STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
A PETITION OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS FOR A DECLARATORY RULING ON THE NEED TO OBTAIN A SITING COUNCIL CERTIFICATE FOR THE INSTALLATION OF A WIRELESS TELECOMMUNICATIONS FACILITY AT 150 DANBURY ROAD, RIDGEFIELD, CONNECTICUT	:	PETITION NO. ____
	:	DECEMBER 26, 2017

PETITION FOR A DECLARATORY RULING:
INSTALLATION HAVING NO
SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

I. Introduction

Pursuant to Sections 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State Agencies ("R.C.S.A."), Cellco Partnership d/b/a Verizon Wireless ("Cellco") hereby petitions the Connecticut Siting Council (the "Council") for a declaratory ruling ("Petition") that the installation of a wireless telecommunications facility at 150 Danbury Road (Route 35) in Ridgefield, Connecticut (the "Property") would not have a substantial adverse environmental effect and would not require the issuance of a Certificate of Environmental Compatibility and Public Need ("Certificate") under Connecticut General Statutes ("C.G.S.") Section 16-50k(a). The Property is owned by Fairfield County Bank. Cellco refers to this cell site as its "Ridgefield 4 Facility".

II. Factual Background

The Property is a 3.35-acre parcel in Ridgefield's Business 2 (B-2) zone and is currently used for commercial purposes by the Fairfield County Bank. The Property is surrounded by

undeveloped land to the east and northeast and commercial uses to the north, south and west. *See* Attachment 1 – Site Vicinity and Site Schematic Maps (Aerial Photograph).

III. Proposed Ridgefield 4 Facility

Cellco is licensed to provide wireless telecommunications services in the 700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges in Ridgefield and throughout the State of Connecticut. Cellco has identified a need for improved wireless service along Danbury Road (Route 35) and local roadway in the northerly portion of Ridgefield's business district.

The proposed Ridgefield 4 Facility will consist of four (4) panel antennas and four (4) remote radio heads ("RRHs") (two sectors of two antennas and two RRHs each) attached to four tower masts on the roof of the building. Each of the two (2) sectors of antennas and RRHs will be surrounded by a faux brick chimney screening structure designed to match the existing chimney on the roof.[1]

Equipment associated with Cellco's antennas will be located on a 10' x 16' concrete pad on grade, with canopy roof, adjacent to the Property owner's existing mechanical equipment and a back-up generator, to the north of the building's portico. Cellco's equipment will be surrounded by a white stockade fence, matching the fence surrounding the owner's mechanical equipment. Cables connecting Cellco's antennas to its equipment will be routed inside and partial along the northerly façade of the bank building. Power and telephone service to the Ridgefield 4 Facility will extend from existing service at the Property. (*See* Cellco's Project Plans included in Attachment 2). Specifications for Cellco's antennas and RRHs are included in Attachment 3.

[1] The existing chimneys are not functional and are designed as architectural features. The faux chimneys that will screen the Cellco antennas and RRHs will be located in the same general location on the roof as the existing chimneys and approximately 3'-6" taller than the existing chimneys.

IV. Discussion

A. The Proposed Facility Modifications Will Not Have A Substantial Adverse Environmental Effect

The Public Utility Environmental Standards Act (the "Act"), C.G.S. § 16-50g et seq., provides for the orderly and environmentally compatible development of telecommunications towers in the state to avoid "a significant impact on the environment and ecology of the State of Connecticut." C.G.S. § 16-50g. To achieve these goals, the Act established the Council, and requires a Certificate of Environmental Compatibility and Public Need for the construction of cellular telecommunication towers "that may, as determined by the council, have a substantial adverse environmental effect". C.G.S. § 16-50k(a).

1. Physical Environmental Effects

Cellco respectfully submits that the installation of antennas and RRHs on the roof of the existing commercial building screened by faux chimney structures and the expansion of the existing fenced equipment compound to accommodate Cellco's radio equipment, will not involve a significant alteration in the physical and environmental characteristics of the Property.

2. Visual Effects

Cellco submits that the Ridgefield 4 Facility would not have an adverse visual impact on existing views of the building at the Property or to the character of the surrounding community. (*See* Visual Assessment & Photo-Simulations ("Visual Assessment") included in Attachment 4). The faux chimney screening structures will appear to be an architectural component of the existing building.

3. FCC Compliance

Radio frequency ("RF") emissions from the proposed installation will be well below the standards adopted by the Federal Communications Commission ("FCC"). Included in

Attachment 5 is a Calculated Radio Frequency Emissions Report that demonstrates that Cellco's Ridgefield 4 Facility will operate well within the FCC safety standard.

4. FAA Summary Report

Included in Attachment 6 is a Federal Airways & Airspace Summary Report (the "FAA Report") verifying that the proposed faux chimney structures on the roof of the existing Fairfield County Bank building do not constitute a hazard to air navigation and would not, therefore, require obstruction marking or lighting. Notification to the FAA of Cellco's improvements is not required.

B. Notice to the Town, Property Owner and Abutting Landowners

On December 26, 2017, a copy of this Petition was sent to Ridgefield's First Selectman Rudy Marconi; Richard S. Baldelli, Ridgefield's Director of Planning and Zoning; and to Fairfield County Bank, the owner of the Property. Copies of the letters sent to the Mr. Marconi, Mr. Baldelli and Fairfield County Bank are included in Attachment 7.

A copy of this Petition was also sent to the owners of land that abut the Property. A sample abutter's letter and the list of those abutting landowners to whom notice was sent is included in Attachment 8.

V. Conclusion

Based on the information provided above, Cellco respectfully requests that the Council issue a determination in the form of a declaratory ruling that the installation of four small tower masts, supporting antennas and RRHs and the installation of ground-mounted equipment as described above will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS

By _____

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
Its Attorneys

ATTACHMENT 1

Legend

- Proposed Verizon Wireless Facility
- Surrounding Verizon Wireless Facilities
- Municipal Boundary

Site Vicinity Map

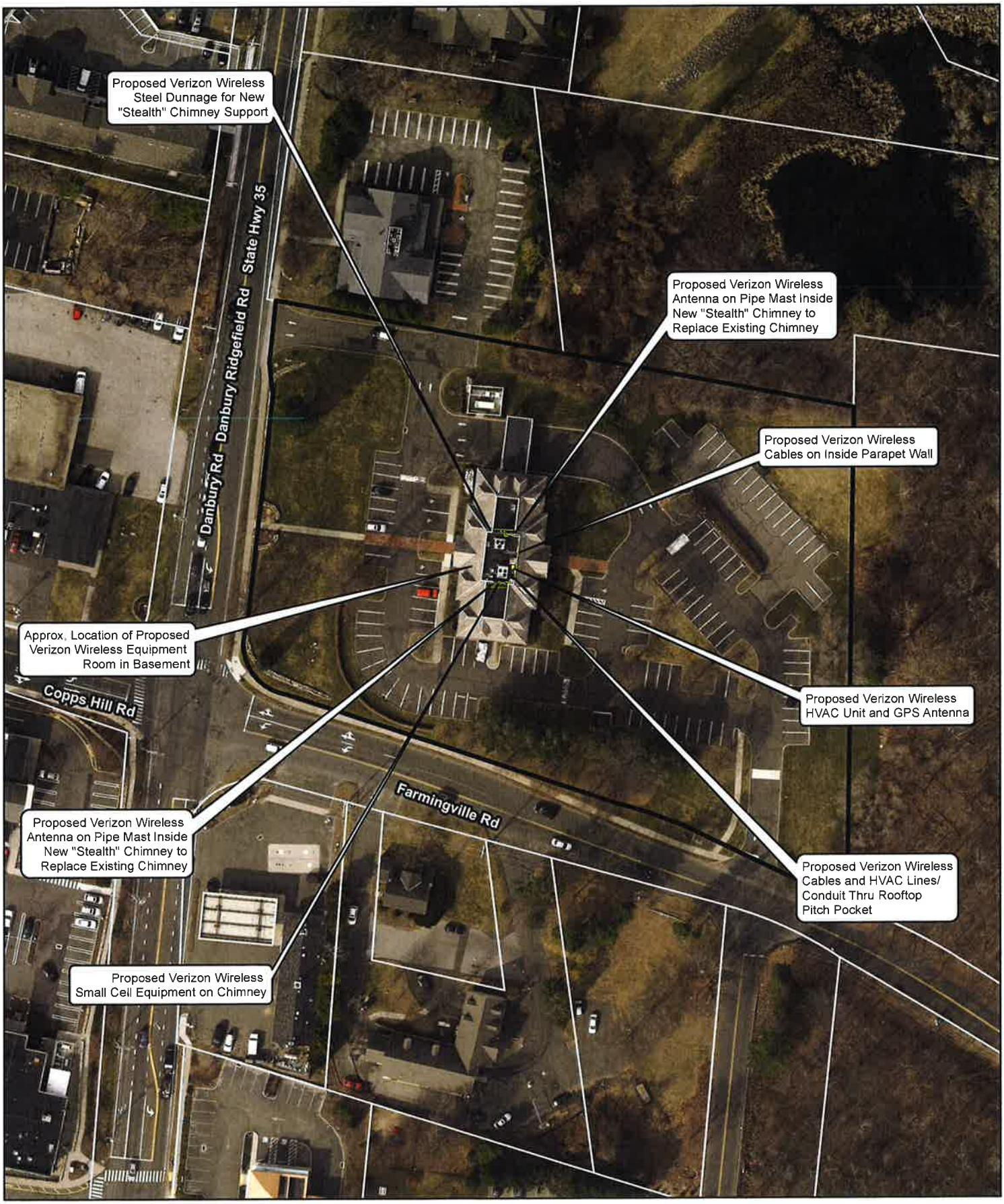
Proposed Wireless
Telecommunications Facility
Ridgefield 4 CT
Fairfield County Bank
150 Danbury Road
Ridgefield, Connecticut

verizon

Base Map Source: 2016 Aerial Photograph (CTECO)
Map Scale: 1 inch = 2,000 feet
Map Date: August 2017

2,000 1,000 0 2,000 Feet

ALL-POINTS TECHNOLOGY CORPORATION



Legend

- Proposed Verizon Wireless
- Proposed Verizon Wireless
- Subject Property
- Approximate Parcel Boundary (CTDEEP GIS Parcels Last Updated 2010)

Map Notes:
Base Map Source: 2016 Aerial Photograph (CTECO)
Map Scale: 1 inch = 100 feet
Map Date: July 2017

N W E S

100 50 0 100 Feet

Site Schematic

Proposed Wireless Telecommunications Facility
Ridgefield 4 CT
Fairfield County Bank
150 Danbury Road
Ridgefield, Connecticut

verizon

ALL-POINTS TECHNOLOGY CORPORATION

ATTACHMENT 2

verizon

WIRELESS COMMUNICATIONS FACILITY

SITE NAME: RIDGEFIELD 4 CT

FAIRFIELD COUNTY BANK
150 DANBURY ROAD
RIDGEFIELD, CT 06877

PROJECT DESCRIPTION

- INSTALLATION OF OUTDOOR CABINETS AT GRADE BEHIND AN EXPANDED FENCED COMPOUND, ADJACENT TO THE OWNER'S EXISTING ELECTRICAL EQUIPMENT/GENERATOR COMPOUND
- VERIZON WIRELESS TO CONNECT INTO EXISTING OWNER'S NATURAL GAS EMERGENCY GENERATOR
- INSTALLATION OF (4) PANEL ANTENNAS AND ASSOCIATED DEVICES PIPE MOUNTED TO NEW ROOFTOP STEEL DUNNAGE BEAMS IN A 2-SECTOR CONFIGURATION
- ANTENNAS AND ASSOCIATED DEVICES SHALL BE CONCEALED WITHIN NEW "RF TRANSPARENT" CHIMNEYS ON THE ROOF; TO REPLACE EXISTING CHIMNEYS
- INSTALLATION OF CABLING FROM EQUIP. CABINETS AT GRADE TO ANTENNAS ON ROOF
- ELECTRICAL & TELEPHONE CONNECTIONS TO EXISTING UTILITY DEMARCATION POINTS

VICINITY MAP

N

NOT-TO-SCALE

PROJECT SUMMARY

SITE NAME:	RIDGEFIELD 4 CT
SITE ADDRESS:	FAIRFIELD COUNTY BANK 150 DANBURY ROAD RIDGEFIELD, CT 06877
PROPERTY OWNER & MAILING ADDRESS:	RIDGEFIELD BANK PO BOX 2050 RIDGEFIELD, CT 06877
PARCEL ID:	E13-0179
COORDINATES:	41° 17' 43.47" N 73° 29' 21.13" W
APPLICANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DR., 9TH FL. EAST HARTFORD, CT 06108
VERIZON WIRELESS CONTACTS:	JIM KING - CONSTRUCTION (203) 856-1701 SHELBY DOCKER - SAC (860) 549-3739
LEGAL/REGULATORY COUNSEL:	KENNETH C. BALDWIN, ESQ. ROBINSON & COLE, LLP (860) 275-8345

DRAWING SCHEDULE

SHEET NO.	SHEET DESCRIPTION
T-1	TITLE SHEET
C-1	2,500 FT. RADIUS MAP, ABUTTERS MAP & PROPERTY OWNER LIST
C-2	SITE LAYOUT
C-3	PARTIAL ROOF PLAN, ANTENNA PLAN AND ELEVATION
C-4	WEST ELEVATION
C-5	COMPOUND & BUILDING FLOOR PLANS
C-6	EQUIPMENT & SITE DETAILS
C-7	STRUCTURAL DUNNAGE PLAN & DETAILS
C-8	STRUCTURAL EQUIPMENT PLANS & ELEVATIONS
C-9	STRUCTURAL DETAILS

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WIRELESS COMMUNICATIONS FACILITY

99 EAST RIVER DRIVE
EAST HARTFORD, CT 06108

On Air Engineering, LLC
88 Foundry Pond Rd.
Cold Spring, NY 10516
onair@optonline.net
201-456-4624

LICENSURE

DAVID WEINPAHL, P.E.
CT LIC NO. 22144

NO.:	DATE:	SUBMISSIONS
0	08.23.17	REVIEW
1	10.31.17	REVISED FOR OUTDOOR EQUIPMENT
2	12.18.17	CSC FILING SET

DRAWN BY:	CHECKED BY:
MF	DW

SITE NAME:

RIDGEFIELD 4 CT

PROJECT DESCRIPTION:

NEW BUILD MACRO

PROJECT INFORMATION:

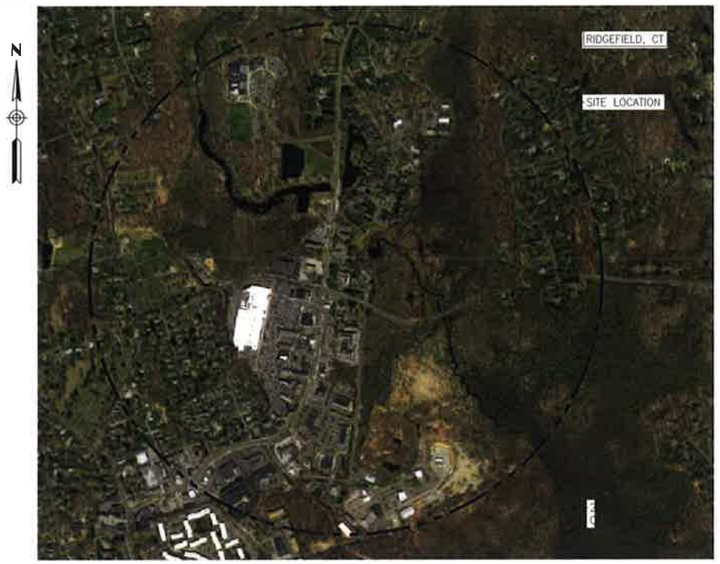
FAIRFIELD COUNTY BANK
150 DANBURY RD.
RIDGEFIELD, CT 06877

DRAWING TITLE:

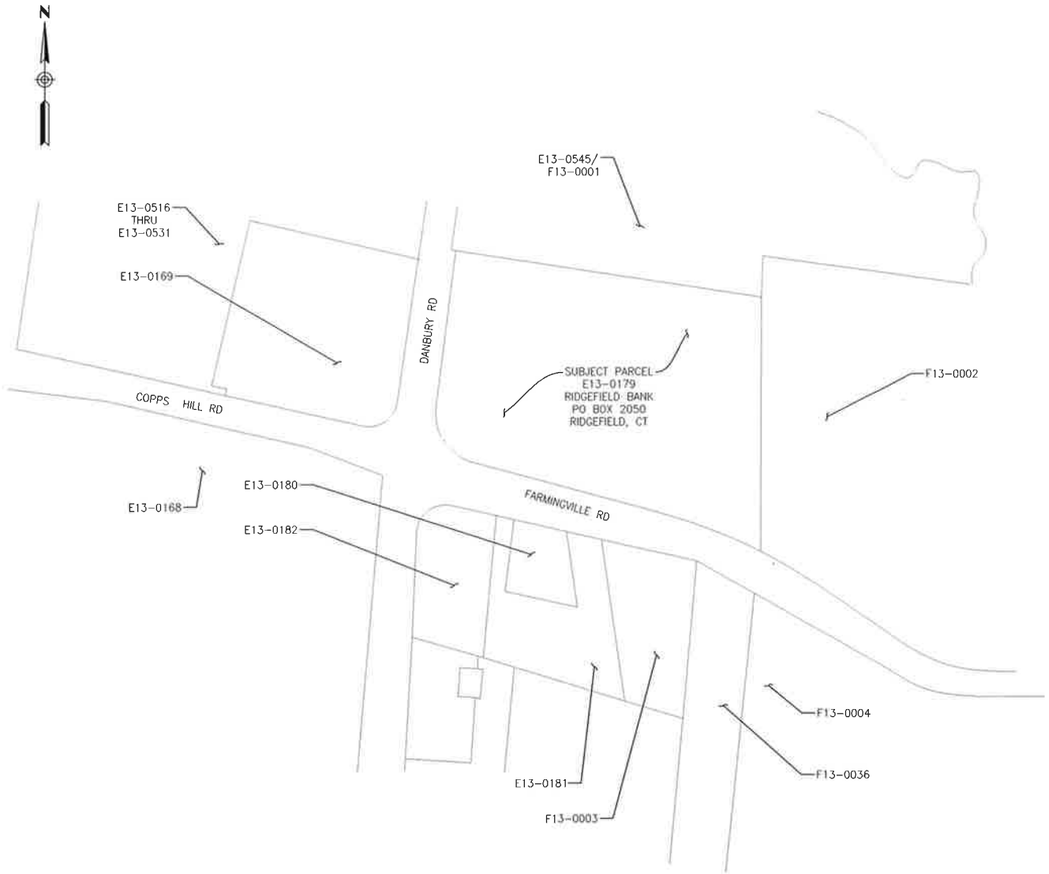
TITLE SHEET

SHEET NUMBER:

T-1



2 / C-1 **2,500 FT. RADIUS MAP**
Scale: N.T.S.



1 / C-1 **ABUTTERS MAP**
Scale: 1"=100'

ABUTTERS LIST FROM PARCEL E13-0179			
PARCEL #	**OWNER NAME**	**OWNER MAILING ADDRESS**	**PROPERTY ADDRESS**
E13-0545/F13-0001	ZEMO STEPHEN J	107 DANBURY RD, RIDGEFIELD, CT 06877	158 DANBURY RD.
F13-0002	STATE OF CT DEP	79 ELM ST, HARTFORD, CT 06106	FARMINGVILLE RD.
F13-0004	STATE OF CT DEP	79 ELM ST, HARTFORD, CT 06106	FARMINGVILLE RD.
F13-0036	TOWN OF RIDGEFIELD	400 MAIN ST, RIDGEFIELD, CT 06877	36 FARMINGVILLE RD.
F13-0003	JOSEPHINE SOCCI & G. GEHNRICH	6 FARMINGVILLE RD, RIDGEFIELD, CT 06877	6 FARMINGVILLE RD.
E13-0181	JOSEPHINE SOCCI, DAVID G FERM, ET AL	6 FARMINGVILLE RD, RIDGEFIELD, CT 06877	6 FARMINGVILLE RD.
E13-0180	RIDGEFIELD REALTY ASSOC.	6 FARMINGVILLE RD, RIDGEFIELD, CT 06877	6 FARMINGVILLE RD.
E13-0182	KELLY COPPS HILL REAELTY LLC C/O SILVERMAN REALTY GROUP	237 MAMARONECK AVE, WHITE PLAINS, NY 10605	130 DANBURY RD.
E13-0168	EQUITY ONE (COPPS HILL) INC. C/O EQUITY ONE; ATTN: VIDYA RAMDHANY	410 PARK AVE, SUITE 1220, NEW YORK, NY 10022	125 DANBURY RD.
E13-0169	JMF REALTY ASSOCIATES, LLC	347 WILTON RD WEST, RIDGEFIELD, CT 06877	143 DANBURY RD.
E13-0516 thru E13-0523	COPPS HILL INVESTMENTS LLC	94 DANBURY RD, RIDGEFIELD, CT 06877	63 COPPS HILL RD. UNITS 21A-21H
E13-0524 thru E13-0531	CH REALTY CORP LLC	164 RAMAPO RD, RIDGEFIELD, CT 06877	63 COPPS HILL RD. UNITS 22A-22H

NOTES TO ABUTTERS MAP & OWNERS LIST:
1. ALL INFORMATION TAKEN FROM TOWN OF RIDGEFIELD ASSESSOR OFFICE, SEPTEMBER 2017.

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WIRELESS COMMUNICATIONS FACILITY

99 EAST RIVER DRIVE
EAST HARTFORD, CT 06108

On Air Engineering, LLC
88 Foundry Pond Rd.
Cold Spring, NY 10516
onair@optonline.net
201-456-4624

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DRAWN BY:	CHECKED BY:
MF	DW

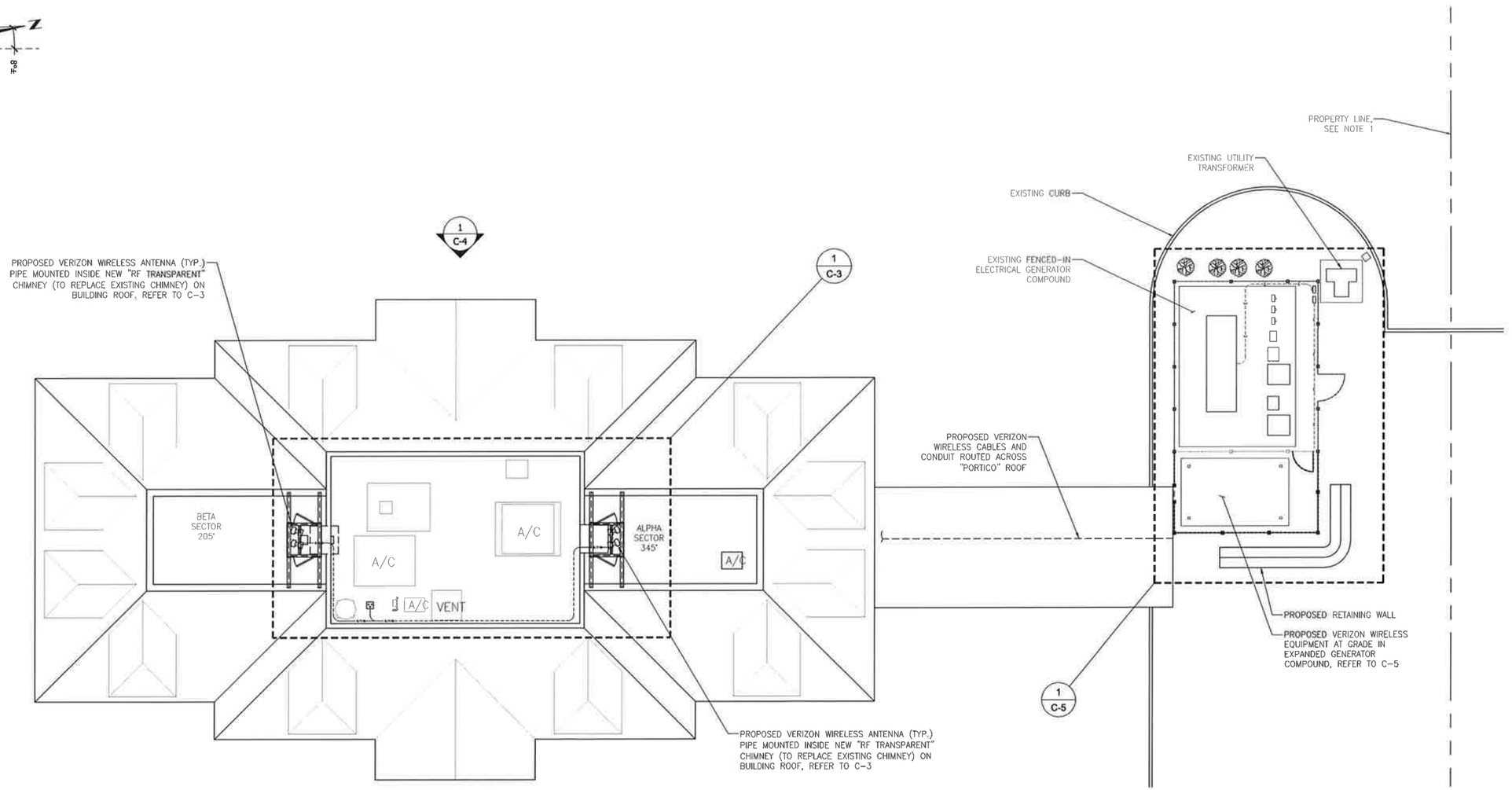
SITE NAME:
RIDGEFIELD 4 CT

PROJECT DESCRIPTION:
NEW BUILD MACRO

PROJECT INFORMATION:
FAIRFIELD COUNTY BANK
150 DANBURY RD.
RIDGEFIELD, CT 06877

DRAWING TITLE:
2,500 FT. RADIUS MAP,
ABUTTERS MAP &
PROPERTY OWNER LIST

SHEET NUMBER:
C-1



1 C-2 **SITE LAYOUT**
Scale: 1/16"=1'-0"

NOTE:
1. PROPERTY LINE TAKEN FROM EXISTING SITE PLAN PREPARED BY CCA, LLC, BROOKFIELD, CT DATED 10-18-99.

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150 DANBURY RD.
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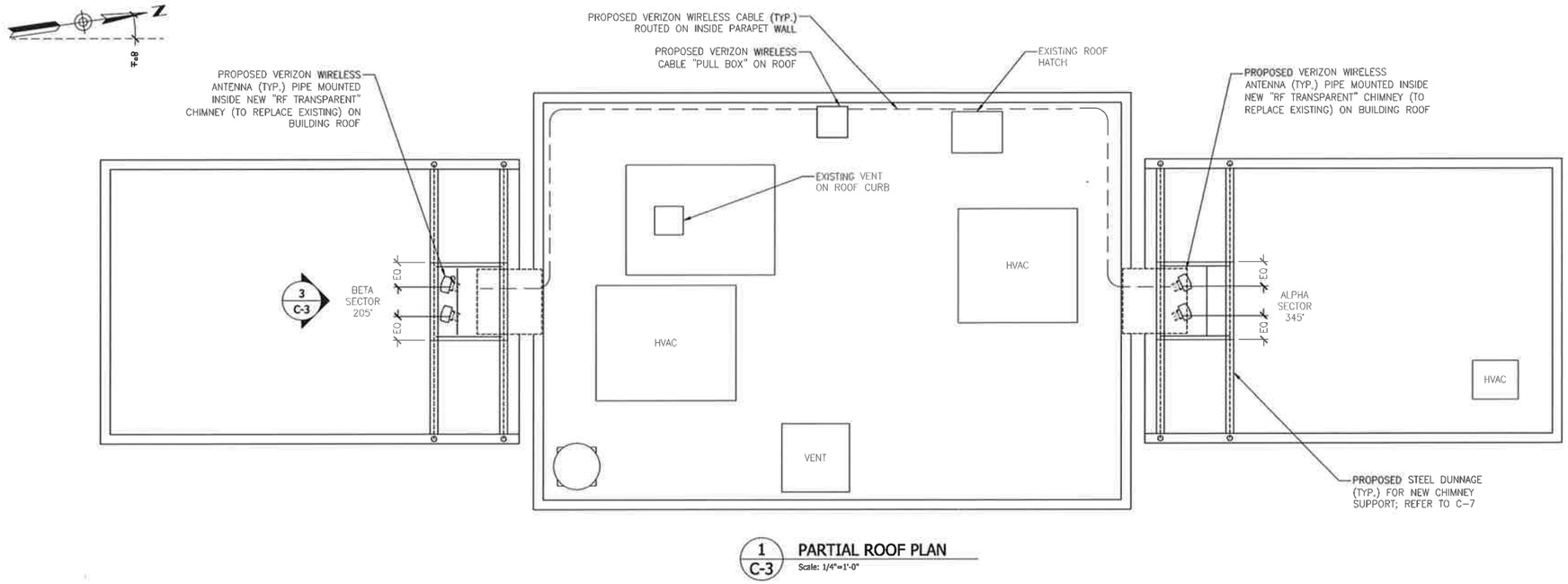
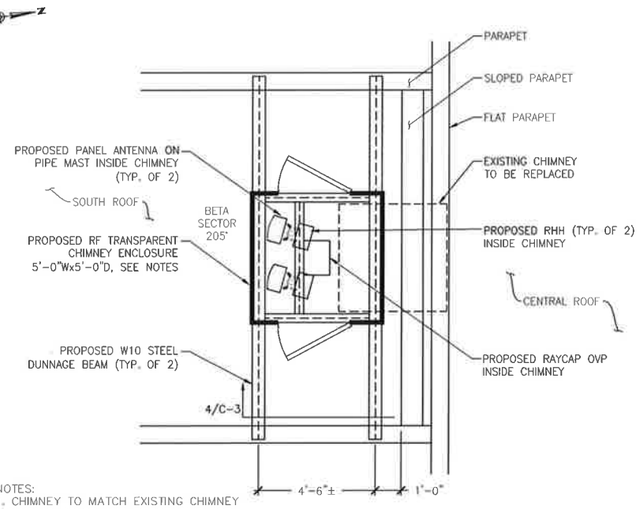
DRAWING TITLE:
SITE LAYOUT

SHEET NUMBER:
C-2

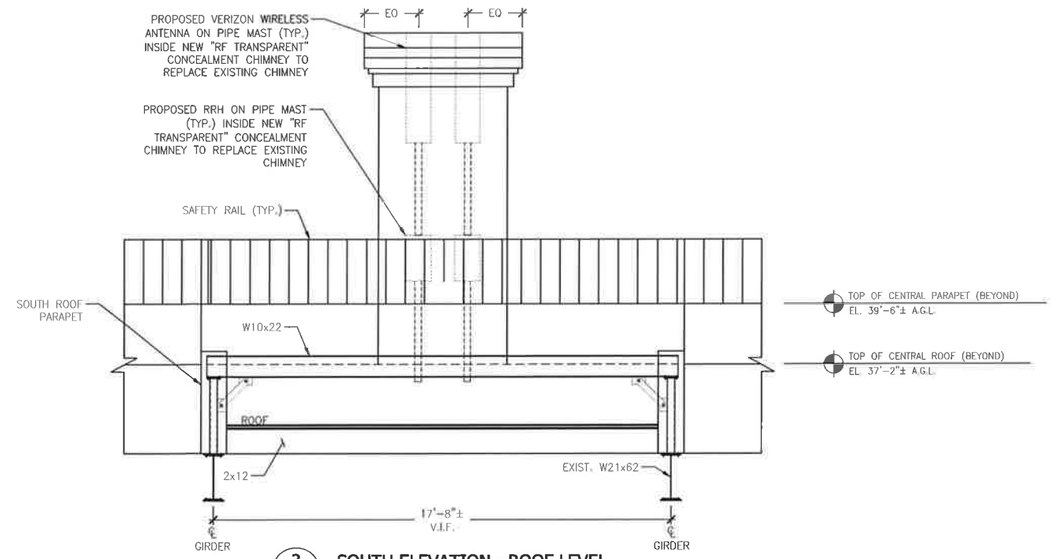


1 C-3 **PARTIAL ROOF PLAN**
Scale: 1/4"=1'-0"



NOTES:
1. CHIMNEY TO MATCH EXISTING CHIMNEY INCLUDING COLOR AND DECORATIVE TOP SECTION; DESIGNED BY OTHERS.
2. ALPHA SECTOR PLAN WILL BE THE SAME AS BETA, EXCEPT MIRRORED.

2 C-3 **ANTENNA PLAN - BETA SECTOR**
Scale: 3/8"=1'-0"



3 C-3 **SOUTH ELEVATION - ROOF LEVEL**
Scale: 3/4"=1'-0"

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MF	DW

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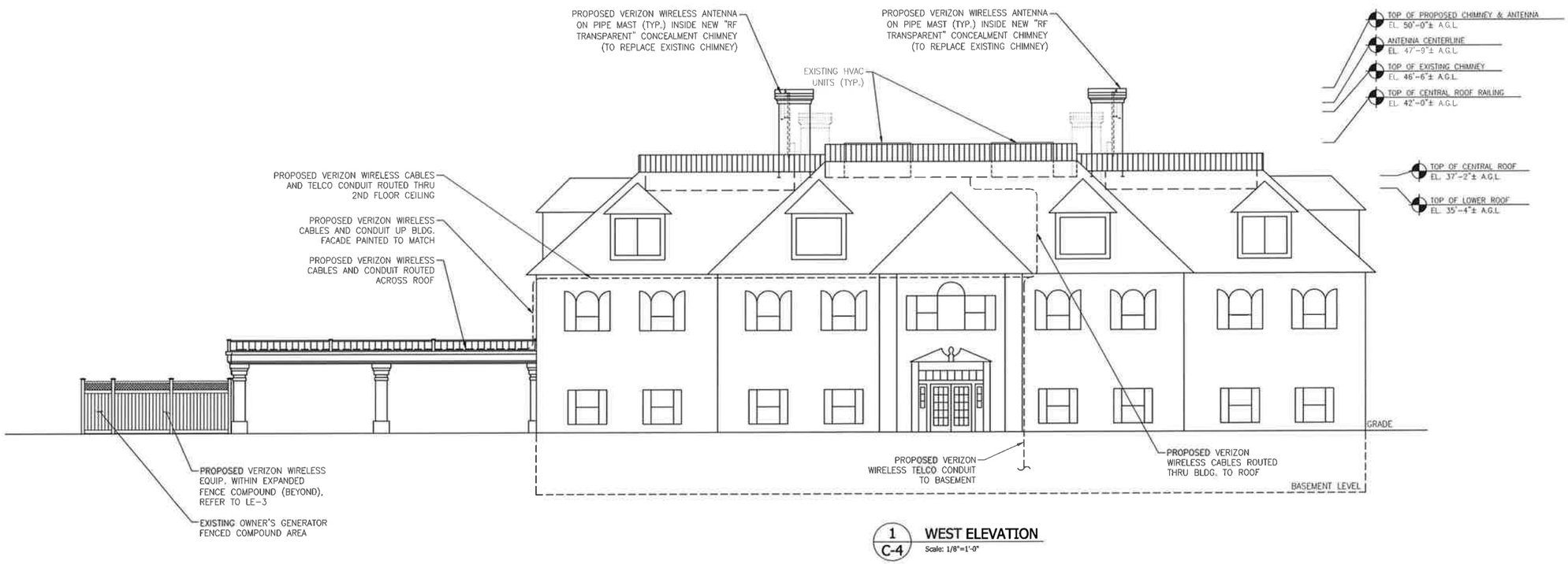
NEW BUILD MACRO

PROJECT INFORMATION:
FAIRFIELD COUNTY BANK
150 DANBURY RD.
RIDGEFIELD, CT 06877

DRAWING TITLE:
PARTIAL ROOF PLAN, ANTENNA PLAN AND ELEVATION

SHEET NUMBER:
C-3



1 / C-4 **WEST ELEVATION**
Scale: 1/8"=1'-0"

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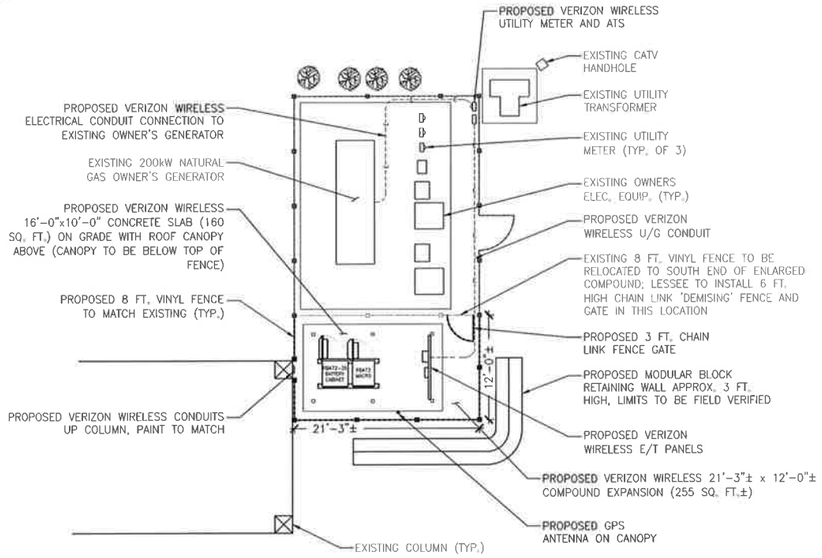
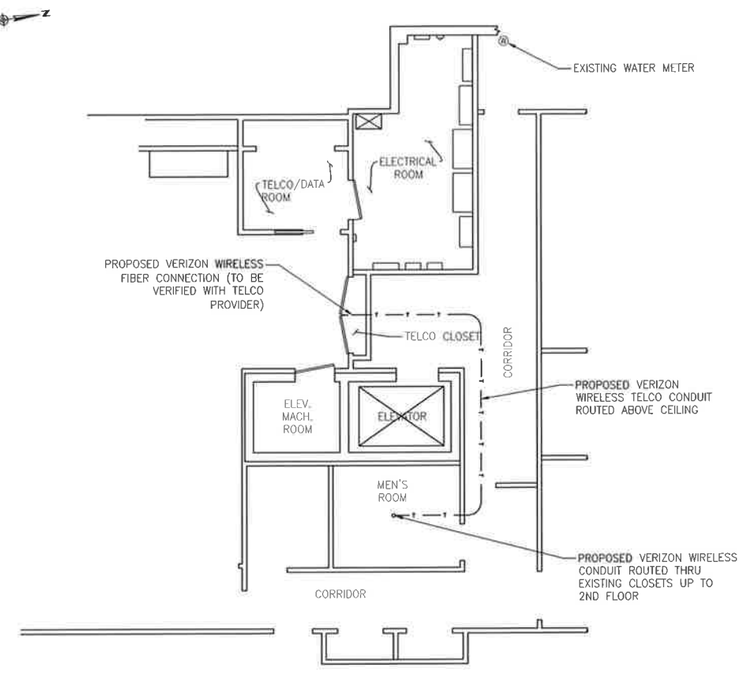
RIDGEFIELD, CT 06877

DRAWING TITLE:
WEST ELEVATION

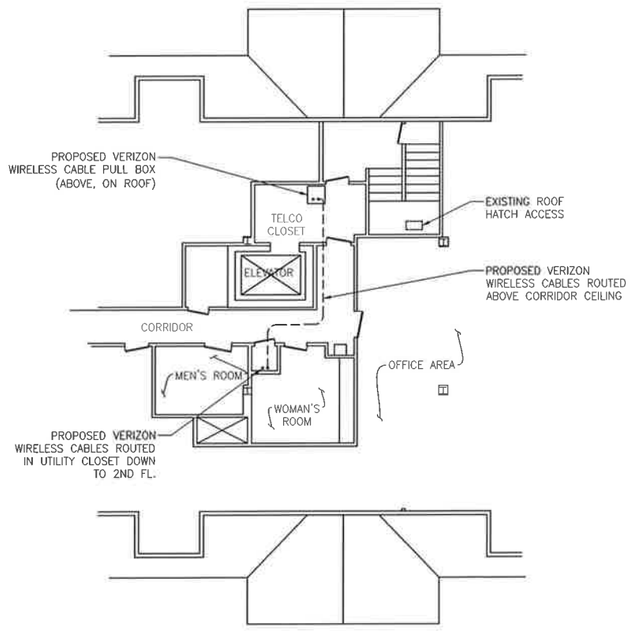
SHEET NUMBER:
C-4



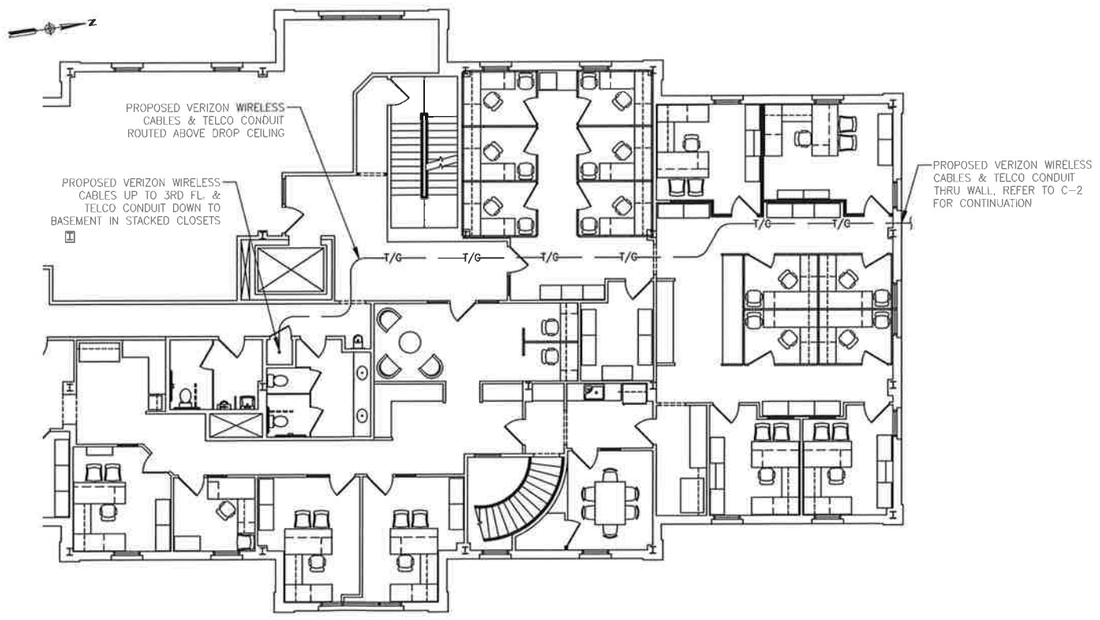
1 C-5 **EQUIPMENT COMPOUND PLAN**
Scale: 1/8"=1'-0"



2 C-5 **PARTIAL BASEMENT FLOOR PLAN**
Scale: 3/16"=1'-0"



3 C-5 **PARTIAL 3RD FLOOR PLAN**
Scale: 1/8"=1'-0"



4 C-5 **PARTIAL 2ND FLOOR PLAN**
Scale: 1/8"=1'-0"

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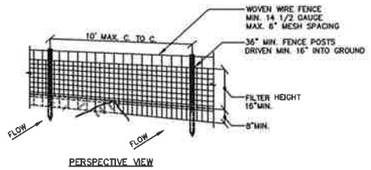
PROJECT DESCRIPTION:
NEW BUILD MACRO

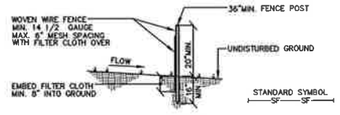
PROJECT INFORMATION:
FAIRFIELD COUNTY BANK
150 DANBURY RD.
RIDGEFIELD, CT 06877

DRAWING TITLE:
COMPOUND & BUILDING FLOOR PLANS

SHEET NUMBER:
C-5



PERSPECTIVE VIEW



SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. EROSION CONTROL MEASURES ARE TO BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.

POSTS:	STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE:	WOVEN WIRE, 14 ½ GA. 6"MAX. MESH OPENING
FILTER CLOTH:	FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT:	GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

1 C-6 **SILT FENCE DETAIL**
Scale: N.T.S.

SILT FENCE SPECIFICATIONS

A. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER, ETHYLENE, OR SIMILAR FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING MINIMUM REQUIREMENTS:

1. FILTERING EFFICIENCY	75 PERCENT (MIN)
2. GRAB TENSILE STRENGTH	100 POUNDS
3. ELONGATION AT FAILURE	15 PERCENT
4. MULLEN BURST STRENGTH	250 POUNDS PER SQUARE INCH
5. PUNCTURE STRENGTH	50 POUNDS
6. APPARENT OPENING SIZE	0.60mm< X <0.90mm
7. FLOW RATE	0.2 GALLONS PER SQUARE FOOT PER MINUTE
8. PERMITTIVITY	0.05 PER SECOND (MIN)
9. ULTRAVIOLET RADIATION STABILITY	70 PERCENT AFTER 500 HOURS OF EXPOSURE (MIN)

B. STAKES ARE TO BE MADE OUT OF HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 1.5 SQUARE INCHES OR STEEL POSTS WITH A MINIMUM WEIGHT OF 0.5 POUNDS PER LINEAR FOOT.

C. TORN OR PUNCTURED GEOTEXTILES SHALL NOT BE USED.

D. ON SLOPES WHERE SURFACE FLOW FOLLOWS THE SILT FENCE LINE, PERPENDICULAR SILT FENCE CHECKS SHALL BE INSTALLED AT 50 FOOT INTERVALS.

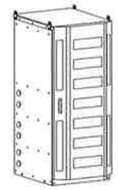
E. LINES OF SILT FENCE SHOULD FOLLOW CONTOUR LINES 5-10 FEET DOWN GRADIENT FROM THE SLOPE. WHERE CONTOUR LINES CAN NOT BE FOLLOWED PERPENDICULAR WINGS SHOULD BE PLACED AT 50 FOOT INTERVALS.

DIMENSIONS W/SOLAR SHIELD B66A RRH 4X45			
HEIGHT	WIDTH	DEPTH	WEIGHT
25.8"	11.8"	7.2"	56.8 LBS

5 C-6 **RRH DETAIL - AWS**
Scale: N.T.S

DIMENSIONS W/SOLAR SHIELD B25 RRH 4X30			
HEIGHT	WIDTH	DEPTH	WEIGHT
21.2"	12.0"	7.2"	53.0 LBS

6 C-6 **RRH DETAIL PCS**
Scale: N.T.S



ISOMETRIC

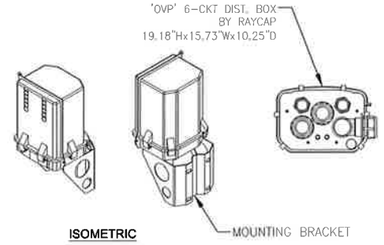
EQUIPMENT SPECIFICATIONS				
MODEL #	HEIGHT	WIDTH	DEPTH	WEIGHT
RBA72	72"	30"	42"	700 LBS

2 C-6 **RBA72 RADIO CABINET**
Scale: N.T.S.

ISOMETRIC

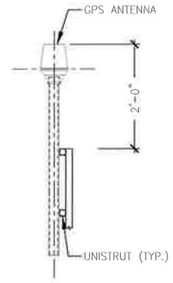
EQUIPMENT SPECIFICATIONS				
MODEL #	HEIGHT	WIDTH	DEPTH	WEIGHT
RBA72-36	72"	36"	39"	2,500 LBS

3 C-6 **RBA-72-36 BATTERY CABINET**
Scale: N.T.S.

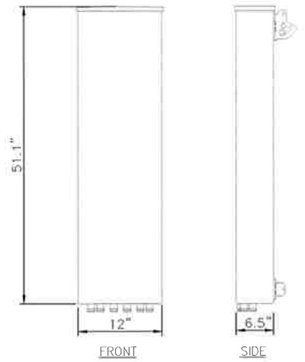


ISOMETRIC

7 C-6 **OVP DIST. BOX DETAIL**
Scale: N.T.S

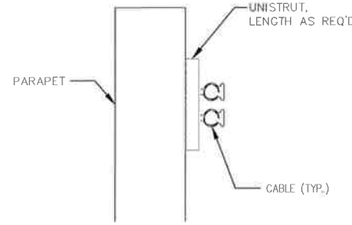


8 C-6 **GPS MOUNTING DETAIL**
Scale: N.T.S.

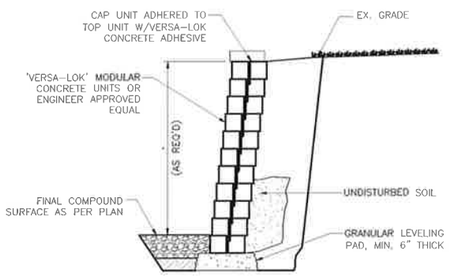


ANTENNA SPECIFICATIONS				
MODEL #	HEIGHT	WIDTH	DEPTH	WEIGHT
HBXX-6516DS-A2M	51.1"	12"	6.5"	30.6 LBS

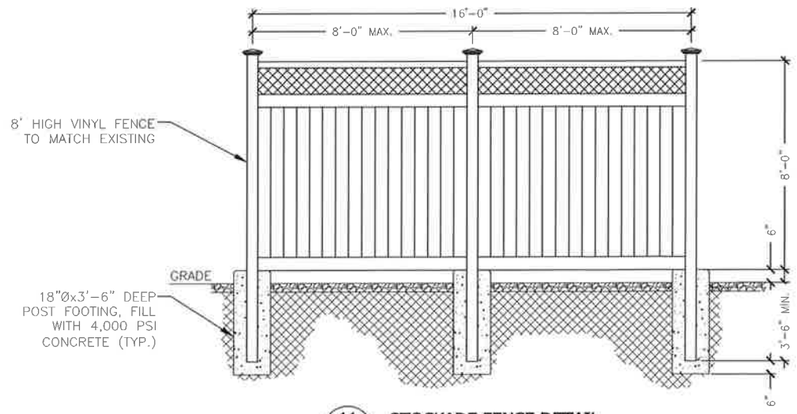
4 C-6 **ANTENNA DETAIL**
Scale: 1"=1'-0"



9 C-6 **CABLE ROUTING DETAIL**
Scale: N.T.S



10 C-6 **RETAINING WALL SECTION (OPTIONAL)**
Scale: 1/2" = 1'-0"



11 C-6 **STOCKADE FENCE DETAIL**
Scale: N.T.S.

verizon
WIRELESS COMMUNICATIONS FACILITY

99 EAST RIVER DRIVE
EAST HARTFORD, CT 06108

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201-456-4624

LICENSURE

DAVID WEINPAHL, P.E.
CT LIC. NO. 22144

NO.:	DATE:	SUBMISSIONS
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2	12.18.17	CSC FILING SET

DRAWN BY:	CHECKED BY:
MF	DW

SITE NAME:
RIDGEFIELD 4 CT

PROJECT DESCRIPTION:
NEW BUILD MACRO

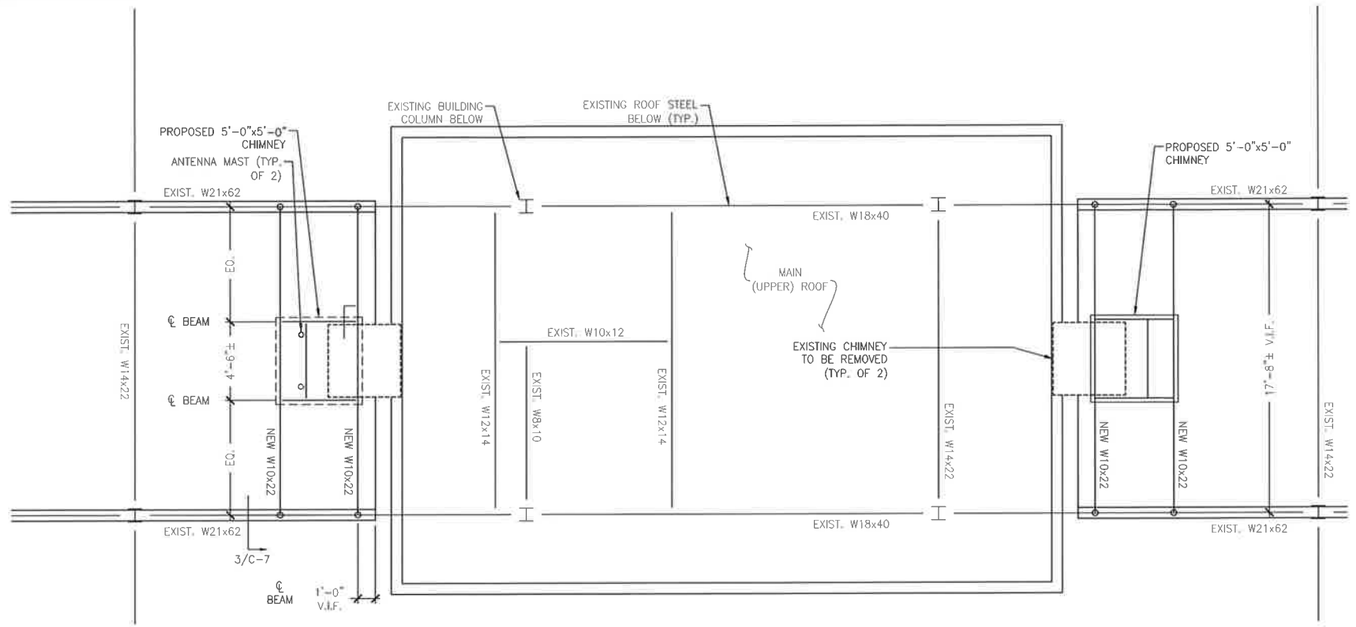
PROJECT INFORMATION:
FAIRFIELD COUNTY BANK
150 DANBURY RD.
RIDGEFIELD, CT 06877

DRAWING TITLE:
EQUIPMENT & SITE DETAILS

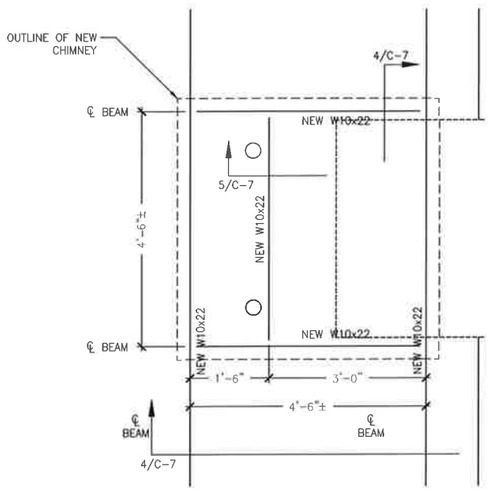
SHEET NUMBER:
C-6

GENERAL STRUCTURAL NOTES:

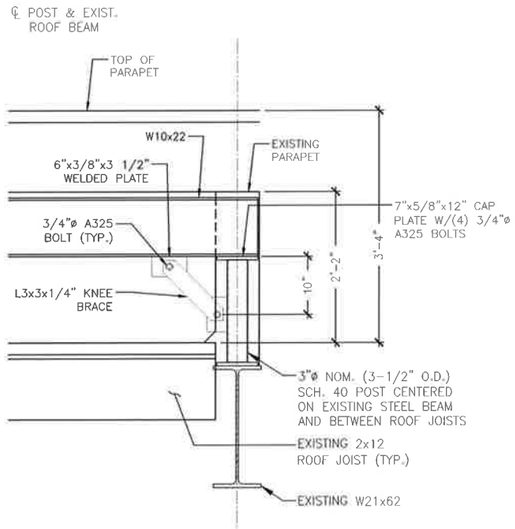
1. DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, ANSI/ASCE7, TIA-222-G STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER.
3. DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
4. WIDE FLANGE STRUCTURAL STEEL SHALL CONFORM TO ASTM S992. MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36.
5. STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING"" GRADE A, OR ASTM S53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
6. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS." ALL BOLTS SHALL BE 3/4"ø (U.O.N.)
7. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
8. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZONC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
9. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ATM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OF A153 AS APPLICABLE.
10. CONTRACTOR SHALL COMPLY WITH AWS CODE PROCEDURES, APPEARANCE AND QUALITY OF WELDS AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION.
11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
12. UNISTRUTS SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP, WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1-5/8"x1-5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.



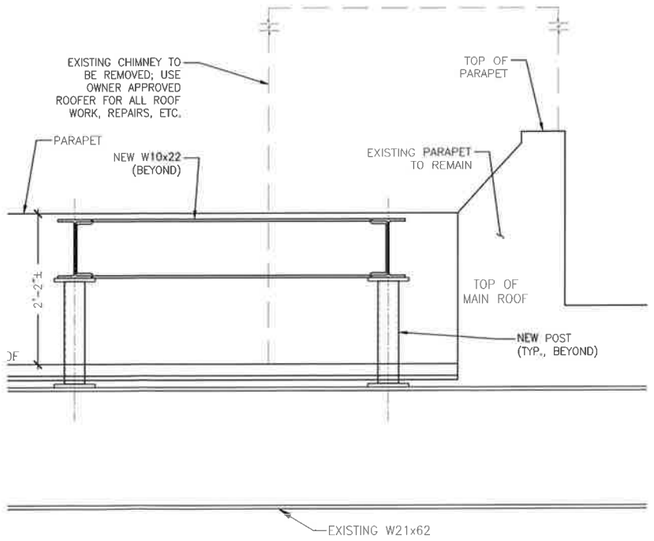
1 / C-7 **DUNNAGE PLAN**
Scale: 1/4"=1'-0"



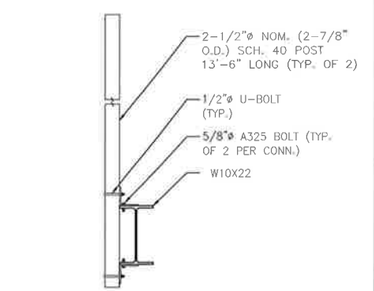
2 / C-7 **ANTENNA/CHIMNEY DUNNAGE PLAN**
Scale: 3/4"=1'-0"



3 / C-7 **SECTION**
Scale: 1"=1'-0"



4 / C-7 **SECTION**
Scale: 1"=1'-0"



5 / C-7 **SECTION**
Scale: 1"=1'-0"

verizon
WIRELESS COMMUNICATIONS FACILITY

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EAST HARTFORD, CT 06108

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onair@optonline.net
201-456-4624

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SITE NAME:
RIDGEFIELD 4 CT

PROJECT DESCRIPTION:
NEW BUILD MACRO

PROJECT INFORMATION:
FAIRFIELD COUNTY BANK
150 DANBURY RD.
RIDGEFIELD, CT 06877

DRAWING TITLE:
STRUCTURAL DUNNAGE PLAN AND DETAILS

SHEET NUMBER:
C-7

GENERAL STRUCTURAL NOTES:

1. ALL EQUIPMENT SHALL BE INSTALLED PLUMB AND LEVEL.

2. ALL WIDE FLANGE STRUCTURAL STELL SHALL CONFORM WITH A992 SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC CODE AND ASTM SPECIFICATION. STEEL SHALL CONFORM TO ASTM A-36. PIPE SHALL CONFORM TO ASTM A-501 OR ASTM TYPE EOR S A-53 (GRADE B).

3. ALL CONNECTIONS OF STRUCTURAL STEEL MEMBERS SHALL BE MADE USING SPECIFIED WELDS WITH WELDING ELECTRODES E-70XX OR SPECIFIED HIGH STRENGTH BOLTS TO BE ASTM A325, THREAD EXCLUDED FROM SHEAR PLANE.

4. ALL STEEL EXPOSED TO MOISTURE SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION PER ASTM A-123. ALL DAMAGED SURFACES, WELDED AREAS AND AUTHORIZED NON-GALVANIZED MEMBERS OR PARTS (EXISTING OR NEW) SHALL BE PAINTED WITH 2 COATS OF ZRC COLD GALVANIZING COMPOUND MANUFACTURED BY ZRC CHEMICAL PRODUCTS CO. QUINCY, MA, OR USE THERMAL SPRAYING WITH PLATTZINC 85/15 AS MANUFACTURED BY PLATT BROTHERS & COMPANY, WATERBURY, CT 1-800-752-8276.

5. ALL SHOP AND FIELD WELDING SHALL BE DONE BY WELDERS QUALIFIED AS DESCRIBED IN THE "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" TO PERFORM THE TYPE OF WORK REQUIRED.

6. ALL PIPE SIZES ARE NOMINAL DIAMETER (INSIDE DIAMETER).

CAST-IN-PLACE CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF THE ACI BUILDING CODE.

2. ALL CONCRETE SHALL ATTAIN 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.

3. READY MIX: COMPLY WITH ACI-301 AND ASTM C-94. ALL CONCRETE EXPOSED TO THE GROUND OR WEATHER SHALL BE AIR ENTRAINED.

4. COLD WEATHER CONCRETE POURING SHALL BE IN ACCORDANCE WITH ACI-306.

5. THROUGHOUT CONSTRUCTION THE CONCRETE WORK SHALL BE ADEQUATELY PROTECTED AGAINST DAMAGE DUE TO EXCESSIVE LOADING, CONSTRUCTION EQUIPMENT, MATERIALS OR THODS, ICE, RAIN, SNOW, EXCESSIVE HEAT AND FREEZING TEMPERATURES.

6. EARLY DRYING OUT OF CONCRETE, ESPECIALLY DURING THE FIRST 24 HOURS, SHALL BE CAREFULLY GUARDED AGAINST. ALL SURFACES SHALL BE PROTECTED USING MOIST CURING OR A MEMBRANE CURING AGENT APPLIED AS SOON AS FORMS ARE REMOVED OR FINISHING OPERATIONS ARE COMPLETE. CARE SHALL BE EXERCISED SO AS NOT TO DAMAGE COATING.

7. APPLY NON-SLIP BROOM FINISH IMMEDIATELY AFTER TROWEL FINISHING.

8. CONTRACTOR TO COORDINATE REQUIREMENTS OF STRUCTURAL, CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS INCLUDING ANY AND ALL PENETRATIONS SPECIFIED PRIOR TO POURING CONCRETE.

9. CONTRACTOR SHALL PROVIDE A 3/4" CHAMFER ON ALL CONCRETE SLABS.

REINFORCING:

1. ALL REINFORCING BAR SHALL CONFORM TO THE LATEST ACI CODE AND DETAILING MANUAL.

2. WHERE REINFORCING IS CALLED OUT IN THE CONSTRUCTION DOCUMENTS IT SHALL BE 3" CLEAR COVER (MINIMUM UNLESS OTHERWISE NOTED).

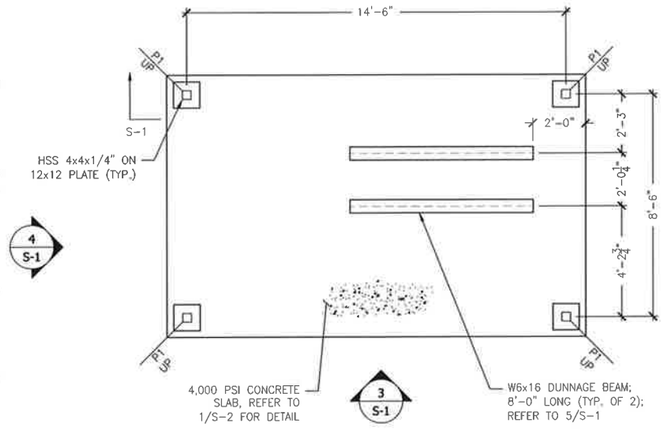
3. ALL BARS SHALL BE ASTM A-615, GRADE 60.

4. WELDED WIRE FABRIC SHALL BE ASTM A-185.

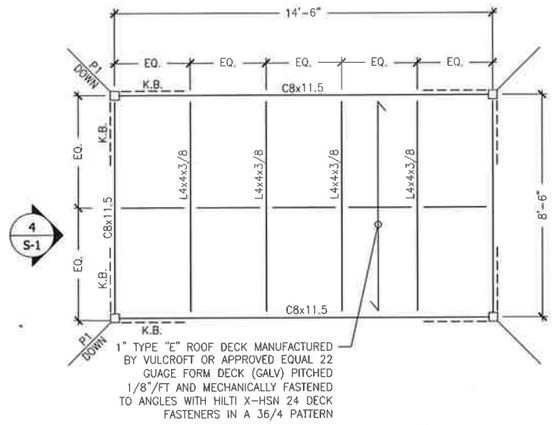
5. WHERE CONTINUOUS BARS ARE CALLED FOR, THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. LAP SHALL BE 40 BAR DIAMETERS.

FOUNDTAION

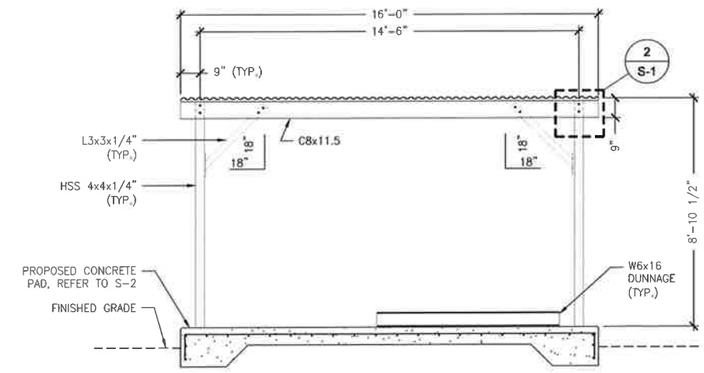
FOOTINGS SHALL BEAR ON UNDISTURBED SOIL AND /OR SUPERVISED COMPACTED FILL, FREE OF FROST,HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 1 1/2 TONS PER SQUARE FOOT



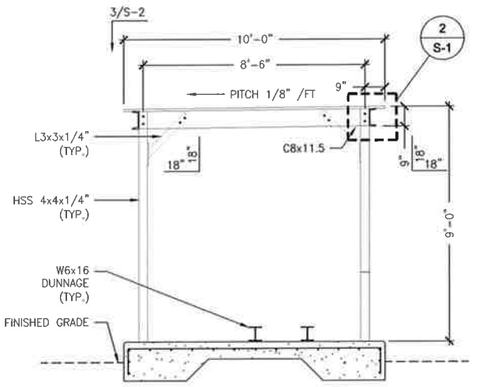
1 C-8 **EQUIPMENT PLAN**
Scale: 1/4" = 1'-0"



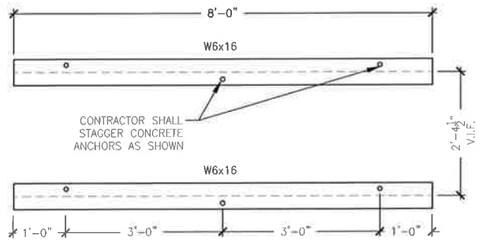
2 C-8 **EQUIPMENT CANOPY ROOF FRAMING PLAN**
Scale: 3/8" = 1'-0"



3 C-8 **EQUIPMENT PAD AND CANOPY "LONG" ELEVATION**
Scale: 3/8" = 1'-0"



4 C-8 **EQUIPMENT PAD AND CANOPY "SHORT" ELEVATION**
Scale: 3/8" = 1'-0"



5 C-8 **EQUIPMENT DUNNAGE PLAN**
Scale: 3/4" = 1'-0"

NOTES:
1. COORDINATE ALL BOLT HOLE LOCATIONS AND DUNNAGE RAIL SPACING BASED ON CABINET REQUIREMENTS.
2. USE HILTI HIT HY-20 ANCHORS 1/2"ø HILTI HIT-HY 200 WITH 3" MIN. EMBEDMENT.

PLAN NOTES

1. VERIFY ALL DIMENSIONS, ELEVATIONS, EXISTING FRAMING MEMBER SIZES AND GENERAL CONDITIONS PRIOR TO COMMENCEMENT OF WORK. NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND EXISTING CONDITIONS.

LEGEND

SYMBOL	DESCRIPTION
	INDICATES HSS4x4x1/4 ASTM A500 GR. B (Fy=48ksi) STEEL POST.
	INDICATES SPAN DIRECTION
K.B.	INDICATES L3x3x1/4 ASTM A36 (Fy=36ksi) STEEL ANGLE

verizon

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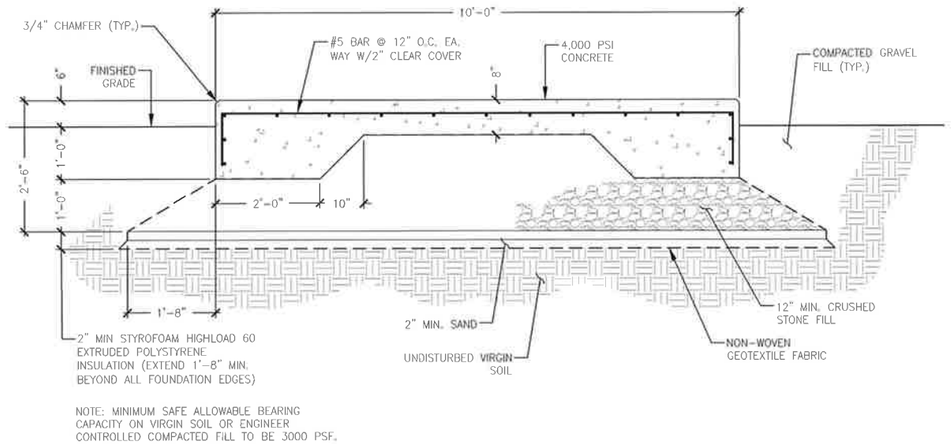
PROJECT DESCRIPTION:
NEW BUILD MACRO

PROJECT INFORMATION:
FAIRFIELD COUNTY BANK
150 DANBURY RD.
RIDGEFIELD, CT 06877

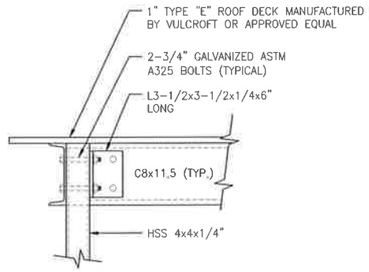
DRAWING TITLE:
STRUCTURAL EQUIP. PLATFORM PLANS & ELEVATIONS

SHEET NUMBER:
C-8

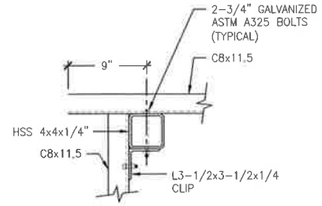


NOTE: MINIMUM SAFE ALLOWABLE BEARING CAPACITY ON VIRGIN SOIL OR ENGINEER CONTROLLED COMPACTED FILL TO BE 3000 PSF.

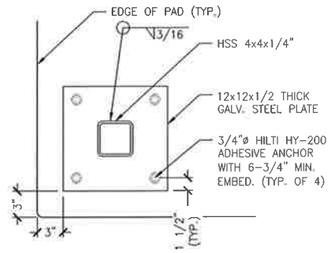
1 / C-9 **CONCRETE SLAB SECTION**
Scale: 3/4" = 1'-0"



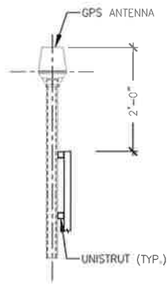
2 / C-9 **CANOPY CONNECTION SECTION**
Scale: 1" = 1'-0"



3 / C-9 **CANOPY CONNECTION PLAN**
Scale: 1-1/2" = 1'-0"



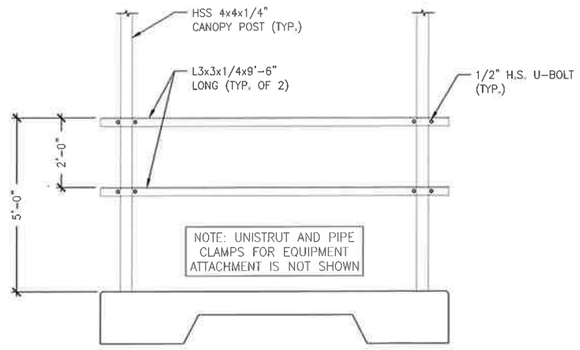
4 / C-9 **CANOPY POST PLAN DETAIL**
Scale: 1-1/2" = 1'-0"



NOTES:

1. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 2-1/2" DIAMETER, SCHEDULE 40, GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MINIMUM OF 24 INCHES) USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.
2. ATTACH TO POST NEAREST EQUIPMENT WITH CLEAN VIEW OF SKY.
3. PRIOR TO INSTALLATION CONTRACTOR SHALL TEST GPS LOCATION WITH HAND HELD AND MOVE GPS ANTENNA TO OTHER ICE BRIDGE POSTS AS REQUIRED TO ACHIEVE ADEQUATE SIGNAL. FAILURE TO ACHIEVE ADEQUATE SIGNAL WITH A HAND HELD GPS SHALL BE REPORTED TO CONSTRUCTION MANAGER AND ENGINEER TO DETERMINE ALTERNATE INSTALLATION LOCATION FOR GPS ANTENNA.

5 / C-9 **GPS MOUNTING DETAIL**
Scale: N.T.S.



6 / C-9 **E/T FRAME DETAIL**
Scale: 1/2" = 1'-0"

verizon

WIRELESS COMMUNICATIONS FACILITY

99 EAST RIVER DRIVE
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RIDGEFIELD, CT 06877

DRAWING TITLE:
STRUCTURAL DETAILS

SHEET NUMBER:
C-9

ATTACHMENT 3

Product Specifications

COMMSCOPE®

HBXX-6516DS-VTM | HBXX-6516DS-A2M

Single Band Quad Port Antenna, 1710–2180 MHz, 65° horizontal beamwidth, RET compatible

- Each DualPol® array can be independently adjusted for greater flexibility
- Excellent gain, VSWR, front-to-back ratio, and PIM specifications for robust network performance
- Ideal choice for site collocations and tough zoning restrictions
- Great solution to maximize network coverage and capacity

Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain, dBi	17.7	18.0	18.0
Beamwidth, Horizontal, degrees	67	66	64
Beamwidth, Vertical, degrees	7.5	7.0	6.6
Beam Tilt, degrees	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	18
Front-to-Back Ratio at 180°, dB	30	30	30
CPR at Boresight, dB	22	22	21
CPR at Sector, dB	8	9	9
Isolation, dB	30	30	30
VSWR | Return Loss, dB	1.4 | 15.6	1.4 | 15.6	1.4 | 15.6
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port, maximum, watts	350	350	350
Polarization	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain by all Beam Tilts, average, dBi	17.2	17.2	17.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.5
Gain by Beam Tilt, average, dBi	0 ° | 17.0	0 ° | 17.1	0 ° | 17.4
	5 ° | 17.3	5 ° | 17.4	5 ° | 17.7
	10 ° | 17.0	10 ° | 17.0	10 ° | 17.2
Beamwidth, Horizontal Tolerance, degrees	±2.7	±2.3	±3.5
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.4
USLS, beampeak to 20° above beampeak, dB	18	19	19
Front-to-Back Total Power at 180° ± 30°, dB	26	26	26
CPR at Boresight, dB	22	22	22
CPR at Sector, dB	9	9	9

* 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.

General Specifications

Antenna Type	Sector
Band	Single band
Brand	DualPol®
Operating Frequency Band	1710 – 2180 MHz
Performance Note	Outdoor usage

Product Specifications

HBXX-6516DS-VTM | HBXX-6516DS-A2M

Mechanical Specifications

Color	Light gray
Lightning Protection	dc Ground
Radiator Material	Low loss circuit board
Radome Material	PVC, UV resistant
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, total	4
Wind Loading, frontal	419.0 N @ 150 km/h 94.2 lbf @ 150 km/h
Wind Loading, lateral	113.0 N @ 150 km/h 25.4 lbf @ 150 km/h
Wind Loading, rear	488.0 N @ 150 km/h 109.7 lbf @ 150 km/h
Wind Speed, maximum	241 km/h | 150 mph

Dimensions

Depth	166.0 mm | 6.5 in
Length	1297.0 mm | 51.1 in
Width	305.0 mm | 12.0 in
Net Weight, without mounting kit	13.9 kg | 30.6 lb

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 2.0 Actuator	HBXX-6516DS-A2M

Packed Dimensions

Depth	292.0 mm | 11.5 in
Length	1427.0 mm | 56.2 in
Width	402.0 mm | 15.8 in
Shipping Weight	23.5 kg | 51.8 lb

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 Products

600899A-2 — 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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

ALCATEL-LUCENT B25 RRH4X30

Alcatel-Lucent Band 25 Remote Radio Head 4x30W is the new addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B25 RRH4x30 allows operators to have a compact radio solution to deploy LTE in the PCS band (1.9 GHz, 3GPP band 25), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B25 RRH4x30 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity, LTE carriers from 3 MHz up to 20 MHz and up to 65 MHz instantaneous bandwidth.

The Alcatel-Lucent B25 RRH4x30 is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

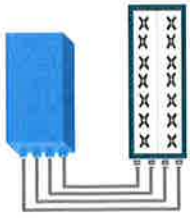
Its compactness and slim design makes the Alcatel-Lucent B25 RRH4x30 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 1.9 GHz band (PCS, 3GPP band 2 & 25)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- Ready for 3, 5, 10, 15 or 20MHz LTE carrier operation with 4Rx Diversity
- Ready to support up to 4 carriers anywhere in 65MHz instantaneous bandwidth
- Convection-cooled (fan-less)
- Supports AISG 2.0 devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in PCS band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Full flexibility for multiple carriers operation over entire PCS spectrum
- Improves downlink spectral efficiency and cell edge throughput through MIMO4
- Increases LTE coverage thanks to 4-way Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options (Pole or Wall)



4x30W with 4T4R
or
2x60W with 2T4R

Can be switched between modes via SW w/o site visit

Alcatel·Lucent

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	3GPP bands 2 & 25 (PCS-G) DL: 1930 - 1995 MHz UL: 1850 - 1915 MHz
Instantaneous bandwidth - #carriers	65MHz – Up to 4 LTE carriers (in 40MHz occupied bandwidth)
LTE carrier bandwidth	3, 5, 10, 15 or 20 MHz
RF output power	2x60W or 4x30W (by SW)
Noise figure (3GPP band 2) **RX Diversity scheme**	2.0 dB typ. (<2.5 dB max) 2 or 4 way Rx diversity
Sizes (HxWxD)(w/ solar shield) in mm (in.) **Volume (w/ solar shield) in L** **Weight (w/ solar shield) in kg (lb)**	538 x 304 x 182 (21.2" x 12.0" x 7.2") 30 24 (53)
DC voltage range **DC power consumption**	-40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 580W typical @100% RF load
Environmental conditions **Wind load (@150km/h or 93mph)**	-40°C (-40°F) /+55°C (+131°F) IP65 Frontal:<200N / Lateral :<150N
Antenna ports	4 ports 7/16 DIN female (50 ohms) VSWR < 1.5 (> 14dB)
CPRI ports	2 CPRI ports (HW ready for Rate7 / 9.8 Gbps)
AISG interfaces	1 AISG2.0 output (RS485), +24V/2A DC power Integrated Smart Bias Tees (x2)
Misc. Interfaces	1 external alarms connector (4 alarms) 4 RF Tx & 4 RF Rx monitor ports 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27

ALCATEL-LUCENT B66A RRH4X45

The Alcatel-Lucent B66a Remote Radio Head 4x45 is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering. Its operational range covers beyond that of B4 (AWS) and B10 (AWS+).

Supporting 2Tx/4Tx MIMO and 2-way/4-way Rx diversity, the Alcatel-Lucent B66a RRH4x45 allows operators to have a compact radio solution to deploy LTE in the 2100 band (3GPP band 4, 10, and 66), providing them with the means to achieve high capacity, high quality, high reliability, large instantaneous bandwidth, and high coverage with minimum site requirements.

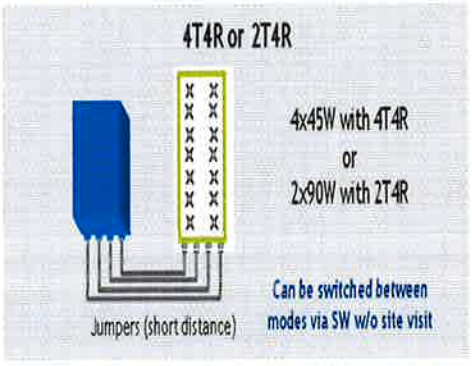
The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.

The Alcatel-Lucent B66a RRH4x45 is a compact (near zero-footprint) solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

Its compactness and slim design makes the Alcatel-Lucent B66a RRH4x45 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 2110 - 2180 MHz band/DL, 1710-1780MHz/UL (3GPP band 4, 10, and 66a)
- LTE 2Tx or 4Tx MIMO (SW selectable)
- Configuration: 2T2R/2T4R/4T4R
- Output power: Up to 2x90W or 4x45W (SW configurable)
- 70MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports



BENEFITS

- Compact to reduce additional footprint when adding LTE in AWS 1-3 band
- Selection of MIMO configuration (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through 4Tx MIMO
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall

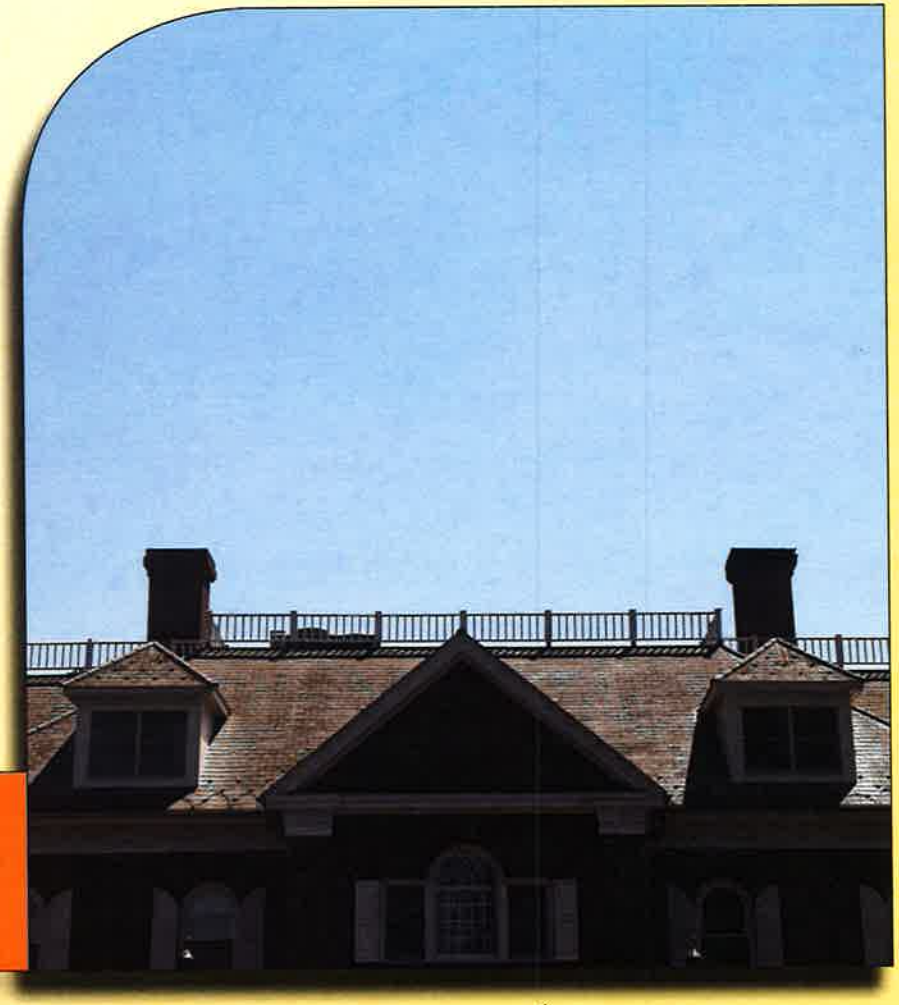
Features & Performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R selectable by SW)
Frequency band	AWS 1-3, B4/B66a DL: 2110-2180 MHz / UL: 1710-1780 MHz
Instantaneous bandwidth - #carriers	70 MHz – 4 LTE MIMO carriers (in 70 MHz occupied bandwidth)
LTE carrier bandwidth	5, 10, 15, 20 MHz
RF output power	2x90W or 4x45W (selectable by SW)
Noise figure – RX Diversity scheme Receiver Sensivity (FRC A1-3)	2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity -104.5 dBm maximum
Sizes (HxWxD) in mm (in.) Volume in Liters Weight in kg (lb) (w/o mounting HW)	655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield) 35.5 (with solar shield) 29.7 (without solar shield) 25.8kg (56.8lb) (with solar shield)
DC voltage range DC power consumption	Nominal: -48V, -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 750W typical @100% RF load (in 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG
Environmental conditions Wind load (@150km/h or 93mph)	-40°C (-40°F) /+55°C (+131°F) UL50E Type 4 Enclosure 250N (56lb) Frontal/150N (34lb) Lateral
Antenna ports	4 ports 4.3-10 female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate 7, 9.8 Gbps) SFP: SMDF (HW supports also SMSF and MMDF)
AISG interfaces	1 AISG 2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-487 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 / FCC Part 15 / GR-3178-CORE

Alcatel·Lucent

ATTACHMENT 4

Visual Assessment & Photo-Simulations

RIDGEFIELD 4 CT
FAIRFIELD COUNTY BANK
150 DANBURY ROAD
RIDGEFIELD, CT 06877



Prepared in December 2017 by:
All-Points Technology Corporation, P.C.
3 Saddlebrook Drive
Killingworth, CT 06419

Prepared for Verizon Wireless

ALL-POINTS
TECHNOLOGY CORPORATION

VISUAL ASSESSMENT & PHOTO-SIMULATIONS

At the request of Cellco partnership LLC d/b/a Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") completed this visual assessment and prepared computer-generated photo-simulations depicting the proposed installation of a wireless telecommunications facility ("Facility") at 150 Danbury Road in Ridgefield, Connecticut (the "Host Property").

Project Setting

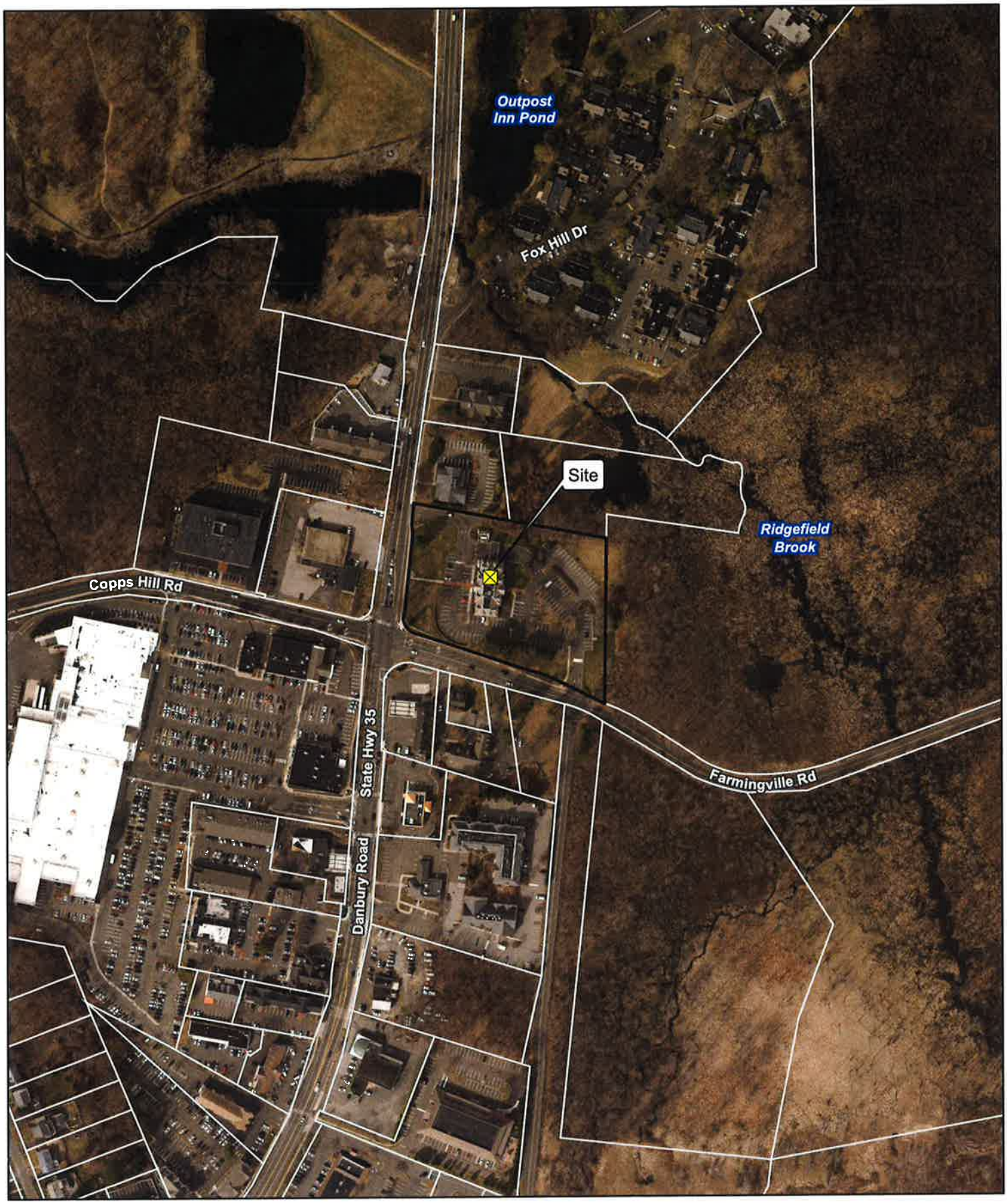
The Host Property is located along the northeastern side of the intersection of Danbury Road (CT Route 35) and Farmingville Road. The Host Property is currently developed with the Fairfield County Bank and several paved parking areas. The surrounding land use in the immediate area is primarily commercial with undeveloped land to the east and southeast. Residential neighborhoods become more prevalent farther to the north and southwest. *See Figure 1 – Site Location Map.*

Verizon Wireless proposes to remove two (2) existing chimneys and replace them with two (2) new fiberglass reinforced plastic ("FRP") radio frequency ("RF") transparent faux chimney enclosures located on the north and south sides of the main roof of the building. The FRP-RF enclosures would be designed to match the existing chimney architecture and each enclosure would contain two (2) pipe mast mounted panel antennas and associated appurtenances. The height of the proposed FRP-RF concealment enclosures would be ±50 feet above ground level ("AGL"), approximately 3.5 feet above the existing chimney heights and extending approximately 13 feet above the building's roof line. All antennas and appurtenances would be located within the FRP-RF enclosures. Ground equipment would be located within an expanded existing fenced compound located to the north of the building's portico. All fencing used for the expansion would be designed to match the existing compound. Utility connections would extend from the compound, across the portico roof and into the building's basement where they would then be routed internally to the Facility's rooftop components. The proposed Facility components and their locations are illustrated in *Figure 2 – Proposed Equipment Location and Elevation Plan.*

Methodology

On July 19, 2017, APT personnel conducted field reconnaissance and photo-documented existing conditions. At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") technology. Photographs were taken with a Canon EOS 6D digital camera body and Canon EF 24 to 105 millimeter ("mm") zoom lens using a focal length of 50 mm for consistency.

Three-dimensional computer models were developed for the building and proposed wireless telecommunication components from AutoCAD information. Photographic simulations were then generated to portray scaled renderings of the proposed installation. Using field data, site plan information and image editing software, the proposed Facility was scaled to the correct location and height, relative to the existing structure and surrounding area. A photolog map, photographs of existing conditions and corresponding photo-simulations are attached.



Legend

- Site
- Subject Property
- Approximate Parcel Boundary (CTDEEP GIS)

Map Notes:
Base Map Source: CT ECO 2016 Imagery
Map Scale: 1 inch = 300 feet
Map Date: August 2017

N
W E
S

300 150 0 300
Feet

Figure 1 - Site Location Map

Proposed Wireless
Telecommunications Facility
Ridgefield 4 CT
Fairfield County Bank
150 Danbury Road
Ridgefield, Connecticut

verizon

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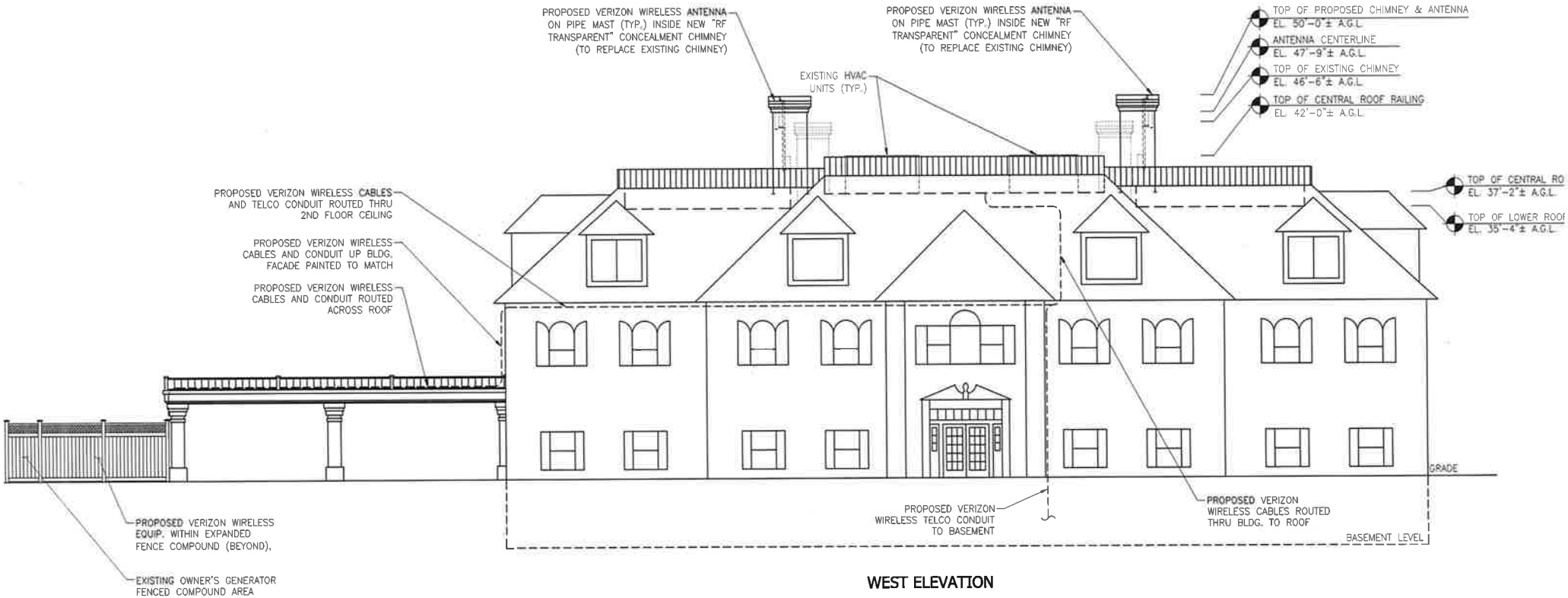

WEST ELEVATION

FIGURE 2 - PROPOSED EQUIPMENT LOCATION AND ELEVATION PLAN

Details extracted from technical drawings provided by On-Air Engineering, LLC dated 10-31-17.

Photograph Locations

Five (5) photo-locations were simulated and present generally unobstructed view lines towards at least a portion of the proposed rooftop installation. The table below summarizes characteristics of the photographs and simulations presented in the attachment to this report including a description of each location, view orientation, and the distance from where the photo was taken relative to the proposed Facility. The photo locations are depicted on the photo-log map provided as an attachment to this report.

View	Location	Orientation	Distance to Site
1	Host Property	Northwest	±181 Feet
2	Farmingville Road	Northeast	±223 Feet
3	Farmingville Road	East	±154 Feet
4	Adjacent to Host Property	Southeast	±215 Feet
5	Host Property	Southwest	±145 Feet
5A	Host Property	West	±82 Feet

Conclusions

The visibility of the proposed Facility would be limited to locations primarily on and immediately around the Host Property where the top of the building and existing chimneys can be seen today. Beyond the slight increase in height, the proposed installations would appear nearly identical to the existing chimney structures. The proposed equipment compound would be concealed behind an expanded fence enclosure and undistinguishable as a telecommunications site.

Based on the results of this assessment, it is our opinion that the proposed installation of the Verizon Wireless Facility will not have an adverse visual impact on existing views of this building or the character of the community.

Limitations

The photo-simulations provide a representation of the Facility under similar settings as those encountered during the reconnaissance. They are however static in nature and do not necessarily characterize the prevailing views from all locations within a given area. For example, moving a few feet in either direction from a specific photo location may significantly alter the view, including obscuring the Facility altogether. Views of the Facility can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location.

ATTACHMENTS

PHOTO LOG

Legend

Site Year-Round Visibility

1 inch = 100 feet

100 50 0 100 Feet

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PHOTOGRAPHED ON 7/19/2017

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
1	**HOST PROPERTY**	**NORTHWEST**	**+/- 181 FEET**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
1	**HOST PROPERTY**	**NORTHWEST**	**+/- 181 FEET**

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verizon

PHOTOGRAPHED ON 7/19/2017

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	**FARMINGVILLE ROAD**	**NORTHEAST**	**+/- 223 FEET**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	**FARMINGVILLE ROAD**	**NORTHEAST**	**+/- 223 FEET**

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verizon

PHOTOGRAPHED ON 7/19/2017

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	**FARMINGVILLE ROAD**	**EAST**	**+/- 154 FEET**

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verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	**FARMINGVILLE ROAD**	**EAST**	**+/- 154 FEET**

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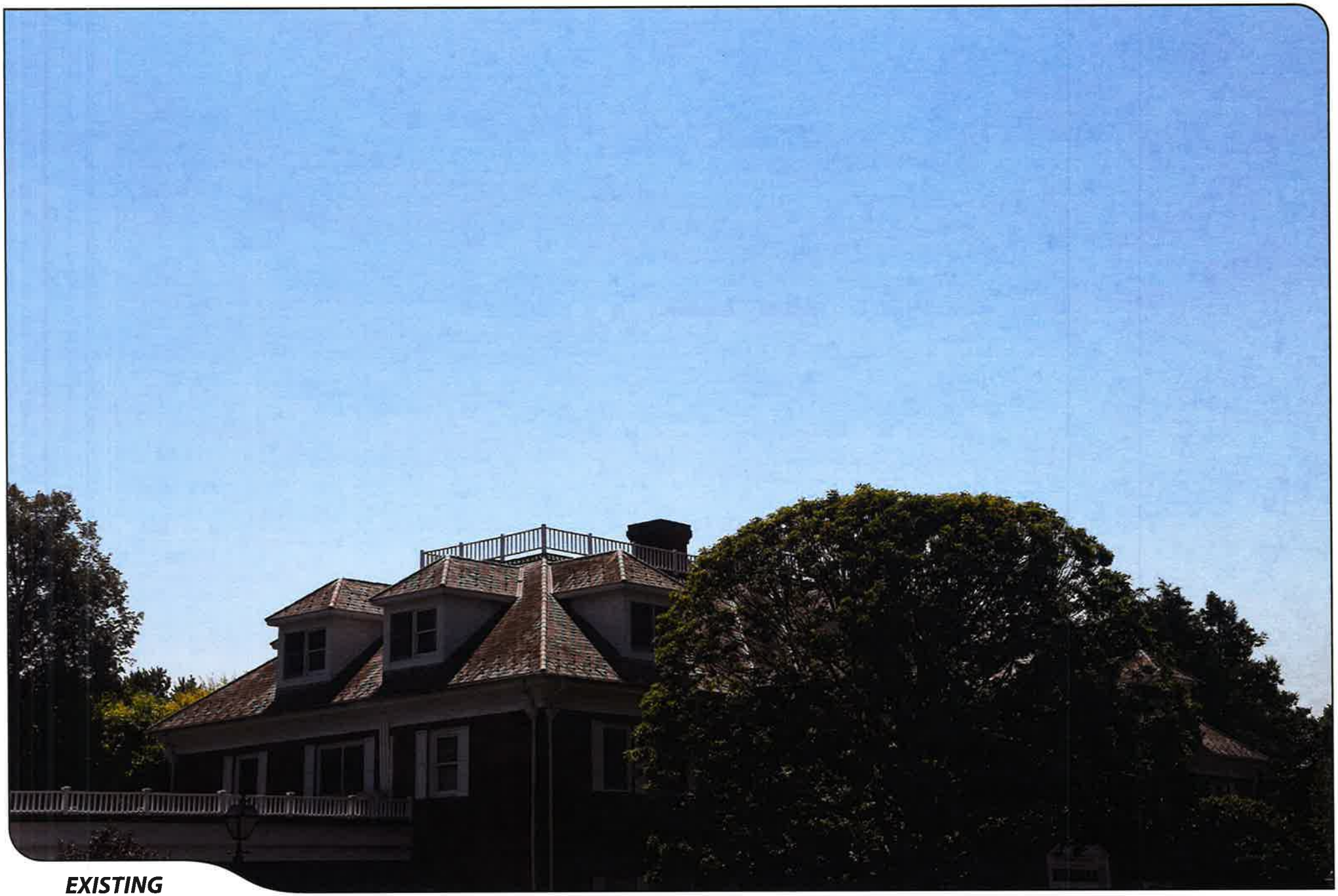

PHOTOGRAPHED ON 7/19/2017

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4	**ADJACENT TO HOST PROPERTY**	**SOUTHEAST**	**+/- 215 FEET**

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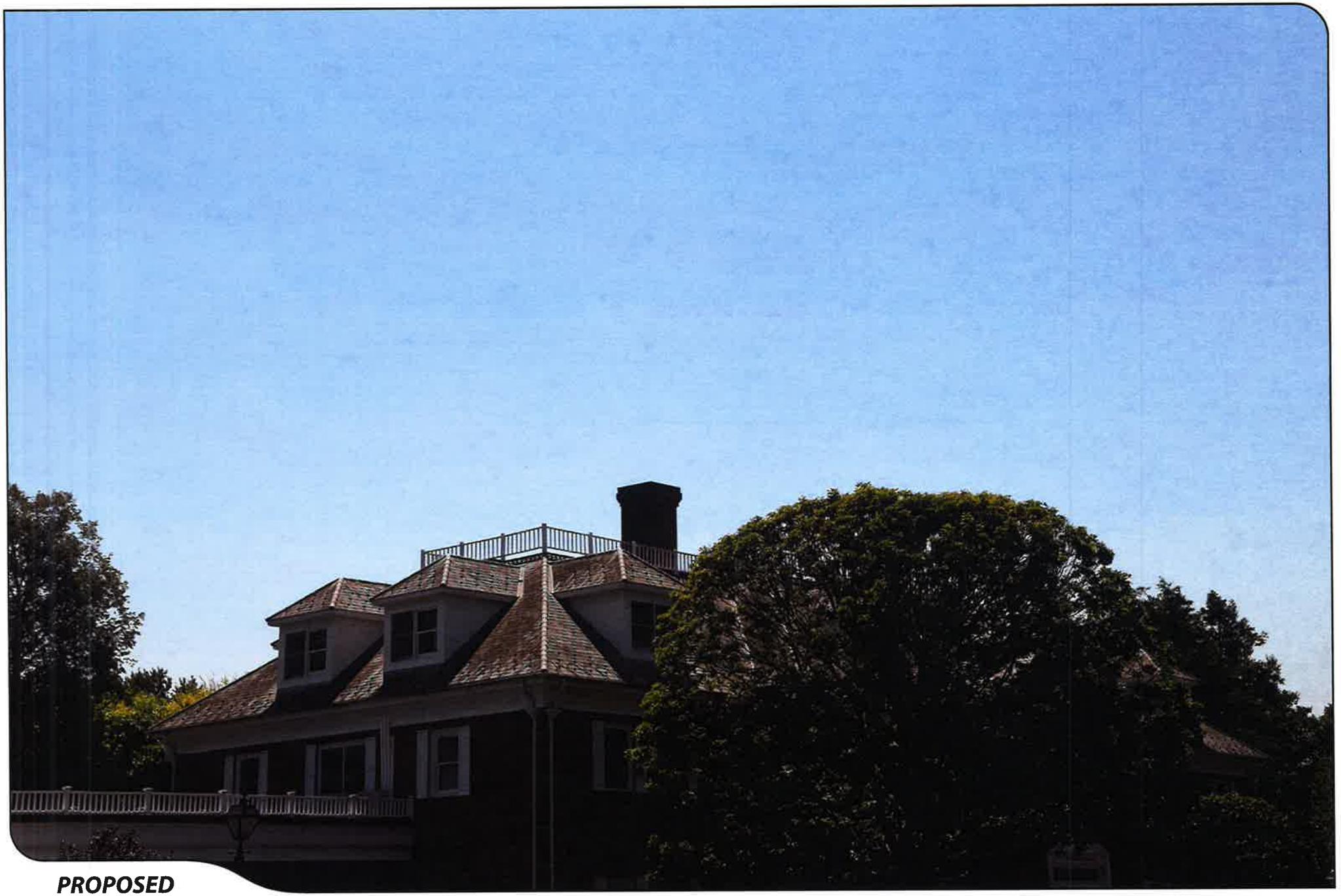
verizon



PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4	**ADJACENT TO HOST PROPERTY**	**SOUTHEAST**	**+/- 215 FEET**

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PHOTOGRAPHED ON 7/19/2017

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
5	**HOST PROPERTY**	**SOUTHWEST**	**+/- 145 FEET**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
5	**HOST PROPERTY**	**SOUTHWEST**	**+/- 145 FEET**

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verizon

PHOTOGRAPHED ON 12/7/2017

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
5A	**HOST PROPERTY**	**WEST**	**+/- 82 FEET**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
5A	**HOST PROPERTY**	**WEST**	**+/- 82 FEET**

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verizon

ATTACHMENT 5

C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions Report

Ridgefield 4

150 Danbury Road, Ridgefield, CT 06877

November 20, 2017

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List of Figures

List of Tables

1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed installation of Verizon Wireless antenna arrays on the rooftop of the 3-story building located at 150 Danbury Road in Ridgefield, CT. The coordinates of the building are 41° 17' 43.47" N, 73° 29' 21.13" W.

Verizon Wireless is proposing to install the following:

1) Install two 1900MHz LTE antennas (one per sector);
2) Install two 2100MHz LTE antennas (one per sector);
3) Add four remote radio heads (RRHs) for 1900/2100MHz LTE (two per sector).

This report uses the planned antenna configuration for Verizon Wireless to derive the resulting % MPE, once the proposed installation has been completed.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

3. RF Exposure Prediction Methods

The emission field calculation results were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{EIRP}{\pi \times R^2}\right) \times \text{Off Beam Loss}$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Off Beam Loss is determined by the selected antenna patterns

Ground reflection factor of 2.0

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the final site configuration.

The percent of MPE values presented in this report reflect levels that one may encounter from one sector of each carrier's antennas. Most carriers use 3 sectors per site with azimuths approximately 120 degrees apart, therefore one could not be standing in the main beam of all 3 sectors at the same time. In cases where downtilt and antenna models are not uniform across all 3 sectors, the downtilt and antenna model with the highest gain was used for the calculations. This results in a conservative or "worst case" assumption for percent of MPE calculations.

4. Proposed Antenna Inventory

The table below outlines Verizon Wireless' proposed antenna configuration for the site. The associated data sheets and antenna patterns for these specific antenna models are included in Attachment C.

Operator	Sector/ Azimuth	TX Freq (MHz)	Power at Antenna (Watts)	Ant Gain (dBi)	Power EIRP (Watts)	Antenna Model	Beam Width	Mech. Tilt	Length (ft)	Antenna Centerline Height (ft)
Verizon	Alpha/ 345	1900	120	17.6	6905	HBXX-6516DS-A2M_2	64	0	4.3	47.9
		2100	180	17.8	10846	HBXX-6516DS-A2M_2	66	0	4.3	47.9
	Beta/ 205	1900	120	17.6	6905	HBXX-6516DS-A2M_4	64	0	4.3	47.9
		2100	180	17.8	10846	HBXX-6516DS-A2M_4	66	0	4.3	47.9

Table 1: Verizon Wireless Antenna Inventory[1] [2]

[1] Antenna heights are in reference to the On Air Engineering, LLC, Lease Exhibit, dated June 12, 2017.

[2] In the case where antenna models are not uniform across all 3 sectors for the same frequency band, the antenna model with the most tilt was used for the calculations to present a worse-case scenario. Transmit power assumes 0dB of cable loss.

5. Calculation Results

The calculated power density results are shown in the figure below. Each frequency band and technology is calculated as well as the resulting total percent of MPE. For completeness, the calculations for this analysis range from 0 feet horizontal distance (directly below the antennas) to a value of 3,000 feet horizontal distance from the site. In addition to the other worst case scenario considerations that were previously mentioned, the power density calculations to each horizontal distance point away from the antennas were completed using a local maximum off beam antenna gain (within ± 2 degrees of the true mathematical angle) to incorporate a realistic worst-case scenario.

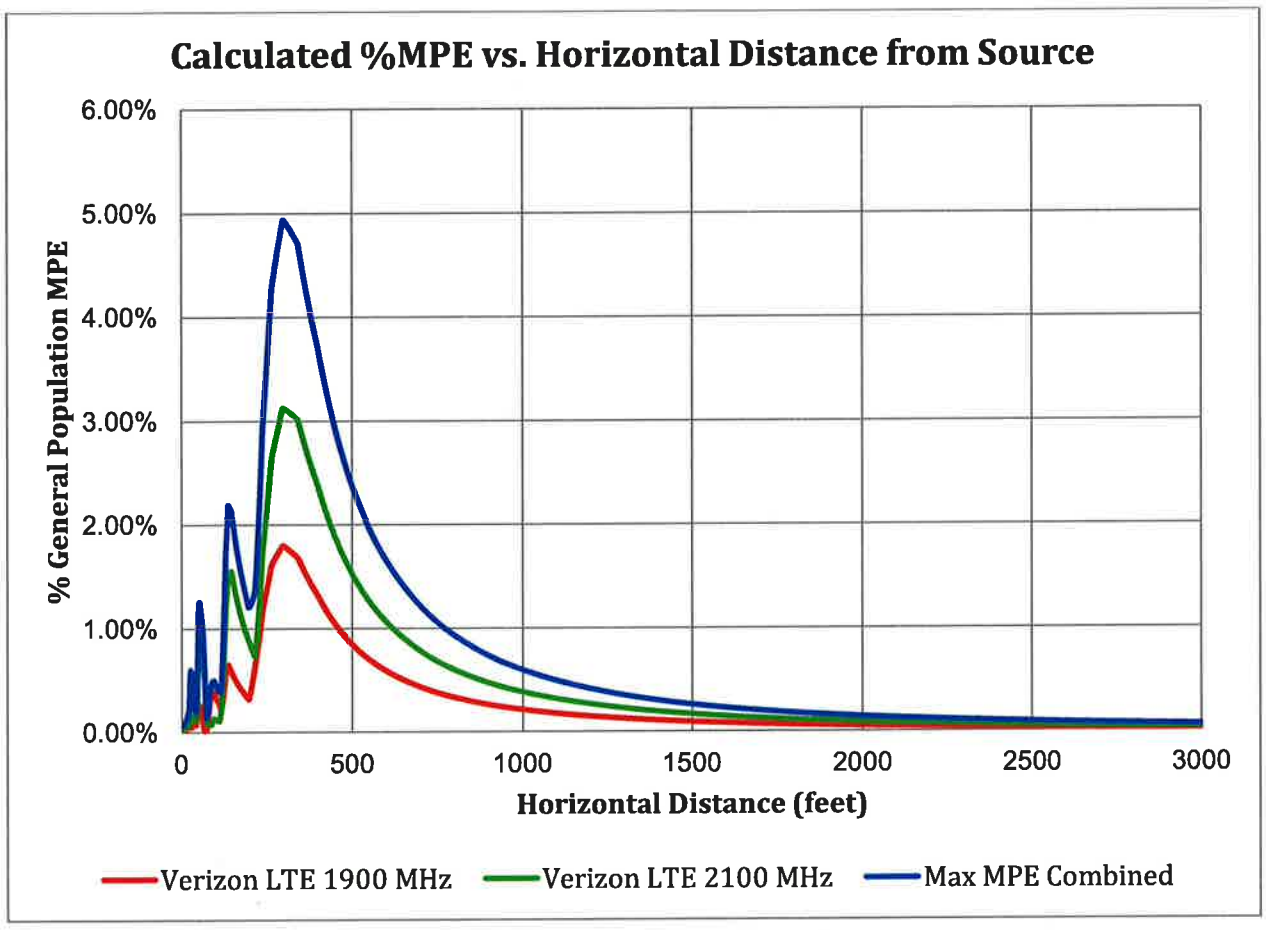


Figure 1: Graph of Percent of General Population MPE vs. Distance

The highest composite percent of MPE (4.93% of the General Population limit) was calculated to occur at a horizontal distance of 298 feet from the site. Please note that the percent of MPE calculations close to the site take into account off beam loss, which is determined from the vertical pattern of the antennas used. Therefore, RF power density levels may increase as the distance from the site increases. At distances of approximately 500 feet and beyond, one would now be in the main beam of the antenna pattern and off beam loss is no longer considered. Beyond this point, RF levels become calculated solely on distance from the site and the percent of MPE decreases significantly as distance from the site increases.

The table below lists percent of MPE values for each technology as well as the associated parameters that were included in the calculations. The highest composite percent of MPE value was calculated to occur at a horizontal distance of 298 feet from the site (reference Figure 1).

As stated in Section 3, all calculations assume that the Verizon Wireless antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. In addition, 6 feet was subtracted from the height of the antennas for this analysis to account for average human height. As a result, the predicted signal levels are significantly higher than the actual signal levels will be from the final site configuration.

Carrier	Number of Trans.	Power out of Base Station Per Transmitter (Watts)	Antenna Height (Feet)	Distance to the Base of Antennas (Feet)	Power Density (mW/cm^2)	Limit (mW/cm^2)	%MPE
Verizon LTE 1900 MHz	1	120.0	47.9	298	0.018027	1.000	1.80%
Verizon LTE 2100 MHz	1	180.0	47.9	298	0.031278	1.000	3.13%
						Total	**4.93%**

Table 2: Maximum Percent of General Population MPE at Ground Level[3] [4]

[3] Frequencies listed in Table 2 are representative of the operating band of the particular carrier and are not the carriers' specific operating frequency.

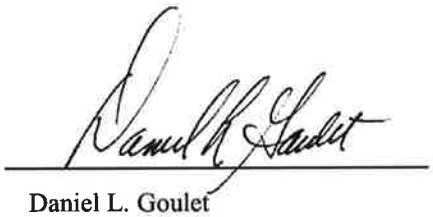
[4] The total %MPE listed is a summation of each unrounded contribution. Therefore, summing each rounded value may not reflect the total value listed in the table.

6. Conclusion

The above analysis verifies that RF exposure levels from the proposed installation will be well below the maximum levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using the conservative calculation methods and parameters detailed above, the maximum percent of MPE calculated at ground level is **4.93% of the FCC General Population limit**. This maximum percent of MPE value is calculated to occur 298 feet away from the site.

7. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.



Daniel L. Goulet
C Squared Systems, LLC

November 20, 2017
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

IEEE C95.1-2005, IEEE Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz IEEE-SA Standards Board

IEEE C95.3-2002 (R2008), IEEE Recommended Practice for Measurements and Computations of Radio Frequency Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz-300 GHz IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure[5]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure[6]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

Table 3: FCC Limits for Maximum Permissible Exposure

[5] Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

[6] General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

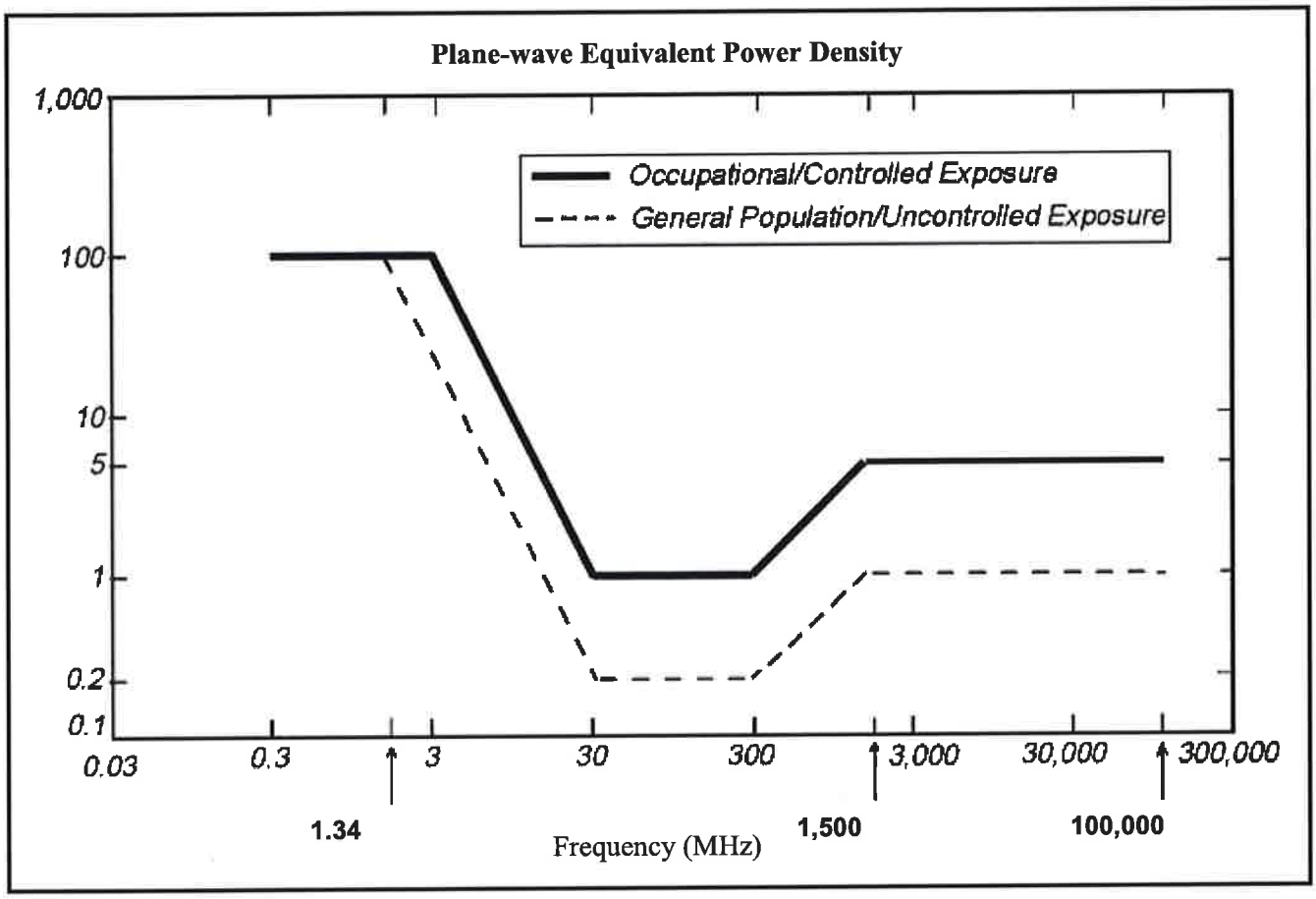
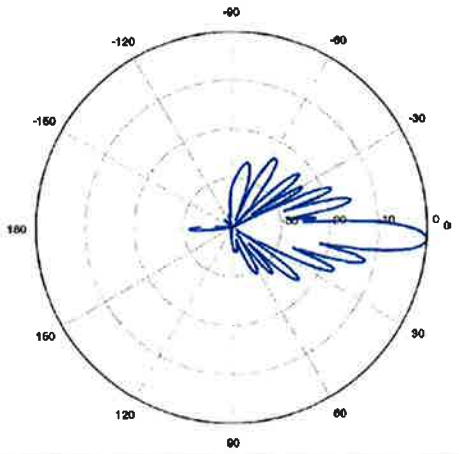


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Verizon Wireless' Antenna Model Data Sheets and Electrical Patterns

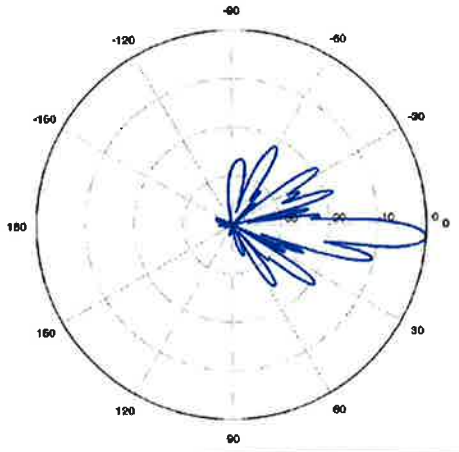
1900 MHz LTE

Manufacturer:	Commscope
Model #:	HBXX-6516DS-A2M_4
Frequency Band:	1850-1990 MHz
Gain:	17.6 dBi
Vertical Beamwidth:	6.9°
Horizontal Beamwidth:	64°
Polarization:	±45°
Size L x W x D:	51.4" x 6.5" x 3.3"



2100 MHz LTE

Manufacturer:	Commscope
Model #:	HBXX-6516DS-A2M_4
Frequency Band:	1920-2180 MHz
Gain:	17.8 dBi
Vertical Beamwidth:	6.4°
Horizontal Beamwidth:	66°
Polarization:	±45°
Size L x W x D:	51.4" x 6.5" x 3.3"



ATTACHMENT 6

RIDGEFIELD_4_CT.SRP.txt

****
* Federal Airways & Airspace *
* Summary Report: Existing Structure *
* Non-Antenna Structure *
****

Airspace User: Your Name

File: RIDGEFIELD_4_CT

Location: Ridgefield, CT

Latitude: 41°-17'-43.47"
Longitude: 73°-29'-21.13"

SITE ELEVATION AMSL.....588 ft.
STRUCTURE HEIGHT.....50 ft.
OVERALL HEIGHT AMSL.....638 ft.
SURVEY HEIGHT AMSL.....638 ft.

NOTICE CRITERIA
FAR 77.9(a): NNR (DNE 200 ft AGL)
FAR 77.9(b): NNR (DNE Notice Slope)
FAR 77.9(c): NNR (Not a Traverse Way)
FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for DXR
FAR 77.9: NNR (No Expected TERPS® impact 11N)
FAR 77.9(d): NNR (Off Airport Construction)

NR = Notice Required
NNR = Notice Not Required
PNR = Possible Notice Required (depends upon actual IFR procedure)
For new construction review Air Navigation Facilities at bottom of this report.

The location and analysis were based upon an existing structure. However, no existing aeronautical study number was identified. If the 'existing' structure penetrates an obstruction surface defined by CFR 77.17, 77.19, 77.21 or 77.23 (see below) it is strongly recommended the FAA be notified of the 'existing' structure to determine obstruction marking or lighting requirements. It is not uncommon for the FAA to issue a Determination of No Hazard (DNH) for an existing structure and modify the airspace to accommodate the structure, should that be required. If the FAA issues a DNH enter the aeronautical study number (ASN) in the space provided on the Airspace Analysis Window Form and re-run Airspace.

The below analysis reflects the aeronautical conditions that exist as of the date stamped on this analysis.

Notice to the FAA is not required at the analyzed location and height for slope, height or Straight-In procedures. Please review the 'Air Navigation' section for notice requirements for offset IFR procedures and EMI.

OBSTRUCTION STANDARDS
FAR 77.17(a)(1): DNE 499 ft AGL
FAR 77.17(a)(2): DNE - Airport Surface
FAR 77.19(a): DNE - Horizontal Surface
FAR 77.19(b): DNE - Conical Surface
FAR 77.19(c): DNE - Primary Surface
FAR 77.19(d): DNE - Approach Surface
FAR 77.19(e): DNE - Approach Transitional Surface
FAR 77.19(e): DNE - Abeam Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: DXR: DANBURY MUNI
Type: A RD: 26707.12 RE: 457.4
FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): DNE - Height No Greater Than 200 feet AGL.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Primary Surface: DNE
VFR Approach Surface: DNE
VFR Transitional Surface: DNE

VFR TRAFFIC PATTERN AIRSPACE FOR: 11N: CANDLELIGHT FARMS
Type: A RD: 98725.14 RE: 654
FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): Does Not Apply.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Primary Surface: DNE
VFR Approach Surface: DNE
VFR Transitional Surface: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)
FAR 77.17(a)(3) Departure Surface Criteria (40:1)
DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)
FAR 77.17(a)(4) MOCA Altitude Enroute Criteria
The Maximum Height Permitted is 600 ft AMSL

PRIVATE LANDING FACILITIES
No Private Landing Facilites Are Within 6 NM

AIR NAVIGATION ELECTRONIC FACILITIES

FAC IDNT	TYPE	ST AT	FREQ	VECTOR	DIST (ft)	DELTA ELEVA	ST	LOCATION	GRND APCH ANGLE	BEAR
CMK	VOR/DME	I	116.6	257.53	25921	-56	NY	CARMEL	-.12	
DXR	LOCALIZER	I	111.5	4.52	27405	+185	CT	RWY 08 DANBURY MU	.39	87
DXR	ATCT	ON	A/G	2.96	28248	+180	CT	DANBURY MUNI	.37	
HPN	RADAR	ON	2735.	217.43	102260	+128	NY	WESTCHESTER COUNT	.07	

No Impact. Existing Structures Do Not Require Notice based upon EMI. The FAA takes into account and adjusts radar facilities for reflection, clutter and false targets. The studied location is within 20 NM of an Air Traffic Radar facility.
The calculated Radar Line-Of-Sight (LOS) distance is: 59 NM.
This location and height is within the Radar Line-Of-Sight.

BDR	VOR/DME	R	108.8	116.19	111699	+629	CT	BRIDGEPORT	.32	
IGN	VOR/DME	R	117.6	326.02	162810	+56	NY	KINGSTON	.02	
HVN	VOR/DME	R	109.8	94.35	166471	+632	CT	NEW HAVEN	.22	
PWL	VOR/DME	I	114.3	350.04	175506	-612	NY	PAWLING	-.2	
SWF	RADAR	Y	2765.	293.01	183495	-83	NY	STEWART INTERNATI	-.03	

DPK	VOR/DME	I	117.7	164.48	190521	+515	NY DEER PARK	.15
ISP	RADAR	ON	2735.	148.76	208631	+456	NY LONG ISLAND MacAR	.13
KOKX	RADAR WXL	Y		132.46	232917	+443	NY NEW YORK	.11

CFR Title 47, §1.30000-§1.30004
AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station.
Movement Method Proof as specified in §73.151(c) is not required.
Please review 'AM Station Report' for details.

Nearest AM Station: WAXB @ 534 meters.

Airspace® Summary Version 17.9.479

11-15-2017
14:03:52

ATTACHMENT 7

Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

December 26, 2017

Via Certificate of Mailing

Rudy Marconi, First Selectman
Town of Ridgefield
400 Main Street
Ridgefield, CT 06877

Re: **Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Installation of a Wireless Telecommunications Facility at 150 Danbury Road, Ridgefield, Connecticut**

Dear Mr. Marconi:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to establish a new telecommunications facility on the roof of the Fairfield County Bank building at 150 Danbury Road in Ridgefield (the "Property").

The facility will consist of four (4) panel antennas and four (4) remote radio heads ("RRHs") attached to individual tower masts on the roof of the building; two (2) antennas and two (2) RRHs in the northerly portion of the roof and two (2) antennas and two (2) RRHs in the southerly portion of the roof. The antennas and RRHs will be screened by faux chimney structures, designed to match the architecture of the building.

Equipment associated with Cellco's antennas will be located on a 10' x 16' concrete pad with a roof canopy to the north of the building's portico adjacent to existing mechanical equipment.

A copy of the full Petition is attached for your review. Landowners whose parcels abut the Property were also sent notice of this filing along with a copy of the Petition.

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

Attachment

Robinson + Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

December 26, 2017

Via Certificate of Mailing

Richard S. Baldelli
Director of Planning and Zoning
Town of Ridgefield
66 Prospect Street
Ridgefield, CT 06877

Re: **Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Installation of a Wireless Telecommunications Facility at 150 Danbury Road, Ridgefield, Connecticut**

Dear Mr. Baldelli:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to establish a new telecommunications facility on the roof of the Fairfield County Bank building at 150 Danbury Road in Ridgefield (the "Property").

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Robinson + Cole

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

Attachment

Robinson + Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

December 26, 2017

Via Certificate of Mailing

Fairfield County Bank
150 Danbury Road
Ridgefield, CT 06877

Re: **Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Installation of a Wireless Telecommunications Facility at 150 Danbury Road, Ridgefield, Connecticut**

Dear Sir/Madam:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to establish a new telecommunications facility on the roof of the Fairfield County Bank building at 150 Danbury Road in Ridgefield (the "Property").

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A copy of the full Petition is attached for your review. Landowners whose parcels abut the Property were also sent notice of this filing along with a copy of the Petition.

Robinson+Cole

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

Attachment

ATTACHMENT 8

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

December 26, 2017

Via Certificate of Mailing

«Name_and_Address»

Re: **Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Installation of a Wireless Telecommunications Facility at 150 Danbury Road, Ridgefield, Connecticut**

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to establish a new telecommunications facility on the roof of the Fairfield County Bank building at 150 Danbury Road in Ridgefield (the "Property").

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Equipment associated with Cellco's antennas will be located on a 10' x 16' concrete pad with a roof canopy to the north of the building's portico adjacent to existing mechanical equipment. A copy of the full Petition is attached for your review.

This notice is being sent to you because you are listed on the Town Assessor's records as an owner of land that abuts the Property. If you have any questions regarding the Petition, the Council's process for reviewing the Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact the Council directly at 860-827-2935.

Sincerely,

Kenneth C. Baldwin

Attachment

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTING PROPERTY OWNERS

150 DANBURY ROAD
RIDGEFIELD, CONNECTICUT

	Property Address	Owner's and Mailing Address
1.	158 Danbury Road	Stephen J. Zemo 107 Danbury Road Ridgefield, CT 06877
2.	Farmingville Road	State of Connecticut DEEP 79 Elm Street Hartford, CT 06106
3.	Farmingville Road	State of Connecticut DEEP 79 Elm Street Hartford, CT 06106
4.	36 Farmingville Road	Town of Ridgefield 400 Main Street Ridgefield, CT 06877
5.	6 Farmingville Road	Gehnrich G. and Josephine Socci 6 Farmingville Road Ridgefield, CT 06877
6.	6 Farmingville Road	Josephine Socci, David G. Ferm, Et Al 6 Farmingville Road Ridgefield, CT 06877
7.	6 Farmingville Road	Ridgefield Realty Associates 6 Farmingville Road Ridgefield, CT 06877
8.	130 Danbury Road	Kelly Copps Hill Realty LLC c/o Silverman Realty Group 237 Mamaroneck Avenue White Plains, NY 10605

	Property Address	Owner's and Mailing Address
9.	125 Danbury Road	Equity One (Copps Hill) Inc. c/o Equity One Attn: Vidya Ramdhany 410 Park Avenue, Suite 1220 New York, NY 10022
10.	143 Danbury Road	JMF Realty Associates, LLC 347 Wilton Road West Ridgefield, CT 06877
11.	63 Copps Hill Road Units 21A – 21H	Copps Hill Investments LLC 94 Danbury Road Ridgefield, CT 06877
12.	63 Copps Hill Road Units 22A – 22H	CH Realty Corp. LLC 164 Ramapo Road Ridgefield, CT 06877