



DEPARTMENT OF TECHNOLOGY SERVICES

Isiah Leggett
County Executive

Harash (Sonny) Segal
Chief Information Officer

June 24, 2015

TO: Transmission Facility Coordinating Group

Marjorie Williams, TFCG Chair, Office of Cable and Communications Services
Carlton Gilbert, M-NCPPC
Naeem Mia, OMB
Martin Rookard, WSSC
Boyd Lawrence, MCPS
Dave Niblock, DPS
Ted Bowser, DTS
Thomas Williamson, DGS

FROM: Robert Hunnicutt, Tower Coordinator,
Columbia Telecommunications Corporation

SUBJECT: Tower Group Meeting Agenda

The next TFCG meeting is scheduled for Wednesday, July 1st at 2:00 p.m. in Room #225 in the COB. The agenda for the meeting is as follows:

Consent Agenda

1. Verizon Wireless application to replace 5 antennas with 5 panel antennas at the 207' level on a 215'-high lattice tower on Atlantic Seaboard Corp. property located at 35 Derwood Circle in Rockville (201506-07). *Minor Modification.*
2. Verizon Wireless application to replace 9 antennas with 9 panel antennas at the 105' level on an 116'-high monopole on State Highway Administration District 3 property located at I-495 & Connecticut Avenue in Chevy Chase (201506-10). *Minor Modification.*
3. Verizon Wireless application to remove 3 antennas and replace with 3 panel antennas at the 160' level on 230'-high self-supporting tower on Montgomery Mule LLC property located at 18500 Elmer School Road (aka 23000 White's Ferry Road) in Dickerson (201506-11). *Minor Modification.*

4. Pacific DataVision application to attach three whip antennas at the 155' level on a 134'-high apartment building on Hillzo Limited Partnership property located at 9727 Mt. Pisgah Road in Silver Spring (201507-01). *Co-location.*
Conditioned on FCC approval of a license to transmit from this location
5. Sprint application to remove 6 antennas and replace with 6 panel antennas at the 110' level on 116'-high PEPCO transmission line tower on PEPCO property located at Seven Lock Road/Tuckerman Lane in Potomac (201507-02). *Minor Modification.*
6. T-Mobile application to remove 3 antennas and replace with 3 panel antennas at the 130' level on a 129'-high monopole on Montgomery County Public Schools property located at 5939 Muncaster Mill Road in Rockville (201507-03). *Minor Modification.*
7. Verizon Wireless application to replace 6 antennas with 6 panel antenna at the 46' level on a 42'-high apartment building on Grossberg Louis C Et Al property located at 11931 Viers Mill Road in Silver Spring (201507-04). *Minor Modification.*
8. Sprint application to replace 6 antennas with 6 panel antennas at the 92' level on a 94'-high apartment building at 18700 Walkers Choice Road in Gaithersburg (201507-05). *Minor Modification.*
9. Sprint application to attach 6 panel antennas at the 100' level on a 120'-high monopole on Montgomery County Public Schools property located at 5939 Muncaster Mill Road in Rockville (201507-06). *Co-location.*
10. Verizon Wireless application to attach 12 panel antennas at the 117' level on a 150'-high monopole on WMMH Building LLC property located at 1 Milestone Center Court in Germantown (201507-07). *Co-location.*

Regular Agenda

There are no items on the Regular Agenda this month.

Discussion Item

- Revised application and plans for TFCG #201303-03 Verizon Wireless @ Gramax Towers – 8060 13th Street, Silver Spring. The applicant reports that Verizon Wireless will install two antenna models that are different from what was proposed in the application the TFCG reviewed and recommended. The new antenna models are SBNHH-1D65C at 96"-high and SBNHH-1D45B at 72"-high. See attached explanation and revised plans from the applicant.

TFCG Meeting Agenda

July 1, 2015

Page 3 of 3

Discussion Item

Revised application/plans for TFCG #201303-03 & excerpt from correspondence

From: Harold Bernadzikowski

Sent: Thursday, June 11, 2015 2:35 PM

Subject: TFCG #201507-07 Request for Information

The permit for the installation was issued recently so the construction is not complete. This will simply be for the antenna model change.



MONTGOMERY COUNTY, MARYLAND
APPLICATION FOR WIRELESS COMMUNICATIONS
SITE COORDINATION

DATE: _____ NUMBER: 201507-07
(To be filled in by County)

Applicant Name: **Verizon Wireless, c/o Network Building and Consulting, LLC**
DBA:
Address: **6095 Marshalee Drive, Suite 300, Elkridge, MD 21075**
Contact Person
and Phone No.: **Harold Bernadzikowski 410-530-0937 or hbernadzikowski@nbcllc.com**

Provide a description of the proposed installation, including the type and height of the structure (i.e. monopole, rooftop, water tank, guyed tower, self-support tower, etc.) and whether it is existing, modified, or new. Describe any modifications that will be made to existing structure.

This application is for Minor Modifications to a telecommunication facility, previously acted on by the TFCG on March 18, 2013. The changes proposed are only for antenna models at the facility – see information in the antenna model section below and the enclosed zoning plans.

Address/City: **8060 13th Street, Silver Spring, MD 20910**

Site Name: **“North Gate”** Zoning: **CBD-1**

Site Owner/Landlord: **Grammax Associates, LP**
168 Business Park Drive, Suite 200
Virginia Beach, VA 23462

Structure Owner: **Same**

Latitude/Longitude (NAD27 degrees/minutes/seconds: **N39° 06’10.70”**; **W77° 11’37.67”**)

Ground Elevation AMSL in feet: **347’**

Antenna Height AGL in feet: **140’ rad center for alpha, beta, and delta sectors; 155’ rad center for gamma sector.**

Frequency bands to be used:
700 MHz (LTE): Tx 746-757; Rx 776-787
850 MHz (Cellular): Tx 880-890 and 891-894; Rx 835-845 and 846-849
1900 MHz (PCS): Tx 1975-1985 and 1945-1950; Rx 1895-1905 and 1865-1870
2100 MHz (AWS): Tx 2120-2135; Rx 1720-1735

Maximum Effective Radiation Power (ERP):
48.65 watts (cellular), 58.04 watts (PCS), 120 watts (LTE), and 100 watts (AWS)

Federal Communication Commission (FCC) Emission Designator:
LTE (9M38F9W); Cellular (1M23G9W); PCS (1M25G9W); and AWS (9M45F9W)

FCC Antenna Structure Registration Number: **N/A**



Description of antenna(s), including physical size, patterns, gain and orientation (include copy of spec sheet or drawings):

Sixteen (16) panel antennas; eight (8) SBNHH-1D65C; eight (8) SBNHH-1D45B. See spec sheets for antenna sizes.

Describe area to be served by the proposed installation. Attach a map of the general area showing the location of the site. Upon request, attach RF propagation studies showing service area coverage surrounding the proposed site with and without the proposed site.

The existing and proposed coverage objective for this telecommunication facility is between 16th Street and Georgia Avenue, in the Silver Spring area.

Will antennas be installed on an existing structure? **Yes**

If not, describe results of investigation about possible co-location. Include a listing of alternative sites considered and an explanation as to why each possible alternative was not selected. If a site was ruled out because of radio frequency (RF) issues, provide RF propagation maps documenting inadequate coverage: **N/A**

Justification of why this site was selected: **The subject building is a tall structure and suitable for installing antennas at a height that will allow for proper transmission and reception of Verizon's wireless signals.**

Will site be used to support government telecommunications facilities or other equipment for government use? **No**

If yes, describe: **N/A**

Attach a site plan of the proposed facility showing location of monopole, tower, or structure on the property, location of existing and proposed equipment buildings or cabinets, and distance of any new structures or buildings from property lines and other buildings or residences within 300 feet. Clearly identify existing versus proposed facilities by carrier. Also provide an elevation sketch of the structure showing major dimensions, existing attachments, and mounting height of proposed antennas. **If a balloon test has been performed, please provide copies of the photographs.**

Will the antenna installation be in compliance with the maximum permissible RF exposure limits set forth in §1.1310 of the FCC Rules and Regulations? Yes No

If the answer is no, please attach an explanation.

Type of compliance study required under §1.1307 of the FCC Rules and Regulations:

- Categorically Excluded
- Routine Environmental Evaluation
- Environmental Assessment

If antennas will be located on a rooftop, please attach a description of any steps that have been or will be taken to prevent the aggregate RF from exceeding exposure limits. **RF safety signage will be posted at the access points to the roof, in accordance with FCC and OSHA standards.**

Montgomery County Code, Chapter 2-58E requires applicants to submit a facility location plan indicating the location of every existing telecommunications transmission facility and the general location of facilities that are anticipated to be built in the near future. Has a new or updated plan been filed with the County within the last year?

Yes No If the answer if no, please submit a plan with this application.

If an application for an FAA review has been submitted or an FAA determination has been issued, please attach a copy.

[\(/Membership/MyProfile.aspx\)](#) [Login \(/membership/default.aspx\)](#)

Please select language

Translate



(/catalog/imagesCache/0000002/t006_r19912_v4.jpg)



([addtoproject.aspx?id=50557&company=wireless](#))SBNHH-1D45B

Andrew® Tri-band Antenna, 698–896 and 2x 1695–2360 MHz, 45° horizontal beamwidth, internal RETs.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Three internal RETs for independent tilt on all three bands

[Specifications \(product_details.aspx?id=50557\)](#)

[Related Products \(product_details.aspx?id=50557&tab=2\)](#)

[Documents/Tools \(product_details.aspx?id=50557&tab=3\)](#)

Electrical Specifications

Frequency Band, MHz	698 -806	806 -896	1695 -1880	1850 -1990	1920 -2180	2300 -2360
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Gain, dBi	16.9	17.6	19.6	20.1	20.5	21.0
Beamwidth, Horizontal, degrees	47	43	45	42	42	39
Beamwidth, Vertical, degrees	12.4	11.4	5.8	5.3	5.1	4.5
Beam Tilt, degrees	0-14	0-14	0-8	0-8	0-8	0-8
USLS, dB	19	22	18	17	17	16
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	30	30	30	30	30	30
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	350	350	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm


Electrical Specifications, BASTA*

Frequency Band, MHz	698 -806	806 -896	1695 -1880	1850 -1990	1920 -2180	2300 -2360
Gain by all Beam Tilts, average, dBi	16.6	17.3	19.2	19.8	20.1	20.8
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.5	±0.4	±0.5	±0.4
Gain by Beam Tilt, average, dBi	0 ° 1 6.6	0 ° 1 7.3	0 ° 1 9.3	0 ° 1 9.9	0 ° 2 0.1	0 ° 2 0.7
	7 ° 1 6.7	7 ° 1 7.4	4 ° 1 9.3	4 ° 1 9.9	4 ° 2 0.2	4 ° 2 0.9
	14 ° 16.4	14 ° 17.1	8 ° 1 9.0	8 ° 1 9.6	8 ° 2 0.0	8 ° 2 0.4

Beamwidth, Horizontal Tolerance, degrees	±1.5	±2.8	±2.1	±1.7	±1	±1.7
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.6	±0.3	±0.2	±0.4	±0.1
USLS, dB	19	23	16	15	16	16
Front-to-Back Total Power at 180° ± 30°, dB	24	24	28	30	31	30
CPR at Boresight, dB	28	29	23	24	20	19
CPR at 10 dB Horizontal Beamwidth, dB	13	17	13	13	13	13

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the whitepaper Time to Raise the Bar on BSAs. (http://info.commscope.com/2014-Gated-Assets_BASTA_TimeToRaiseBarOnBSAs_WP-108068---LP.html)

General Specifications

Antenna Brand	Andrew®
Antenna Type	DualPol® multiband with internal RET
Band	Multiband
Brand	DualPol® Teletilt®
Operating Frequency Band	1695 – 2360 MHz 698 – 896 MHz
Performance Note 	Outdoor usage

Mechanical Specifications

Color	Light gray
Lightning Protection	dc Ground
Radiator Material	Aluminum Low loss circuit board
Radome Material	Fiberglass, UV resistant

Reflector Material	Aluminum
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, total	6
Wind Loading, maximum	1038.0 N @ 150 km/h 233.4 lbf @ 150 km/h
Wind Speed, maximum	241.4 km/h 150.0 mph

Dimensions

Depth	178.0 mm 7.0 in
Length	1829.0 mm 72.0 in
Width	457.0 mm 18.0 in
Net Weight	29.2 kg 64.4 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Power Consumption, idle state, maximum	2.0 W
Power Consumption, normal conditions, maximum	13.0 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
RET System	Teletilt®

Patterns- Show

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



Included Parts



BSAMNT-1

Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

About Us (/About-Us/Who-We-Are/) News Center (/NewsCenter)

Careers (/About-Us/Careers/)

Corporate Responsibility (/About-Us/Corporate-Responsibility/)

Timeline (/About-Us/Who-We-Are/Timeline/)

Investor Relations (<http://ir.commscope.com>)

Management Team (/About-Us/Management-Team/)

Supply Chain (/About-Us/Corporate-Responsibility-and-Sustainability/Supply-Chain/)

Blog (/Blog/)

Events (/NewsCenter/Events/)

Infographics (/NewsCenter/Infographics/)

In the News (/NewsCenter/NewsItems/)

Media Contacts

(/NewsCenter/MediaContacts/)

Press Kit (/NewsCenter/PressKit/)

Press Releases (/NewsCenter/PressReleases/)

Product Specifications

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SBNHH-1D65C

Andrew® Tri-band Antenna, 1 x 698–896 MHz and 2 x 1710–2360 MHz, 65° horizontal beamwidth, internal electrical tilt. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- The values presented on this datasheet have been calculated based on N-P-BASTA White Paper version 9.6 by the NGMN Alliance

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	15.8	15.6	17.3	17.8	18.2	18.1
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.3	±0.2	±0.5	±0.4
Gain by Beam Tilt, average, dBi	0° 16.0 5° 16.0 11° 15.5	0° 15.8 5° 15.8 11° 15.2	0° 17.3 4° 17.4 7° 17.3	0° 17.7 4° 17.8 7° 17.7	0° 18.0 4° 18.2 7° 18.1	0° 17.9 4° 18.2 7° 18.2
Beamwidth, Horizontal, degrees	66	64	70	65	63	58
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.9	±3.4	±3.8	±4.7	±3.7
Beamwidth, Vertical, degrees	8.9	7.8	5.7	5.2	5.0	4.4
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.3	±0.2	±0.3	±0.2
Beam Tilt, degrees	0–11	0–11	0–7	0–7	0–7	0–7
USLS, dB	13	14	17	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	26	24	27	25	25	26
CPR at Boresight, dB	29	22	20	21	19	21
CPR at Sector, dB	14	11	13	11	9	5
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	30	30	30	30	30	30
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	400	400	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

General Specifications

Antenna Brand	Andrew®
Antenna Type	DualPol® tri-band
Band	Multiband
Brand	DualPol® Teletilt®
Operating Frequency Band	1710 – 2360 MHz 698 – 896 MHz

Mechanical Specifications

Color	Light gray
Connector Interface	7-16 DIN Female
Connector Location	Bottom
Connector Quantity, total	6
Lightning Protection	dc Ground
Radiator Material	Aluminum Low loss circuit board
Radome Material	Fiberglass, UV resistant
Wind Loading, maximum	879.0 N @ 150 km/h 197.6 lbf @ 150 km/h

Product Specifications

COMMSCOPE®

SBNHH-1D65C

Wind Speed, maximum

241.4 km/h | 150.0 mph

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Dimensions

Depth	181.0 mm 7.1 in
Length	2438.0 mm 96.0 in
Width	301.0 mm 11.9 in
Net Weight	22.5 kg 49.6 lb

Remote Electrical Tilt (RET) Information

Annual Failure Rate, maximum	0.01%
Power Consumption, idle state, maximum	2.0 W
Power Consumption, normal conditions, maximum	11.0 W
Power Input	10-30 V
Protocol	3GPP/AISG 2.0 Multi-RET
RET Interface	RS-485 Female (daisy chain port ,1) RS-485 Male (input port, 1)
RET Interface, quantity	1 female 1 male
RET System	Teletilt®

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
China RoHS SJ/T 11364-2006
ISO 9001:2008

Classification

Compliant by Exemption
Above Maximum Concentration Value (MCV)
Designed, manufactured and/or distributed under this quality management system



Included Products

BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.5 - 4.5 in (64 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

Product Specifications

COMMScope®

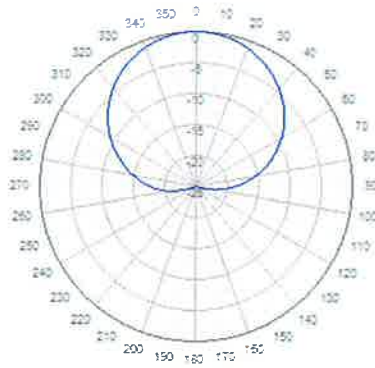
SBNHH-1D65C

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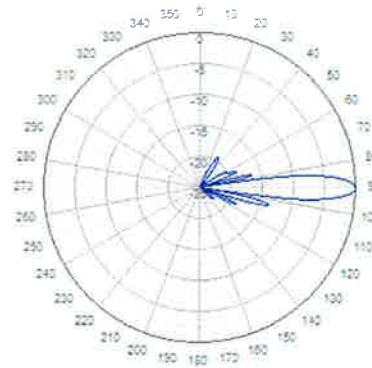


Horizontal Pattern

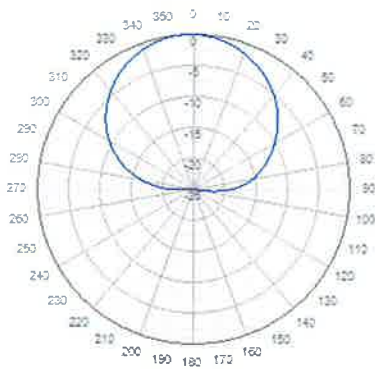
Vertical Pattern



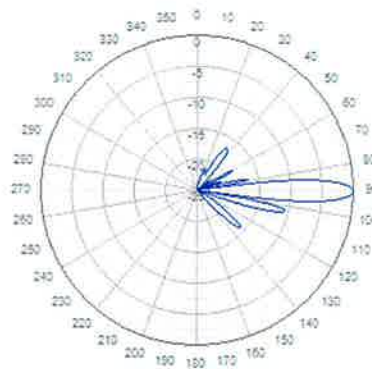
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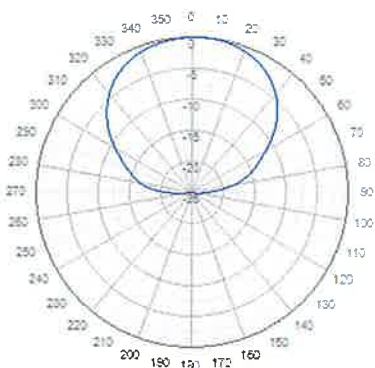
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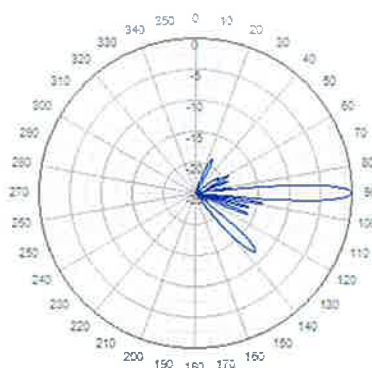
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Freq: 850 MHz, Tilt: 0°



Freq: 1785 MHz, Tilt: 0°



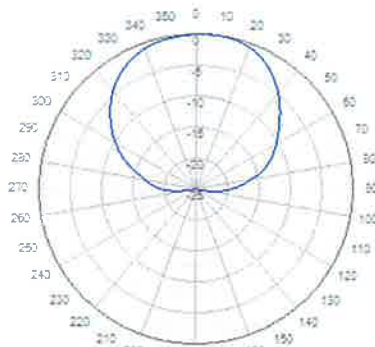
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Product Specifications

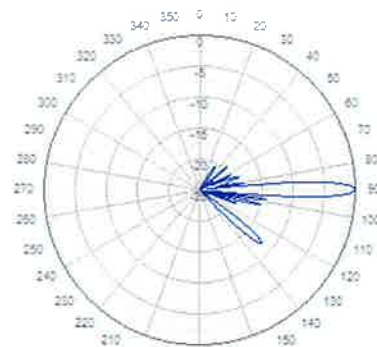
COMMScope®

SBNHH-1D65C

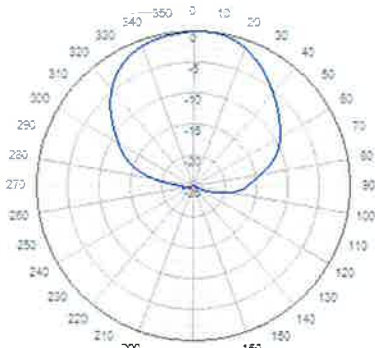
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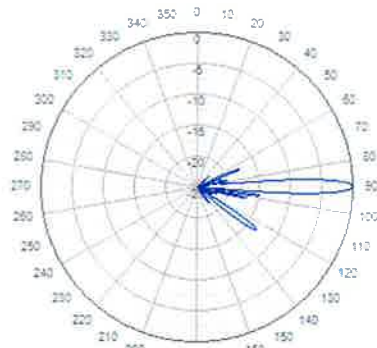
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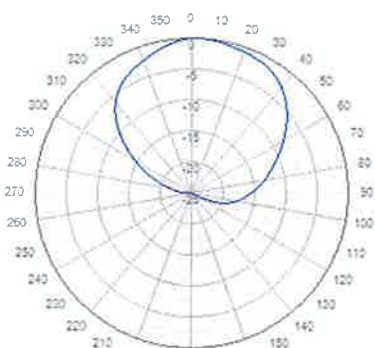
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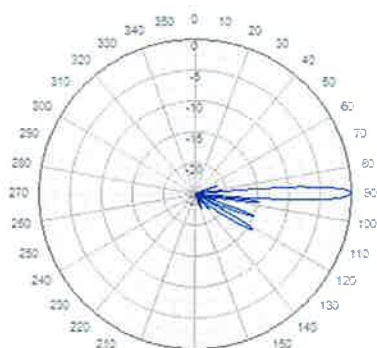
Freq: 2110 MHz, Tilt: 0°



Freq: 2110 MHz, Tilt: 0°



Freq: 2330 MHz, Tilt: 0°



Freq: 2330 MHz, Tilt: 0°

Product Specifications

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BSAMNT-1

Wide Profile Antenna Downtilt Mounting Kit for 2.5 - 4.5 in (64 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

General Specifications

Antenna Brand	Andrew®
Mount Type	Pipe mounts
Application	Outdoor
Includes	Brackets Hardware
Package Quantity	1

Mechanical Specifications

Color	Silver
Material Type	Galvanized steel

Dimensions

Compatible Diameter, maximum	114.3 mm 4.5 in
Compatible Diameter, minimum	63.5 mm 2.5 in
Net Weight	5.6 kg 12.3 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
China RoHS SJ/T 11364-2006

Classification

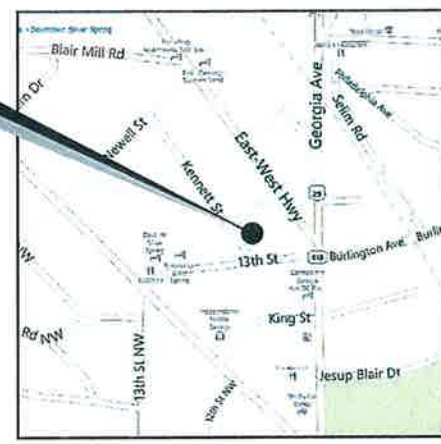
Compliant
Below Maximum Concentration Value (MCV)



MRA
MORRIS & RITCHIE ASSOCIATES, INC.
 Civil/Structural Engineers
 1000 East Joppa Road, Suite 600
 Towson, Maryland 21286
 410-821-1890
 410-821-1748 Fax

STATE OF MARYLAND
 J. No. 3128
 PROFESSIONAL ENGINEER
 07/19/19

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32364, EXPIRATION DATE: 11/02/2015.



VICINITY MAP
 SCALE: 1" = 400'

- SITE NOTES:**
- APPLICANT: VERIZON WIRELESS
 4000 JUNCTION DRIVE
 ANNAPOLIS, MARYLAND 20710
 TEL: (301) 512-2000
 FAX: (301) 512-2186
 - APPLICANT'S ATTORNEY: M.E. DIAMOND
 LAW OFFICES OF M. GREGG DIAMOND, P.C.
 7800 ROCKHURST AVENUE, SUITE 402
 BETHESDA, MARYLAND 20814-5874
 (240) 316-5314
 - PROPERTY OWNER: GRAMAX ASSOCIATES LP
 160 BUSINESS PARK DRIVE, SUITE 200
 VIRGINIA BEACH, VIRGINIA 23462-8332
 - PARCEL ID: 03464518
 MAP: #82
 TRACT AREA: 46,134 SQ FT
 DISTRICT: 13
 ADDRESS: 8060 13TH STREET
 SILVER SPRING, MARYLAND 20910
 EXISTING USE: COMMERCIAL CONDOMINIUM
 - ZONING: CBD1
 - HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON A GPS LATITUDE BY MORRIS & RITCHIE ASSOCIATES, INC. DATED JANUARY 2015:
 LATITUDE: 38° 54' 15.84"
 LONGITUDE: 76° 11' 01.9491"
 GRAOUND ELEVATION: 94.2' AMSL (AVG.)
 TOP OF MAIN ROOF: 133' 46.1" AMSL
 TOP OF PENTHOUSE: 145' 48.1" AMSL
 TOP OF UPPER FORTIFICATION: 154' 48.1" AMSL
 - TOTAL DISTURBED AREA: 0 SF

- THE PROPOSED FACILITIES WILL CONSIST OF ONE (1) 20' LONG x 13'-6" WIDE COMMUNICATIONS EQUIPMENT PLATFORM ON ROOFTOP. FOUR (4) ANTENNAS SHALL BE FLUSH MOUNTED ON THE EXISTING 8'-0" UPPER PENTHOUSE WITH A RAD CENTER OF 159'-0"; EIGHT (8) ANTENNAS SHALL BE MOUNTED ON ANTENNA FRAMES WITH A RAD CENTER OF 142'-0" AND FOUR (4) ANTENNAS SHALL BE MOUNTED TO THE PROPOSED EQUIPMENT FRAME WITH A RAD CENTER OF 142'-0" FOR THE RECEPTION OF VERIZON WIRELESS TELECOMMUNICATIONS.
- THE STRUCTURE WILL NOT SUPPORT LIGHTS OR SIGNS UNLESS REQUIRED FOR AIRCRAFT WARNINGS OR OTHER SAFETY RECORDS.
- THE APPLICANT WILL PROVIDE A CERTIFICATION FROM A REGISTERED ENGINEER THAT THE STRUCTURE WILL MEET THE APPLICABLE DESIGN STANDARDS FOR WIND LOADS PER THE REQUIREMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION.
- IF THE ANTENNAS ARE NO LONGER USED FOR TELECOMMUNICATIONS PURPOSES FOR A CONTINUOUS PERIOD OF ONE (1) YEAR, THEY SHALL BE REMOVED BY THE ANTENNA OWNER AT OWNERS' EXPENSE.
- NO WATER OR SANITARY UTILITIES ARE REQUIRED FOR THE OPERATION OF THIS FACILITY.
- STORMWATER MANAGEMENT NOTE: NO STORMWATER MANAGEMENT IS REQUIRED FOR THIS SITE.
- BOUNDARY SHOWN PER COUNTY RECORDS. EXISTING SITE FEATURES SHOWN PER SURVEY BY MORRIS & RITCHIE ASSOCIATES, INC. DATED JANUARY 2015.
- THIS PLAN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. PLAN IS SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
- ALL DETAILS SHOWN ARE "STANDARD" OR "TYPICAL" FOR REFERENCE ONLY. FOR ACTUAL DETAILS, SEE ARCHITECTURAL, STRUCTURAL, OR CONSTRUCTION PLANS BY OTHERS.
- STRUCTURAL ANALYSIS/DESIGN TO BE PERFORMED BY OTHERS AT CLIENT AND/OR OWNER'S DISCRETION PRIOR TO COMMENCEMENT OF ANY WORK.
- THE COMMUNICATION PLATFORM SHALL BE UNMANNED, WITH INFREQUENT VISITS (FOUR OR FEWER PER YEAR) BY MAINTENANCE PERSONNEL, AND WITH ACCESS AND PARKING FOR NO MORE THAN ONE VEHICLE. THE PROPOSED FACILITY IS NOT FOR HUMAN HABITATION AND THEREFORE HANDICAP ACCESS IS NOT REQUIRED.
- THE PROPOSED COMMUNICATIONS PLATFORM, ANTENNAS AND RELATED HOATING DEVICES DO NOT EXCEED TWELVE (12) FEET IN TOTAL HEIGHT.

- GENERAL NOTES:**
- CONTRACTOR SHALL NOTIFY "MISS UTILITY" (811) 48 HOURS PRIOR TO DOING ANY EXCAVATION IN THIS AREA. CONTRACTOR SHALL CONTACT A SUBSURFACE UTILITY LOCATOR FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL VERIFY EXISTING UTILITY LOCATIONS BY TEST PIT AS NECESSARY. LOCATION OF UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND FOR PLANNING PURPOSES ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, TRANSMISSIONS TO UTILITIES OR PROPERTY OF OTHERS BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.
 - ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES, THE LATEST EDITION THEREOF.
 - ANY PERMITS WHICH MUST BE OBTAINED SHALL BE THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
 - CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS WITH APPROPRIATE UTILITY OWNERS.
 - THESE PLANS ARE NOT FOR RECORDATION OR CONVEYANCE.
 - EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.
- MONTGOMERY COUNTY NOTES:**
- THE PROPOSED TOWER RELATED EQUIPMENT CONTROLS AND EQUIPMENT CABINETS, AND PROPOSED PANEL BOXES SHALL COMPLY WITH ALL THE DESIGN STANDARDS IN SECTION 5.2.2.1(2) OF THE REVISED MONTGOMERY COUNTY ZONING REGULATIONS THAT WENT INTO EFFECT ON OCTOBER 31, 2014.

verizon wireless
 NORTH GATE
 8060 13TH STREET
 SILVER SPRING, MD 20910 (MONTGOMERY COUNTY)

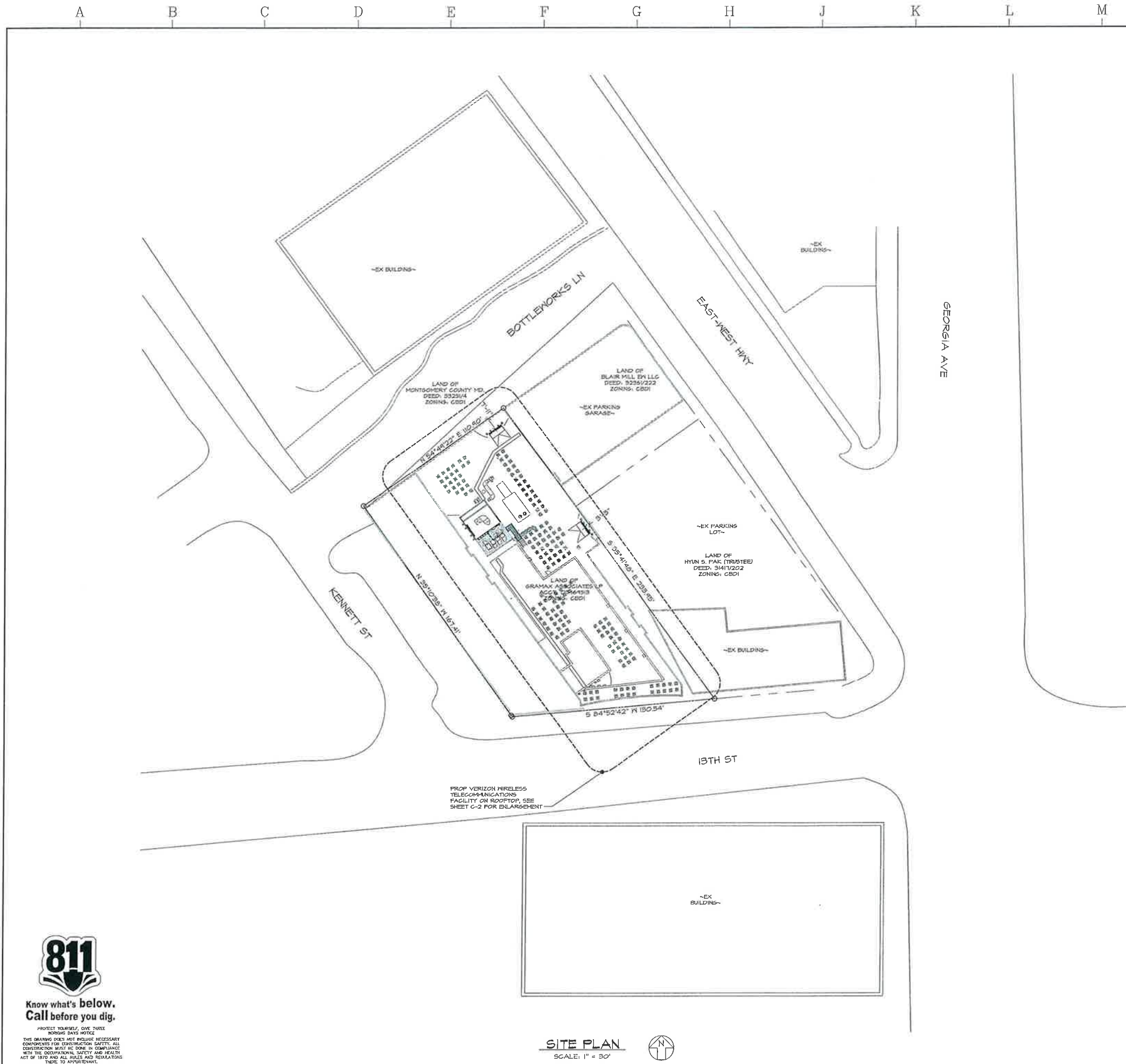
REVISIONS:

NO.	DESCRIPTION	DATE
1	EQUIPMENT REV.	7/23/2015
	PERMIT DWGS	05/05/2015
	ANTENNA REV.	05/15/2015

DESIGNED BY: CJS
 PROJECT NO: 10421.1069
 DATE: 01/28/2013
 SCALE: AS NOTED

TITLE:
 Site Plan

SHEET:
 C-1



SITE PLAN
 SCALE: 1" = 30'

811
 Know what's below.
 Call before you dig.
 PROTECT YOURSELF. GIVE THREE WORKING DAYS NOTICE.
 THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

MRA
MORRIS & RITCHIE ASSOCIATES, INC.
 Civil/Structural Engineers
 1225-C East Joyce Road, Suite 600
 Towson, Maryland 21286
 410-821-1800
 410-821-1748 Fax

STATE OF MARYLAND
JOSEB TORRES
 No. 3773
 PROFESSIONAL ENGINEER
 05/19/15

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 37734, EXPIRATION DATE: 5/10/2025.

verizon wireless
 NORTH GATE
 8060 13TH STREET
 SILVER SPRING, MD 20910 (MONTGOMERY COUNTY)

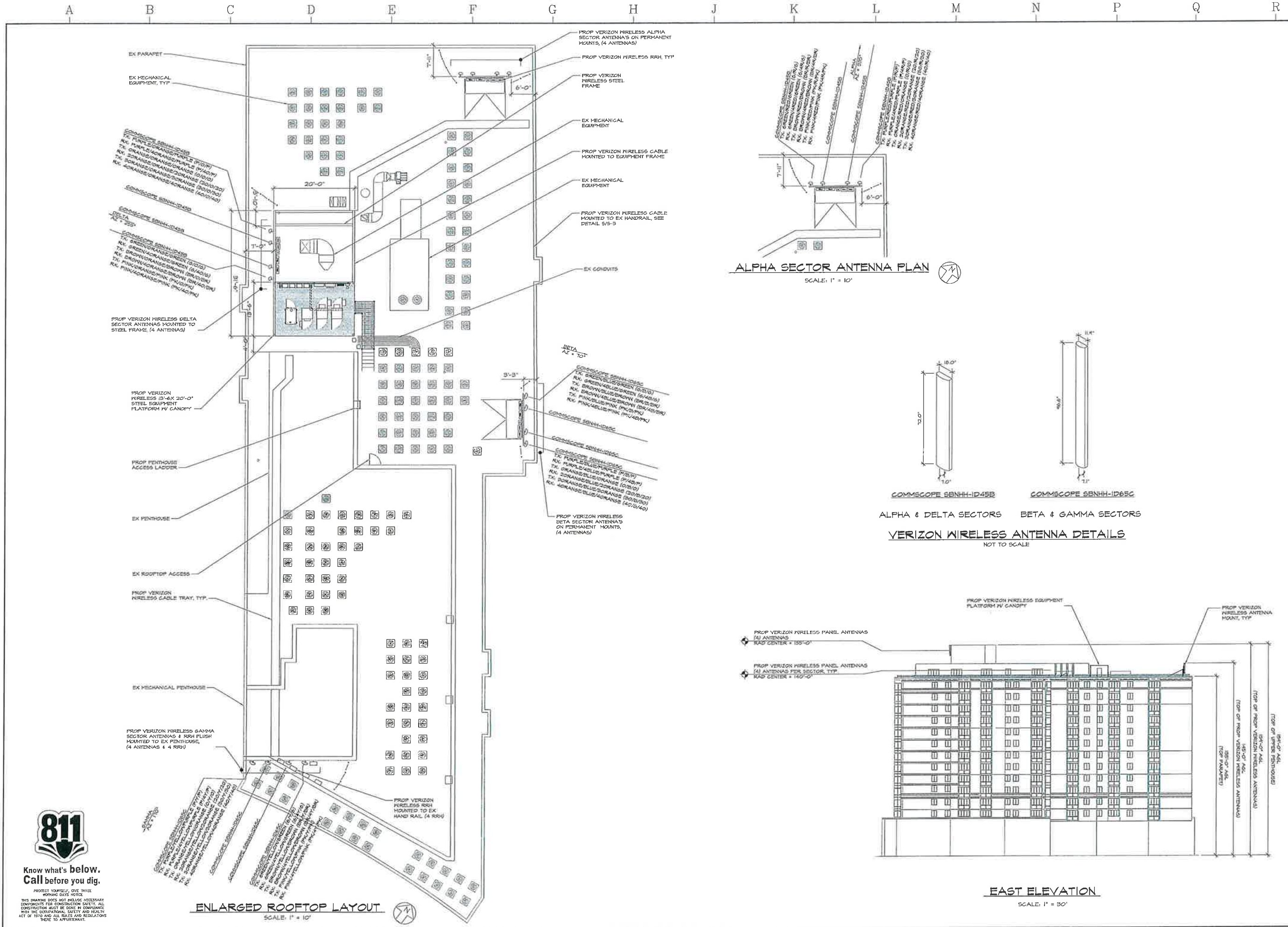
REVISIONS:

NO.	DESCRIPTION	DATE
1	EQUIPMENT REV.	3/23/2015
	PERMIT DWGS	05/06/2015
	ANTENNA REV.	05/15/2015

DESIGNED BY: CJS
 PROJECT NO: 10421.1089
 DATE: 01/28/2013
 SCALE: AS NOTED

TITLE:
 Site Details

SHEET:
C-2



THIS DRAWING DOES NOT ENCLOSE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL SALES AND REGULATIONS MADE TO APPLICABLE.