

KENNETH C. BALDWIN

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Hartford, CT 06103-3597
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Also admitted in Massachusetts
and New York

July 12, 2021

Via Electronic Mail

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification
234 Sherman Avenue, Meriden, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas inside two faux-chimney structures on the roof of the building and associated equipment in the building’s attic and inside the building’s basement. The telecommunications facility was approved by the Siting Council (“Council”) in November of 2015 (PE1133-VER-20150928). A copy of the Council’s Decision and Staff Report is included in [Attachment 1](#).

Cellco now intends to modify its facility by removing six (6) existing antennas and installing three (3) new MX08FIT265-01 antennas, three (3) MX10FIT665-xx antennas and one (1) MX14FIT665-01 antenna within the same faux-chimney structures. A set of project plans showing Cellco’s proposed facility modifications and the specifications for Cellco’s new antennas are included in [Attachment 2](#).

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Meriden’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.
July 12, 2021
Page 2

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower/antenna structure. Cellco's replacement antennas will be installed on existing antenna mounts inside the existing faux chimneys.
2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary. Cellco's associated equipment is inside the building's attic and basement.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A far field table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. According to the attached Mount and Building Structural Analysis ("MSA"), the existing structure, faux-chimneys and antenna mounts can support Cellco's proposed modifications. A copy of the MSA is included in Attachment 4.

A copy of the parcel map and Property owner information is included in Attachment 5.

A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Melanie A. Bachman, Esq.
July 12, 2021
Page 3

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Enclosures

Copy to:

Kevin Scarpati, Meriden Mayor
Paul Dickson, Meriden Acting Director of Planning, Development & Enforcement
Britannia Ventures LLC, Property Owner
Aleksy Tyurin

ATTACHMENT 1



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

November 5, 2015

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **PE1133-VER-20150928** – Cellco Partnership d/b/a Verizon Wireless sub-petition for a declaratory ruling for approval of an eligible facility request for modifications to an existing telecommunications facility located at 234 Sherman Avenue, Meriden, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby approves your Eligible Facilities Request (EFR) to install antennas and associated equipment at the above-referenced facility pursuant to the Federal Communications Commission Wireless Infrastructure Report and Order, with the following conditions:

- Within 45 days of installation, Cellco shall provide to the Council post-construction measurements or calculations of the cumulative percent maximum permissible exposure, including AT&T's existing facility and Cellco's installation, for power density at ground level to demonstrate compliance with applicable Federal Communications Commission maximum permissible exposure standards;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by the Petitioner shall be removed within 60 days of the date the antenna ceased to function;
- The validity of this action shall expire one year from the date of this letter; and
- The Petitioner may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the EFR dated September 25, 2015.

Thank you for your attention and cooperation.

Very truly yours,

Melanie Bachman
Acting Executive Director

MB/CW

c: The Honorable Manny Santos, Mayor, City of Meriden
Lawrence Kendzior, City Manager, City of Meriden
Dominick Caruso, City Planner, City of Meriden

ATTACHMENT 2



MERIDEN 5 CT

234 SHERMAN AVENUE
MERIDEN, CT 06450

FUZE PROJECT ID: 16227628
PSLC: 468015



VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

MERIDEN 5 CT

CONSTRUCTION DRAWINGS

3	07/07/22	FOR SUBMITTAL
2	06/29/22	FOR SUBMITTAL
1	06/15/22	FOR SUBMITTAL
0	06/13/22	FOR SUBMITTAL
B	05/31/22	FOR REVIEW
A	05/24/22	FOR REVIEW



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89 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.696.3400
FAX: 617.696.3310



DRAWN BY: TGC

REVIEWED BY: CDH

CHECKED BY: BBR

PROJECT NUMBER: 50121487

JOB NUMBER: 50150884

SITE NUMBER

468015

SITE ADDRESS

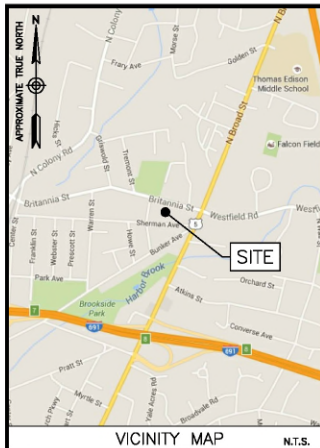
234 SHERMAN AVENUE
MERIDEN, CT 06450

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



ENGINEER
DEWBERRY ENGINEERS INC.
99 SUMMER ST.
SUITE 700
BOSTON, MA 02110
PHONE # (617) 531-0800
CONTACT: BENJAMIN REVETTE, PE

CONSTRUCTION
VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

COORDINATES*:
LATITUDE: 41° 32' 52.65" N
LONGITUDE: 72° 47' 4.08" W
*PER RFD5

GROUND ELEVATION*:
165'±
*PER GOOGLE EARTH

PROJECT INFORMATION

PMI ACCESSED AT: N/A
SMART TOOL VENDOR: N/A
PROJECT NUMBER:
VZW LOCATION CODE (PSLC): 468015
FUZE NUMBER: 16227628

MOUNT MODIFICATION REQUIRED? YES

CONTRACTOR PMI REQUIREMENTS

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

1. REMOVE (6) EXISTING ANTENNAS
2. INSTALL (3) MX10FIT665-01 ANTENNAS.
3. INSTALL (2) MX08FIT265-01 ANTENNAS, (ALPHA/BETA).
4. INSTALL (1) MX14FIT865-01 ANTENNA, (GAMMA).
5. REMOVE (9) EXISTING REMOTE UNITS IN ATTIC.
6. INSTALL (9) RRH UNITS IN ATTIC.
7. INSTALL (2) DIPLEXERS IN ATTIC, (ALPHA/BETA).
8. INSTALL NEW JUMPER CABLING BETWEEN OVPS AND ANTENNAS AS REQUIRED

NOTE:
1. SCOPE OF WORK BASED ON ANTENNA REC FOR MERIDEN 5 CT DATED 06/02/2022. VERIFY SCOPE OF WORK WITH FINAL RFD5 PRIOR TO CONSTRUCTION.

SCOPE OF WORK

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
GN-1	GENERAL NOTES
C-1	ROOF PLAN
C-2	SOUTHEAST ELEVATION
C-3	EXISTING & PROPOSED ANTENNA PLANS
C-4	CONSTRUCTION DETAILS
C-5	FINAL EQUIPMENT CONFIGURATION

SHEET INDEX

GENERAL CONSTRUCTION NOTES :

- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, AND COMPLY WITH VERIZON WIRELESS SPECIFICATIONS.
- CONTRACTOR SHALL CONTACT "DIG SAFE" (888-344-7233) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, VERIZON WIRELESS PROJECT CONSTRUCTION MANAGER, AND LANDLORD IMMEDIATELY.
- CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- ALL ROOF WORK SHALL BE DONE BY A QUALIFIED AND EXPERIENCED ROOFING CONTRACTOR IN COORDINATION WITH ANY CONTRACTOR WARRANTING THE ROOF TO ENSURE THAT THE WARRANTY IS MAINTAINED.
- CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH VERIZON WIRELESS WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK.
- ANTENNAS AND CABLES ARE TYPICALLY PROVIDED BY VERIZON WIRELESS. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY VERIZON WIRELESS. ALL ITEMS NOT PROVIDED BY VERIZON WIRELESS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY VERIZON WIRELESS.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH VERIZON WIRELESS PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY VERIZON WIRELESS. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON WIRELESS MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
- GENERAL CONTRACTOR SHALL HAVE A LICENSED HVAC CONTRACTOR START THE HVAC UNITS, SYNCHRONIZE THE THERMOSTATS, ADJUST ALL SETTINGS ON EACH UNIT ACCORDING TO VERIZON WIRELESS CONSTRUCTION MANAGER'S SPECIFICATIONS, AND THOROUGHLY TEST AND BALANCE EACH UNIT TO ENSURE PROPER OPERATION PRIOR TO TURNING THE SITE OVER TO OWNER.
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON WIRELESS SPECIFICATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- UNLESS OTHERWISE NOTED VERIZON WIRELESS SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL INCLUDING ANTENNAS, TMA'S, BIAS-T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE PROVIDED BY VERIZON WIRELESS FOR INSTALLATION BY CONTRACTOR.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON WIRELESS SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE PRIOR TO CONSTRUCTION START, MORE SPECIFICALLY BEFORE SEALING ANY FLOOR, WALL OR ROOF PENETRATION, FINAL UTILITY CONNECTIONS, POURING CONCRETE, BACKFILLING UTILITY TRENCHES AND STRUCTURAL POST OR MOUNTING CONNECTIONS, FOR ENGINEERING REVIEW AND INSPECTION.
- SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED D FIRE CODE APPROVED MATERIALS.
- REPAIR ANY DAMAGE DURING CONSTRUCTION TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE CONSTRUCTION MANAGER AND LANDLORD.
- ALL DISRUPTIVE WORK AND WORK WITHIN TENANT SPACES TO BE COORDINATED WITH BUILDING REPRESENTATIVE.

CODE SPECIFICATIONS:

- ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:
 2016 CONNECTICUT STATE BUILDING CODE WITH THE FOLLOWING APPLICABLE CODES:
 2015 INTERNATIONAL RESIDENTIAL CODE (IRC)
 2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
 2015 INTERNATIONAL BUILDING CODE (IBC)
 2015 INTERNATIONAL MECHANICAL CODE (IMC)
 2017 NATIONAL ELECTRICAL CODE (NEC) (NFPA 70)
 2015 INTERNATIONAL PLUMBING CODE (IPC)
 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
 IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.
- ALL STRUCTURAL WORK TO BE DONE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL, 13TH EDITION (AISC 13TH ED.)
- ALL CONCRETE WORK TO BE DONE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI 301) SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 318) AND BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
- ALL REINFORCING STEEL WORK TO BE DONE IN ACCORDANCE WITH THE (ACI 315) MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.

GROUNDING NOTES:

- GROUNDING SHALL COMPLY WITH NEC ART. 250.
- GROUNDING CONDUCTORS SHALL BE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR INDOOR USE.
- ALL GROUND CONNECTIONS TO BE BURNDY HYDRONIC COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- ROUTE GROUNDING CONNECTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEGS SHOULD NOT BE BENT AT RIGHT ANGLE. ALWAYS MAKE 12" RADIUS BENDS. #8 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY.
- CONNECTIONS TO GROUNDING BAR SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- TEST COMPLETED GROUNDING SYSTEM AND RECORD RESISTANCE VALUES FOR PROJECT CLOSE-OUT DOCUMENTATION. GROUND RESISTANCE SHALL NOT EXCEED 5 OHMS.
- GROUNDING CONDUCTORS BETWEEN MOB AND WATERMAN SHALL BE #2/0. BONDING JUMPERS FROM METALLIC SURFACES SHALL BE #2 MINIMUM. ALL GROUND CONDUCTORS AND BONDING JUMPERS SHALL BE SOFT DRAWN ANNEALED, TINNED, BARE STRANDED COPPER WIRE. COAXIAL CABLES SHALL BE GROUNDED AT A MINIMUM OF TWO LOCATIONS USING VERIZON PROVIDED GROUNDING KITS. EXACT LOCATIONS SHALL BE FINIALIZED IN THE FIELD BY THE CONSTRUCTION MANAGER.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL ROLLED SHAPES, PLATES, AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
 ASTM A-992, GRADE 50 ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE.
 ASTM A-36 ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
 ASTM A-500, GRADE B HSS SECTION (SQUARE, RECTANGULAR, ROUND)
 ASTM A-325, TYPE SC OR N ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS.
 F1554, GRADE 36 ALL ANCHORS BOLTS, UNLESS NOTED OTHERWISE.
 ASTM A-53, GRADE B STEEL PIPE.
- ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1 WHERE FLLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 14TH EDITION, WHERE WELD LENGTH IS NOT INDICATED, USE FULL LENGTH WELD. AT THE COMPLETION OF ALL WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA.) SUPPLIED WITH A NUT AND WASHER UNDER TURNED END AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
- USE PRECAUTIONS & PROCEDURES PER AWS D1.1 WHEN WELDING GALVANIZED METALS.
- ALL EXISTING BEAM AND COLUMN DIMENSIONS SHALL BE FIELD VERIFY BY CONTRACTOR PRIOR TO FABRICATION. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THOSE SHOWN SHALL BE REPORTED TO DEWBERRY ENGINEER IMMEDIATELY.
- CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER.
- ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123/A123M-00 HOT-DIP GALVANIZED FINISH UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DIMS, SQUARES, MARKS, AND WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED. REPAIR DAMAGED GALVANIZED COATINGS ON GALVANIZED ITEMS WITH GALVANIZED REPAIR PAINT ACCORDING TO ASTM A780 AND MANUFACTURER'S WRITTEN INSTRUCTIONS. PRIOR TO COMPLETION OF WORK, TOUCHUP ALL DAMAGED GALVANIZED STEEL WITH APPROVED COLD ZINC "GALVANOID", "ZINC GALV", "ZINC-IT", OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURERS GUIDELINES. TOUCHUP DAMAGED NON GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.
- ALL WELDED COMPONENTS TO BE SHOP WELDED PRIOR TO INSTALLATION. NO WELDING ACTIVITIES IS PERMITTED DURING INSTALLATION OF PROPOSED EQUIPMENTS AND/OR HARDWARE ON SITE.



VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

MERIDEN 5 CT

CONSTRUCTION DRAWINGS

NO.	DATE	DESCRIPTION
3	07/07/22	FOR SUBMITTAL
2	06/29/22	FOR SUBMITTAL
1	06/15/22	FOR SUBMITTAL
0	06/13/22	FOR SUBMITTAL
B	05/31/22	FOR REVIEW
A	05/24/22	FOR REVIEW



Dewberry Engineers Inc.
89 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.696.3400
FAX: 617.696.3310



DRAWN BY: TGC

REVIEWED BY: CDH

CHECKED BY: BBR

PROJECT NUMBER: 50121487

JOB NUMBER: 50150884

SITE NUMBER

468015

SITE ADDRESS

234 SHERMAN AVENUE
MERIDEN, CT 06450

SHEET TITLE

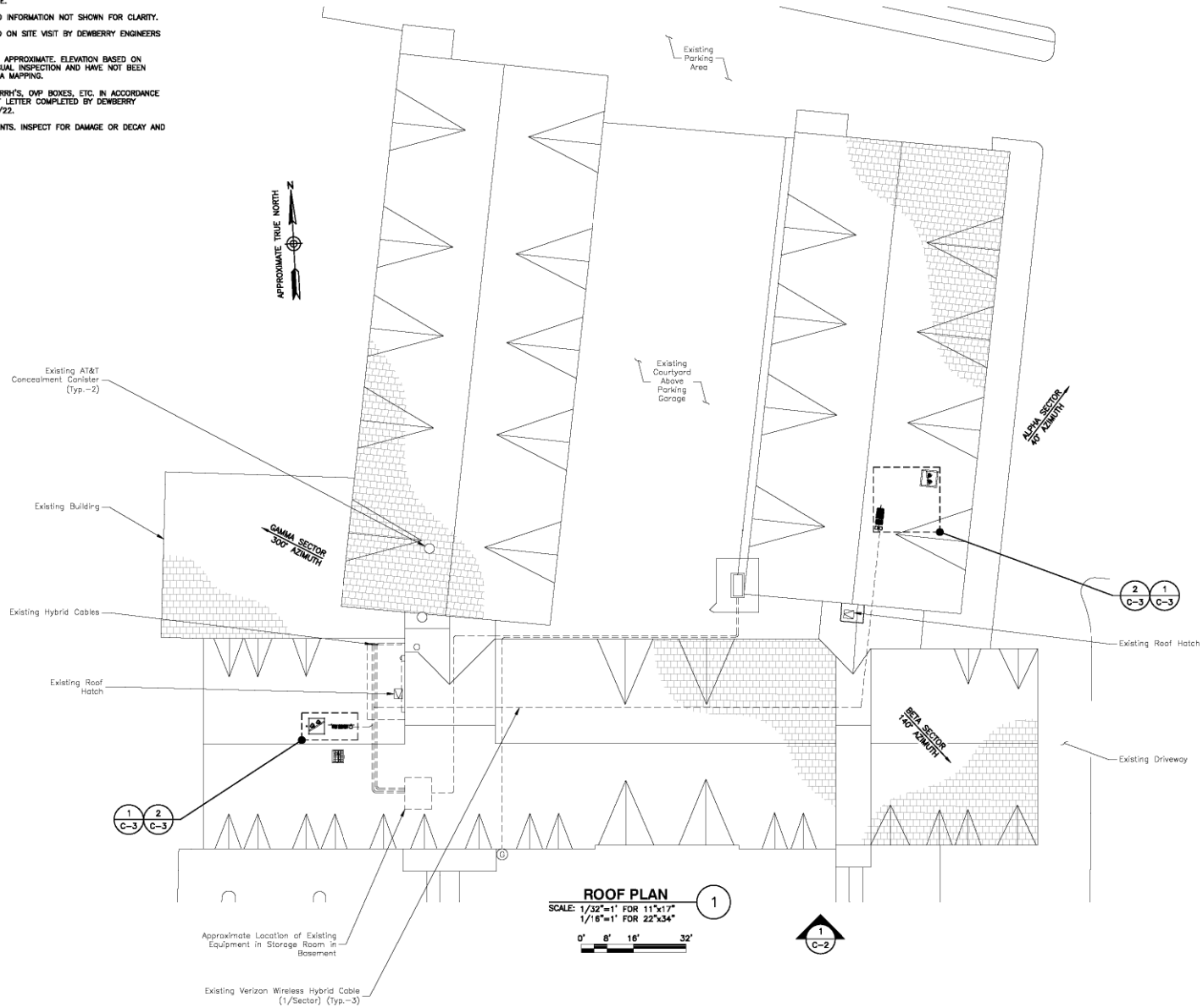
GENERAL NOTES

SHEET NUMBER

GN-1

NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
3. SITE PLAN & ELEVATION BASED ON SITE VISIT BY DEWBERRY ENGINEERS INC. ON 04/28/22.
4. EXISTING ANTENNAS SHOWN AS APPROXIMATE. ELEVATION BASED ON EXISTING INFORMATION AND VISUAL INSPECTION AND HAVE NOT BEEN VERIFIED THROUGH AN ANTENNA MAPPING.
5. MOUNT ALL ANTENNAS, CDAX, RRR'S, OVP BOXES, ETC. IN ACCORDANCE WITH STRUCTURAL ASSESSMENT LETTER COMPLETED BY DEWBERRY ENGINEERS INC. DATED 07/07/22.
6. REUSE EXISTING ANTENNA MOUNTS. INSPECT FOR DAMAGE OR DECAY AND REPLACE AS NEEDED.



VERIZON WIRELESS
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234 SHERMAN AVENUE
MERIDEN, CT 06450

SHEET TITLE

ROOF PLAN

SHEET NUMBER

C-1

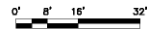
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SOUTH ELEVATION

SCALE: 1/32"=1' FOR 11"x17"
1/16"=1' FOR 22"x34"



1



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WALLINGFORD, CT 06492

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234 SHERMAN AVENUE
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SHEET TITLE

SOUTH ELEVATION

SHEET NUMBER

C-2



VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

MERIDEN 5 CT

CONSTRUCTION DRAWINGS

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468015

SITE ADDRESS

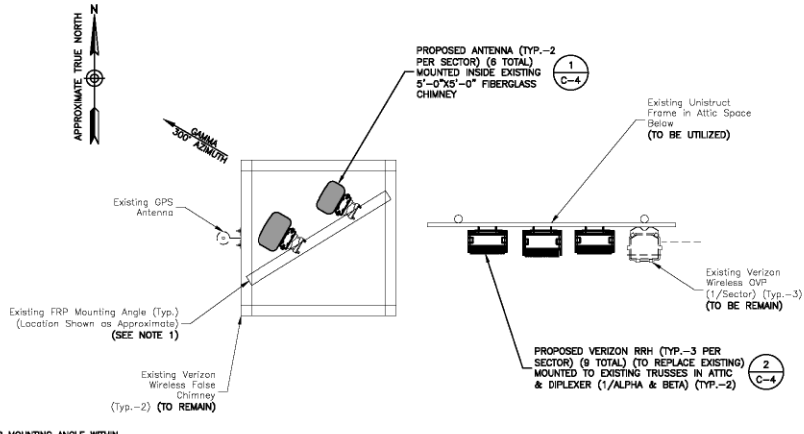
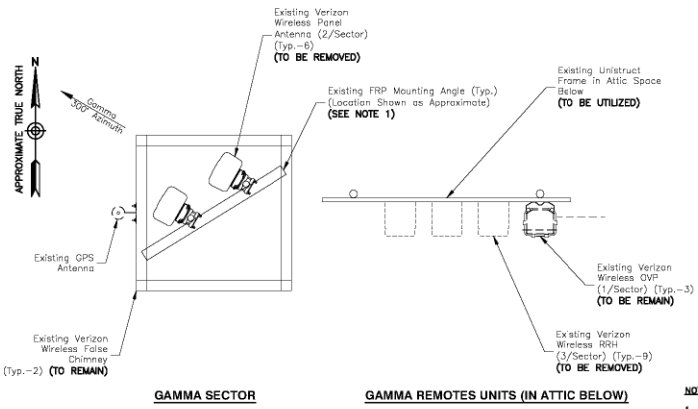
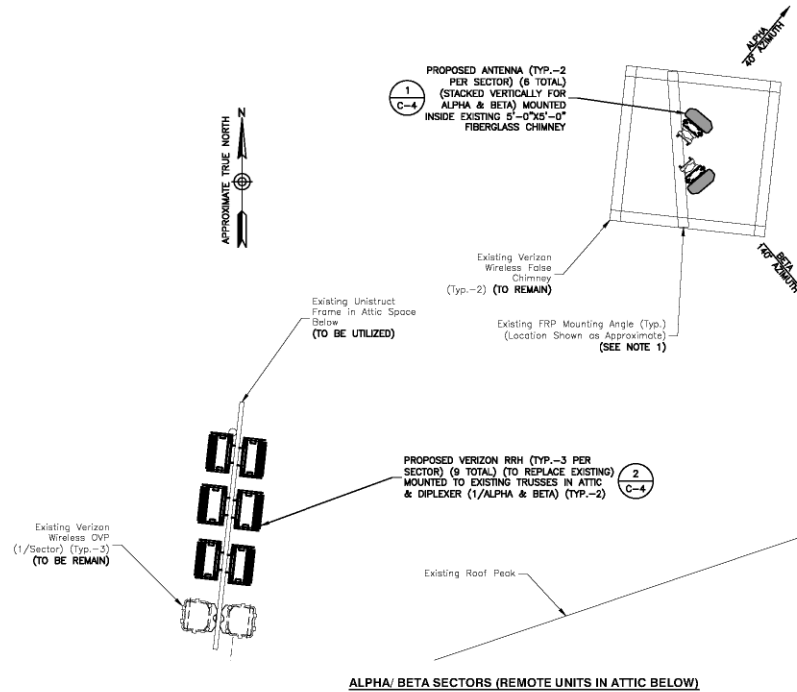
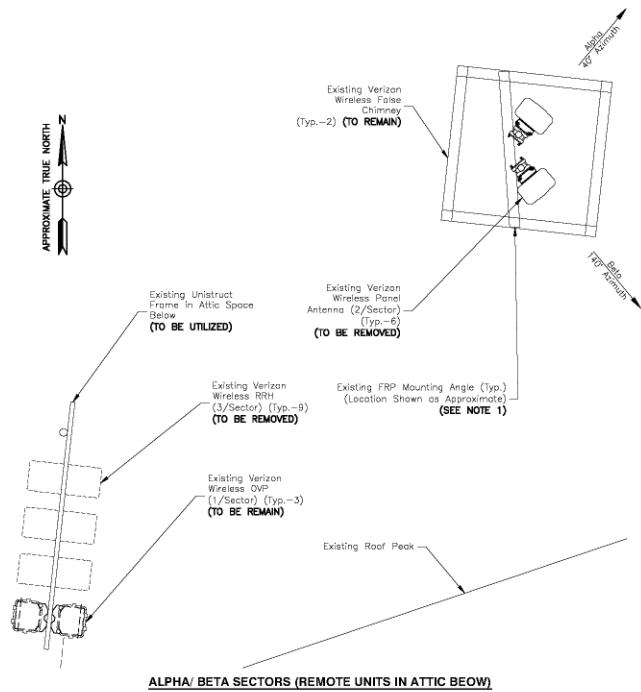
234 SHERMAN AVENUE
MERIDEN, CT 06450

SHEET TITLE

EXISTING & PROPOSED
ANTENNA PLANS

SHEET NUMBER

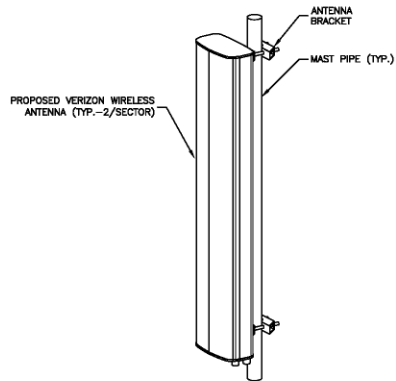
C-3



EXISTING SECTOR PLANS (1)
SCALE: 1/4"=1' FOR 11"x17"
1/2"=1' FOR 22"x34"
0' 1' 2' 4'

PROPOSED SECTOR PLANS (2)
SCALE: 1/4"=1' FOR 11"x17"
1/2"=1' FOR 22"x34"
0' 1' 2' 4'

- NOTES:**
- CONTRACTOR TO VERIFY LOCATION OF FRP MOUNTING ANGLE WITHIN EXISTING FRP CHIMNEY AND RELOCATE AS REQUIRED FOR PROPOSED ANTENNAS.
 - MOUNT ALL ANTENNAS, COAX, RRH'S, OVP BOXES, ETC. IN ACCORDANCE WITH STRUCTURAL ASSESSMENT LETTER COMPLETED BY DEWBERRY ENGINEERS INC. DATED 07/07/22.
 - CONTRACTOR TO INSPECT CHIMNEY STRUCTURE, RFP PANELS AND ATTACHMENT HARDWARE, NOTIFY ENGINEER AND VERIZON OF ANY DAMAGE OR AREAS OF CONCERN.
 - NORTH IS SHOWN AS APPROXIMATE

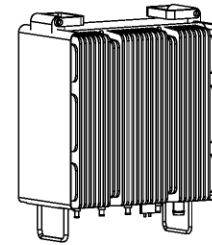


PANEL ANTENNA DETAIL
SCALE: N.T.S.

MANUFACTURER: JMA WIRELESS
PART NUMBER: MX08FTT265-01
DIMENSIONS: 32.0"H X 11.6"W X 4.5"D
WEIGHT: 23.2 LBS

MANUFACTURER: JMA WIRELESS
PART NUMBER: MX10FTT865-01
DIMENSIONS: 70.9"H X 12.2"W X 7.5"D
WEIGHT: 53.4 LBS

MANUFACTURER: JMA WIRELESS
PART NUMBER: MX14FTT865-01
DIMENSIONS: 72.0"H X 14.2"W X 8.5"D
WEIGHT: 63.0 LBS



PROPOSED 5G

MANUFACTURER: SAMSUNG
MODEL: 5G MACRO RADIO RT-8808-77A
DIMENSIONS: 14.9"H X 14.9"W X 6.9"D
WEIGHT: 59.5 LBS

PROPOSED LTE 700/850

MANUFACTURER: SAMSUNG
MODEL: 700/850MHZ MACRO RADIO RF44406-13A
DIMENSIONS: 14.9"H X 14.9"W X 9.0"D
WEIGHT: 70.3 LBS

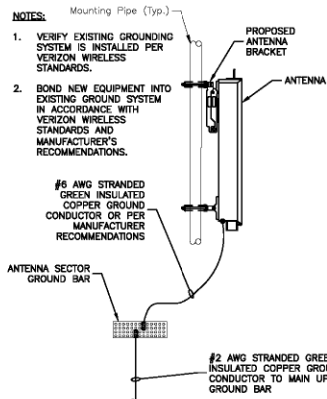
PROPOSED LTE AWS/PCS

MANUFACTURER: SAMSUNG
MODEL: AWS/PCS MACRO RADIO RF44394-25A
DIMENSIONS: 14.9"H X 14.9"W X 10.0"D
WEIGHT: 74.7 LBS

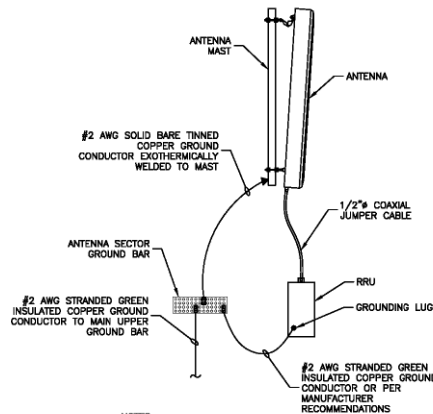
NOTE:

- CONTRACTOR TO VERIFY WITH CONSTRUCTION MANAGER FOR FINAL MANUFACTURER SPECIFICATIONS PRIOR TO CONSTRUCTION.

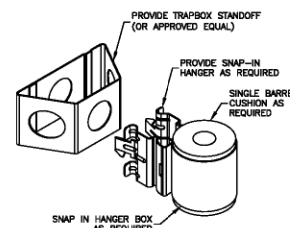
REMOTE UNIT DETAILS
SCALE: N.T.S.



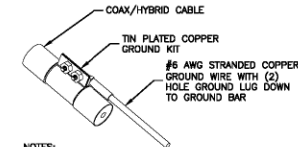
TYPICAL ANTENNA GROUNDING DETAIL
SCALE: N.T.S.



TYPICAL ANTENNA/RRU GROUNDING DETAIL
SCALE: N.T.S.



JUMPER MOUNT
SCALE: N.T.S.



NOTES:

- DO NOT INSTALL CABLE GROUND KIT AT A BEND. ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- GROUNDING KIT SHALL BE TIN PLATED COPPER WITH TWO-HOLE LUG, SIZE PER COAX DIAMETER.
- WEATHER SEAL GROUND KIT PER CARRIER REQUIREMENTS.
- COAX CABLE GROUND KIT LOCATION & QUANTITY SHALL BE PER CARRIER SPECIFICATIONS & STANDARDS.

COAX/HYBRID GROUNDING DETAIL
SCALE: N.T.S.



VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

MERIDEN 5 CT

CONSTRUCTION DRAWINGS

3	07/07/22	FOR SUBMITTAL
2	06/29/22	FOR SUBMITTAL
1	06/15/22	FOR SUBMITTAL
0	06/13/22	FOR SUBMITTAL
B	05/31/22	FOR REVIEW
A	05/24/22	FOR REVIEW



Dewberry Engineers Inc.
88 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.595.3400
FAX: 617.595.3310



DRAWN BY:	TGC
REVIEWED BY:	CDH
CHECKED BY:	BBR
PROJECT NUMBER:	50121487
JOB NUMBER:	50150884
SITE NUMBER	

468015

SITE ADDRESS
234 SHERMAN AVENUE
MERIDEN, CT 06450

SHEET TITLE	CONSTRUCTION DETAILS
SHEET NUMBER	

C-4



VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

MERIDEN 5 CT

CONSTRUCTION DRAWINGS

3	07/07/22	FOR SUBMITTAL
2	06/29/22	FOR SUBMITTAL
1	06/15/22	FOR SUBMITTAL
0	06/13/22	FOR SUBMITTAL
B	05/31/22	FOR REVIEW
A	05/24/22	FOR REVIEW



Dewberry Engineers Inc.
86 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.595.3400
FAX: 617.595.3310



DRAWN BY: TGC
REVIEWED BY: CDH
CHECKED BY: BBR
PROJECT NUMBER: 50121487
JOB NUMBER: 50150884
SITE NUMBER

468015

SITE ADDRESS

234 SHERMAN AVENUE
MERIDEN, CT 06450

SHEET TITLE

FINAL EQUIPMENT CONFIGURATION

SHEET NUMBER

C-5

FINAL EQUIPMENT CONFIGURATION											
SECTOR	POSITION	TECHNOLOGY	ANTENNA MODEL	VENDOR	RR# (QTY./MODEL)	DIPLEXER (QTY./MODEL)	CENTERLINE	AZIMUTH	OVP	HYBRID CABLE TYPE	FEED LINE LENGTH*
ALPHA	A1	LTE AWS/5G	(P) MX08FT265-01	JMA WIRELESS	(1) (P) RT-8808-77A	-	76'-0"±	40'	(1) (E) OVP BOX TO REMAIN	(1) (E) 6X12 HYBRID CABLE TO REMAIN	300'±
	A2	LTE 700/1900/5G	(P) MX10FT1665-01	JMA WIRELESS	(1) (P) B5/B13 RF4440d-13A (1) (P) B2/B66A RF-44339d-25A	(1) (P) SDX1926Q-43	71'-0"±	40'			
BETA	B1	LTE AWS/5G	(P) MX08FT265-01	JMA WIRELESS	(1) (P) RT-8808-77A	-	76'-0"±	140'	(1) (E) OVP BOX TO REMAIN	(1) (E) 6X12 HYBRID CABLE TO REMAIN	300'±
	B2	LTE 700/1900/5G	(P) MX10FT1665-01	JMA WIRELESS	(1) (P) B5/B13 RF4440d-13A (1) (P) B2/B66A RF-44339d-25A	(1) (P) SDX1926Q-43	71'-0"±	140'			
GAMMA	G1	LTE AWS/5G	(P) MX14FT1665-01	JMA WIRELESS	(1) (P) RT-8808-77A	-	73'-1"±	300'	(1) (E) OVP BOX TO REMAIN	(1) (E) 6X12 HYBRID CABLE TO REMAIN	95'±
	G2	LTE 700/1900/5G	(P) MX10FT1665-01	JMA WIRELESS	(1) (P) B5/B13 RF4440d-13A (1) (P) B2/B66A RF-44339d-25A	-	73'-1"±	300'			

*CONTRACTOR TO FIELD VERIFY HYBRID CABLE LENGTHS PRIOR TO CONSTRUCTION. LENGTH IS ESTIMATED FROM THE BASE EQUIPMENT OVP TO SECTOR OVP. NO HYBRID CABLES ARE PROPOSED UNDER CURRENT SCOPE OF WORK.

(E) = Existing
(P) = PROPOSED

FINAL EQUIPMENT CONFIGURATION

SCALE: N.T.S.

1

MX10FIT665-xx

NWAV™ X-Pol Ten-Port Antenna

X-Pol Ten-Port 6 ft, 65° Form in Tighter with Smart Bias Ts, 698-4200 MHz:

2 ports 698-894 MHz, 4 ports 1695-2180 MHz, and 4 ports 3400-4200 MHz

- Excellent passive intermodulation (PIM) performance reduces harmful interference.
- Fully integrated (iRETs) with independent RET control for low band and mid band
- FET configured with internal RET for high band & ease of future network optimization.
- SON-Ready array spacing supports beamforming capabilities
- Suitable for 3G, 4G, and 5G interface technologies
- Integrated Smart Bias-Ts reduce leasing costs
- Optimized form factor for reduced wind loading




Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180
Polarization	± 45°		± 45°		
Average gain over all tilts, dBi	14.4	14.8	17.8	18.1	18.2
Horizontal beamwidth (HBW), degrees ¹	66.0	61.0	63.0	63.0	58.0
Front-to-back ratio, co-polar power @180°± 30°, dB	>22	>22.0	>25.0	>25.0	>25.0
X-Pol discrimination (CPR) at boresight, dB	>17.0	>15.6	>23	>18	>18
Vertical beamwidth (VBW), degrees ¹	13.5	12.0	6.0	5.5	5.4
Electrical downtilt (EDT) range, degrees	2-14		0-9		
First upper side lobe (USLS) suppression, dB ¹	≤-17.0	≤-16.0	≤-17.0	≤-16.0	≤-16.0
Cross-polar isolation, port-to-port, dB ¹	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Max input power per any port, watts	300		250		
Total composite power all ports (1-10), watts	1500				

¹ Typical value over frequency and tilt

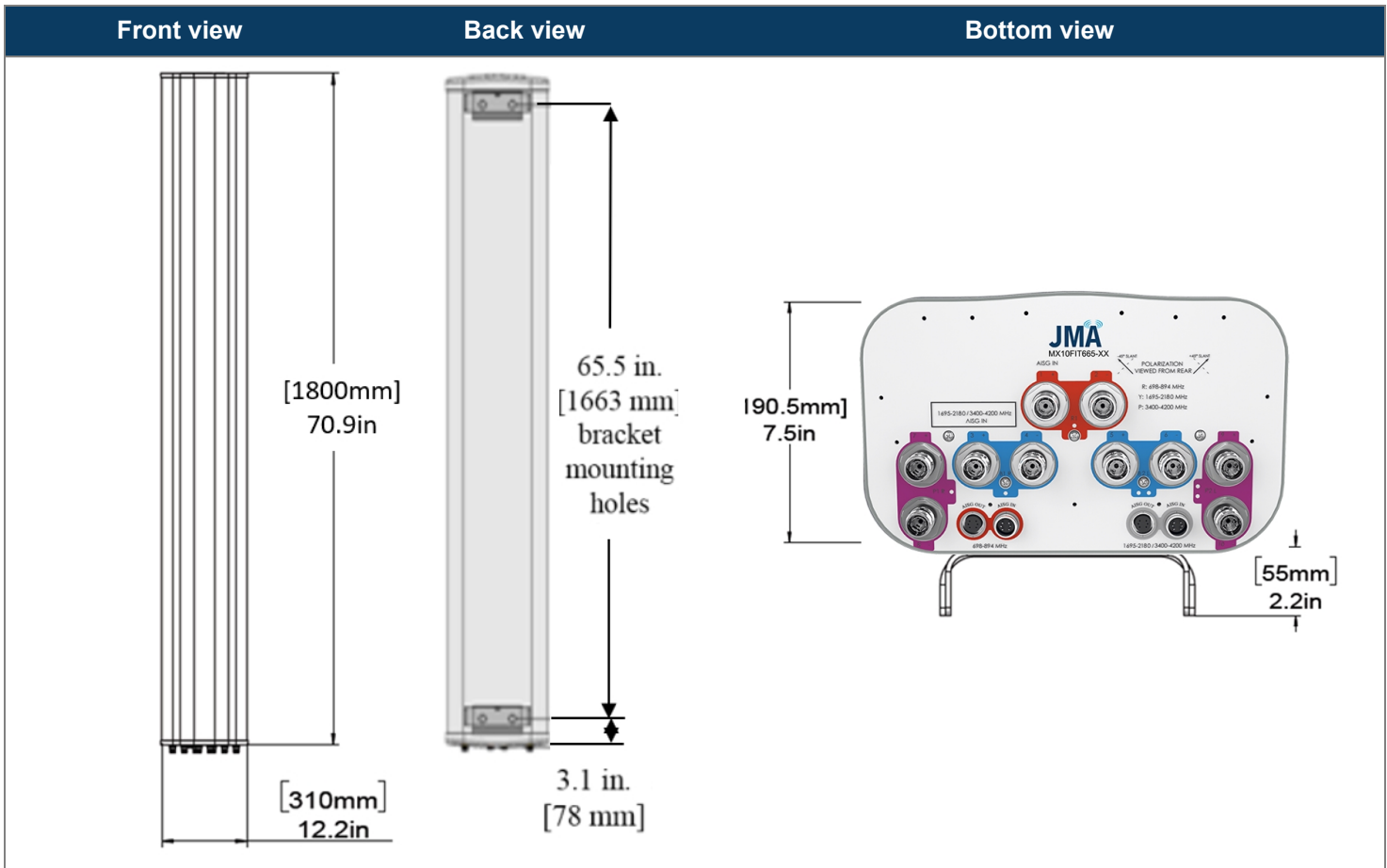
Electrical specification (minimum/maximum)	Ports 7, 8, 9, 10			
Frequency bands, MHz	3400-3550	3550-3700	3700-3950	3950-4200
Polarization	± 45°			
Average gain over all tilts, dBi	13.6	13.8	14.0	14.2
Horizontal beamwidth (HBW), degrees	65	62	60	58
Front-to-back ratio, co-polar power @180°± 30°, dB	>23	>23	>23	>22
Vertical beamwidth (VBW), degrees ¹	20	19.6	19.3	18.5
Electrical downtilt (EDT) range, degrees	2-12 orderable in 1 deg increments			
First upper side lobe (USLS) suppression, dB ¹	≤-15	≤-15	≤-15	≤-15
Cross-polar isolation, port-to-port, dB ¹	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0			
Max input power per any port, watts	150			
Total composite power all ports (1-10), watts	1500			

¹ Typical value over frequency and tilt

* For ports 7-10, the electrical downtilt is FET configured with internal RET, where the required electrical downtilt is defined at the time of order per the ordering information below.

Ordering information	
Antenna model	Description
MX10FIT665-xx (xx represents the FET in one degree increments for 3.4-4.2 GHz)	6F X- Pol 10 Port FIT 65° 2-14°/ 0-9°/ 2-12°, 4.3-10 & SBTs xx=02 thru 12 for each 1 degree tilt 3.4-4.2 GHz Examples MX10FIT665-02 – 2deg, MX10FIT665-09 – 9deg, MX10FIT665-12-12deg
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations
91900314-02	Dual Mount Bracket (see 91900314 bracket document for details)

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	70.9/ 12.2/ 7.5 (1800/ 309.9/ 190.5)
Shipping dimensions length/width/height, inches (mm)	76/ 20/ 14.5 (1930/ 508/ 368)
No. of RF input ports, connector type, and location	10 x 4.3-10 female, bottom
RF connector torque	96 lbf-in (10.85 N·m or 8 lbf-ft)
Net antenna weight, lb (kg)	53.4 (24.3)
Shipping weight, lb (kg)	97.5 (44.3)
Antenna mounting and downtilt kit included with antenna	91900318
Net weight of the mounting and downtilt kit, lb (kg)	20.3 (9.2)
Range of mechanical up/down tilt	-2° to 12°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal and lateral, and rear wind loading @ 150 km/h, lbf (N)	66.9 (297.6), 60.0 (266.9)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	1.49
EPA frontal and lateral, ft ² , (m ²)	3.0 (0.28), 3.6 (0.33)



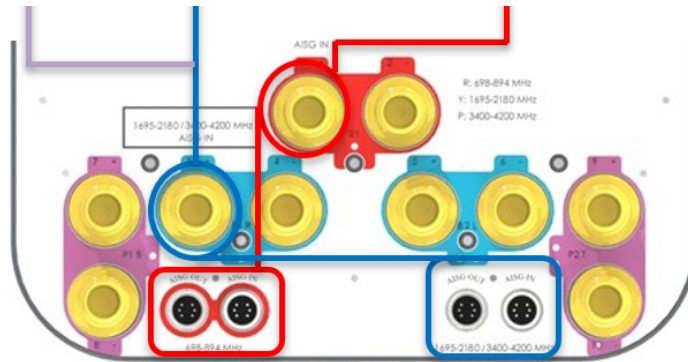
Remote electrical tilt (RET 1000) information

RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9 or RF port bias-t
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors and 2 RF port bias-ts
RET interface connector location	Bottom of the antenna
Total no. of internal RETs 698-894 MHz	1
Total no. of internal RETs 1695-2180 MHz	1
Total no. of internal RETs 3400-4200 MHz	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET and RF connector topology

Each RET device can be controlled either via the designated external AISG connector or RF smart bias-t port as shown below:

Band	RF port	Band	RF port	Band	RF port
3400-4200	7-10	1695-2180	3-6	698-894	1-2



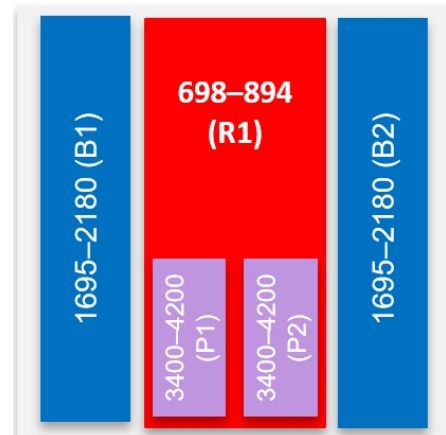
Note: The RET Device for 3400-4200 MHz is connected via the 1695-2180 Port 3 Bias T port or 1695-2180/3400-4200 MHz AISG ports.

Array topology

5 sets of radiating arrays

R1: 698-894 MHz
 B1: 1695-2180 MHz
 B2: 1695-2180 MHz
 P1: 3400-4200 MHz
 P2: 3400-4200 MHz

Band	RF port
698-894	1-2
1695-2180	3-4
1695-2180	5-6
3400-4200	7-8
3400-4200	9-10



MX08FIT265-01

NWAV™ Panel Antenna

8-Port 32 in. FIT (Form in Tighter), 3700 - 4200 MHz

- 5G C-Band 8T8R beamforming antenna
- Optimized antenna array design for all C-Band beamforming combinations
- Excellent passive intermodulation (PIM) performance reduces harmful interference
- Integrated (internal RET) for remote electrical tilt control



nwav™

Electrical specification (minimum/maximum)	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Gain, dBi	17.1
Horizontal beamwidth (HBW), degrees	85
Horizontal beamwidth tolerance, degrees	±5
Front-to-back ratio, co-polar power @180°± 30°, dB	27
Vertical beamwidth (VBW), degrees ¹	5.5
Vertical beamwidth tolerance, degrees	±0.3
Remote electrical downtilt (EDT) range, degrees	2-12
First upper side lobe (USLS) suppression, dB ¹	15
Coupling level, Amp, Antenna port to Cal port, dB	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±0.6
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.65
Coupler, max Phase Δ, Antenna port to Cal port, degrees	4
Cross-polar isolation, port-to-port, dB ¹	25
Max VSWR / return loss, dB	1.5:1 / -14.0
Max passive intermodulation (PIM), 2x20W carrier, dBc	-145
Max input power per port at 50 °C, watts	75

¹ Typical value over frequency and tilt

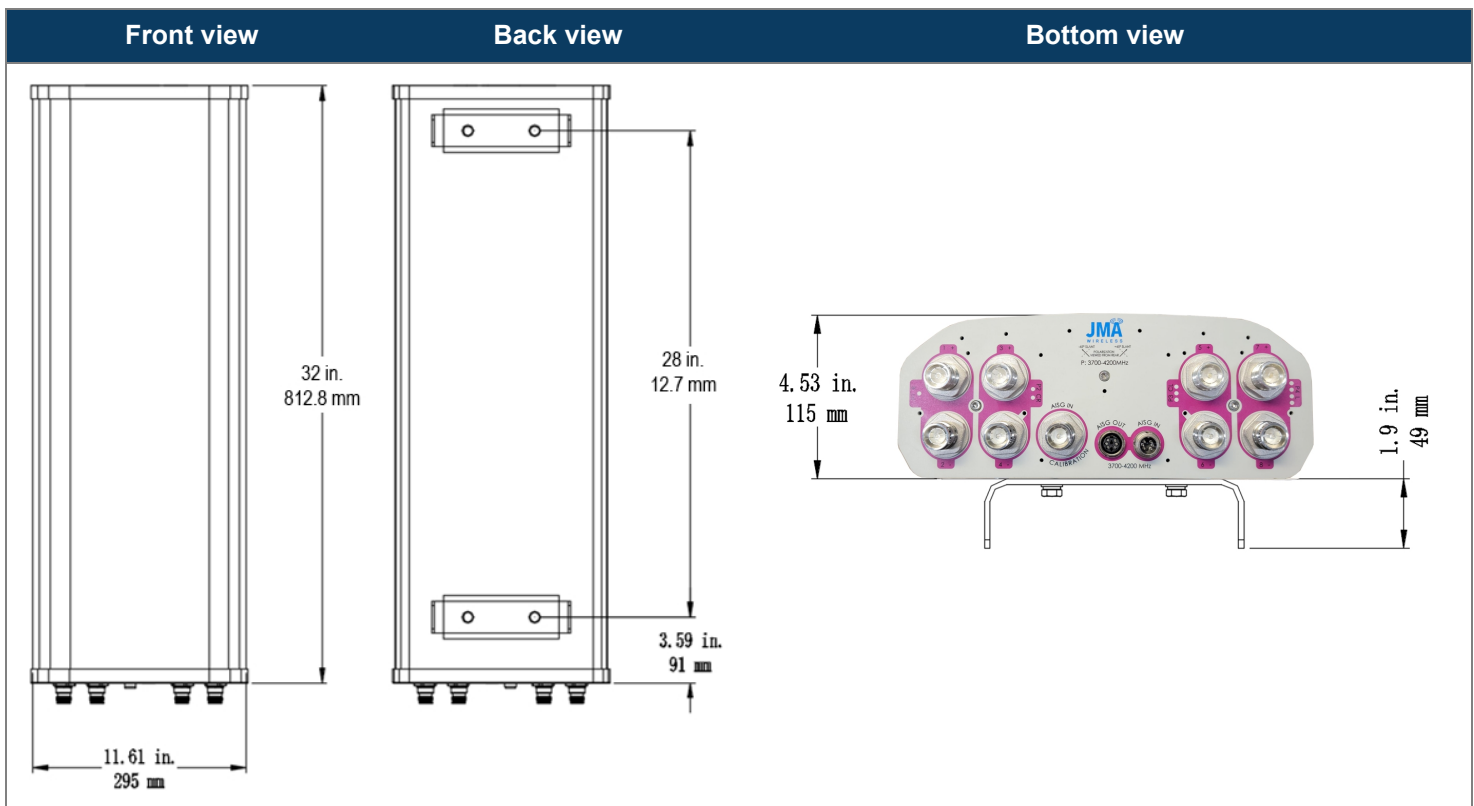
Electrical specification, Broadcast 65°	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	22.5
Horizontal beamwidth (HBW), degrees ¹	65
Horizontal beamwidth tolerance, degrees	±6
Vertical beamwidth (VBW), degrees ¹	5.5
Vertical beamwidth tolerance, degrees	±0.3
First upper side lobe (USLS) suppression, dB ¹	<-16

Electrical specification, Service Beam	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Steered 0° gain, dBi	22.5
Steered 0° Gain tolerance, dBi	±0.6
Steered 0° Beamwidth, Horizontal, degrees	22
Steered 0° CPR at beampeak, dB	18
Steered 0° Horizontal Sidelobe, dB	12
Steered 30° Gain, dBi (max)	21.8
Steered 30° Gain tolerance, dBi	±0.6
Steered 30° Gain, dBi	21
Steered 30° Beamwidth, Horizontal, degree	22.2
Steered 30° CPR at beampeak, dB	18
Steered 30° Horizontal Sidelobe, dB	10

Electrical specification, Soft Split	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	21.8
Horizontal beamwidth (HBW), degrees ¹	32
First upper side lobe (USLS) suppression, dB ¹	15

Beamforming weighting table available upon request

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	32.0/ 11.6/ 4.53 (812.8/ 295/ 115)
Shipping dimensions length/width/height, inches (mm)	37.0/ 16.9/ 11.8 (939.8/ 430/ 300)
No. of RF input ports, connector type, and location	8 x 4.3-10 female, bottom
Calibration interface port, connector type, and location	1 x 4.3-10 female, bottom
RF connector torque	96 lbf-in (10.85 N·m or 8 lbf-ft)
Net antenna weight, lb (kg)	23.2 (10.52)
Weight with supplied pipe mount bracket, lb (kg)	26.5 (12.02)
Shipping weight, lb (kg)	49.1 (22.27)
Rated wind survival speed, mph (km/h)	56.9 (253.1). 10.9 (48.5)
Frontal and lateral wind loading @ 150 km/h, lbf (N)	56.9
EPA frontal and lateral, ft ² , (m ²)	2.6 (0.24), 0.5 (0.05)



Ordering information	
Antenna model	Description
MX08FIT265-01	32-inch 8T8R beamforming antenna, 3700-4200 MHz with RET
Mounting kit (included)	91900330 BRACKET KIT, range of mechanical up/down tilt -2° to 12°
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9 or RF port Bias-T
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	1 pair of AISG male/female connectors and 1 RF port Bias-T
RET interface connector location	Bottom of the antenna
Total no. of internal RETs	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET and RF connector topology

Each RET device can be controlled either via the designated external AISG connector or RF port as shown below:

RET device	Band	RF port
1	3700-4200	1-8



Array topology

1 set of radiating arrays
P1: 3700-4200 MHz

Band	RF port
3700-4200	1-8



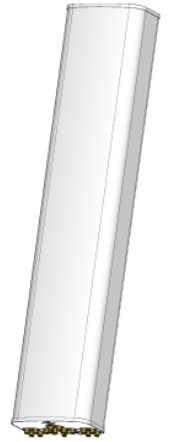
MX14FIT665-01

NWAV™ X-Pol 14-Port Antenna

X-Pol 14-Port 6 ft, 65° Form in Tighter with Smart Bias Ts, 698-4200 MHz:

2 ports 698-894 MHz, 4 ports 1695-2180 MHz, and 8 ports 3700-4200 MHz

- Combination of Hex Port Antenna with integrated 5G 3.5 GHz 8T8R beamforming capability
- Optimized antenna array design for all 3.5 GHz beamforming combinations
- Maintains existing low and mid band RF performance
- New optimized form factor for reduced wind loading
- Lower antenna weight with new Integrated RF distribution design
- Excellent passive intermodulation (PIM) performance reduces harmful interference.
- Fully integrated internal (iRETs) with SBT for independent RET control on all bands




Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180
Polarization	± 45°		± 45°		
Gain over all tilts, dBi	14.4	15.0	17.3	17.7	18.0
Horizontal beamwidth (HBW), degrees ¹	66	62	66	63.0	58.0
Front-to-back ratio, @180°, dB	>26.0	>27.0	>28.0	>26.0	>25.0
X-Pol discrimination (CPR) at boresight, dB	>20.0	>18.0	>19.0	>17.0	>17.0
Vertical beamwidth (VBW), degrees ¹	14	12	5.7	5.3	4.8
Electrical downtilt (EDT) range, degrees	2-14		0-9		
First upper side lobe (USLS) suppression, dB ¹	≤-16.0	≤-16.0	≤-16.0	≤-16.0	≤-16.0
Cross-polar isolation, port-to-port, dB ¹	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Max input power per any port, watts	300		250		
Total composite power all ports (1-14), watts	1500				

¹ Typical value over frequency and tilt

Electrical specification (minimum/maximum)	Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	15.7
Horizontal beamwidth (HBW), degrees ¹	85
Horizontal beam width tolerance, degrees	±5
Front-to-back ratio, @180°, dB	27
Vertical beamwidth (VBW), degrees ¹	7.5
Vertical beam width tolerance, degrees	±0.3
Beam tilt, degrees	2-12
First upper side lobe (USLS) suppression, dB ¹	15
Coupling level, Amp, Antenna port to Cal port, dB	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±0.7
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.65
Coupler, max Phase Δ, Antenna port to Cal port, degrees	4
Cross-polar isolation, port-to-port, dB ¹	25
Isolation, Inter-band, dB	25
Max VSWR / return loss, dB	1.5 / -14.0
PIM, 3rd Order, 2 x 20 W, dBc	-145
Max input power per any port at 50 °C, watts	75

¹ Typical value over frequency and tilt

Electrical specification, Broadcast 65°	Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	21.2
Horizontal beamwidth (HBW), degrees ¹	65
Horizontal beamwidth tolerance, degrees	±4
Vertical beamwidth (VBW), degrees ¹	7.5
Vertical beamwidth tolerance, degrees	±0.3
First upper side lobe (USLS) suppression, dB ¹	<-16

Electrical specification, Service Beam	Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz	3700-4200
Steered 0° gain, dBi	21.2
Steered 0° Gain tolerance, dBi	±0.6
Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° CPR at beampeak, dB	18
Steered 0° Horizontal Sidelobe, dB	12
Steered 30° Gain, dBi (max)	20.5
Steered 30° Gain tolerance, dBi	±0.6
Steered 30° Gain, dBi	20.7
Steered 30° Beamwidth, Horizontal, degree	22
Steered 30° CPR at beampeak, dB	18
Steered 30° Horizontal Sidelobe, dB	10

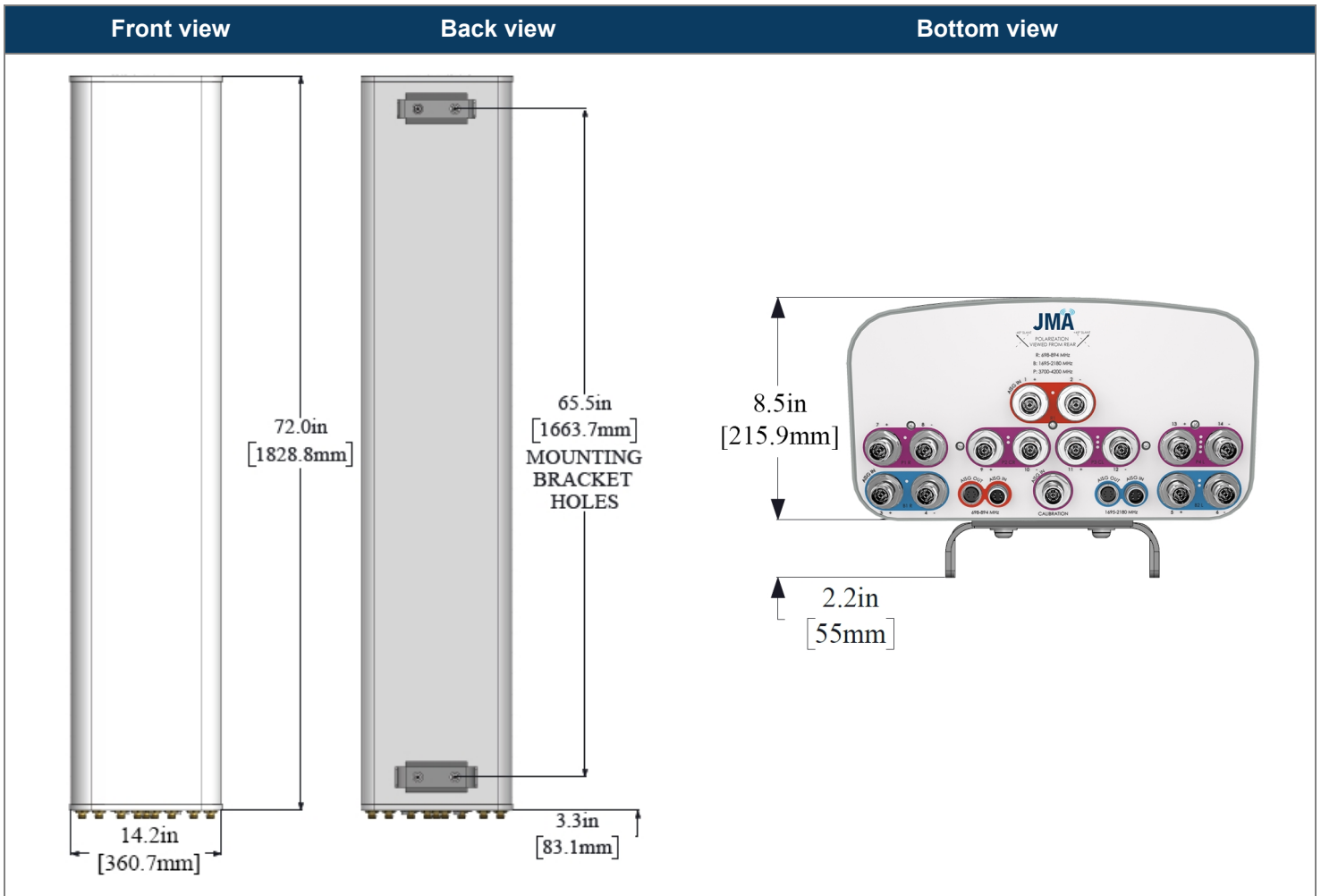
Electrical specification, Soft Split	Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	19.8
Horizontal beamwidth (HBW), degrees ¹	33
First upper side lobe (USLS) suppression, dB ¹	15

Beamforming weighting table available upon request

Ordering information	
Antenna model	Description
MX14FIT665-01	6F X-Pol 14 Port FIT 65° 2-14°/ 0-9°/ 2-12° RET, 4.3-10 & SBT
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations
91900314-03	Dual Mount Bracket (see 91900314 bracket document for details)

Mechanical specifications

Dimensions height/width/depth, inches (mm)	72.0/ 14.2/ 8.5 (1828.8/ 360.7/ 215.9)
Shipping dimensions length/width/height, inches (mm)	82/ 20/ 15 (2082.8/ 508/ 381)
No. of RF input ports, connector type, and location	14 x 4.3-10 female, bottom
Calibration interface port, connector type & location	1 x 4.3-10 female, bottom
RF connector torque	96 lbf-in (10.85 N·m or 8 lbf-ft)
Net antenna weight, lb (kg)	63 (28.57)
Shipping weight, lb (kg)	101 (45.81)
Antenna mounting and downtilt kit included with antenna	91900318
Net weight of the mounting and downtilt kit, lb (kg)	18 (8.18)
Range of mechanical up/down tilt	-2° to 12°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal and lateral wind loading @ 150 km/h, lbf (N)	67.0 (298.3), 28.1 (124.9)
EPA frontal and lateral, ft ² , (m ²)	3.0 (0.28), 1.3 (0.12)

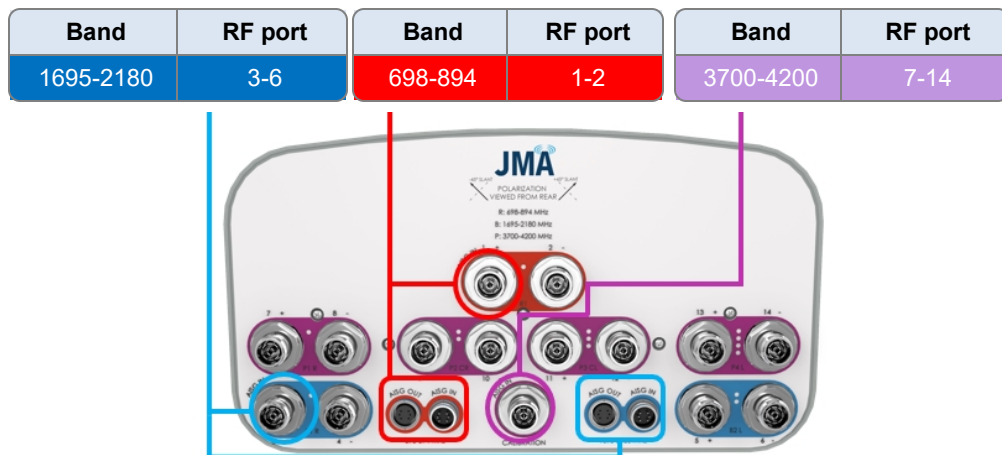


Remote electrical tilt (RET 1000) information

RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9 or RF port bias-t
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors and 3 RF port bias-ts
RET interface connector location	Bottom of the antenna
Total no. of internal RETs 698-894 MHz	1
Total no. of internal RETs 1695-2180 MHz	1
Total no. of internal RETs 3700-4200 MHz	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET and RF connector topology

The R1 and B1/B2 RET devices can be controlled via either the designated external AISG connectors or the RF smart bias-t ports. The P1 RET devices can be controlled via the RF smart bias-t port only as shown below:

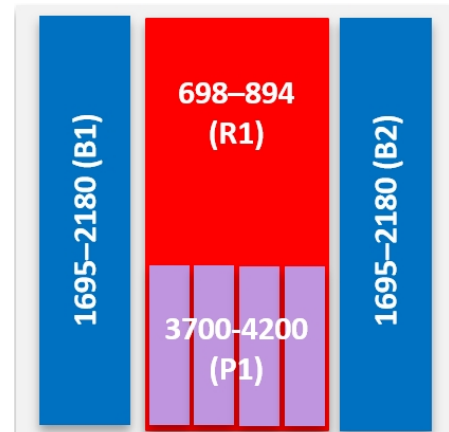


Array topology

4 sets of radiating arrays

R1: 698-894 MHz
 B1: 1695-2180 MHz
 B2: 1695-2180 MHz
 P1: 3700-4200 MHz

Band	RF port
698-894	1-2
1695-2180	3-4
1695-2180	5-6
3700-4200	7-14



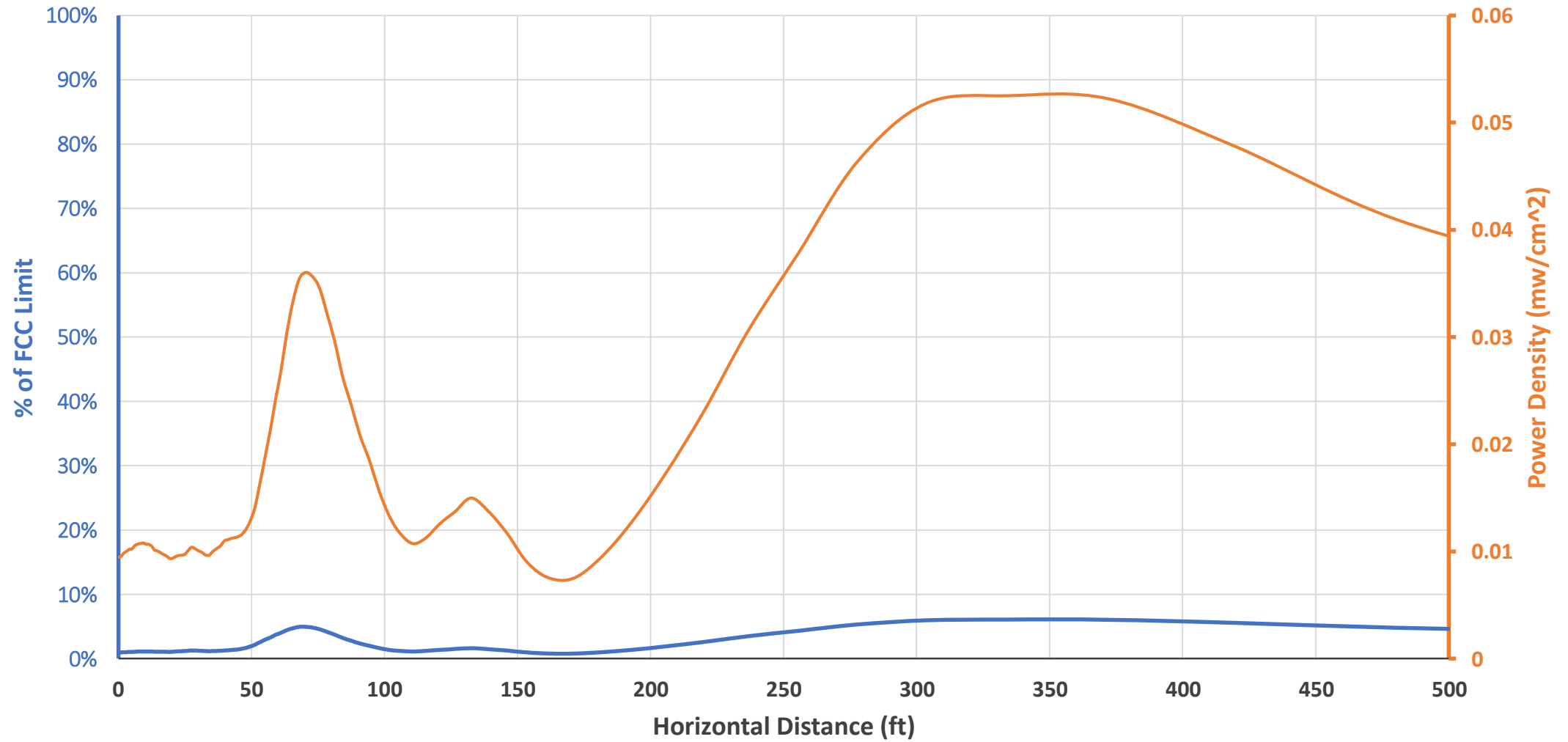
ATTACHMENT 3

Location	MERIDEN 5 CT				
Date	6/20/2022				
Band	C-Band	AWS	PCS	850-LTE	700
Operating Frequency (MHz)	3,700	2,145	1,970	880	746
General Population MPE (mW/cm ²)	1	1	1	0.586666667	0.497333333
ERP Per Transmitter (Watts)	21,627	1,678	3,054	881	922
Number of Transmitters	1	4	4	4	4
Antenna Centerline (feet)	71	71	71	71	71
Total ERP (Watts)	21,627	6,712	12,216	3,523	3,688
Total ERP (dBm)	73	68	71	65	66
Maximum % of General Population Limit	6.1%				

RF Exposure 6ft Above Ground Level Far Field Formula (per FCC OET65)

— Total %
General
Pop MPE

— Total
Pwr Density
(mW/cm²)



24	0.012407146	0.000860058	0.000175632	0.001082764	0.000451301	0.00%	0.00%	1.24%	0.00%	0.09%	0.02%	0.18%	0.00%	0.09%	132.5161697	0.014976901	1.62%
23	0.010713889	0.001320696	0.000417715	0.00097906	0.000331697	0.00%	0.00%	1.07%	0.00%	0.13%	0.04%	0.17%	0.00%	0.07%	138.9952896	0.013763056	1.48%
22	0.008193183	0.001567864	0.000944899	0.000804109	0.000184182	0.00%	0.00%	0.82%	0.00%	0.16%	0.09%	0.14%	0.00%	0.04%	146.0301244	0.011694237	1.24%
21	0.004742793	0.001373693	0.002177544	0.000613615	5.468E-05	0.00%	0.00%	0.47%	0.00%	0.14%	0.22%	0.10%	0.00%	0.01%	153.7002548	0.008962325	0.94%
20	0.001881546	0.000828649	0.004349582	0.000424988	6.00219E-07	0.00%	0.00%	0.19%	0.00%	0.08%	0.43%	0.07%	0.00%	0.00%	162.1011677	0.007485365	0.78%
19	0.000158377	0.000255004	0.006708475	0.000328513	7.35336E-05	0.00%	0.00%	0.02%	0.00%	0.03%	0.67%	0.06%	0.00%	0.01%	171.3484418	0.007523902	0.78%
18	0.00050272	3.17821E-05	0.008361016	0.000276814	0.000317776	0.00%	0.00%	0.05%	0.00%	0.00%	0.84%	0.05%	0.00%	0.06%	181.5833287	0.009490108	1.00%
17	0.003343057	0.000242661	0.008223876	0.000197245	0.000749788	0.00%	0.00%	0.33%	0.00%	0.02%	0.82%	0.03%	0.00%	0.15%	192.9803045	0.012756627	1.37%
16	0.0085274	0.000623264	0.006378952	0.000375559	0.001395119	0.00%	0.00%	0.85%	0.00%	0.06%	0.64%	0.06%	0.00%	0.28%	205.7574522	0.017300295	1.90%
15	0.015522252	0.000852728	0.003722952	0.00083333	0.00219154	0.00%	0.00%	1.55%	0.00%	0.09%	0.37%	0.14%	0.00%	0.44%	220.1909976	0.023122801	2.59%
14	0.023882929	0.000781526	0.001390018	0.001389792	0.003110873	0.00%	0.00%	2.39%	0.00%	0.08%	0.14%	0.24%	0.00%	0.63%	236.6360751	0.030555137	3.47%
13	0.030948548	0.0006173	0.000219065	0.002044101	0.00398506	0.00%	0.00%	3.09%	0.00%	0.06%	0.02%	0.35%	0.00%	0.80%	255.5570766	0.037814075	4.33%
12	0.038273649	0.000565921	3.49006E-05	0.002708707	0.004706461	0.00%	0.00%	3.83%	0.00%	0.06%	0.00%	0.46%	0.00%	0.95%	277.5731765	0.046289639	5.30%
11	0.042458767	0.000600929	0.00015449	0.003227227	0.005355031	0.00%	0.00%	4.25%	0.00%	0.06%	0.02%	0.55%	0.00%	1.08%	303.5286869	0.051796444	5.95%
10	0.042627179	0.000498359	0.000106566	0.003694441	0.005590894	0.00%	0.00%	4.26%	0.00%	0.05%	0.01%	0.63%	0.00%	1.12%	334.6056274	0.052517439	6.08%
9	0.042612338	0.000222531	3.36874E-05	0.003867208	0.005461727	0.00%	0.00%	4.26%	0.00%	0.02%	0.00%	0.66%	0.00%	1.10%	372.5113394	0.052197492	6.04%
8	0.038410726	2.11986E-05	0.000485719	0.003769768	0.005084487	0.00%	0.00%	3.84%	0.00%	0.00%	0.05%	0.64%	0.00%	1.02%	419.8068136	0.047771899	5.56%
7	0.030870851	0.000263879	0.001784355	0.003559678	0.004480673	0.00%	0.00%	3.09%	0.00%	0.03%	0.18%	0.61%	0.00%	0.90%	480.5164393	0.040959436	4.80%
6	0.024355229	0.000973751	0.003455612	0.003009223	0.003617319	0.00%	0.00%	2.44%	0.00%	0.10%	0.35%	0.51%	0.00%	0.73%	561.3475028	0.035411133	4.12%
5	0.016750339	0.001741323	0.004580958	0.002349015	0.002696611	0.00%	0.00%	1.68%	0.00%	0.17%	0.46%	0.40%	0.00%	0.54%	674.3730859	0.028118245	3.25%
4	0.010253065	0.002030997	0.004444127	0.001650881	0.001809874	0.00%	0.00%	1.03%	0.00%	0.20%	0.44%	0.28%	0.00%	0.36%	843.7393091	0.020188944	2.32%
3	0.005351583	0.001653248	0.003224148	0.000973519	0.001042982	0.00%	0.00%	0.54%	0.00%	0.17%	0.32%	0.17%	0.00%	0.21%	1125.787065	0.01224548	1.40%
2	0.002021442	0.000844339	0.001536718	0.000443122	0.000463934	0.00%	0.00%	0.20%	0.00%	0.08%	0.15%	0.08%	0.00%	0.09%	1689.538944	0.005309556	0.61%
1	0.000410978	0.000201685	0.000350551	0.000108313	0.0001134	0.00%	0.00%	0.04%	0.00%	0.02%	0.04%	0.02%	0.00%	0.02%	3380.107736	0.001184927	0.14%

ATTACHMENT 4

July 7, 2022

Andrew Leone
Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492**Re: Meriden 5 CT – Britannia Commons Rev # 2**
Site ID: 468015
Fuze #: 16227628
234 Sherman Avenue
Meriden, CT 06450

Dear Mr. Leone:

Verizon Wireless has proposed to replace six (6) antennas and nine (9) RRHs with two (2) new JMA Wireless MX08FIT265-01 antennas, three (3) new JMA Wireless MX10FIT665-xx antennas, one (1) new JMA Wireless MX14FIT665-01 antenna, two (2) new Commscope SDX1926Q-43 diplexers, three (3) new Samsung RF4439d-25A RRHs, three (3) new Samsung RF4440d-13A RRHs and three (3) new Samsung RT-8808-77A RRHs at the above referenced site. Verizon also has three (3) 6-OVP junction boxes that are to remain. The proposed panel antennas will be mounted inside the existing fiberglass false chimneys located above the existing building's roof. The remote radio units will be mounted to the existing timber truss in the building attic.

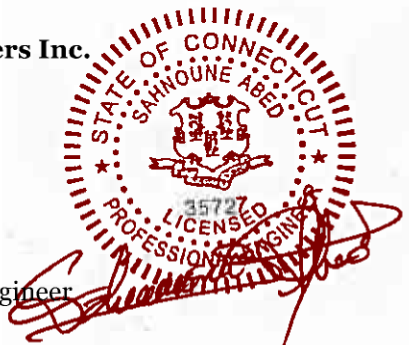
Pursuant to 2015 International Existing Building Code Sections 707, 807 and 1206, the proposed Verizon Wireless equipment does not increase design lateral loads or decreases the capacity of any existing lateral load carrying structural elements. Our calculations demonstrate that the addition of the proposed equipment represents less than a 5% increase of gravity loads. The proposed addition of new equipment in existing false chimneys have sufficient capacity (Utilization Ratio = 25%) to support the proposed installation. Based on code requirements and supporting calculations, it has been determined that the existing structure, faux chimneys and antenna mounts have adequate capacity to support the proposed equipment configuration. Dewberry assumes that the proposed equipment is installed per latest associated construction drawings.

This assessment is based our on visual inspection that the existing structure and the existing fiberglass false chimneys appear to be in good condition and were constructed in conformance with all applicable state and local building codes. If, during construction, any damage, deterioration, and/or discrepancies are noticed, Dewberry is to be notified to assess any deviation from the assumed condition. Any alteration in equipment loading described above and on the associated plans will void any conclusions expressed herein and will require further analysis and design. No structural qualification is made or implied by this structural letter for existing structural members not supporting the proposed installation.

If you have any questions, please do not hesitate to call me at 617-531-0810.

Sincerely,
Dewberry Engineers Inc.

Sahnoune Abed, P.E.
Structural Project Engineer



Meriden 5 CT - Chimney and Equipment Weight Estimation

Codes / Standards / References

- 2018 Connecticut State Building Code – Amendments to IBC 2015
- TIA-222-G
- ASCE 7-10
- AISC 14th Ed.
- RFDS dated 06/02/22
- Structural Analysis Report by Dewberry Engineers, Inc. dated 11/22/16
- Latest Construction Drawings by Dewberry Engineers, Inc

Design & Analysis Assumptions

- Proposed antennas will be mounted in existing fiberglass chimneys.
- Proposed RRHs will be mounted in existing timber truss in building attic.
- Analysis only considers dead load since all proposed equipment will be shielded from wind loads.
- Existing fiberglass chimneys are assumed to be installed correctly and in good condition.

Gamma chimney considered as worst-case scenario for false-chimney comparison

- Alpha/Beta Equipment Weight:
 - Existing antennas:
(4) SBNHH-1D65B antennas = 40.6 lbs. * 4 = 162.4 lbs.
 - Proposed antennas:
(2) MX08FIT265-01 antennas = 23.2 lb. * 2 = 46.4 lbs.
(2) MX10FIT665-01 antennas = 53.4 lb. * 2 = 106.8 lbs.
Total Weight = 153.2 lbs. (Decrease)
- Gamma Equipment Weight:
 - Existing antennas:
(2) SBNHH-1D65B antennas = 40.6 lbs. * 2 = 81.2 lbs.
 - Proposed antennas:
(1) MX10FIT665-01 antennas = 53.4 lb. * 1 = 46.4 lbs.
(1) MX14FIT665-01 antennas = 63.0 lb. * 1 = 63.0 lbs.
Total Weight = 109.4 lbs. (Increase)
- Existing Chimney Weight (Per Chimney): *(Per Structural Analysis by Dewberry dated 11/22/16)*
 - Chimney Enclosure Screening = 1,237.5 lbs.
 - Chimney Enclosure Framing = 1,500.0 lbs.
 - Mount & Antenna Framing = 300.0 lbs.
 - Total Weight = 3,037.5 lbs. (No change)

Worst-case false chimney weight comparison

- Existing configuration: 3,037.5 lbs. + 81.2 lbs. = 3,118.7 lbs.
- Proposed configuration: 3,037.5 lbs. + 109.4 lbs. = 3,146.9 lbs.
Weight Increase = 28.2 lbs.
- Compare to existing equipment: 28.2 lbs. / 3,118.7 lbs. = 0.009 * 100 = 0.9
Percent Increase = 0.9% < 5% (OK)

All equipment considered as for overall building comparison

- Total Weight:
 - Existing antennas:
 - (6) SBNHH-1D65B antennas = 40.6 lbs. * 6 = 243.6 lbs.
 - Proposed antennas:
 - (2) MX08FIT265-01 antennas = 23.2 lb. * 2 = 46.4 lbs.
 - (3) MX10FIT665-01 antennas = 53.4 lb. * 3 = 160.2 lbs.
 - (1) MX14FIT665-01 antennas = 63.0 lb. * 1 = 63.0 lbs.

Total Weight = 269.6 lbs. (Increase)

- Existing RRH equipment:
 - (3) B13 RRH 4x30 = 57.2 lbs. * 3 = 171.6 lbs.
 - (3) B25 RRH 4x30 = 53.0 lbs. * 3 = 159.0 lbs.
 - (3) B4 RRH 2x60 = 55.0 lbs. * 3 = 165.0 lbs.

Total Weight = 495.6 lbs.

- Proposed RRH equipment:
 - (3) RT-8808-77A RRH = 59.5 lbs. * 3 = 178.5 lbs.
 - (3) RF4440d-13A RRH = 70.3 lbs. * 3 = 210.9 lbs.
 - (3) RF4439d-25A RRH = 74.7 lbs. * 3 = 224.1 lbs.

Total Weight = 613.5 lbs. (Increase)

- Existing Chimney Weight (Total): *(Per Structural Analysis by Dewberry dated 11/22/16)*
 - Chimney Enclosure Screening = 1,237.5 lbs. * 2 = 2,475.0 lbs.
 - Chimney Enclosure Framing = 1,500.0 lbs. * 2 = 3,000.0 lbs.
 - Mount & Antenna Framing = 300.0 lbs. * 2 = 600.0 lbs.

Total Weight = 6,075.0 lbs. (No change)

All equipment weight comparison

- Existing configuration: 6,075.0 lbs. + 243.6 lbs. + 495.6 lbs. = 6,814.2 lbs.
- Proposed configuration: 6,075.0 lbs. + 269.6 lbs. + 613.5 lbs. = 6,958.1 lbs.

Weight Increase = 143.9 lbs.

- Compare to existing equipment: 143.9 lbs. / 6,814.2 lbs. = 0.0211 * 100 = 2.11

Percent Increase = 2.11% < 5% (OK)



Job Number 50150884
 Made by: AMD
 Date: 06/23/22
 Checked by: SA
 Date: 06/24/22

(Meriden 5 CT) - Design Wind Load

\\bos-fs\Boston\Projects\50121487\50150884 - Meriden 5 CT\Engineering\Structural\Rev.2\Calcs\Rooftop Mount SA Loading STAAD XX- V1.0

Wind Load Design Criteria

Site Name: Meriden 5 CT

General Information & Design Input from ASCE 7-10

Item	Value	Description	Reference
V =	125.00	Design Wind Speed (mph)	2018 Connecticut State Building Code
K _d =	0.95	Wind Directionality Factor	Table 26.6-1
Risk Cat.	II	Risk Category	Table 1.5-1
I =	1.00	Importance Factor (Without Ice)	Table 1.5-2
z = h =	80.00	ft. (A.G.L.)	Max. Center of Appurtenance
Exp. Cat.	B	Exposure Category	Sect. 26.7.3
Z _g =	1200.00	Terrain Exposure Constant	Table 26.9-1
α =	7.00	Terrain Exposure Constant	Table 26.9-2
K _z =	0.93	Velocity Pressure Coefficient	Table 29.3-1
Topo. Cat.	1	Topographic Feature	Sect. 26.8.1
e =	2.72	Natural Logarithmic base	
γ =	N/A	Height attenuation Factor	
L _h =	N/A	Distace upwind of crest	
H =	N/A	ft. Height of crest above surrounding terrain	
K ₁ =	N/A	Topographic Multiplier	Figure 26.8-1
K ₂ =	N/A	Topographic Multiplier	Figure 26.8-1
K ₃ =	N/A	Topographic Multiplier	Figure 26.8-1
K _{zt} =	1.00	$= (1+K_1K_2K_3)^2$	Sect. 26.8.2
G =	0.85	Gust Effect Factor	Sect. 26.9.1
q _{z design} =	35.3 psf	$= 0.00256(K_z)(K_{zt})(K_d)(V^2)$	Sect.29.3.2

Design Wind Forces:

Section 29.5

$$F_A = q_{z \text{ design}} G C_f A_f$$
 (see calculation tables on following pages)

(where $A_f = (EPA)_A = \text{effective projected area of the appurtenance}$)



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CONNECTED User: Ashley Deuschle

Job No 50067831	Sheet No 1	Rev 2
Part Alpha/Beta Sector Enclosure		
Ref		
By AMD	Date 6/24/2022	Chd SA
Client Verizon Wireless	File Meriden 5 - AB Framing.s	Date/Time 24-Jun-2022 13:22

Job Information

	Engineer	Checked	Approved
Name:	AMD	SA	
Date:	6/24/2022	6/24/2022	

Project ID	
Project Name	

Structure Type	SPACE FRAME
----------------	-------------

Number of Nodes	28	Highest Node	28
Number of Elements	24	Highest Beam	24
Number of Plates	4	Highest Plate	28

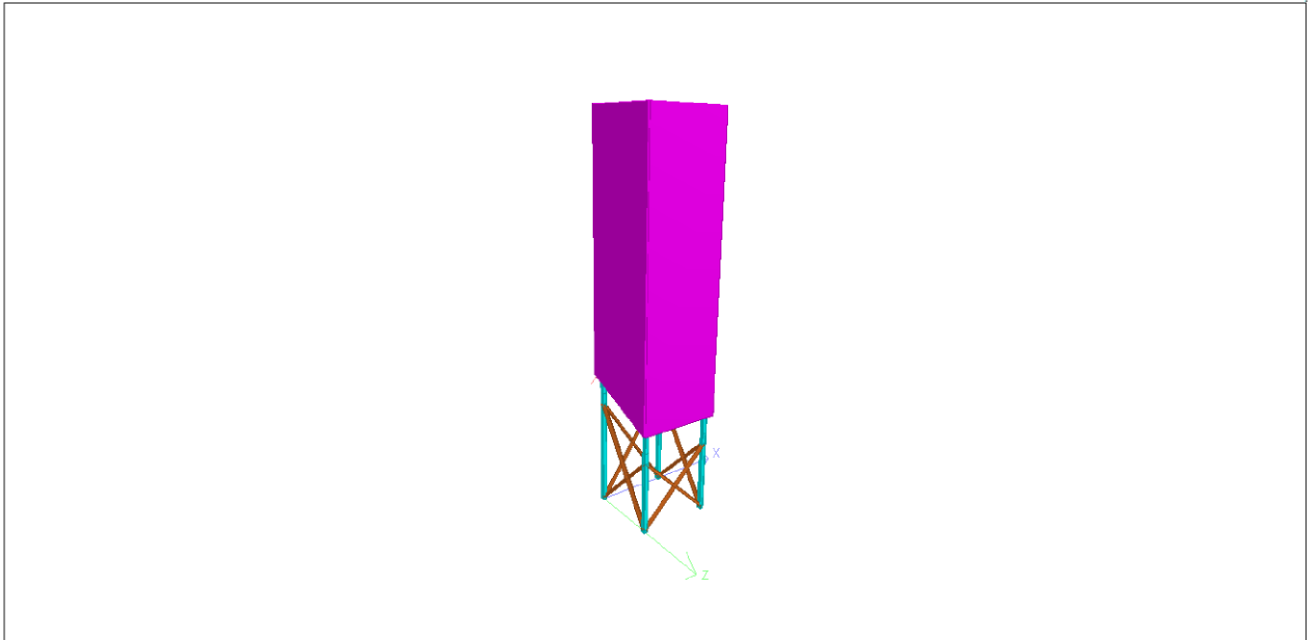
Number of Basic Load Cases	4
Number of Combination Load Cases	3

Included in this printout are data for:

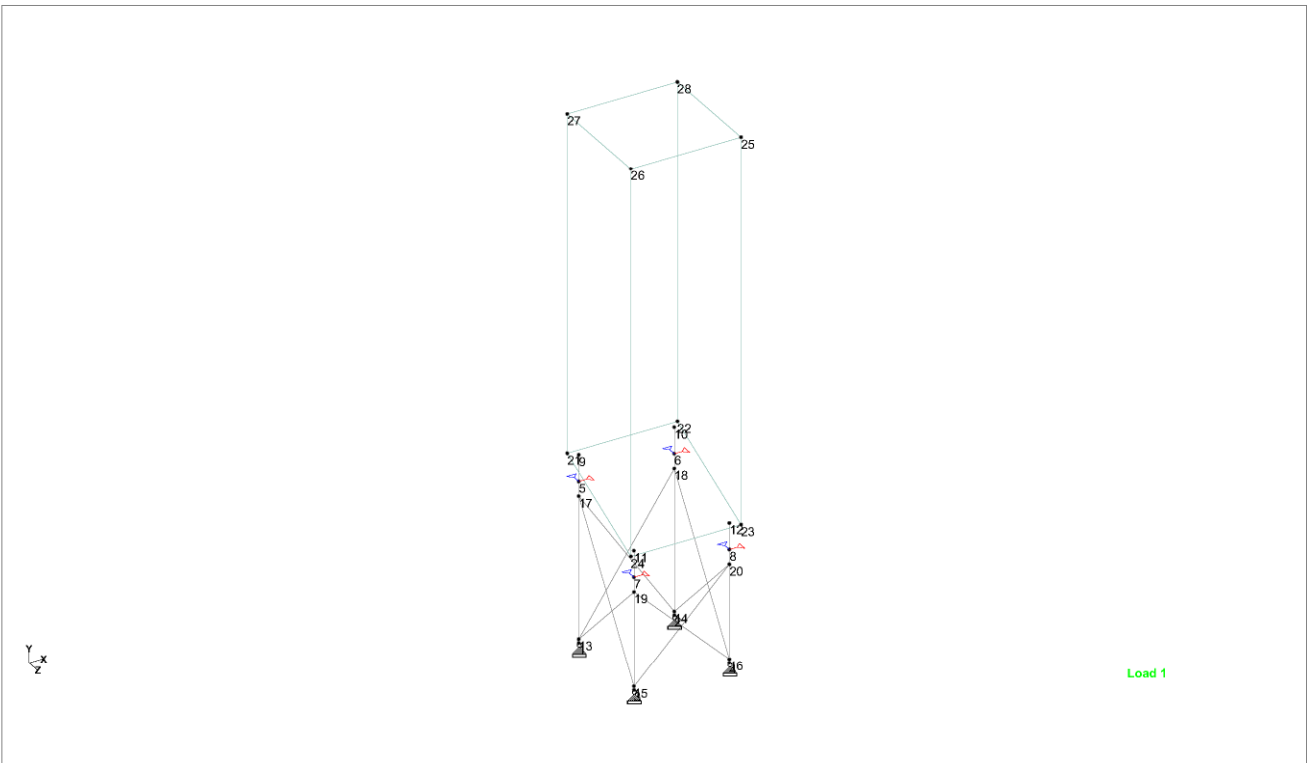
All	The Whole Structure
-----	---------------------

Included in this printout are results for load cases:

Type	L/C	Name
Primary	1	DEAD
Primary	2	WIND(X)
Primary	3	WIND(Z)
Primary	6	WIND(-Z)
Combination	4	D+0.6W(X)
Combination	5	D+0.6W(Z)
Combination	7	D+0.6W(-Z)



3D Rendered View



Node Numbers



Beam Numbers

Plates

Plate	Node A	Node B	Node C	Node D	Property
25	21	27	26	24	1
26	21	27	28	22	1
27	28	25	23	22	1
28	26	25	23	24	1

Section Properties

Prop	Section	Area (in ²)	I _{yy} (in ⁴)	I _{zz} (in ⁴)	J (in ⁴)	Material
2	L25253	0.901	0.876	0.220	0.011	STEEL
3	HSST3X3X0.25	2.440	3.020	3.020	4.936	STEEL

Plate Thickness

Prop	Node A (in)	Node B (in)	Node C (in)	Node D (in)	Material
1	2.000	2.000	2.000	2.000	FIBERGLASS



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CONNECTED User: Ashley Deuschle

Job No 50067831	Sheet No 4	Rev 2
Part Alpha/Beta Sector Enclosure		
Ref		
By AMD	Date 6/24/2022	Chd SA
Client Verizon Wireless	File Meriden 5 - AB Framing.s	Date/Time 24-Jun-2022 13:22

Materials

Mat	Name	E (kip/in ²)	v	Density (kip/in ³)	α (/°F)
1	STEEL	29E+3	0.300	0.000	6E -6
2	CONCRETE	3.15E+3	0.170	8.68e-05	5.5E -6
3	ALUMINUM	10E+3	0.330	9.8e-05	12.8E -6
4	STAINLESSSTEEL	28E+3	0.300	0.000	9.9E -6
5	STEEL_36_KSI	29E+3	0.300	0.000	6.5E -6
6	STEEL_50_KSI	29E+3	0.300	0.000	6.5E -6
7	STEEL_275_NMM2	29.7E+3	0.300	0.000	6.67E -6
8	STEEL_355_NMM2	29.7E+3	0.300	0.000	6.67E -6
9	Q235	29.9E+3	0.300	0.000	6.67E -6
10	Q345	29.9E+3	0.300	0.000	6.67E -6
11	Q355	29.9E+3	0.300	0.000	6.67E -6
12	Q390	29.9E+3	0.300	0.000	6.67E -6
13	Q420	29.9E+3	0.300	0.000	6.67E -6
14	Q460	29.9E+3	0.300	0.000	6.67E -6
15	TIMBER	1.5E+3	0.150	0.000	3E -6
16	FIBERGLASS	2.8E+3	0.350	0.000	4.400

Supports

Node	X (kip/in)	Y (kip/in)	Z (kip/in)	rX (kip ft/deg)	rY (kip ft/deg)	rZ (kip ft/deg)
1	Fixed	Fixed	Fixed	-	-	-
2	Fixed	Fixed	Fixed	-	-	-
3	Fixed	Fixed	Fixed	-	-	-
4	Fixed	Fixed	Fixed	-	-	-
5	Fixed	-	Fixed	-	-	-
6	Fixed	-	Fixed	-	-	-
7	Fixed	-	Fixed	-	-	-
8	Fixed	-	Fixed	-	-	-

Releases

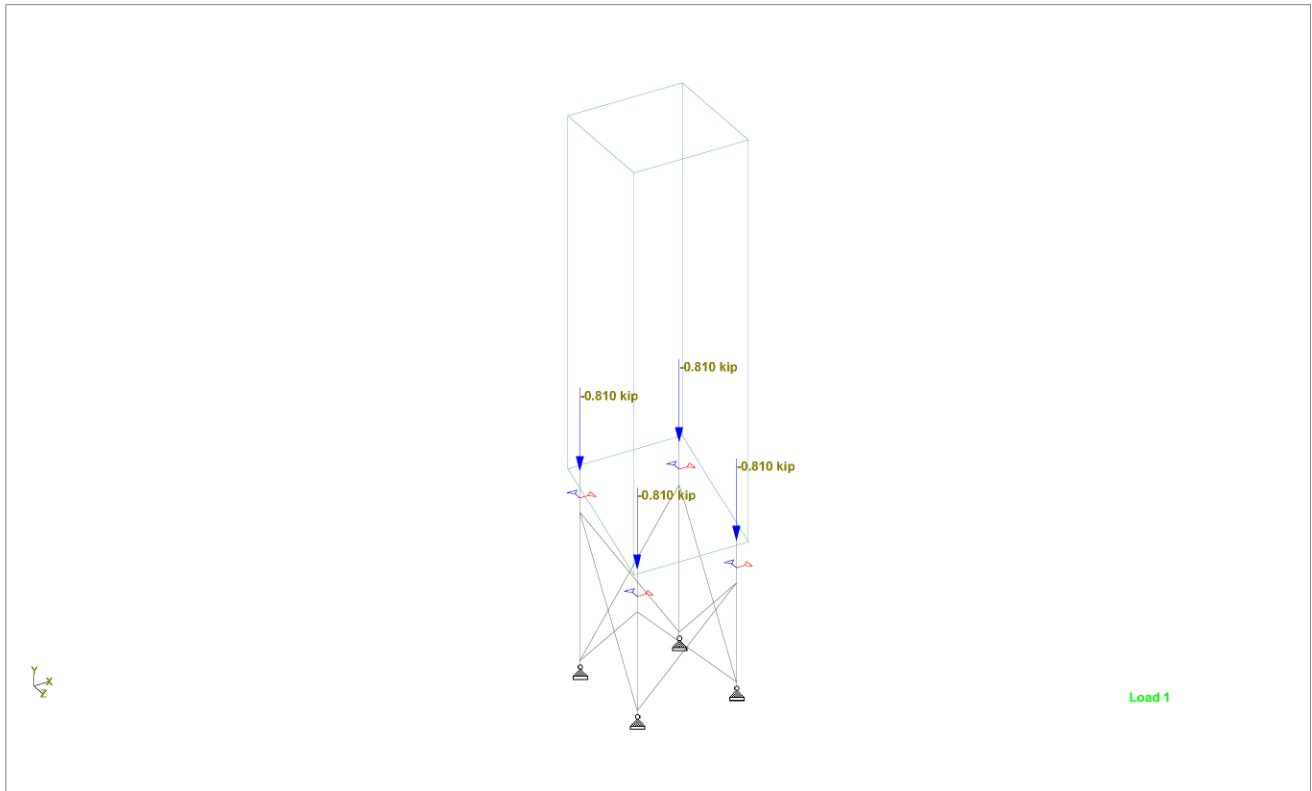
There is no data of this type.

Primary Load Cases

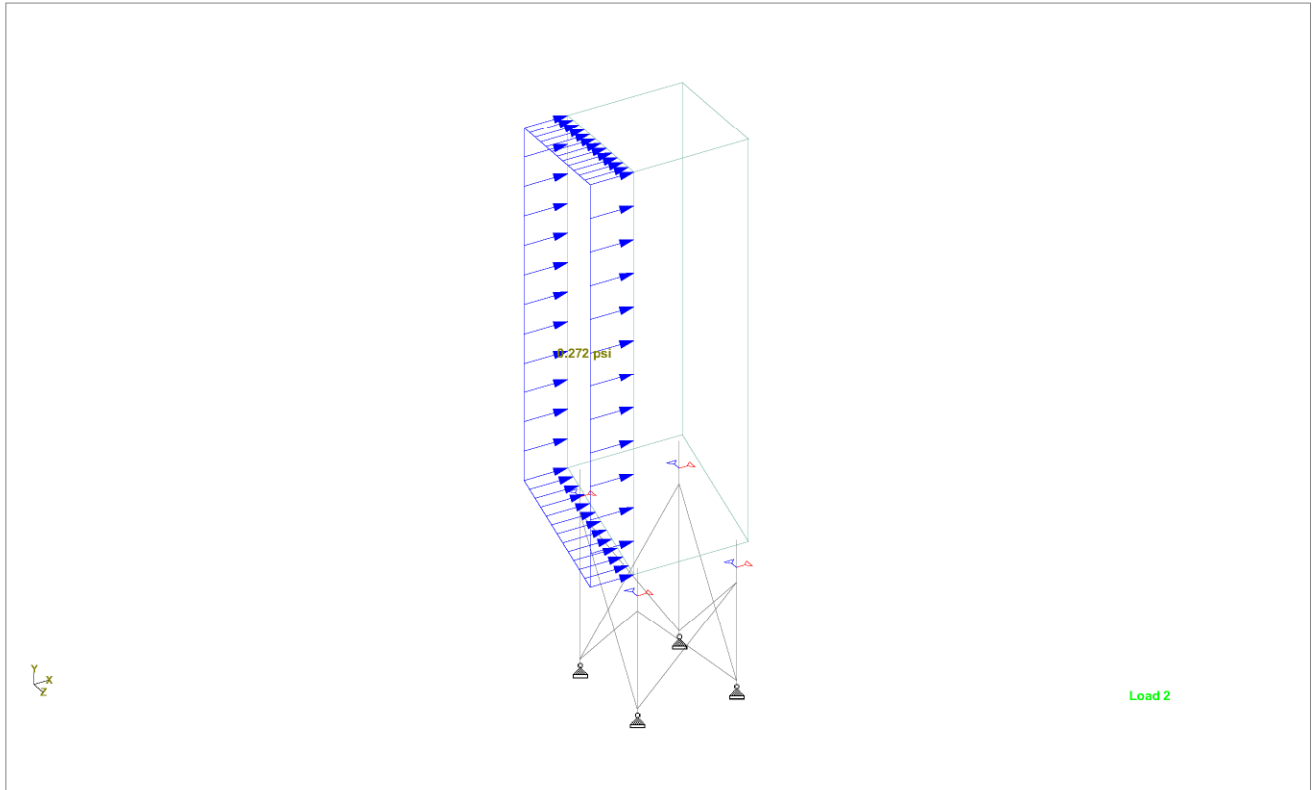
Number	Name	Type
1	DEAD	Dead
2	WIND(X)	Wind
3	WIND(Z)	Wind
6	WIND(-Z)	Wind

Combination Load Cases

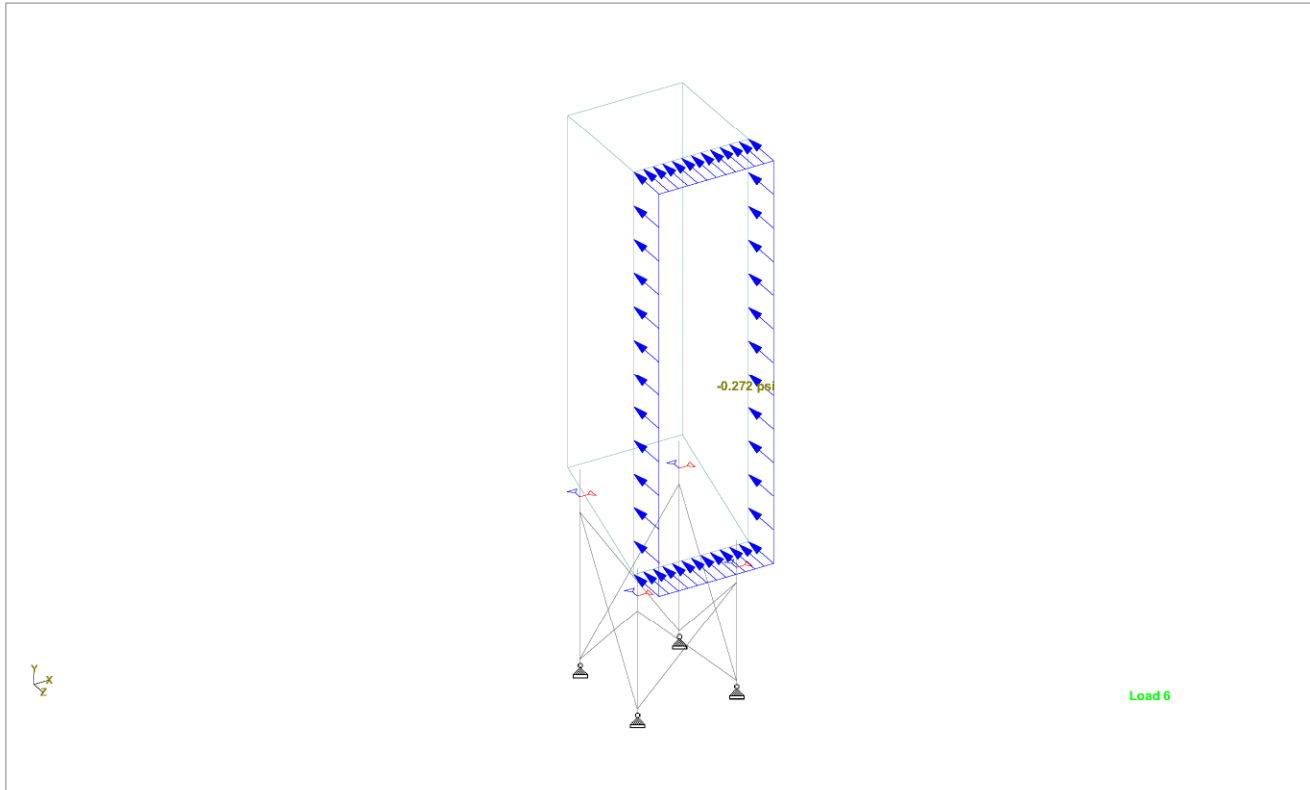
Comb.	Combination L/C Name	Primary	Primary L/C Name	Factor
4	D+0.6W(X)	1	DEAD	1.00
		2	WIND(X)	0.60
5	D+0.6W(Z)	1	DEAD	1.00
		3	WIND(Z)	0.60
7	D+0.6W(-Z)	1	DEAD	1.00
		6	WIND(-Z)	0.60



Dead Load



Wind Load (Typ.)



Wind Load (Typ.)

Utilization Ratio

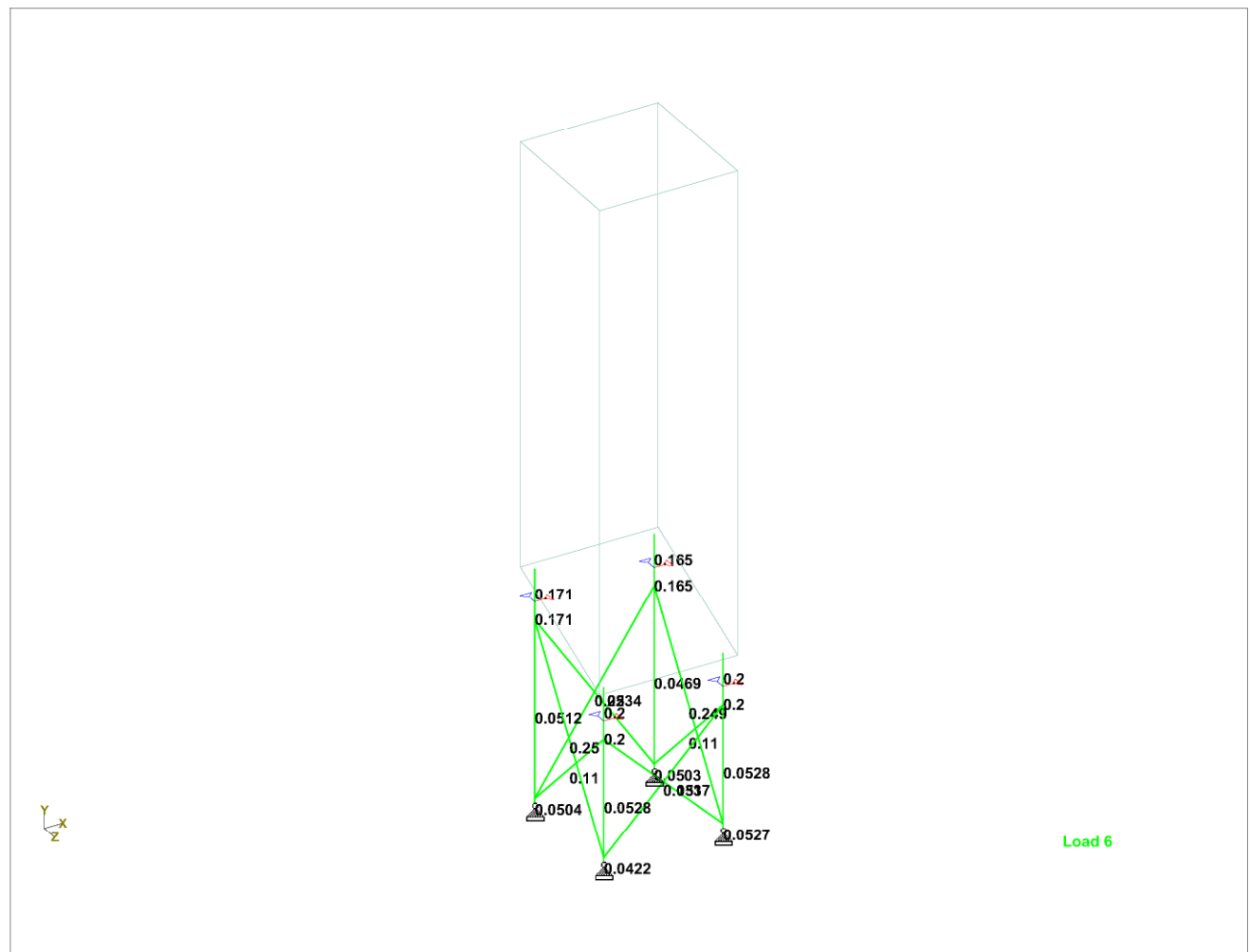
Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in ²)	Iz (in ⁴)	Iy (in ⁴)	Ix (in ⁴)
1	HSST3X3	HSST3X3	0.050	1.000	0.050	Sec. G1	6	2.440	3.020	3.020	5.080
2	HSST3X3	HSST3X3	0.050	1.000	0.050	Sec. G1	6	2.440	3.020	3.020	5.080
3	HSST3X3	HSST3X3	0.042	1.000	0.042	Sec. G1	3	2.440	3.020	3.020	5.080
4	HSST3X3	HSST3X3	0.053	1.000	0.053	Sec. G1	2	2.440	3.020	3.020	5.080
5	HSST3X3	HSST3X3	0.171	1.000	0.171	Eq. H1-1b	2	2.440	3.020	3.020	5.080
6	HSST3X3	HSST3X3	0.200	1.000	0.200	Eq. H1-1b	6	2.440	3.020	3.020	5.080
7	HSST3X3	HSST3X3	0.165	1.000	0.165	Eq. H1-1b	3	2.440	3.020	3.020	5.080
8	HSST3X3	HSST3X3	0.200	1.000	0.200	Eq. H1-1b	6	2.440	3.020	3.020	5.080
9	HSST3X3	HSST3X3	0.051	1.000	0.051	Eq. H1-1b	2	2.440	3.020	3.020	5.080
10	HSST3X3	HSST3X3	0.047	1.000	0.047	Eq. H1-1b	6	2.440	3.020	3.020	5.080
11	HSST3X3	HSST3X3	0.053	1.000	0.053	Eq. H1-1b	6	2.440	3.020	3.020	5.080
12	HSST3X3	HSST3X3	0.053	1.000	0.053	Eq. H1-1b	6	2.440	3.020	3.020	5.080
13	HSST3X3	HSST3X3	0.171	1.000	0.171	Eq. H1-1b	2	2.440	3.020	3.020	5.080
14	HSST3X3	HSST3X3	0.165	1.000	0.165	Eq. H1-1b	3	2.440	3.020	3.020	5.080
15	HSST3X3	HSST3X3	0.200	1.000	0.200	Eq. H1-1b	6	2.440	3.020	3.020	5.080
16	HSST3X3	HSST3X3	0.200	1.000	0.200	Eq. H1-1b	6	2.440	3.020	3.020	5.080
17	L25253	L25253	0.110	1.000	0.110	Eq. H2-1	3	0.901	0.209	0.886	0.011
18	L25253	L25253	0.250	1.000	0.250	Eq. H2-1	6	0.901	0.209	0.886	0.011

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in ²)	Iz (in ⁴)	Iy (in ⁴)	Ix (in ⁴)
19	L25253	L25253	0.110	1.000	0.110	Eq. H2-1	3	0.901	0.209	0.886	0.011
20	L25253	L25253	0.249	1.000	0.249	Sec. E1	6	0.901	0.209	0.886	0.011
21	L25253	L25253	0.053	1.000	0.053	Eq. H2-1	2	0.901	0.209	0.886	0.011
22	L25253	L25253	0.220	1.000	0.220	Sec. E1	2	0.901	0.209	0.886	0.011
23	L25253	L25253	0.131	1.000	0.131	Eq. H2-1	2	0.901	0.209	0.886	0.011
24	L25253	L25253	0.054	1.000	0.054	Eq. H2-1	2	0.901	0.209	0.886	0.011

Failed Members

There is no data of this type.



Utilization Ratio



Project Details

FUZE Project ID: 16227628
Project Name: 5G L-Sub6 - Carrier Add
Project Alt Name: MERIDEN 5 CT - MKT 64 - MODIFICATION
Project Type: Modification
Modification Type: RF
Designed Sector Carrier 4G: 18
Designed Sector Carrier 5G: 3
Additional Sector Carrier 4G: N/A
Additional Sector Carrier 5G: N/A
FP Solution Type & Tech Type: MODIFICATION;4G_850,4G_Radio Swap,5G_850,5G_L-Sub6,5G_vDU add - Sub6
Carrier Aggregation: false
MPT Id:
eCIP-O: false
Suffix: REV1

Location Information

Site ID: 2994681
E-NodeB ID: 0649404,064392
PSLC: 468015
Switch Name: Wallingford 1
Tower Owner:
Tower Type: Rooftop
Site Type: MACRO
Site Sub Type: TRADITIONAL
Street Address: 234 Sherman Ave
City: Meriden
State: CT
Zip Code: 06450
County: New Haven
Latitude: 41.54795999 / 41° 32' 52.656" N
Longitude: -72.78446722 / 72° 47' 4.082" W

RFDS Project Scope: RFDS SOW: 850 5G NR/ L-SUB6 8T8R carrier add, Samsung dual band RRH swap, antenna change

REV1 (6/2/22): Updates Alpha/Beta LS6 C/L and removes Gamma SBS mount to match CDs

- 1- Retain 700/ AWS/ PCS carriers and add 850 5G NR/ L-SUB6 8T8R carriers
- 2- Replace (6) existing antennas with (3) new JMA MX10FIT665-01 antennas, (2) new JMA MX08FIT265-01 antennas (Alpha/Beta), and (1) new JMA MX14FIT665-01 antenna (Gamma) according to the plumbing diagram. Alpha/Beta antennas will be stacked where Gamma antennas will be on the same C/L. Note the new C/Ls in Alpha/Beta to get maximum height. All antennas will remain in existing chimneys
- 3- Replace (9) existing Nokia RRHs in attic with (3) new Samsung B5/B13 RRH- RF4440d-13A, (3) new Samsung B2/B66A RRH- RF4439d-25A, and (3) new Samsung RT8808-77A RRHs
- 4- Add (2) Commscope SDX1926Q-43 diplexers to attic (Alpha/ Beta)
- 5- Add (3) 1/2" coax from LS6 RRH to antenna for calibration
- 6- Plumb 700/ 850/ PCS/ AWS/ L-SUB6 according to the plumbing diagram
- 7- Use RF ports on dual band RRHs to communicate with RETs via Smart bias-T built into the antenna
- 8- Cap and weatherproof unused ports/connectors

Antenna Summary

Added														
700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID
				5G	JMA Wireless	MX08FIT265-01	78	79	40(0220) 140(0221)	false	false	PHYSICAL	2	
LTE	LTE	LTE	LTE		JMA Wireless	MX10FIT665-xx	71	74	40(01) 140(02)	true	true	PHYSICAL	2	
LTE	LTE	LTE	LTE		JMA Wireless	MX10FIT665-xx	73.1	76.1	300(03)	true	true	PHYSICAL	1	
LTE	LTE	LTE	LTE	5G	JMA Wireless	MX14FIT665-01	73.1	76.1	300(03)	true	true	PHYSICAL	1	
Removed														
700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID
LTE	LTE	LTE	LTE		ANDREW	SBHHH-ID65B	76.6	79.6	40(01) 140(02)	false	false	PHYSICAL	4	
LTE	LTE	LTE	LTE		ANDREW	SBHHH-ID65B	73.1	76.1	300(03)	false	false	PHYSICAL	2	
Retained														
700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID

No data available.



Equipment Summary

Added

Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
Coaxial Cables	Tower					5G	N/A	1/2" Coax CAL	1/2"		PHYSICAL	3	
Diplexer	Other						Commscope	SDX1926Q-43			PHYSICAL	2	
RRU	Other			LTE	LTE		Samsung	B2/B66A RRH ORAN (RF4439d-25A)			PHYSICAL	3	
RRU	Other	LTE	LTE				Samsung	B5/B13 RRH ORAN (RF4440d-13A)			PHYSICAL	3	
RRU	Other					5G	Samsung	RT-8806-77A			PHYSICAL	3	

Removed

Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
RRU	Tower	LTE					Nokia	UHBA B13 RRH 4x30			PHYSICAL	3	
RRU	Tower		LTE	LTE			Nokia	UHFA B25 RRH 4x30			PHYSICAL	3	
RRU	Tower				LTE		Nokia	UHIC B4 RRH 2x60-4R			PHYSICAL	3	

Retained

Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
Hybrid Cable	Other	LTE	LTE	LTE	LTE	5G	N/A	6x12 Hybriflex LI		1 1/4"	PHYSICAL	3	
OVP Box	Other	LTE	LTE	LTE	LTE	5G	Raycap	OVP-6			PHYSICAL	3	

Service Info

700 MHz LTE

	0000		5GLS	
Sector	01	02	01	03
Azimuth	40	140	40	300
Cell / ENode B ID	064392	064392	064392	064392
Antenna Model	SBNHH-1D65B	SBNHH-1D65B	MX10FIT665-xx	MX14FIT665-01
Antenna Make	ANDREW	ANDREW	JMA Wireless	JMA Wireless
Antenna Centerline(Ft)	76.6	76.6	71	73.1
Mechanical Down-Tilt(Deg.)	0	0	0	0
Electrical Down-Tilt	0	2	2	6
Tip Height	79.6	79.6	74	76.1
Regulatory Power	60.13	59.42	95.62	71.71
DLEARFCN	5230	5230	5230	5230
Channel Bandwidth(MHz)	10	10	10	10
Total ERP (W)	541.13	534.81	860.6	645.36
TMA Make				
TMA Model				
RRU Make	Nokia	Nokia	Samsung	Samsung
RRU Model	UHBA B13 RRH 4x30	UHBA B13 RRH 4x30	B5/B13 RRH ORAN (RF4440d-13A)	B5/B13 RRH ORAN (RF4440d-13A)
Number of Tx, Rx Lines	4,4	4,4	2,2	4,4
Transmitter Id	11056900	11056903	7474947	7474949
Source	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API

850 MHz LTE

	0000		5GLS	
Sector	01	02	01	03
Azimuth	40	140	40	300
Cell / ENode B ID	064392	064392	064392	064392
Antenna Model	MX10FIT665-xx	MX10FIT665-xx	MX10FIT665-xx	MX14FIT665-01
Antenna Make	JMA Wireless	JMA Wireless	JMA Wireless	JMA Wireless
Antenna Centerline(Ft)	71	71	71	73.1
Mechanical Down-Tilt(Deg.)	0	0	0	0
Electrical Down-Tilt	2	2	2	6
Tip Height	74	74	74	76.1
Regulatory Power	235.28	235.28	235.28	336.99
DLEARFCN	2450	2450	2450	2450
Channel Bandwidth(MHz)	10	10	10	10
Total ERP (W)	1058.77	1058.77	1058.77	758.23
TMA Make				
TMA Model				
RRU Make	Samsung	Samsung	Samsung	Samsung
RRU Model	B5/B13 RRH ORAN (RF4440d-13A)	B5/B13 RRH ORAN (RF4440d-13A)	B5/B13 RRH ORAN (RF4440d-13A)	B5/B13 RRH ORAN (RF4440d-13A)
Number of Tx, Rx Lines	2,2	2,2	2,2	4,4
Transmitter Id	12852179	12852180	12852179	12852181
Source	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API

Sector	0220	0221	0222
Azimuth	40	140	300
Cell / ENode B ID	0649404	0649404	0649404
Antenna Model	MX10FIT665-xx	MX10FIT665-xx	MX14FIT665-01
Antenna Make	JMA Wireless	JMA Wireless	JMA Wireless
Antenna Centerline(Ft)	71	71	73.1
Mechanical Down-Tilt(Deg.)	0	0	0
Electrical Down-Tilt	2	2	6
Tip Height	74	74	76.1
Regulatory Power	235.28	235.28	336.99
DLEARFCN	2450	2450	2450
Channel Bandwidth(MHz)	10	10	10
Total ERP (W)	1058.77	1058.77	758.23
TMA Make			
TMA Model			
RRU Make	Samsung	Samsung	Samsung
RRU Model	B5/B13 RRH ORAN (RF4440d-13A)	B5/B13 RRH ORAN (RF4440d-13A)	B5/B13 RRH ORAN (RF4440d-13A)
Number of Tx, Rx Lines	2,2	2,2	4,4
Position			
Transmitter Id	12852179	12852180	12852181
Source	ATOLL_API	ATOLL_API	ATOLL_API

0000			5GLS		
Sector	01	02	01	02	
Azimuth	40	140	40	140	
Cell / ENode B ID	064392	064392	064392	064392	
Antenna Model	SBNHH-1D65B	SBNHH-1D65B	MX10FIT665-xx	MX10FIT665-xx	
Antenna Make	ANDREW	ANDREW	JMA Wireless	JMA Wireless	JMA Wireless
Antenna Centerline(Ft)	69.6	69.6	71	71	71
Mechanical Down-Tilt(Deg.)	0	0	0	0	0
Electrical Down-Tilt	2	0	2	0	0
Tip Height	72.6	72.6	74	74	74
Regulatory Power	148.89	148.89	148.89	148.89	148.89
DLEARFCN	1050	1050	1050	1050	1050
Channel Bandwidth(MHz)	10	10	10	10	10
Total ERP (W)	816.77	816.77	334.81	334.81	334.81
TMA Make					
TMA Model					
RRU Model	Nokia	Nokia	Samsung	Samsung	Samsung
Number of Tx, Rx Lines	UHFA B25 RRH 4x30	UHFA B25 RRH 4x30	B2/B66A RRH ORAN (RF4439d-25A)	B2/B66A RRH ORAN (RF4439d-25A)	B2/B66A RRH ORAN (RF4439d-25A)
Position	4,4	4,4	4,4	4,4	4,4
Transmitter Id	11056901	11056902	12852182	7474953	12852183
Source	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API
	02	03	02	03	03
	140	300	140	300	300
	064392	064392	064392	064392	064392
	SBNHH-1D65B	SBNHH-1D65B	MX10FIT665-xx	MX10FIT665-xx	MX10FIT665-xx
	ANDREW	ANDREW	JMA Wireless	JMA Wireless	JMA Wireless
	69.6	73.1	71	73.1	73.1
	0	0	0	0	0
	0	2	0	2	2
	72.6	76.1	74	76.1	76.1
	149.24	148.89	184.31	122.06	184.31
	1175	1050	1050	1175	1050
	5	10	10	5	10
	409.36	816.77	1011.11	334.81	1011.11
	Nokia	Nokia	Samsung	Samsung	Samsung
	UHFA B25 RRH 4x30	UHFA B25 RRH 4x30	B2/B66A RRH ORAN (RF4439d-25A)	B2/B66A RRH ORAN (RF4439d-25A)	B2/B66A RRH ORAN (RF4439d-25A)
	4,4	4,4	4,4	4,4	4,4
	11056910	11056907	7474954	12852184	7474955
	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API

		0000		5GLS	
Sector	01	02	03	01	02
Azimuth	40	140	300	40	140
Cell / ENode B ID	064392	064392	064392	064392	064392
Antenna Model	SBNHH-1D65B	SBNHH-1D65B	SBNHH-1D65B	MX10FIT665-xx	MX14FIT665-01
Antenna Make	ANDREW	ANDREW	ANDREW	JMA Wireless	JMA Wireless
Antenna Centerline(Ft)	76.6	76.6	73.1	71	73.1
Mechanical Down-Tilt(Deg.)	0	0	0	0	0
Electrical Down-Tilt	2	0	2	0	2
Tip Height	79.6	79.6	76.1	74	76.1
Regulatory Power	220.61	223.11	220.61	133.21	137.89
DLEARFCN	2050	2050	2050	2050	2050
Channel Bandwidth(MHz)	20	20	20	20	20
Total ERP (W)	2420.47	2447.94	2420.47	1461.5	1512.86
TMA Make					
TMA Model					
RRU Make	Nokia	Nokia	Nokia	Samsung	Samsung
RRU Model	UHIC B4 RRH 2x60-4R	UHIC B4 RRH 2x60-4R	UHIC B4 RRH 2x60-4R	B2/B66A RRH ORAN (RF4439d-25A)	B2/B66A RRH ORAN (RF4439d-25A)
Number of Tx, Rx Lines	4,4	4,4	4,4	4,4	4,4
Transmitter Id	11056902	11056905	11056908	7474950	7474952
Source	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API

nL-Sub6

		5GLS		5GLS	
Sector	0220	0221	0222	0220	0222
Azimuth	40	140	300	40	300
Cell / ENode B ID	0649404	0649404	0649404	0649404	0649404
Antenna Model	MX08FIT265-01	MX08FIT265-01	MX08FIT265-01	MX08FIT265-01	MX14FIT665-01
Antenna Make	JMA Wireless	JMA Wireless	JMA Wireless	JMA Wireless	JMA Wireless
Antenna Centerline(Ft)	78	78	78	78	73.1
Mechanical Down-Tilt(Deg.)	0	0	0	0	0
Electrical Down-Tilt	2	2	2	2	2
Tip Height	79	79	79	79	76.1
Regulatory Power	999.9	999.9	999.9	999.9	785.15
DLEARFCN	648672	648672	648672	648672	648672
Channel Bandwidth(MHz)	60	60	60	60	60
Total ERP (W)	17370.01	17370.01	17370.01	17370.01	13639.55
TMA Make					
TMA Model					
RRU Make	Samsung	Samsung	Samsung	Samsung	Samsung
RRU Model	RT-8808-77A	RT-8808-77A	RT-8808-77A	RT-8808-77A	RT-8808-77A
Number of Tx, Rx Lines	2,2	2,2	2,2	2,2	2,2
Transmitter Id	7474990	7474992	7474994	7474990	7474994
Source	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API	ATOLL_API

Service Comments

Callsigns Per Antenna

Sector	Antenna Make	Antenna Model	Ant CL Height AGL	Tip Height	Azimuth (TN)	Elec Tilt	Mech Tilt	Gain	Beam Width	Regulatory Power	Callsigns	700	850	1900	2100	28 GHz	31 GHz	39 GHz
No data available.																		

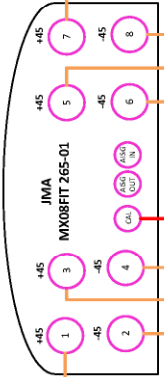
Callsigns

Callsign	Market	Radio Code	Market Number	Block	State	County	Licensee Name	Wholly Owned	Total MHz	Freq Range 1	Freq Range 2	Freq Range 3	Freq Range 4	Regulatory Power	Threshold (W)	POPs /Sq Mi	Status	Action	Approve for Insvc
WQJQ689	Northeast	WU	REA001 C		CT	New Haven	Celco Partnership	Yes	22.000	746.000-757.000	776.000-787.000	.000-.000	.000-.000	95.62	1000	1430.62	Active	added	Yes
KNKA1313	New Haven-West Haven-Waterbury-Meriden, CT	CL	CMA049 A		CT	New Haven	Celco Partnership	Yes	25.000	824.000-835.000	869.000-880.000	845.000-846.500	890.000-891.500	336.99	400	1430.62	Active	added	Yes
WQCS996	New Haven-Waterbury-Meriden, CT	CW	BTA318 C		CT	New Haven	Celco Partnership	Yes	10.000	1905.000-1910.000	1985.000-1990.000	.000-.000	.000-.000	184.31	1640	1430.62	Active	added	Yes
WQEM953	New Haven-Waterbury-Meriden, CT	CW	BTA318 C		CT	New Haven	Celco Partnership	Yes	10.000	1895.000-1900.000	1975.000-1980.000	.000-.000	.000-.000	184.31	1640	1430.62	Active	added	Yes
KNLH262	New Haven-Waterbury-Meriden, CT	CW	BTA318 F		CT	New Haven	Celco Partnership	Yes	10.000	1890.000-1895.000	1970.000-1975.000	.000-.000	.000-.000	184.31	1640	1430.62	Active	added	Yes
WQGB280	New Haven-West Haven-Waterbury-Meriden, CT	AW	CMA049 A		CT	New Haven	Celco Partnership	Yes	20.000	1710.000-1720.000	2110.000-2120.000	.000-.000	.000-.000	137.89	1640	1430.62	Active	added	Yes
WRNE581	New York, NY	PM	PEA001 A1		CT	New Haven	Celco Partnership	Yes	20.000	3700.000-3720.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	added	Yes
WRNE582	New York, NY	PM	PEA001 A2		CT	New Haven	Celco Partnership	Yes	20.000	3720.000-3740.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	added	Yes
WRNE583	New York, NY	PM	PEA001 A3		CT	New Haven	Celco Partnership	Yes	20.000	3740.000-3760.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	added	Yes
WRNE584	New York, NY	PM	PEA001 A4		CT	New Haven	Celco Partnership	Yes	20.000	3760.000-3780.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	N/A	No
WRNE585	New York, NY	PM	PEA001 A5		CT	New Haven	Celco Partnership	Yes	20.000	3780.000-3800.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	N/A	No
WQGA906	New York-No. New Jer.-Long Island, NY-NJ-CT-PA-MA-	AW	BEA010 B		CT	New Haven	Celco Partnership	Yes	20.000	1720.000-1730.000	2120.000-2130.000	.000-.000	.000-.000	137.89	1640	1430.62	Active	added	Yes
WRNE586	New York, NY	PM	PEA001 B1		CT	New Haven	Celco Partnership	Yes	20.000	3800.000-3820.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	N/A	No
WRNE587	New York, NY	PM	PEA001 B2		CT	New Haven	Celco Partnership	Yes	20.000	3820.000-3840.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	N/A	No
WRNE588	New York, NY	PM	PEA001 B3		CT	New Haven	Celco Partnership	Yes	20.000	3840.000-3860.000	.000-.000	.000-.000	.000-.000	999.9	1640	1430.62	Active	N/A	No
WRBA734	New Haven-Waterbury-Meriden, CT	UU	BTA318 L1		CT	New Haven	Celco Partnership	Yes	325.000	27600.000-27925.000	.000-.000	.000-.000	.000-.000			1430.62	Active		Yes
WRBA735	New Haven-Waterbury-Meriden, CT	UU	BTA318 L2		CT	New Haven	Celco Partnership	Yes	325.000	27925.000-27950.000	28050.000-28350.000	.000-.000	.000-.000			1430.62	Active		Yes
WRHD609	New York, NY	UU	PEA001 M1		CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	37600.000-37700.000	.000-.000	.000-.000	.000-.000			1430.62	Active		Yes

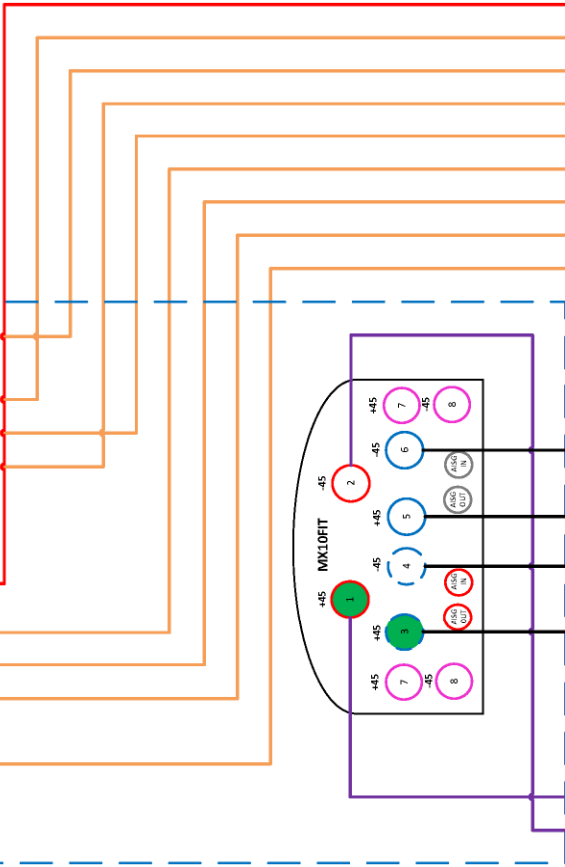
WRHD610	New York, NY	UU	PEA001	M10	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	38500.000-38600.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD611	New York, NY	UU	PEA001	M2	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	37700.000-37800.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD612	New York, NY	UU	PEA001	M3	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	37800.000-37900.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD613	New York, NY	UU	PEA001	M4	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	37900.000-38000.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD614	New York, NY	UU	PEA001	M5	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	38000.000-38100.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD615	New York, NY	UU	PEA001	M6	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	38100.000-38200.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD616	New York, NY	UU	PEA001	M7	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	38200.000-38300.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD617	New York, NY	UU	PEA001	M8	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	38300.000-38400.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD618	New York, NY	UU	PEA001	M9	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	38400.000-38500.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	Yes
WRHD619	New York, NY	UU	PEA001	N1	CT	New Haven	Straight Path Spectrum, LLC	Yes	100.000	38600.000-38700.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	1430.62	Active	No
WRLD518	D09009 - New Haven, CT	PL	D09009 0	0	CT	New Haven	Verizon Wireless Network Procurement LP	Yes	100.000	3550.000-3650.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	501	Active	Yes
WRLD517	D09009 - New Haven, CT	PL	D09009 0	0	CT	New Haven	Verizon Wireless Network Procurement LP	Yes	100.000	3550.000-3650.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	501	Active	Yes
WRLD516	D09009 - New Haven, CT	PL	D09009 0	0	CT	New Haven	Verizon Wireless Network Procurement LP	Yes	100.000	3550.000-3650.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	.000-.000	501	Active	Yes

ALPHA/
BETA

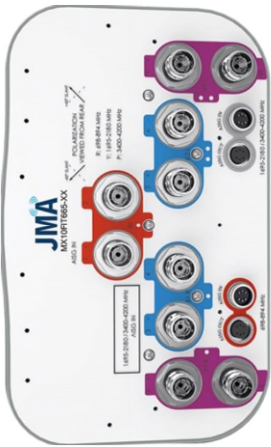
Chimney



78' C/L



71' C/L



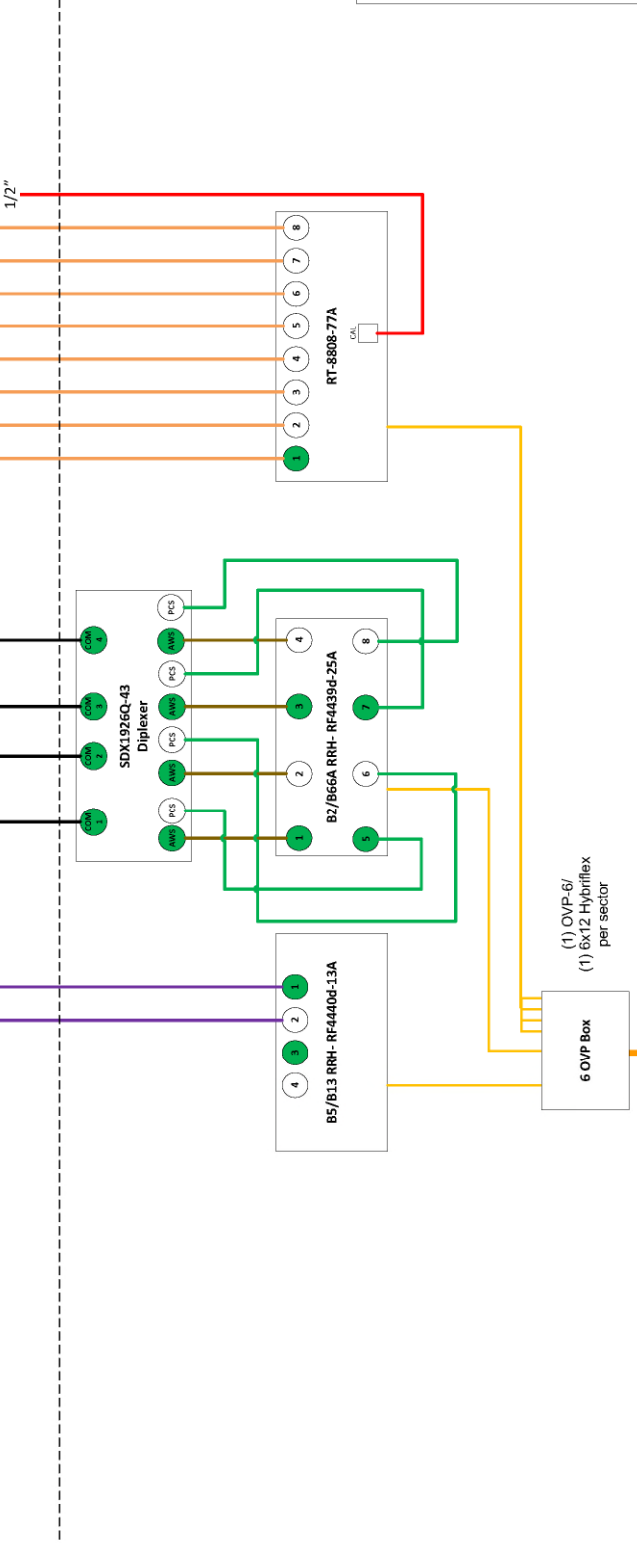
The Calibration Port (CAL) on the antenna is required to be used on the MX108FIT antenna as C-Band cannot use the Beam Forming function without this. The cable to this port is shown in RED and should be connected to the antenna using 1/2" coax cable.



Comments:
 Diagram shows antenna port configuration as viewed from below antennas.
 Antenna positions are indicated as viewed from IN FRONT of antennas.
 Cap and weatherproof unused antenna ports.
 All plumbing diagram colors are irrelevant except for AISG & Hybriflex cable. (For the coax colors follow Coax Colors guide above)

Rooftop

Attic

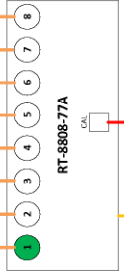
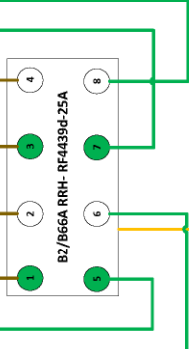


- Port 1 & 2 are for low band (698-896 MHz).
- Port 3, 4, 5, & 6 are for high band (1695-2360 MHz).
- Smart Bias Tee (SBT) is through antenna ports 1 & 3 (1 for low band & 3 for high band).
- AISG cable is only needed when drawn in the diagrams below, if it is not drawn then SBT is enough to control all RET motors.
- Not all SBT ports are needed to control RET, only green port connection to green port will control RET.

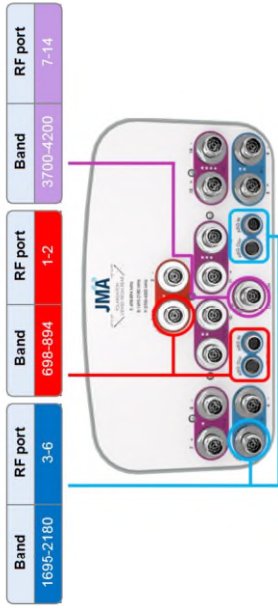
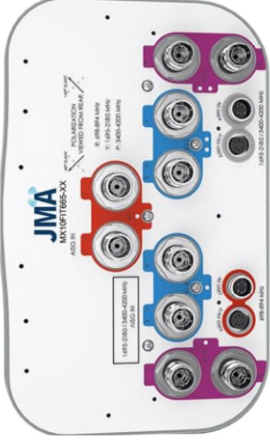
Attic

Equipment Pad

(1) OVP-6/
(1) 6x12 Hybriflex
per sector

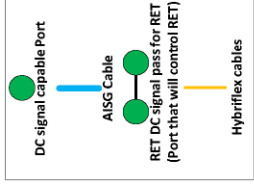
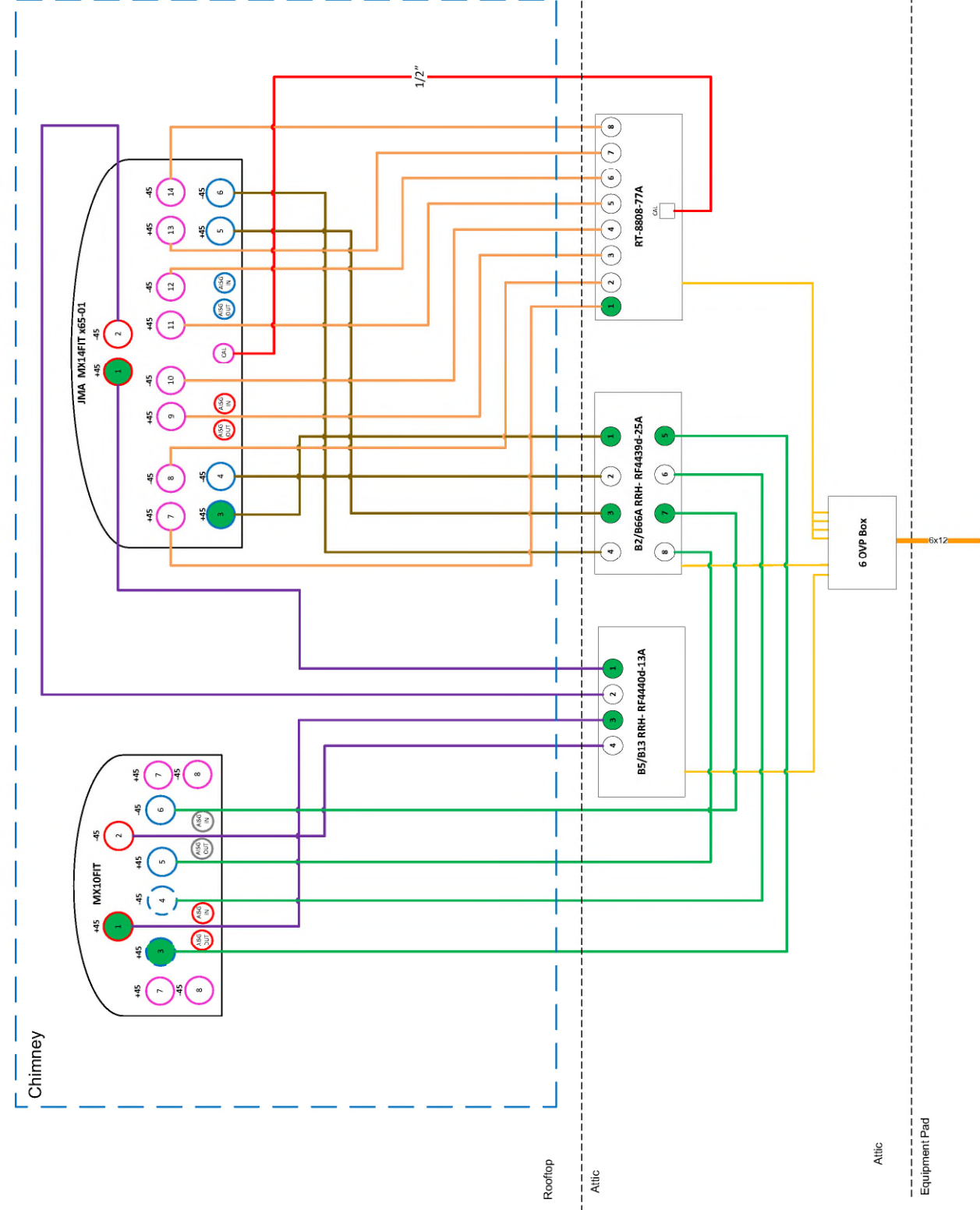


6x12

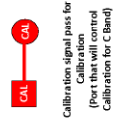


Band	RF port	Band	RF port	Band	RF port
1895-2180	3-6	698-894	1-2	3700-4200	7-14

- Port 1 & 2 are for low band (698-896 MHz).
- Port 3,4,5, & 6 are for high band (1895-2360 MHz).
- Smart Bias Tee (SBT) is through antenna ports 1 & 3 (1 for low band & 3 for high band).
- AISG cable is only needed when drawn in the diagrams below, if it is not drawn then SBT is enough to control all RET motors.
- Not all SBT ports are needed to control RET, only green port connection to green port will control RET.



The Calibration Port (CAL) on the antenna is required to be used on the MX14FT antenna as C-Band cannot use the Beam Forming function without this. The cable to this port is shown in RED and should be connected to the antenna using 1/2" coax cable.



Comments:
 Diagram shows antenna port configuration as viewed from below antennas.
 Antenna positions are indicated as viewed from IN FRONT of antennas.
 Cap and weatherproof unused antenna ports.
 All plumbing diagram colors are irrelevant except for AISG & Hybriflex cable. (For the coax colors follow Coax Colors guide above)

Band	Sector 1 (Alpha) Color Codes	Sector 2 (Beta) Color Codes	Sector 3 (Gamma) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	B	G
	R	W	G
AWS / PCS	R	B	G
	R	W	G
CBRS	R	B	G
	R	W	G
LAA	R	Y	G
	R	Y	Y

Band	Sector 1 (Alpha) Color Codes	Sector 2 (Beta) Color Codes	Sector 3 (Gamma) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	B	G
	R	W	G
AWS / PCS	R	B	G
	R	W	G
CBRS	R	B	G
	R	W	G
LAA	R	Y	G
	R	Y	Y

Band	Sector 1 (Alpha) Color Codes	Sector 2 (Beta) Color Codes	Sector 3 (Gamma) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	B	G
	R	W	G
AWS / PCS	R	B	G
	R	W	G
CBRS	R	B	G
	R	W	G
LAA	R	Y	G
	R	Y	Y

Band	Sector 1 (Alpha) Color Codes	Sector 2 (Beta) Color Codes	Sector 3 (Gamma) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	B	G
	R	W	G
AWS / PCS	R	B	G
	R	W	G
CBRS	R	B	G
	R	W	G
LAA	R	Y	G
	R	Y	Y

Band	Sector 4 (Delta) Color Codes	Sector 5 (Epsilon) Color Codes	Sector 6 (Zeta) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	W	G
	R	B	G
AWS / PCS	R	W	G
	R	B	G
CBRS	R	Y	G
	R	B	G
LAA	R	Y	G
	R	Y	Y

Band	Sector 4 (Delta) Color Codes	Sector 5 (Epsilon) Color Codes	Sector 6 (Zeta) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	W	G
	R	B	G
AWS / PCS	R	W	G
	R	B	G
CBRS	R	Y	G
	R	B	G
LAA	R	Y	G
	R	Y	Y

Band	Sector 4 (Delta) Color Codes	Sector 5 (Epsilon) Color Codes	Sector 6 (Zeta) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	W	G
	R	B	G
AWS / PCS	R	W	G
	R	B	G
CBRS	R	Y	G
	R	B	G
LAA	R	Y	G
	R	Y	Y

Band	Sector 4 (Delta) Color Codes	Sector 5 (Epsilon) Color Codes	Sector 6 (Zeta) Color Codes
850 CDMA	R	B	G
700	R	B	P
	R	B	G
850 LTE	R	B	G
	R	B	P
700 / 850	R	B	G
	R	B	P
AWS	R	W	G
	R	B	G
PCS	R	W	G
	R	B	G
AWS / PCS	R	W	G
	R	B	G
CBRS	R	Y	G
	R	B	G
LAA	R	Y	G
	R	Y	Y

Sector	Antenna Desc	Base Station ID	Sector ID
Alpha	700-850	064392_1_16	064392_1,064392_1_6
Alpha	AWS-PCS	064392_1_24	064392_1_2,064392_1_4
Beta	700-850	064392_2_16	064392_2,064392_2_6
Beta	AWS-PCS	064392_2_24	064392_2_2,064392_2_4
Gamma	700-850	064392_3_16	064392_3,064392_3_6
Gamma	AWS	064392_3_2	064392_3_2
Gamma	PCS	064392_3_4	064392_3_4

ATTACHMENT 5

234 sherman



Scale: 1" = 100 ft



Export Address Owner

	234 SHERMAN AVE (Card: 1)	BRITANNIA VENTURES LLC
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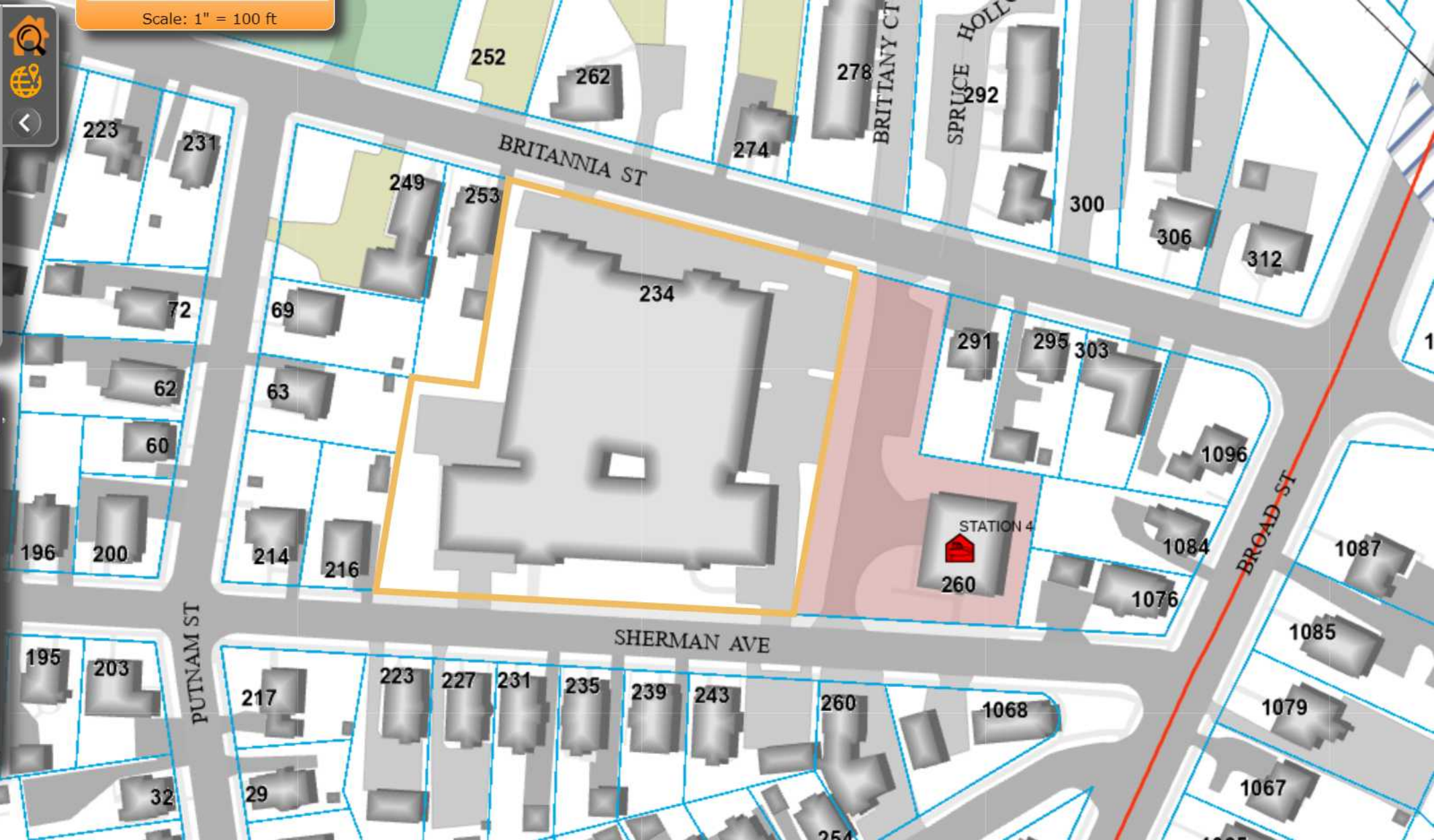
Select all Export selected

234 SHERMAN AVE



VIEW FULL PROPERTY CARD

MBL:	0306-0268-0010-0000
CardNumber:	1
Current Owner:	BRITANNIA VENTURES LLC
Owner Address:	PO BOX 868 LAKEWOOD NJ 08701
Land Use:	Comm Apt
Lot Size:	2.05
Last Sale:	2020-08-18 00:00:00
Sale Price:	\$ 13 200 000



STATION 4

260

DISCLAIMER: The City of Meriden maintains this website to enhance public access to the City's tax assessment information. However, this information is continually being developed and is subject to change. The data presented here is not legally binding on the City of Meriden or any of its departments. This website reflects the best information available to the City Assessor and it should not be construed as confirming or denying the existence of any permits, licenses, or other such rights. The City of Meriden shall not be liable for any loss, damages, or claims that arise out of the user's access to, and use of, this information.

THE USER IS RESPONSIBLE FOR CHECKING THE ACCURACY OF ALL INFORMATION OBTAINED WITH THE APPROPRIATE CITY DEPARTMENT AND TO COMPLY WITH ALL CURRENT LAWS, RULES, REGULATIONS, ORDINANCES, PROCEDURES, AND GUIDELINES.

PROPERTY INFORMATION

Location: **234 SHERMAN AVE** Map/Lot: 0306-0268-0010-0000

OWNER INFORMATION

Owner(s): BRITANNIA VENTURES LLC
Owner Address: PO BOX 868
LAKEWOOD, NJ 08701

BUILDING INFORMATION

Card Number: 1

OVERVIEW	
Building ID	5348
Finished Area	143,412
Comm/Rental Units	0
Living Units	88
Building Type	Apt
Year Built	1924
Effective Yr Built	
Building Number	1


INTERIOR DETAILS	
Rooms	34
BedRooms	14
Full Bath	88
Full Bath Rating	
Half Bath	0
Half Bath Rating	
Kitchens	88
Kitchen Rating	
Fireplaces	0

CONSTRUCTION DETAILS	
Exterior	Brick
Roof Structure	
Roof Cover	
Quality	C+
Heat Fuel	Oil
Heat Type	Forced Air
Prcnt. Heated	100.00
Prcnt. AC	3.00
Stories	4 story
Foundation	Concrete

ATTACHMENT 6



MERIDEN 5 Certificate of Mailing — Firm

Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender 3	TOTAL NO. of Pieces Received at Post Office™ 3
	Postmaster, per (name of receiving employee) 	

neopost[®]
07/12/2022
US POSTAGE \$000.1990
ZIP 06103
041L12203937

pt.

neopost[®]
07/12/2022
US POSTAGE \$002.990
ZIP 06103
041L12203937



USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee 2022	Special Handling	Parcel Airlift
1.	Kevin Scarpati, Mayor City of Meriden 142 East Main Street Meriden, CT 06450				
2.	Paul Dickson, Meriden Acting Director of Planning, Development & Enforcement City of Meriden 142 East Main Street Meriden, CT 06450				
3.	Britannia Ventures LLC P.O. Box 860 Lakewood, NJ 08701				
4.					
5.					
6.					

See Reverse for Instructions