LCD Display
- // Cooling System
 - Integral Set-Mounted
 - Engine Driven Fan

STANDARD EQUIPMENT*

// Engine

Air Cleaner
 Oil Pump
 Oil Drain Extension & S/O Valve
 Full Flow Oil Filter
 Jacket Water Pump
 Thermostat
 Blower Fan & Fan Drive
 Radiator - Unit Mounted
 Electric Starting Motor - 12V
 Governor - Electronic Isochronous
 Base - Formed Steel
 SAE Flywheel & Bell Housing
 Charging Alternator - 12V
 Battery Box & Cables
 Flexible Fuel Connectors
 Flexible Exhaust Connection
 EPA Certified Engine

// Generator

NEMA MG1, IEEE and ANSI standards compliance for temperature rise and motor starting
 Self-Ventilated and Drip-Proof
 Superior Voltage Waveform
 Solid State, Volts-per-Hertz Regulator
 $\pm 1\%$ Voltage Regulation No Load to Full Load
 Brushless Alternator with Brushless Pilot Exciter
 4 Pole, Rotating Field

130 °C Maximum Standby Temperature Rise
 1 Bearing, Sealed
 Flexible Coupling
 Full Amortisseur Windings
 125% Rotor Balancing
 3-Phase Voltage Sensing
 100% of Rated Load - One Step
 3% Maximum Harmonic Content

// Digital Control Panel(s)

Digital Metering
 Engine Parameters
 Generator Protection Functions
 Engine Protection
 SAE J1939 Engine ECU Communications
 Windows-Based Software
 Multilingual Capability
 Remote Communications to RDP-110 Remote Annunciator
 16 Programmable Contact Inputs
 Up to 11 Contact Outputs
 UL Recognized, CSA Certified, CE Approved
 Event Recording
 IP 54 Front Panel Rating with Integrated Gasket
 NFPA110 Compatible

* Represents standard product only. Consult Factory/MTU Onsite Energy Distributor for additional configurations.

APPLICATION DATA

// Engine

Manufacturer	GM
Model	4.3L
Type	4-Cycle
Arrangement	6-V
Displacement: L (in ³)	4.3 (262)
Bore: cm (in)	10.2 (4)
Stroke: cm (in)	8.8 (3.5)
Compression Ratio	9.4:1
Rated RPM	1,800
Engine Governor	Bosch
Maximum Power (NG): kWm (bhp)	49.6 (66.5)
Maximum Power (LP): kWm (bhp)	53.2 (71.4)
Speed Regulation	C/F
Air Cleaner	Dry

// Fuel Consumption (NG-1000 BTU/ft³ / LP-2500 BTU/ft³)

	NG	LPG
At 100% of Power Rating: m ³ /hr (ft ³ /hr)	13.9 (489)	6.1 (216)
At 75% of Power Rating: m ³ /hr (ft ³ /hr)	10.4 (368)	4.6 (163)
At 50% of Power Rating: m ³ /hr (ft ³ /hr)	7.3 (256)	3.2 (113)

// Cooling - Radiator System

Ambient Capacity of Radiator: °C (°F)	50 (122)
Maximum Restriction of Cooling Air, Intake, and Discharge Side of Rad.: kPa (in. H ₂ O)	0.12 (0.5)
Water Pump Capacity: L/min (gpm)	117.3 (31)
Heat Rejection to Coolant: kW (BTUM)	39 (2,220)
Heat Radiated to Ambient: kW (BTUM)	16.5 (938)

// Liquid Capacity (Lubrication)

Total Oil System: L (gal)	4.2 (1.1)
Engine Jacket Water Capacity: L (gal)	7.2 (1.9)
System Coolant Capacity: L (gal)	21.6 (5.7)

// Air Requirements

Aspirating: *m ³ /min (SCFM)	3.9 (136.5)
Air Flow Required for Rad.	
Cooled Unit: *m ³ /min (SCFM)	211.4 (7,464)
Remote Cooled Applications; Air Flow Required for Dissipation of Radiated Gen-set Heat For a Max of 25 °F Rise: *m ³ /min (SCFM)	59.9 (2,114)

// Electrical

Electric Volts DC	12
Cold Cranking Amps Under -17.8 °C (0 °F)	925

* Air density = 1.184 kg/m³ (0.0739 lbm/ft³)

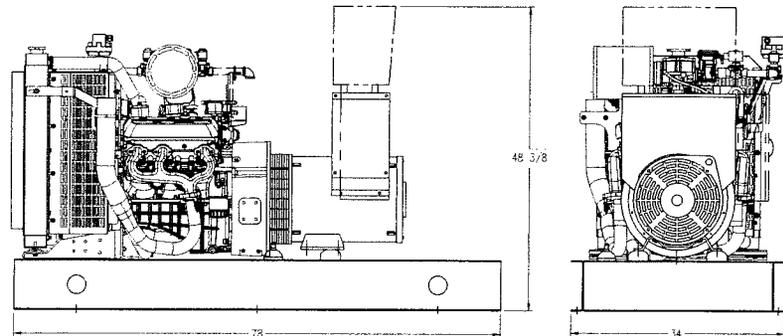
// Fuel Inlet

Fuel Supply Connection Size	3/4" NPT
Fuel Supply Pressure: mm H ₂ O (in. H ₂ O)	178-279 (7-11)

// Exhaust System

Gas Temp. (Stack): °C (°F)	704.4 (1,300)
Gas Volume at Stack Temp: m ³ /min (CFM)	12.5 (440.8)
Maximum Allowable Back Pressure: kPa (in. H ₂ O)	10 (40)

WEIGHTS AND DIMENSIONS



Drawing above for illustration purposes only, based on standard open power 480 volt engine-generator set. Lengths may vary with other voltages. Do not use for installation design. See website for unit specific template drawings.

System	Dimensions (L x W x H)	Weight (dry)
OPU	1,981 x 864 x 1,229 mm (78 x 34 x 48.38 in)	572 kg (1,260 lb)

Weights and dimensions are based on open power units and are estimates only. Consult the factory for accurate weights and dimensions for your specific engine-generator set.

SOUND DATA

Unit Type	Standby	Full Load
Level 0: Open Power Unit (dBA)	C/F	
WPE - No Sound Attenuation (dBA)	C/F	
CQE (dBA)	C/F	

Sound data is provided at 7 m (23 ft). Engine-generator set tested in accordance with ISO 8528-10 and with infinite exhaust.

EMISSIONS DATA

Fuel Type	THC + NO _x	CO
Natural Gas	5.24	16.38
Liquid Propane	6.09	23.88

All units are in g/hp-hr.
 Engine meets EPA 40 CFR Part 60/90 specifications.

RATING DEFINITIONS AND CONDITIONS

// Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. No overload capability for this rating. Ratings are in accordance with ISO 3046-1, BS 5514, AS 2789, and DIN 6271.

// Deration Factor:

Altitude: Consult your local MTU Onsite Energy Power Generation Distributor for altitude derations.

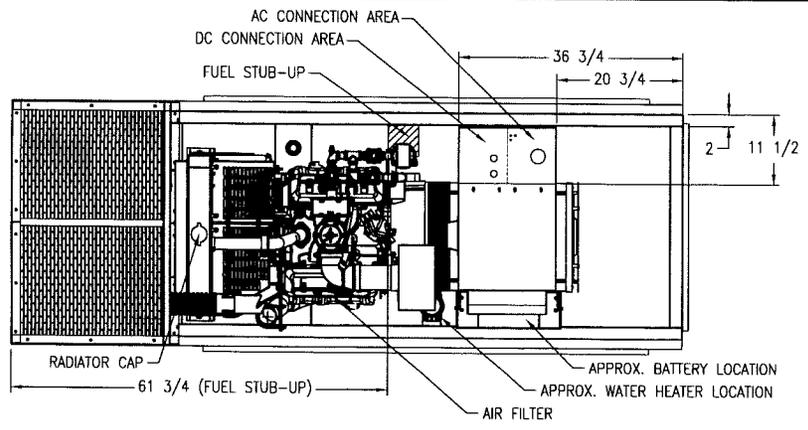
Temperature: Consult your local MTU Onsite Energy Power Generation Distributor for temperature derations.

Materials and specifications subject to change without notice.

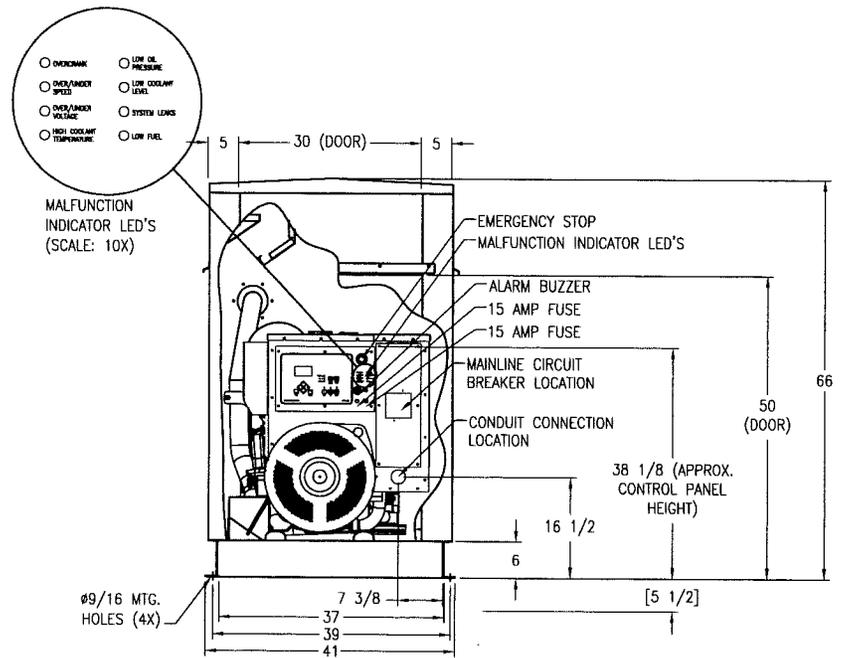
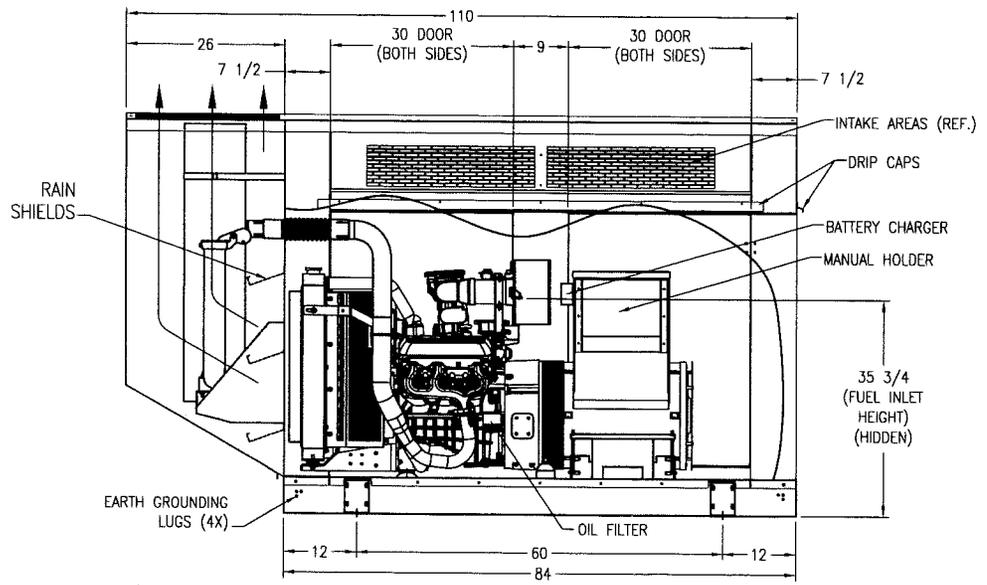
C/F = Consult Factory/MTU Onsite Energy Distributor

// **Tognum Group Companies: Europe / Middle East / Africa** / MTU Onsite Energy / 88040 Friedrichshafen / Germany / Phone + 49 7541 90 7060 / Fax +49 7541 90 7084 / powergenregion1@mtu-online.com // **Asia / Australia / Pacific** / MTU Onsite Energy / 1, Benoi Place / Singapore 629923 / Republic of Singapore / Phone + 65 6861 5922 / Fax + 65 6861 3615 / powergenregion2@mtu-online.com // **USA / Canada / Latin America / Mexico** / MTU Onsite Energy Corporation / 100 Power Drive / Mankato, Minnesota 56001 / USA / Phone + 1 507 625 7973 / Fax + 1 507 625 2968 / powergenregion3@mtu-online.com

DWG. #: VER30_GC6NLT1(4.3)CQE-MI-5



- NOTES:
- 1) APPROX. WEIGHT: (WET) 1900#
 - 2) REFERENCE BASE DRAWING: 105-5425
 - 3) REFERENCE ENCLOSURE DRAWING: CQE-729-ALUM
 - 4) SOUND LEVEL: 65 DBA @ 23 FT. (TO BE DETERMINED)
 - 5) GEN-SET IS OFF-SET 1 3/4" TO LEFT SIDE OF BASE/ENCL.
 - 6) ENCLOSURE & EXHAUST SYSTEMS ARE NOT SHOWN ON TOP VIEW
 - 7) FUEL CONNECTIONS 3/4" NPT
 - 8) PAINT FINISH: ANSI 61 GRAY



REVISION	DATE	REVISION DESCRIPTION	INITIALS
A	04-11-13	INITIAL RELEASE TO SALES AND ENGINEERING	JDA

THE MARK IS PROPERTY OF ON SITE ENERGY COMPANY AND SHALL BE USED ONLY AS SPECIFIED AND NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF ON SITE ENERGY COMPANY.

GEN-SET INFORMATION	
ENGINE: GM 4.3L	ENCLOSURE: CQE-729-ALUM
GENERATOR: 361	BREAKER: AS SPECIFIED
RADIATOR: W/ ENG.	TANK: NA
RADIATOR AMBIENT: 50C	MUFFLER: 3 CRITICAL
DUCT FLANGE: 105-1401	TRAILER: NA
CONTROL PANEL: DCC-2020	ISOLATORS: PADS
BASE: 105-5425	

DIMENSIONAL LAYOUT	
DRAWN TO SCALE	MODEL: VER30_GC6NLT1
ALL DIMENSIONS ARE IN INCHES	
DATE: 04-11-13	DRAWN BY: JDA
DWG. #: VER30_GC6NLT1(4.3)CQE-MI-5	



4.3L GM Genset
 AIRBORNE NOISE ANALYSIS
 30 / 1800

Onsite Energy
 VER-S30NG-CQE-100-7
 Data No.: S141
 Date: 10/15/2009

Genset Surface Noise Analysis - 1/3-Octave

ENGINE TYPE:	4.3L GM	ENGINE NO.:	4.3LX5247409
GENERATOR:	361 / 1600	TYPE:	60 Hz
POWER / SPEED:	30 / 1800	TEST CELL:	LB T1
ORDER / PROJECT NO.:	P2043	DATE MEASURED:	9/16/2009
TEST LOAD:	30 kW / 100%		
INTAKE AIR OPENING:	Paper filters with housing	ENCLOSURE:	CQE
MEASURING DISTANCE:	7 m		
MEASURING SURFACE DIMENSION:	29.2 dB		
NO. OF MEASURING POINTS:	12		
SOUND PROPAGATION:	Free-field		
MEASUREMENT STANDARD:	ISO 8528		
TOLERANCE:	+5 dB for single 1/3 octave band, +2 dB(A) for total A-weighted level.		

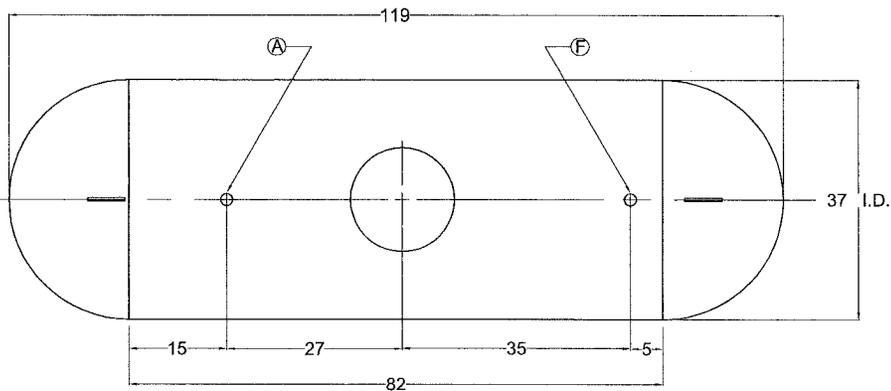
Energy mean sound pressure levels of the airborne noise that is emitted by the generator-set surface.
 For project purposes only.

Energy mean free-field level Average Level at 7 meters: 58.3 dB(A)

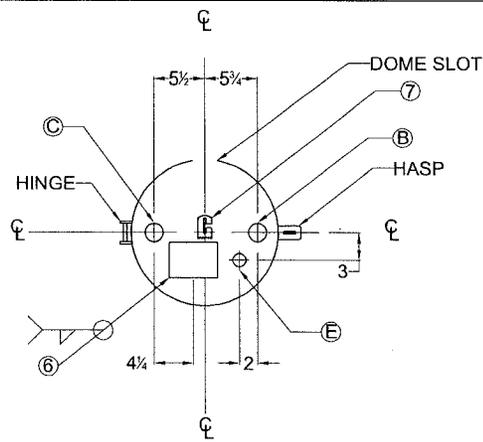
Level per Position [dB(A)]						Average [dB(A)]
1	2	3	4	5	6	
56.4	57.2	59.1	60.1	58.4	58.6	58.3

f [Hz]	Level per Frequency per Position [dB(A)]					
	1	2	3	4	5	6
25	8.5	9.3	8.4	8.3	8.2	8.2
31.5	25.2	27.7	24.8	23.4	21.9	17.4
40	8.9	16.5	15.9	14.7	8.9	13.8
50	12.5	20.3	17.4	12.0	16.4	11.9
63	33.1	32.8	30.4	32.3	34.0	34.9
80	37.1	39.5	41.1	39.9	45.5	38.9
100	41.4	33.8	42.9	39.9	45.3	32.8
125	45.3	45.2	48.2	48.4	45.9	49.5
160	46.6	42.2	52.0	52.9	50.1	53.8
200	48.6	47.8	53.2	53.5	53.9	56.1
250	46.2	53.8	51.5	51.6	55.3	57.5
315	45.2	47.6	47.4	47.1	47.6	50.6
400	52.3	49.9	55.4	54.8	52.3	53.9
500	46.4	46.5	49.0	49.7	46.8	49.6
630	43.1	43.6	45.0	46.3	45.4	44.3
800	49.2	47.4	51.7	51.1	47.3	46.5
1k	40.2	41.1	43.4	43.7	42.7	41.0
1.25k	45.0	46.7	48.2	49.2	47.7	47.2
1.6k	47.6	48.6	49.0	51.0	49.2	49.5
2k	44.7	46.9	47.2	50.1	47.9	47.3
2.5k	43.9	45.4	47.3	49.0	46.8	45.0
3.15k	43.4	45.1	46.0	47.5	46.2	44.8
4k	41.3	42.8	44.0	44.6	44.1	42.8
5k	38.8	40.3	41.5	43.4	41.1	40.4
6.3k	37.6	38.5	40.2	41.5	40.2	38.6
8k	36.2	39.1	39.2	40.8	40.3	40.9
10k	37.1	37.1	37.1	40.0	37.3	37.1

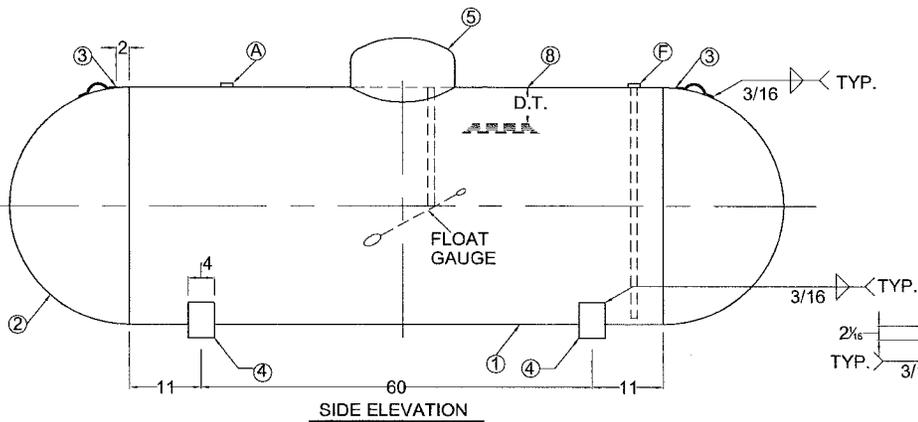
THIS VESSEL IS DESIGNED FOR THE STORAGE
OF LIQUEFIED PETROLEUM GAS ONLY



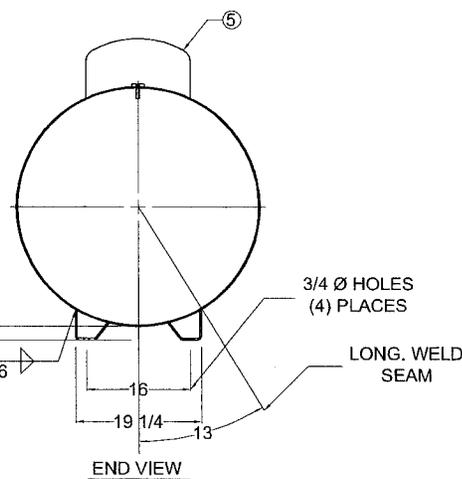
TOP VIEW (E - 500C9J)



FITTING LAYOUT



SIDE ELEVATION



END VIEW

NOTE: TANK MUST BE INSTALLED LEVEL, WITH ALL FOUR LEGS IN SAME PLANE TO ASSURE EVEN DISTRIBUTION OF LOADS AND OPTIMIZE ACCURACY OF GAUGE DEVICE.

MARK	QTY.	SIZE	TYPE	FITTINGS		SERVICE
				REGO	SHERWOOD	
A	1	1	XH FLG.	8684GT	UVE443AM	RELIEF VALVE
B	1	1	XH FLG.	ROCHESTER 8 0881-27 OR SHERWOOD FG 38H143A OR SQUIBS TAYLOR HA14MC		FLOAT GAUGE
C	1	1-1/4	XH FLG.	7579T	PVE623B	FILL VALVE
E	1	3/4	XH FLG.	7556RS 12.0	PVE2033CLDB	MULTI VALVE
F	1	3/4	XH FLG W/EVAC. TUBE	7580U	PVS136	CHEK-LOK
F (OPT)	1	1 1/4	XH FLG W/EVAC. TUBE	7580FCT	PVE5135S	CHEK-LOK

MARK	QTY.	DESCRIPTION	DWG. NO.
1	1	SHELL-.0218" X 81 1/2" X 116 13/16" -SA414G	
2	2	HEADS - 37" I.D. X 0.185"-HEMI- SA414C	
3	2	LIFTING LUGS	D - 2
4	4	TANK LEGS	D - 2
4(ALT.)	2	TANK LEGS (FREMONT PLANT ONLY)	D - 3
5	1	DOME	D - 4
6	1	DATA PLATE	
7	1	REGULATOR BRACKET	D - 10
8	1	DIP TUBE LENGTH = 10.7" FOR 80 % @ 40° F	

PART NO: 0105001X

REV.	BY:	DESCRIPTION	DATE:
10	CDH	RELOCATED "A" & "F"	3/21/00
11	CDH	NEW DATA PLATE & CHEK-LOK	10/16/01
11J	CDH	DELETED DRAIN PLUG	6/27/02
12J	CDH	REMOVED INCORRECT CONNECTIONS	9/13/02
13J	CDH	REVISED MDMT TO 250 PSI	10/22/02
14J	CDH	ADDED BLOOMFIELD TO SIDE ELEVATION NOTE	10/24/02
15J	CDH	CORRECTED RELIEF VLV. MODEL NOS.	11/5/03
16J	CDH	CORRECTED SHELL LENGTH	11/17/03
17	llm	CORRECT HOLE PUNCH LOCATIONS RELIEF VALVE	01/13/06
18	llm	ADDED "J" TO FLAT PLATE TITLE HEAD	01/20/06
19	llm	REVISE FLAT PLATE	01/30/06

NAT'L. BD. SERIAL No. []

CERTIFIED BY: AMERICAN WELDING & TANK
HARSCO CORPORATION GAS & FLUID CONTROL GROUP
JESUP, GEORGIA-BLOOMFIELD, IOWA, SALT LAKE CITY, UTAH-FREMONT, OHIO

MAX. ALLOW. WORKING PRESS. [250] PSI AT [400] °F
MDMT [-20] °F AT [250] PSI PLANT NO. []
CRN NO. L-4709.5C

SERIAL NO. [E] YEAR BUILT [20]

LENGTH [119] IN. OUTSIDE DIA. [37.4] IN.
HEAD THK. [.185] IN. SHELL THK. [.218] IN.
ABOVE GROUND TYPE [BS-AP] SURFACE AREA [97.5] SQ. FT.

LISTED CONTAINER ASSEMBLY FOR LP GAS 895A WATER CAPACITY [500] GALS.

THIS CONTAINER SHALL NOT CONTAIN A PRODUCT HAVING A VAPOR PRESSURE IN EXCESS OF 215 PSI AT 100°F.
DIP TUBE LENGTH-80% FULL @ 40 DEG. F. D.T.= 10.7 IN.

DATA PLATE DETAIL

GENERAL NOTES:

- LIFTING LUGS DESIGNED FOR TOTAL LIFTING WEIGHT OF 1500#.
- TOTAL EMPTY WEIGHT IS 949#.
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
- COMPLETE TANK DRIED TO REMOVE ALL MOISTURE.
- NOTE DELETED
- EXTERIOR OF TANK TO BE GRIT BLASTED.
- PAINT PER SHOP ORDER.
- VACUUM PURGE TANK.
- DIMENSIONS ARE SUBJECT TO CHANGE WITH OUT NOTICE. (NON-PRESSURE RETAINING COMPONENTS ONLY)
- THREADS OF ALL FITTINGS TO BE COATED WITH COMPOUND SUITABLE FOR USE WITH LP GAS.
- FLOAT GAUGE TO BE INSTALLED WITH FLOAT ARM 45° OFF LONGITUDINAL CENTERLINE OF TANK.

GENERAL SPECIFICATIONS

WATER CAPACITY (GALLONS)	500
ALLOWABLE WORKING PRESSURE (PSIG)	250
JOINT EFFICIENCY:	ASME UW-51 LONG SEAM 100 %
	ASME UW-52 HEAD TO SHELL 80 %
HYDROSTATIC TEST PRESSURE (PSIG)	325
SURFACE AREA (SQ. FT.)	97.5
RELIEF VALVE SETTING (PSIG)	250
RELIEF DISCHARGE RATE - (CFM REQ'D.)	2290
CODE:	ASME SECTION VIII DIV. I
STANDARDS:	UNDERWRITERS LABORATORIES INC. MH-5127
	N.F.P.A. 58 LP GAS CODE

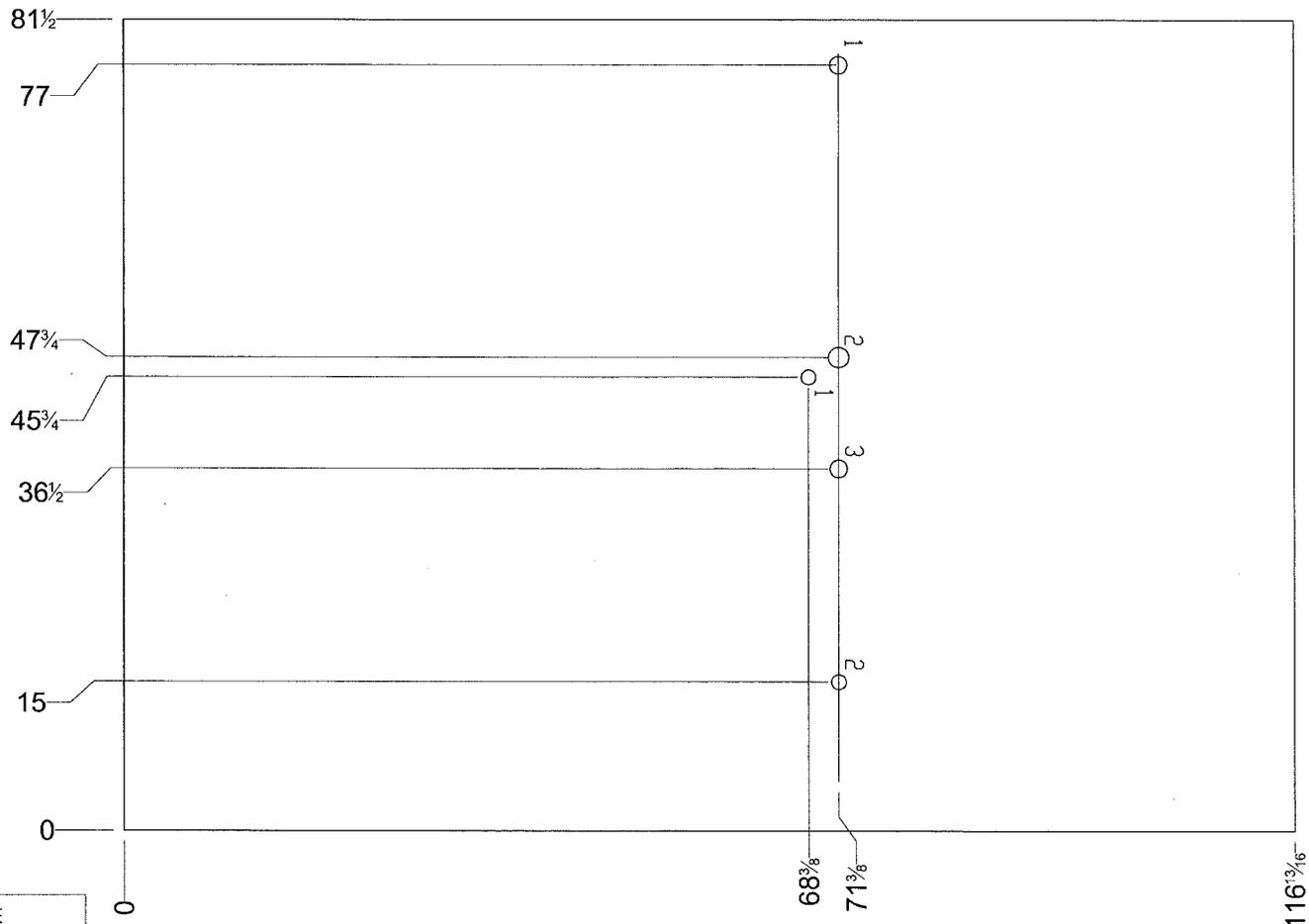
MATERIAL SPECS:

COUPLINGS	SA-105
TANK FLANGES	SA-105
ADAPTOR	SA-105

500 W.G. ABOVEGROUND
PROPANE TANK-TYPE BS-AP

AMERICAN WELDING & TANK
HARSCO CORPORATION GAS & FLUID CONTROL GROUP

DATE:	DRAWN BY:	APPROVED BY:	REVISION:	DRAWING NO.:
01 / 03 / 00	RAC	wlo	19	E-500C9J

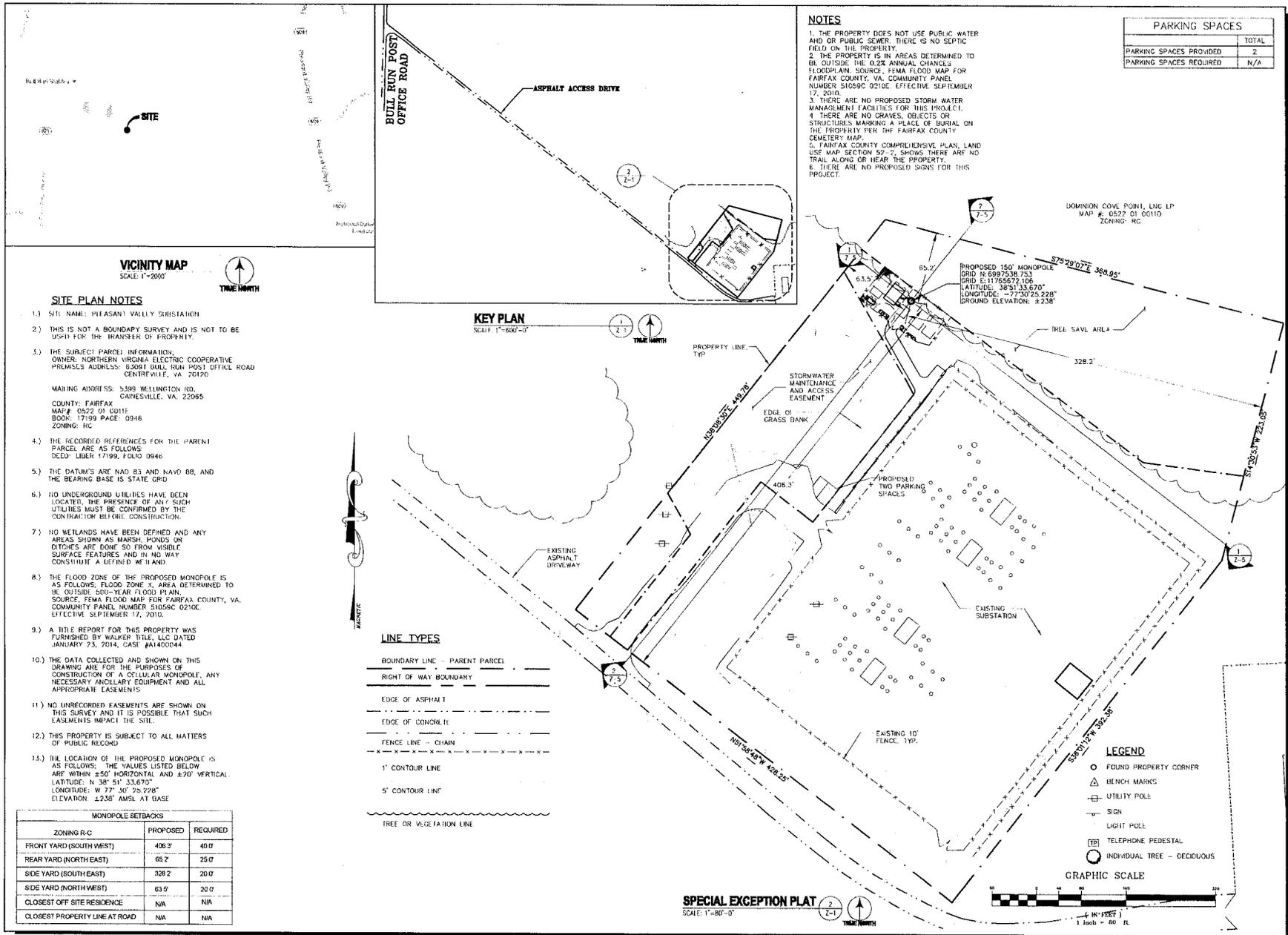


HOLE SCHEDULE		
HOLE	DIA.	FITTING
1	1 1/2	3/4"
2	1 3/4	1"
3	2 1/16	1 1/4"
4	3 1/8"	2 1/2"
5	7/8"	1/4"
6	2 11/16"	2"
7		
8		

NOTE: SEE
TANK
DRAWING
FOR
REVISION
BLOCK

ROLL UP

500 W.G. ABOVEGROUND FLAT PLATE LAYOUT	
AMERICAN WELDING & TANK CO. DIVISION OF	
TAYLOR-WHARTON GAS EQUIPMENT HARSCO CORPORATION	
REVISION: 19	DRAWING NO.: E-500 C9J



entrex
communication services, inc.

6600 Rockledge Drive, Suite 660
BETHESDA, MD 20817
PHONE: (202)408-0860
FAX: (202)408-0861

SUBMITTALS

DATE	DESCRIPTION	REV
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-19-14	ZONING REVIEW	
06-18-14	ZONING	
09-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



PROJECT NO: 1050.153
DESIGNER: M.M.E.
ENGINEER: M.M.

SCALE:
0 1/2 1
GRAPHIC SCALE IN INCHES

**PLEASANT VALLEY
SUBSTATION
6399T BULL RUN
POST OFFICE ROAD
CENTREVILLE, VA 20120**

TITLE:
SITE PLAN

SHEET NUMBER:
Z-1



6600 Rockledge Drive, Suite 650
 BETHESDA, MD 20817
 PHONE: (202)408-0960
 FAX: (202)408-0951

SUBMITTALS

DATE	DESCRIPTION	REV.
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
05-12-14	ZONING REVIEW	
06-18-14	ZONING	
09-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



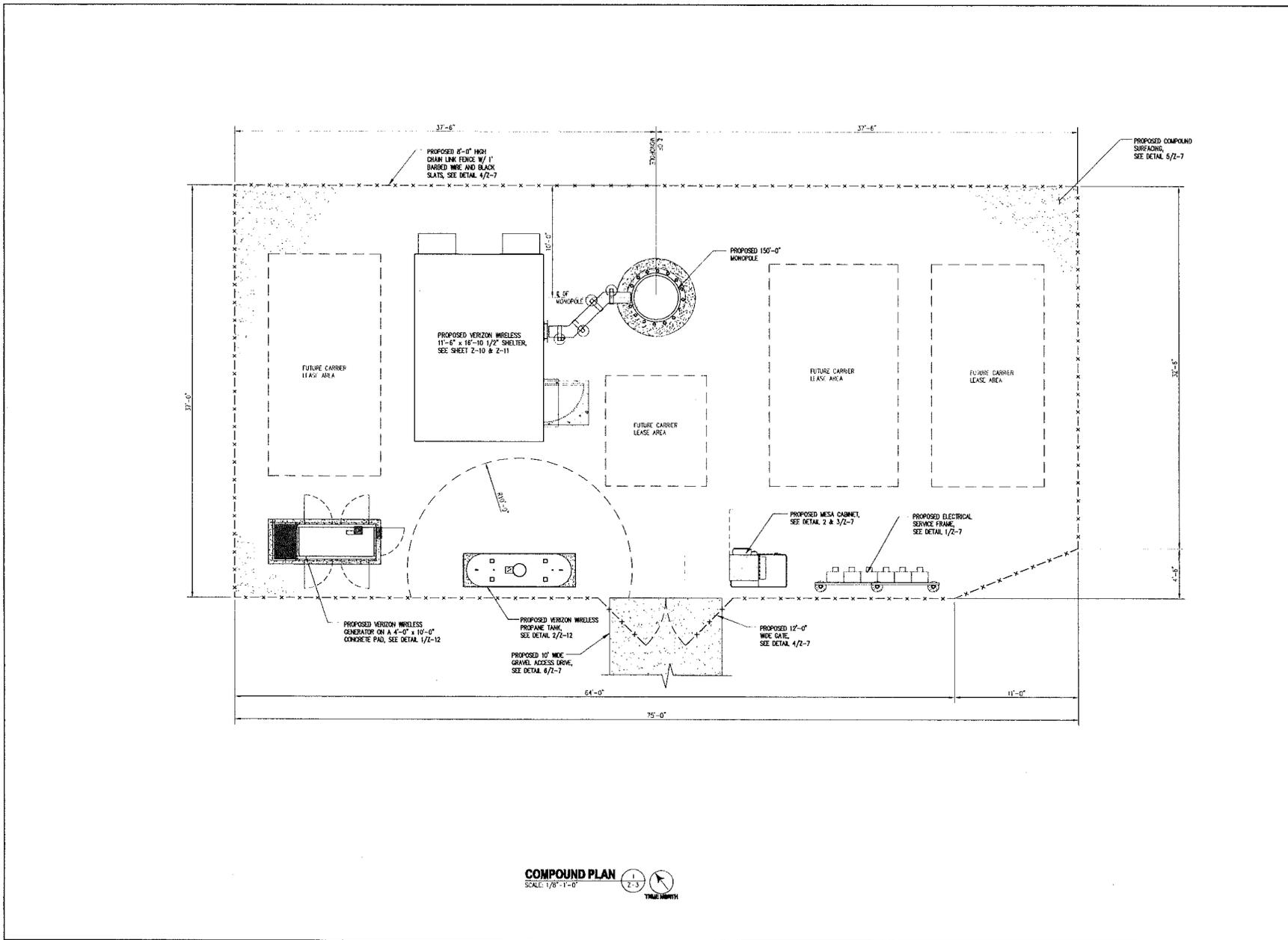
PROJECT NO: 1050.15.3
 DESIGNER: M.M.E.
 ENGINEER: H.M.

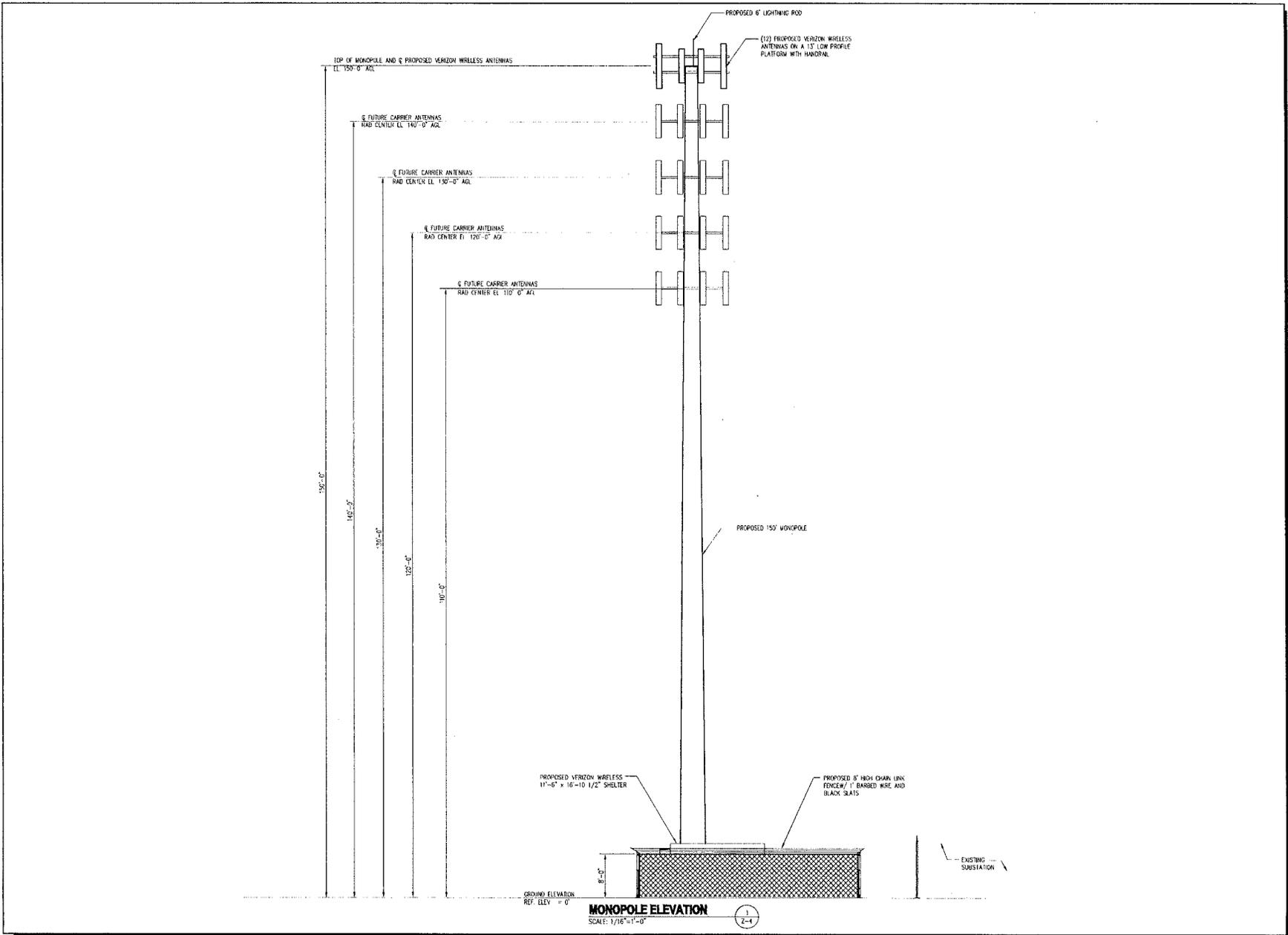
SCALE:
 0 1/2 1
 GRAPHIC SCALE IN INCHES

**PLEASANT VALLEY
 SUBSTATION**
 6309T BULL RUN
 POST OFFICE ROAD
 CENTREVILLE, VA 20120

TITLE:
COMPOUND PLAN

SHEET NUMBER:
Z-3





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 BETHESDA, MD 20817
 PHONE: (202)408-0980
 FAX: (202)408-0981

SUBMITTALS		
DATE	DESCRIPTION	REV.
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-17-14	ZONING REVIEW	
06-18-14	ZONING	
09-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



PROJECT NO: 1050.15.3
 DESIGNER: M.M.E.
 ENGINEER: H.M.

SCALE:
 0 1/2 1
 GRAPHIC SCALE IN INCHES

**PLEASANT VALLEY
 SUBSTATION**
**6389T BULL RUN
 POST OFFICE ROAD
 CENTREVILLE, VA 20120**

TITLE:
**MONOPOLE
 ELEVATION**

SHEET NUMBER:
Z-4



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 FAX: (202)408-0961

SUBMITTALS

DATE	DESCRIPTION	REV
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-12-14	ZONING REVIEW	
06-18-14	ZONING	
09-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



Milestone
 COMMUNICATIONS

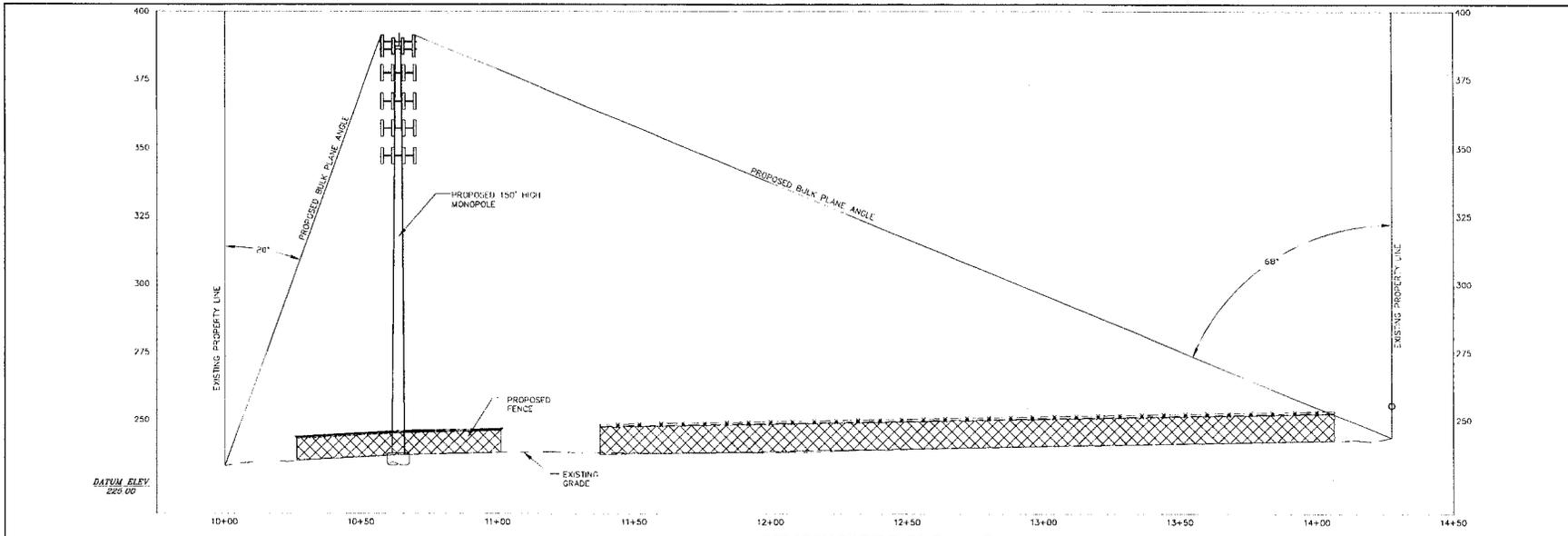
PROJECT NO.: 1050.15.3
 DESIGNER: M.M.
 ENGINEER: H.M.

SCALE:
 0 1/2 1
 GRAPHIC SCALE IN INCHES

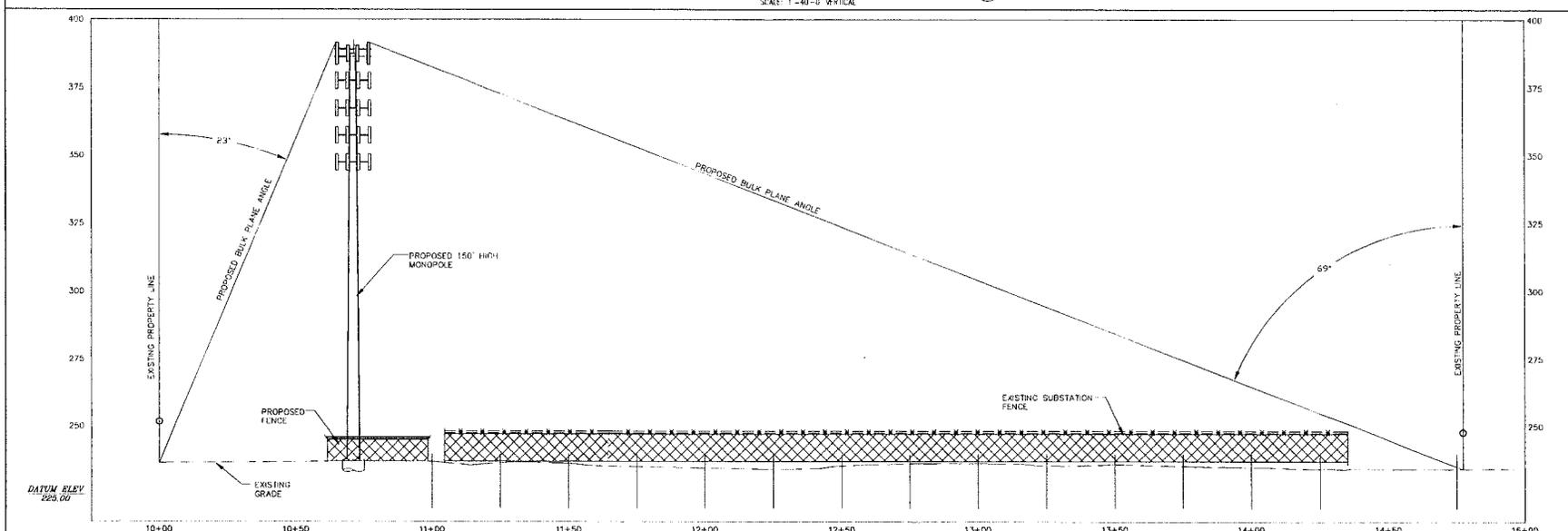
**PLEASANT VALLEY
 SUBSTATION
 6309T BULL RUN
 POST OFFICE ROAD
 CENTREVILLE, VA 20120**

TITLE:
SITE PROFILES

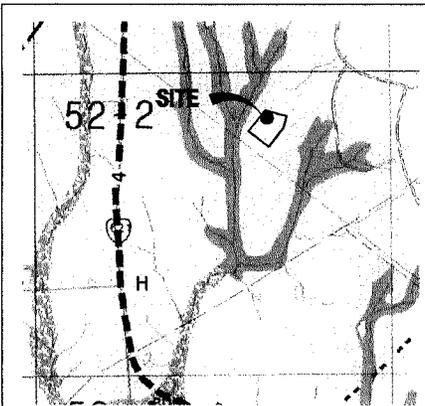
SHEET NUMBER:
Z-5



SITE PROFILE WEST TO EAST
 SCALE: 1"=40'-0" HORIZONTAL
 SCALE: 1"=40'-0" VERTICAL



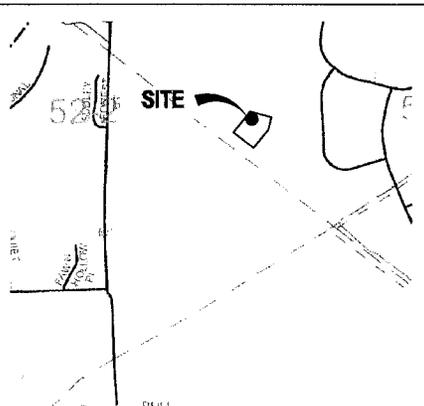
SITE PROFILE NORTH TO SOUTH
 SCALE: 1"=40'-0" HORIZONTAL
 SCALE: 1"=40'-0" VERTICAL



LAND USE MAP
SCALE: 1"=2000'



SOURCE:
FAIRFAX COUNTY COMPREHENSIVE PLAN

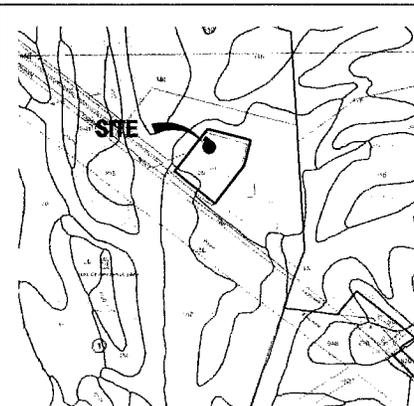


TRAIL MAP
SCALE: 1"=2000'



SOURCE:
FAIRFAX COUNTY

NOTES:
NO TRAIL IN THE AREA

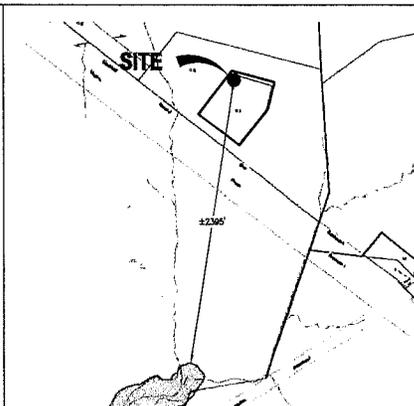


SOILS MAP
SCALE: 1"=1000'



SOURCE:
FAIRFAX COUNTY
MAP SECTION 15-7

NOTE:
SOIL TYPE: S9
SOIL NAME: ASHBURN SLET LOAM, 2-72

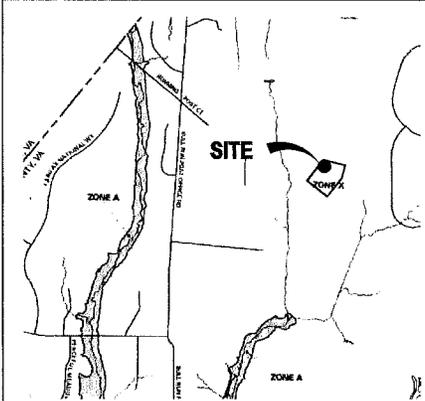


RESOURCE MANAGEMENT MAP
SCALE: 1"=1000'



SOURCE:
FAIRFAX COUNTY

NOTES:
THE PROJECT SITE IS LOCATED APPROXIMATELY 2,395'
FROM THE NEAREST RESOURCE PROTECTION AREA.

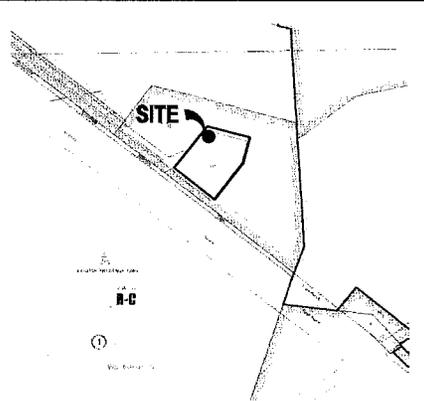


FLOOD ZONE MAP
SCALE: 1"=2000'

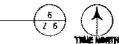


SOURCE:
FEMA FLOOD MAP FOR FAIRFAX COUNTY, VA,
COMMUNITY PANEL NUMBER 51055C 0210C, SEPTEMBER 17, 2010

NOTES:
THE PROJECT SITE IS LOCATED IN FLOOD ZONE X, AREAS DETERMINED
TO BE OUTSIDE 500-YEAR FLOOD-PLAN.



ZONING MAP
SCALE: 1"=1000'



SOURCE:
FAIRFAX COUNTY

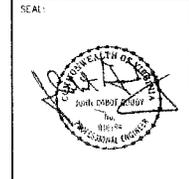
NOTES:
THE PROJECT SITE IS LOCATED IN A R-C AREA



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BETHESDA, MD 20817
PHONE: (202)408-6960
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SUBMITTALS

DATE	DESCRIPTION	REV
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-12-14	ZONING REVIEW	
08-18-14	ZONING	
08-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



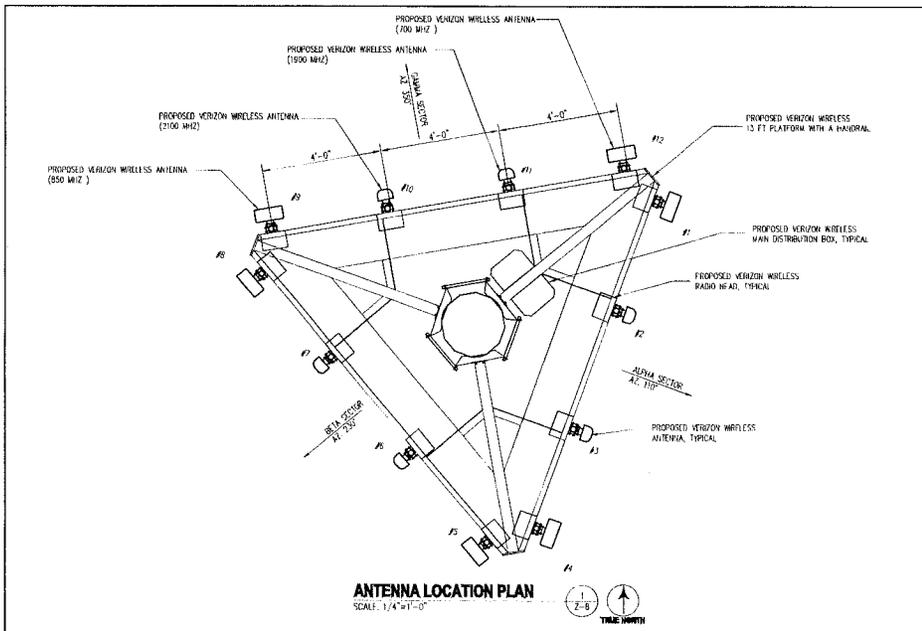
PROJECT NO: 1050.153
DESIGNER: M.M.E.
ENGINEER: H.M.

SCALE:
0 1/2 1
GRAPHIC SCALE IN INCHES

**PLEASANT VALLEY
SUBSTATION
6399T BULL RUN
POST OFFICE ROAD
CENTREVILLE, VA 20120**

TITLE:
CIVIL MAPS

SHEET NUMBER:
Z-6



ANTENNA LOCATION PLAN

SCALE: 1/4"=1'-0"

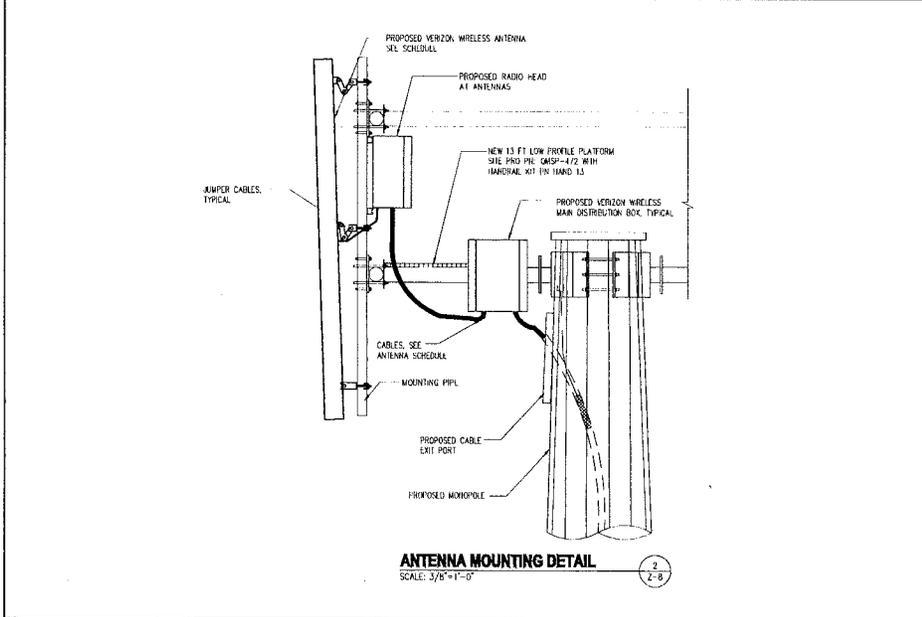


ANTENNA AND CABLE SCHEDULE							
ANTENNA SECTOR	ANTENNA MARK	HAZ CENTER	ANTENNA	MECHANICAL DOWN-TILT	AZIMUTH	CABLE LENGTH (NOTE 7)	CABLE TYPE
ALPHA	# 1	150'-0"	BXA-70063-BCF (94.6" H x 11.2" W x 4.5" D)	SEE NOTE 6	110°	170'	(1) 6X12 HYBRID CABLE
	# 2	150'-0"	BXA-171063-12CF (72.4" H x 6.1" W x 4.1" D)	-	110°	170'	(1) 6X12 HYBRID CABLE
	# 3	150'-0"	BXA-171063-12CF (72.4" H x 6.1" W x 4.1" D)	-	110°	-	SHARED HYBRID CABLE
	# 4	150'-0"	BXA-70063-BCF (94.6" H x 11.2" W x 4.5" D)	-	110°	-	SHARED HYBRID CABLE
BETA	# 5	150'-0"	BXA-70063-BCF (94.6" H x 11.2" W x 4.5" D)	-	230°	-	SHARED HYBRID CABLE
	# 6	150'-0"	BXA-171063-12CF (72.4" H x 6.1" W x 4.1" D)	-	230°	-	SHARED HYBRID CABLE
	# 7	150'-0"	BXA-171063-12CF (72.4" H x 6.1" W x 4.1" D)	-	230°	-	SHARED HYBRID CABLE
	# 8	150'-0"	BXA-70063-BCF (94.6" H x 11.2" W x 4.5" D)	-	230°	-	SHARED HYBRID CABLE
GAMMA	# 9	150'-0"	BXA-70063-BCF (94.6" H x 11.2" W x 4.5" D)	-	350°	-	SHARED HYBRID CABLE
	# 10	150'-0"	BXA-171063-12CF (72.4" H x 6.1" W x 4.1" D)	-	350°	-	SHARED HYBRID CABLE
	# 11	150'-0"	BXA-171063-12CF (72.4" H x 6.1" W x 4.1" D)	-	350°	-	SHARED HYBRID CABLE
	# 12	150'-0"	BXA-70063-BCF (94.6" H x 11.2" W x 4.5" D)	-	350°	-	SHARED HYBRID CABLE
OPS	-	-	MANRAD OPS-TWO-HREINVOLELA (2) REQUIRED	-	-	-	1/2"

NOTES:

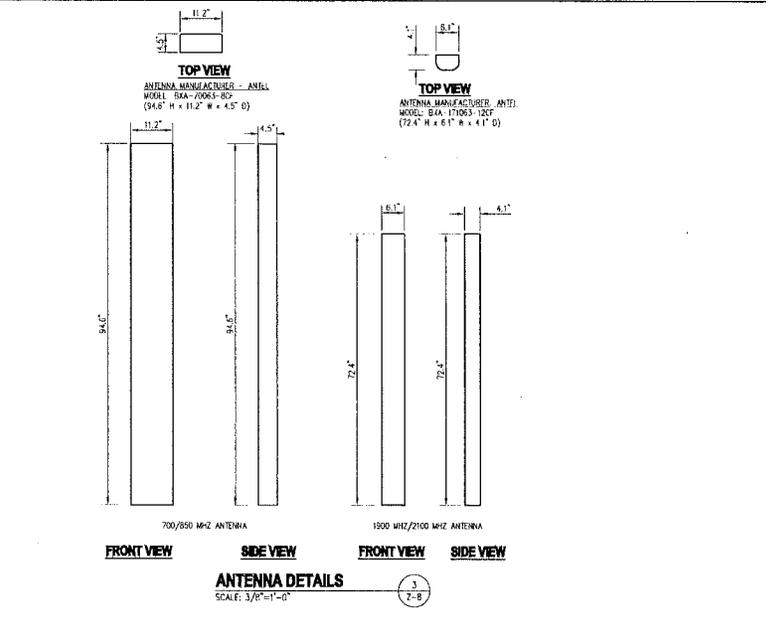
1. ALL ANTENNAS SHALL BE FURNISHED WITH DOWNTILT BRACKETS. CONTRACTOR SHALL COORDINATE REQUIRED MECHANICAL DOWNTILT FOR EACH ANTENNA WITH RF ENGINEER. ANTENNA DOWNTILT SHALL BE SET AND VERIFIED BY A SMART LEVEL.
2. ANTENNA CENTERING HEIGHT IS IN REFERENCE TO ELEVATION 0.00.
3. FINAL CABLE LENGTHS SHALL BE DETERMINED AFTER INSTALLATION.
4. COORDINATE THE ANTENNA DOWNTILT WITH THE RF ENGINEER.
5. ALL CABLE LENGTHS SHOWN ARE THE ACTUAL COMPILED LENGTHS WITH NO OVERLAP ALLOWANCE.
6. REFER TO THE AFS FOR THE ANTENNA DOWNTILT REQUIREMENTS.
7. THE CABLE LENGTH IS MEASURED FROM THE MAIN DISTRIBUTION BOX ON THE STRUCTURE.

CABLE MINIMUM BEND RADIUS				
7/8" RF	1-1/4" RF	1-5/8" RF	2-1/4" RF	1 1/2" HYBRIFLEX
10"	15"	20"	25"	10"



ANTENNA MOUNTING DETAIL

SCALE: 3/8"=1'-0"



ANTENNA DETAILS

SCALE: 3/8"=1'-0"



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BETHESDA, MD 20817
PHONE: (202)408-0860
FAX: (202)408-0861

SUBMITTALS		
DATE	DESCRIPTION	REV
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-12-14	ZONING REVIEW	
06-18-14	ZONING	
09-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



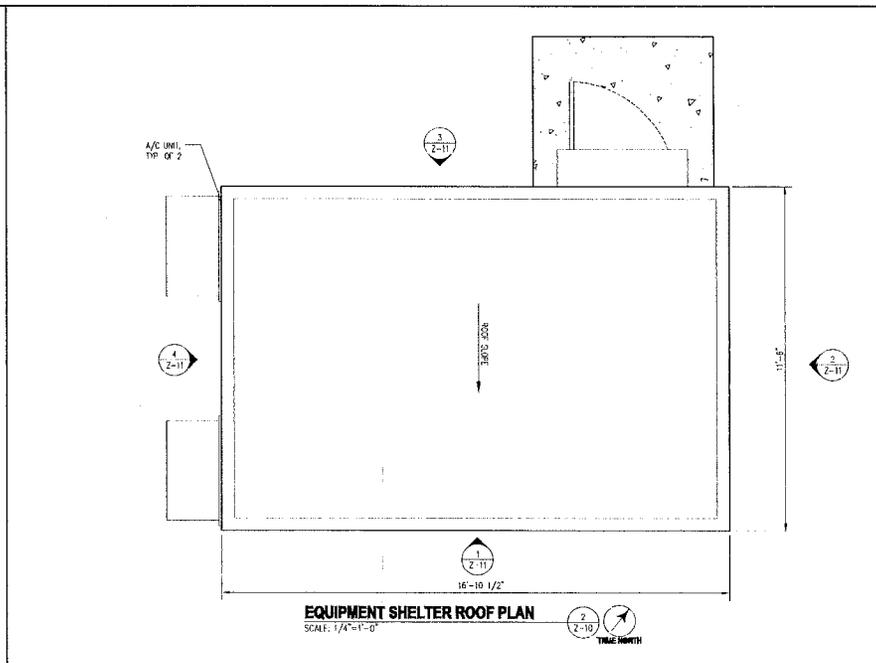
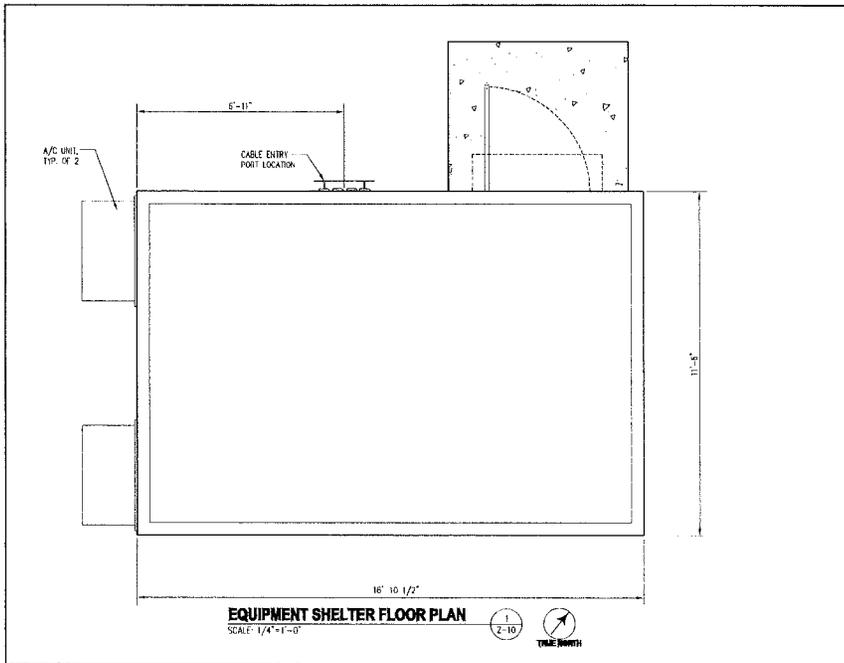
PROJECT NO: 1050.153
DESIGNER: M.M.E.
ENGINEER: H.L.M.

SCALE:
0 1/2 1
GRAPHIC SCALE IN INCHES

PLEASANT VALLEY SUBSTATION
6309T BULL RUN
POST OFFICE ROAD
CENTREVILLE, VA 20120

TITLE:
ANTENNA SCHEDULE AND DETAILS

SHEET NUMBER:
Z-8



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communication services, inc.

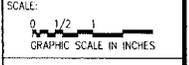
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FAX: (202)408-6961

SUBMITTALS

DATE	DESCRIPTION	REV
04-28-14	ZONING REVIEW	
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06-12-14	ZONING REVIEW	
07-18-14	ZONING	
07-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



PROJECT NO: 1050.153
DESIGNER: M.M.E.
ENGINEER: H.M.



**PLEASANT VALLEY
SUBSTATION**
6309T BULL RUN
POST OFFICE ROAD
CENTREVILLE, VA 20120

TITLE:

SHELTER PLANS

SHEET NUMBER:

Z-10



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 PHONE: (202)408-0960
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SUBMITTALS

DATE	DESCRIPTION	REV
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-12-14	ZONING REVIEW	
06-18-14	ZONING	
06-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



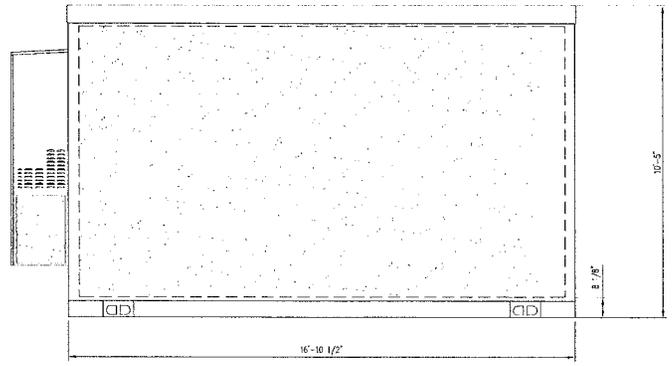
PROJECT NO: 1050.15.3
 DESIGNER: M. A.
 ENGINEER: M. M.

SCALE:
 0 1/2 1
 GRAPHIC SCALE IN INCHES

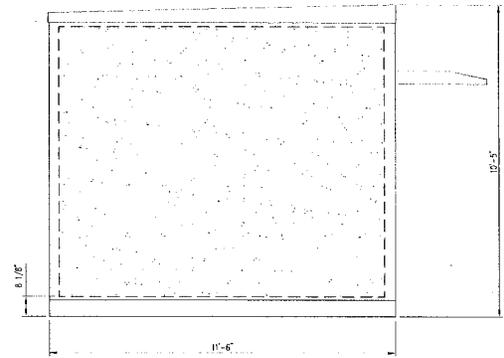
**PLEASANT VALLEY
 SUBSTATION
 6399T BULL RUN
 POST OFFICE ROAD
 CENTREVILLE, VA 20120**

TITLE:
**SHELTER
 ELEVATIONS**

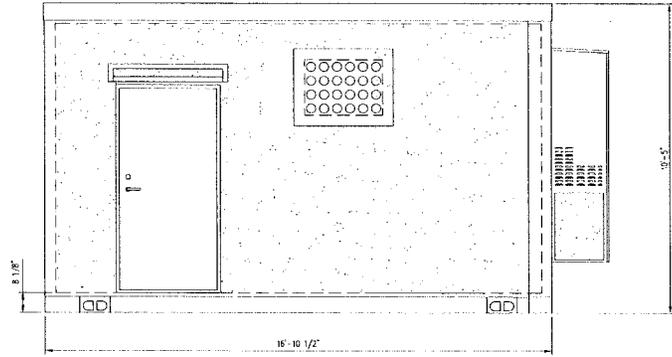
SHEET NUMBER:
Z-11



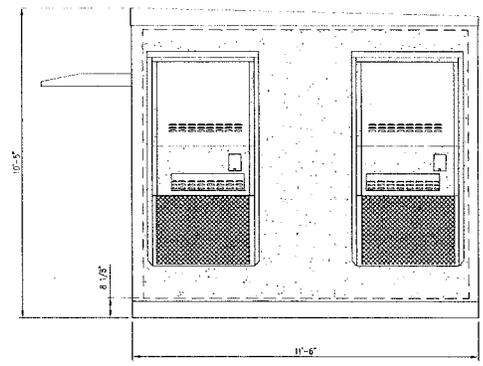
SHELTER ELEVATION
 SCALE: 1/4"=1'-0"
 1
 Z-11



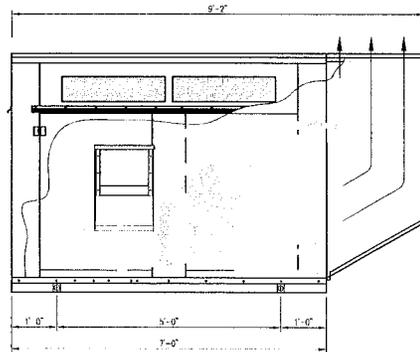
SHELTER ELEVATION
 SCALE: 1/4"=1'-0"
 2
 Z-11



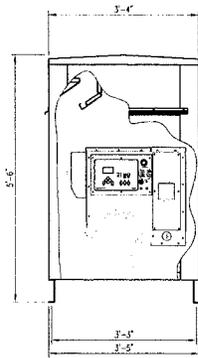
SHELTER ELEVATION
 SCALE: 1/4"=1'-0"
 3
 Z-11



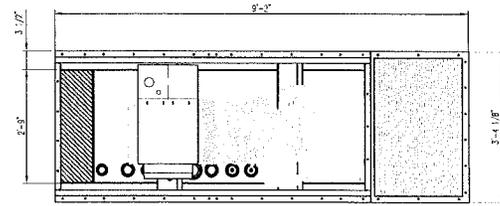
SHELTER ELEVATION
 SCALE: 1/4"=1'-0"
 4
 Z-11



SIDE VIEW



END VIEW

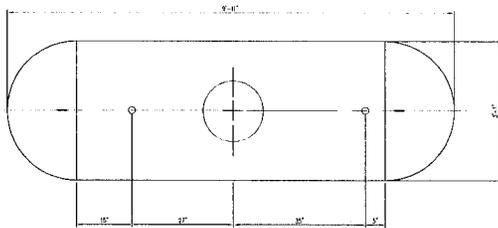


TOP VIEW

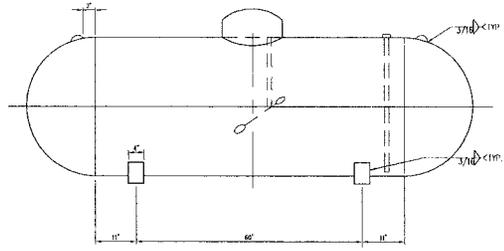
- NOTES:
1. STANBY PROPANE GENERATOR.
 2. MANUFACTURER: MTU MODEL: 4000P/ALTI.
 3. REFERENCE ENCLOSURE DRAWING: CO2 729-ALUM.
 4. THE GENERATOR DESIGN WEIGHT (WT): 1530 LBS.

PROPANE GENERATOR DETAILS
SCALE: 3/8"=1'-0"

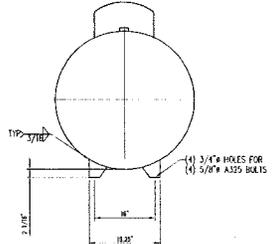
1
2-12



TOP VIEW [E - 500CSJ]



SIDE ELEVATION



END VIEW

E - 500CSJ PROPANE TANK
SCALE: 3/8"=1'-0"

2
7-12

entrex
communication services, inc.

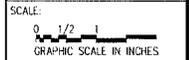
6800 Rockledge Drive, Suite 650
BETHESDA, MD 20817
PHONE: (202)408-0980
FAX: (202)408-0981

SUBMITTALS

DATE	DESCRIPTION	REV
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-12-14	ZONING REVIEW	
06-18-14	ZONING	
06-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



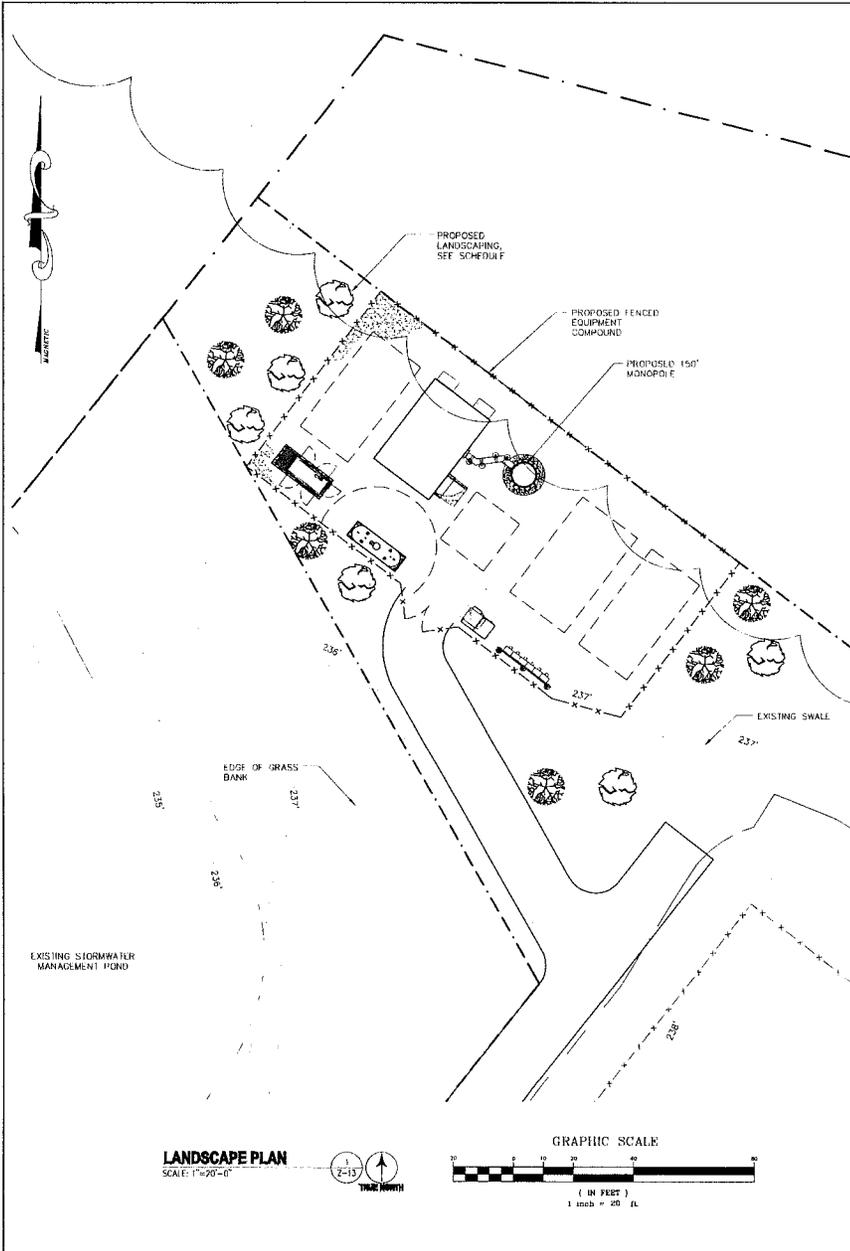
PROJECT NO: 1050.153
DESIGNER: M. M. E.
ENGINEER: H. M.



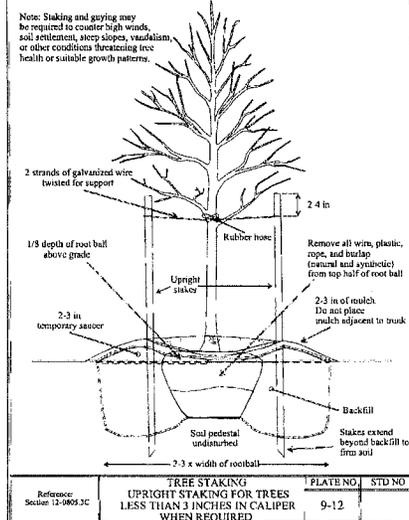
**PLEASANT VALLEY
SUBSTATION
6309 BULL RUN
POST OFFICE ROAD
CENTREVILLE, VA 20120**

TITLE:
**GENERATOR AND
PROPANE TANK
DETAILS**

SHEET NUMBER:
Z-12



FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



TREE STAKING & STAKING DETAIL
SCALE: N.T.S.

PLANTING SCHEDULE

BOTANICAL NAME	COMMON NAME	DIMENSIONS			QUANTITY	REMARKS	SYMBOL
		CALIPER	HEIGHT	SPREAD			
PICEA ABIES	NORWAY SPRUCE	± 2"	± 8'-0"	24"-36"	6	FULL DENSE	
MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	± 2"	± 8'-0"	24"-36"	6	FULL DENSE	

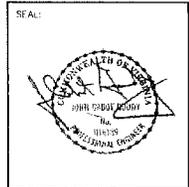
- TREE PLANTING NOTES:**
- EXCAVATE "PLANTING PIT" TWICE THE DIAMETER OF BALL & 6" GREATER IN DEPTH
 - LOOSEN SUBSOIL W/PICK TO ENSURE POROSITY
 - PLACE 6" PLAT MOSS IN "PLANTING PIT" & TAMP
 - SELECT BEST VIEWING ANGLE, LIFT STOCK BY BALL & PLACE IN "PLANTING PIT"
 - UNWRAP TOP HALF OF BALL BACK
 - FILL W/MIXTURE 1/3 PEAT MOSS-2/3 TOP- SOIL & TAMP
 - WRAP TRUNK W/PAPER TAPE TO FIRST BRANCH
 - LAY-IN (POROUS) FABRIC WEED BARRIER FORM 3" SAUCER TO ENCIRCLE STOCK
 - FILL W/3" PINE STRAW MULCH
 - FLOOD IMMEDIATELY & WATER FREQUENTLY

entrex
communication services, inc.

8600 Rockledge Drive, Suite 660
BETHESDA, MD 20817
PHONE: (202)408-0550
FAX: (202)408-0981

SUBMITTALS

DATE	DESCRIPTION	REV.
04-28-14	ZONING REVIEW	
05-09-14	ZONING REVIEW	
06-17-14	ZONING REVIEW	
06-18-14	ZONING	
09-22-14	ZONING	
11-13-14	COUNTY COMMENTS	



PROJECT NO: 1050.153
DESIGNER: M.A.
ENGINEER: M.M.

SCALE:
0 1/2 1
GRAPHIC SCALE IN INCHES

PLEASANT VALLEY
SUBSTATION
6389T BULL RUN
POST OFFICE ROAD
CENTREVILLE, VA 20120

TITLE:
**LANDSCAPE PLAN,
DETAIL AND NOTES**

SHEET NUMBER:
Z-13

Attachment B

Hansen, Doug

From: Hansen, Doug
Sent: Friday, November 07, 2014 4:27 PM
To: Hansen, Doug
Subject: 2232-Y14-7; Verizon Wireless; 6309 Bull Run Post Office Road

From: O'connell, Sandra
Sent: Friday, November 07, 2014 4:24 PM
To: Hansen, Doug
Cc: Hushour, Andrew
Subject: RE: 2232-Y14-7; Verizon Wireless; 6309 Bull Run Post Office Road

Doug,

After our discussion and clarification with ZAD on the volume measurements for propane tanks, the comments for this application are revised as follows:

2232-Y14-7
Verizon Wireless
6309T Bull Run Post Office Road
Tax Map Ref: 52-2 ((1)) 11E
Zoning District: RC

Comments: Based on the resubmission, received on October 23, 2014, the proposed application meets those standards set forth in Par. 3 of Sect. 2-514 of the Zoning Ordinance, however, please note the following:

1. The area of the mesa cabinet is still not listed item D on page 7 of the application.

ZED: Must be in substantial conformance with SE 2004-SU-039.

Prepared by Sandra O'Connell - 11/5/14

Attachment C

Hansen, Doug

From: Gardner, Stephen
Sent: Friday, September 12, 2014 3:18 PM
To: Hansen, Doug
Cc: Guinaw, Kevin
Subject: 2232-Y14-7 - 6309 Bull Run Post Office Road

Doug,

Please accept this email as response to your request for review of 2232-Y14-7, 6309 Bull Run Post Office Road, to permit construction of a 150-foot telecommunications monopole in the RC zoning district. The site is subject to SE 2004-SU-039, approved by the Board of Supervisors on March 21, 2005, subject to development conditions, to permit an electric substation. The special exception was applicable to a 15,600 square foot area located within the southern portion of the existing fenced compound. The proposed telecommunications monopole facility, to be located at the northwest portion of the site, outside of the fenced compound for the electric substation, is outside of the special exception area. As such, SE 2004-SU-039 is not applicable.

Stephen Gardner

Hansen, Doug

From: Dhavale, Maya
Sent: Wednesday, July 09, 2014 5:00 PM
To: Hansen, Doug
Cc: Nee, Pamela
Subject: 2232-Y14-7 / Verizon Wireless Monopole / 6309T Bull Run Post Office Road

Doug,

I've reviewed the 2232 application for the Verizon Monopole at 6309T Bull Run Post Office Road. There are no environmental concerns associated with the site, so we have no issues with the application.

Please let me know if you need any other information for this application.

Thanks!
Maya



County of Fairfax, Virginia

MEMORANDUM

DATE: 7 August 2014

TO: Doug Hansen, Senior Planner, Facilities Planning Branch

FROM: Linda Cornish Blank, Historic Preservation Planner *JCB*

SUBJECT: 2232-Y14-7, 6309T Bull Run Post Office Rd., Tax Map 52-2 ((1)) 11E, to construct a 150' tall monopole with associated equipment

Policy Plan: Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Amended through 3-4-2014, Public Facilities, page 39:

“Policy m. Locate telecommunication facilities to ensure the protection of historically significant landscapes. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.”

Background: This subject parcel is not included within the boundaries of a Fairfax County Historic Overlay District, is not listed in the Fairfax County Inventory of Historic Sites or the National Register of Historic Places or documented in the historic structures survey file. There are no properties in the immediate vicinity of the subject property of this application that are within the boundaries of a Fairfax County Historic Overlay District, listed in the Fairfax County Inventory of Historic Sites or the National Register or documented in the historic structures survey file that would be negatively impacted by the construction of the monopole.

The applicant has complied with Section 106 of the National Historic Preservation Act of 1966. As a local government, Fairfax County was afforded an opportunity to provide comment as required under Section 106.

Findings:

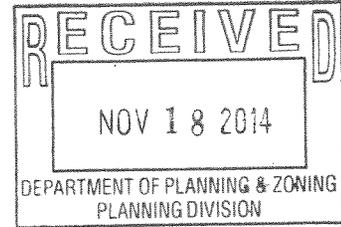
1. Staff finds the proposal in-keeping with the Policy Plan text cited above and finds that no known historic properties will be affected by the project.
2. No action concerning heritage resources is required.





County of Fairfax, Virginia

MEMORANDUM



DATE: November 17, 2014

TO: Doug Hansen, Senior Planner
Planning Division, DPZ

FROM: Hugh C. Whitehead, Urban Forester III
Forest Conservation Branch, DPWES *HUN*

SUBJECT: Verizon Wireless- 6309T Bull Run Post Office Road, 2232-Y14-7

I have reviewed the above referenced 2232 application for the Pleasant Valley Substation located at 6309T Bull Run Post Office Road. The plan is stamped as received by the Planning Division, DPZ, on November 14, 2014.

All Forest Conservation Branch comments made during review of previous submissions of this plan have been adequately addressed. Forest Conservation Branch staff has no further comments regarding this application.

If there are any questions or further assistance is desired, please contact me at (703)324-1770.

HCW/
UFMDID #: 193340

cc: DPZ File



Attachment G

Hansen, Doug

From: Hansen, Doug
Sent: Thursday, August 07, 2014 9:06 AM
To: Hansen, Doug
Subject: FW: 2232-Y14-7 : 6309T Bull Run Post Office Road

From: Stone, Laurie A.
Sent: Thursday, August 07, 2014 8:42 AM
To: Hansen, Doug
Subject: RE: 2232-Y14-7 : 6309T Bull Run Post Office Road

Hi Doug,

The Fire and Rescue Department has no comments regarding application number 2232-Y14-7 for a new monopole on Bull Run Post Office Road.

Laurie Stone
Strategic Planner
Fairfax County Fire and Rescue Department
4100 Chain Bridge Road
Fairfax, VA 22030
Phone: 703-246-3889

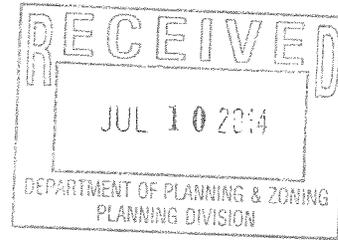
Fairfax Water

Attachment H

FAIRFAX COUNTY WATER AUTHORITY
8560 Arlington Boulevard, Fairfax, Virginia 22031
www.fairfaxwater.org

**PLANNING & ENGINEERING
DIVISION**

Jamie Bain Hedges, P.E.
Director
(703) 289-6325
Fax (703) 289-6382



July 9, 2014

Mr. Doug Hansen
Fairfax County Department of Planning & Zoning
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035

Re: Application No. 2232-Y14-7
Verizon Wireless – 6309T Bull Run
Post Office Road
Tax Map: 52-2 ((1)) 11E

Dear Mr. Hansen:

Fairfax Water has reviewed the above referenced application and has no comments.

If you have any questions regarding this information please contact Ross Stilling,
P.E., Chief Site Plan Review at (703) 289-6385.

Sincerely,

A handwritten signature in cursive script that reads "Traci K. Goldberg".

Traci K. Goldberg, P.E.
Manager, Planning



County of Fairfax, Virginia

MEMORANDUM

DATE: July 25, 2014

TO: Chris Caperton, Chief
Facilities Planning Branch, DPZ

FROM: Leonard Wolfenstein, Chief *L.W.*
Transportation Planning Section
Department of Transportation

FILE: 10-5

SUBJECT: Application for 15.2-2232 determination –2232-Y14-7 for the installation of a 150 ft. monopole, equipment shelter, and propane generator near 6309 Bull Run Post Office Road

The Fairfax County Department of Transportation (FCDOT) has reviewed the above 2232 application and does not anticipate any impacts on planned or existing roads, trails or transit service in the area. There appears to be no significant traffic impact resulting from the proposed use for the site.

If you have any questions please feel free to contact Kristin Calkins (tel. 703-877-5710) Kristin.Calkins@fairfaxcounty.gov.

Cc: Doug Hansen, DPZ
Mike Davis, FCDOT
Karyn Moreland, FCDOT
Charlie Strunk, FCDOT
Kristin Calkins, FCDOT
Randy White, FCDOT
Chris Wells, FCDOT



COMMONWEALTH of VIRGINIA
DEPARTMENT OF TRANSPORTATION

CHARLES A. KILPATRICK, P.E.
COMMISSIONER

4975 Alliance Drive
Fairfax, VA 22030

July 30, 2014

Mr. Chris B. Caperton, Chief
Facilities Planning Branch
Planning Division
Fairfax County Department of Planning and Zoning
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5505

Re: **Verizon Wireless Monopole**
NOVEC Substation
6309 Bull Run Post Office Road
Centreville, VA
Fairfax County Plan No: 2232-Y14-7

Dear Mr. Caperton:

VDOT has reviewed the above referenced plan and has no objection to its approval.

Sincerely,

A handwritten signature in cursive script that reads "Paul J. Kraucunas".

Paul J. Kraucunas, P.E.
Land Development Program Manager

cc: Fairfax Permits

Attachment K

§ 15.2-2232. Legal status of plan.

A. Whenever a local planning commission recommends a comprehensive plan or part thereof for the locality and such plan has been approved and adopted by the governing body, it shall control the general or approximate location, character and extent of each feature shown on the plan. Thereafter, unless a feature is already shown on the adopted master plan or part thereof or is deemed so under subsection D, no street or connection to an existing street, park or other public area, public building or public structure, public utility facility or public service corporation facility other than a railroad facility or an underground natural gas or underground electric distribution facility of a public utility as defined in subdivision (b) of § 56-265.1 within its certificated service territory, whether publicly or privately owned, shall be constructed, established or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the commission as being substantially in accord with the adopted comprehensive plan or part thereof. In connection with any such determination, the commission may, and at the direction of the governing body shall, hold a public hearing, after notice as required by § 15.2-2204. Following the adoption of the Statewide Transportation Plan by the Commonwealth Transportation Board pursuant to § 33.1-23.03 and written notification to the affected local governments, each local government through which one or more of the designated corridors of statewide significance traverses, shall, at a minimum, note such corridor or corridors on the transportation plan map included in its comprehensive plan for information purposes at the next regular update of the transportation plan map. Prior to the next regular update of the transportation plan map, the local government shall acknowledge the existence of corridors of statewide significance within its boundaries.

B. The commission shall communicate its findings to the governing body, indicating its approval or disapproval with written reasons therefor. The governing body may overrule the action of the commission by a vote of a majority of its membership. Failure of the commission to act within 60 days of a submission, unless the time is extended by the governing body, shall be deemed approval. The owner or owners or their agents may appeal the decision of the commission to the governing body within 10 days after the decision of the commission. The appeal shall be by written petition to the governing body setting forth the reasons for the appeal. The appeal shall be heard and determined within 60 days from its filing. A majority vote of the governing body shall overrule the commission.

C. Widening, narrowing, extension, enlargement, vacation or change of use of streets or public areas shall likewise be submitted for approval, but paving, repair, reconstruction, improvement, drainage or similar work and normal service extensions of public utilities or public service corporations shall not require approval unless such work involves a change in location or extent of a street or public area.

D. Any public area, facility or use as set forth in subsection A which is identified within, but not the entire subject of, a submission under either § 15.2-2258 for subdivision or subdivision A 8 of § 15.2-2286 for development or both may be deemed a feature already shown on the adopted master plan, and, therefore, excepted from the requirement for submittal to and approval by the commission or the governing body; provided, that the governing body has by ordinance or resolution defined standards governing the construction, establishment or authorization of such public area, facility or use or has approved it through acceptance of a proffer made pursuant to § 15.2-2303.

E. Approval and funding of a public telecommunications facility on or before July 1, 2012, by the Virginia Public Broadcasting Board pursuant to Article 12 (§ 2.2-2426 et seq.) of Chapter 24 of Title 2.2 or after July 1, 2012, by the Board of Education pursuant to § 22.1-20.1 shall be deemed to satisfy the requirements of this section and local zoning ordinances with respect to such facility with the exception of television and radio towers and structures not necessary to house electronic apparatus. The exemption provided for in this subsection shall not apply to facilities existing or approved by the Virginia Public Telecommunications Board prior to July 1, 1990. The Board of Education shall notify the governing body of the locality in advance of any meeting where approval of any such facility shall be acted upon.

F. On any application for a telecommunications facility, the commission's decision shall comply with the requirements of the Federal Telecommunications Act of 1996. Failure of the commission to act on any such application for a telecommunications facility under subsection A submitted on or after July 1, 1998, within 90 days of such submission shall be deemed approval of the application by the commission unless the governing body has authorized an extension of time for consideration or the applicant has agreed to an extension of time. The governing body may extend the time required for action by the local commission by no more than 60 additional days. If the commission has not acted on the application by the end of the extension, or by the end of such longer period as may be agreed to by the applicant, the application is deemed approved by the commission.

(Code 1950, §§ 15-909, 15-923, 15-964.10; 1958, c. 389; 1960, c. 567; 1962, c. 407, § 15.1-456; 1964, c. 528; 1966, c. 596; 1968, c. 290; 1975, c. 641; 1976, c. 291; 1978, c. 584; 1982, c. 39; 1987, c. 312; 1989, c. 532; 1990, c. 633; 1997, cc. 587, 858; 1998, c. 683; 2007, c. 801; 2009, cc. 670, 690; 2012, cc. 803, 835.)