

CRAIG CODY

16 Chestnut Street, Suite 420
Foxboro, MA 02035
Tel (781) 831-1281
Fax (774) 215-5423

Melanie Bachman
Executive Director
Connecticut Siting Counsel
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – 438 Bridgeport Ave, Milford, CT**

Dear Ms. Bachman:

Please accept this letter as notification pursuant to R.C.S.A Section 16-50j-73, for construction that constitutes modification pursuant to R.C.S.A Section 16-50j-72(b) and 16-50j-73. In accordance with R.C.S.A Section 16-50j-73, a copy of this submission is being sent to the Town of Milford. A copy of this submission is also being sent to Henry Charchenko, the property owner on which the tower is located.

T-Mobile Northeast LLC's Proposed Wireless Modifications

T-Mobile as successor in interest to Omnipoint Communications achieved an initial approval from the Siting Council to install antennas as well as related ground equipment and currently maintains this equipment. The facility consists of a One-Hundred foot high communications tower within a fenced in compound. T-Mobile now intends to modify the facility as shown on the enclosed plans prepared by Infinigy Engineering and annexed hereto in Exhibit 1. The modifications will consist of adding three (3) new antennas at the existing AGL of 73'. A structural analysis has been completed for the site and attached as exhibit 3,

T-Mobile's Proposed Wireless Modifications Constitutes An "Exempt Modification"

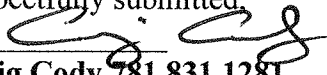
The proposed modification to the above mentioned Facility constitutes an exempt modification of an existing facility provided for in R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

- 1) The proposed modification will not result in an increase in the height of the existing tower.
- 2) The modifications will remain entirely within the limits of the leased area. The modifications therefor, will not require the extension of the boundary.
- 3) The proposed modification does not increase the noise levels at the boundary by six(6) decibels or more under normal conditions.

- 4) T-Mobile's proposed facility will not increase the cumulative radio frequency electromagnetic radiation power density at the Tower sites' boundary to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. A cumulative General Power Density table for T-Mobile's proposed modified facility is included as Exhibit 2.
- 5) The facility has received all municipal zoning approvals and building permits. (Regs., Conn. State Agencies Section 16-50j-72))

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

Respectfully submitted,



Craig Cody 781.831.1281

On behalf of American Tower Corporation
c/o Tower Resource Management, Inc.
16 Chestnut Street, Suite 420
Foxboro, MA 02035

cc: **Town of Milford**
Henry Charchenko

Exhibit 1

Site Plan

Exhibit 2
Power Density Report

Exhibit 3
Structural Analysis

T-MOBILE NORTHEAST LLC

CT11318F

CT318/SPECTRA_DEVON

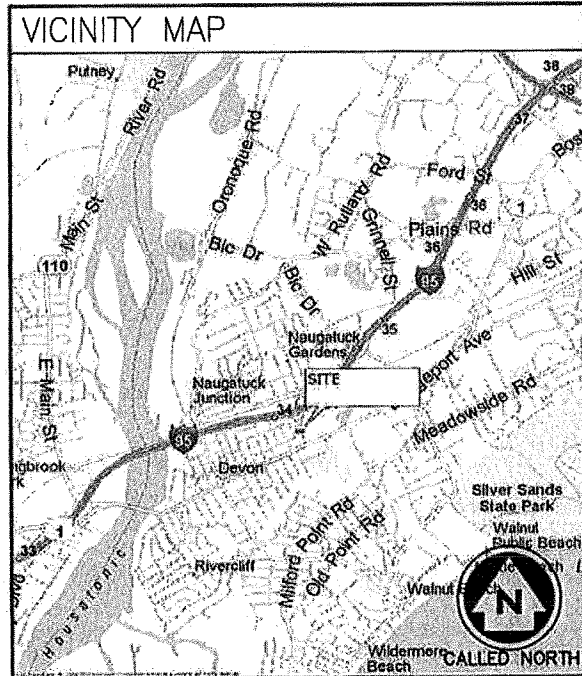
438 BRIDGEPORT AVE MILFORD, CT 06460

(704Bu CONFIGURATION)

SUBMITTALS		
DATE	DESCRIPTION	REVISION
8/03/19	REVISED FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 317-000
 DRAWN BY: MAP
 CHECKED BY: ASW



DO NOT SCALE DRAWINGS
 CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL:
 "CALL BEFORE YOU DIG"
 WWW.CBYD.COM
 CALL 811 OR 1-800-922-4455
 CALL THREE WORKING DAYS PRIOR TO DIGGING
 SAFETY REGULATIONS SHALL BE IMPLEMENTED BY CONTRACTORS AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

COLOR CODE FOR UTILITY LOCATIONS

ELECTRIC - RED	SEWER - GREEN	
GAS/OIL - YELLOW	SURVEY - PINK	
TEL/CATV - ORANGE	PROPOSED EXCAVATION - WHITE	
WATER - BLUE	RECLAIMED WATER - PURPLE	

- ### GENERAL NOTES
1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
 2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONSTRUCT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
 3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE T-MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
 4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
 5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
 7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
 8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
 9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
 11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
 12. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
 13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
 14. THE CONTRACTOR SHALL NOTIFY THE T-MOBILE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE T-MOBILE REPRESENTATIVE.
 15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
 16. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

PROJECT SUMMARY

SITE NUMBER:	CT11318F	APPLICANT:	T-MOBILE NORTHEAST LLC 103 MONARCH DR. LIVERPOOL, NY 13088
SITE NAME:	CT318/SPECTRA_DEVON		
SITE ADDRESS:	438 BRIDGEPORT AVE MILFORD, CT 06460	PROJECT MANAGER:	AMERICAN TOWER CORPORATION 319 QUARRY ROAD SPRING CITY, PA 19475
PROPERTY OWNER:	AMERICAN TOWER CORPORATION	CONTACT:	BRIAN MUCK (717) 496-3169
PARCEL:	00549/1620	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING 1033 WATERVLIET SHAKER ROAD ALBANY, NY 12205
ZONING:	CDD3		
JURISDICTION:	TOWN OF MILFORD	CONTACT:	ALEX WELLER 518-690-0790
ATC SITE NUMBER:	302516		
LAT./LONG.:	N 41.20639° / W -73.09417°		
CONSTRUCTION TYPE:	L700 UPGRADE		

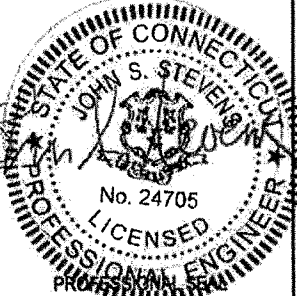
PROJECT DESCRIPTION

<input checked="" type="checkbox"/> EXISTING MONOPOLE	<input checked="" type="checkbox"/> EXISTING CABINET(S)	<input type="checkbox"/> OUTDOOR
<input type="checkbox"/> EXISTING LATTICE TOWER	<input type="checkbox"/> EXISTING RBS 8201	<input type="checkbox"/> INDOOR
<input type="checkbox"/> EXISTING GUYED TOWER	<input checked="" type="checkbox"/> EXISTING GSM 3106	<input checked="" type="checkbox"/> EXISTING CONCRETE PAD
<input type="checkbox"/> EXISTING WATER TANK	<input checked="" type="checkbox"/> EXISTING RBS 6102	<input type="checkbox"/> EXISTING STEEL PLATFORM
<input type="checkbox"/> EXISTING BUILDING	<input type="checkbox"/> SITE SUPPORT KIT	<input checked="" type="checkbox"/> EXISTING PPC
<input type="checkbox"/> EXISTING FLAGPOLE	<input type="checkbox"/> SITE SUPPORT CABINET	<input type="checkbox"/> PANELBOARD
<input type="checkbox"/> EXISTING FORT WORTH	<input checked="" type="checkbox"/> GPS	

T-MOBILE NORTHEAST LLC PROPOSES THE MODIFICATION OF AN UNMANNED WIRELESS BROADBAND FACILITY. ADDITION OF PROPOSED RBS 8201-ODE TO EXISTING GROUND LEASE AREA. ADDITION OF PROPOSED LTE 700 PANEL ANTENNAS. REUSE, GPS ANTENNA AND EXISTING EQUIPMENT CABINETS.

SHEET INDEX

SHEET	DESCRIPTION	REVISION
T-1	TITLE SHEET	0
C-1	SITE PLAN	0
C-2	COMPOUND PLAN & ELEVATION	0
C-3	ANTENNA DETAIL & RF SCHEDULE	0
C-4	EQUIPMENT SPECIFICATIONS	0
E-1	GROUNDING AND POWER DIAGRAMS	0
E-2	COAX/FIBER PLUMBING DIAGRAM	0
N-1	GENERAL AND ELECTRICAL NOTES	0



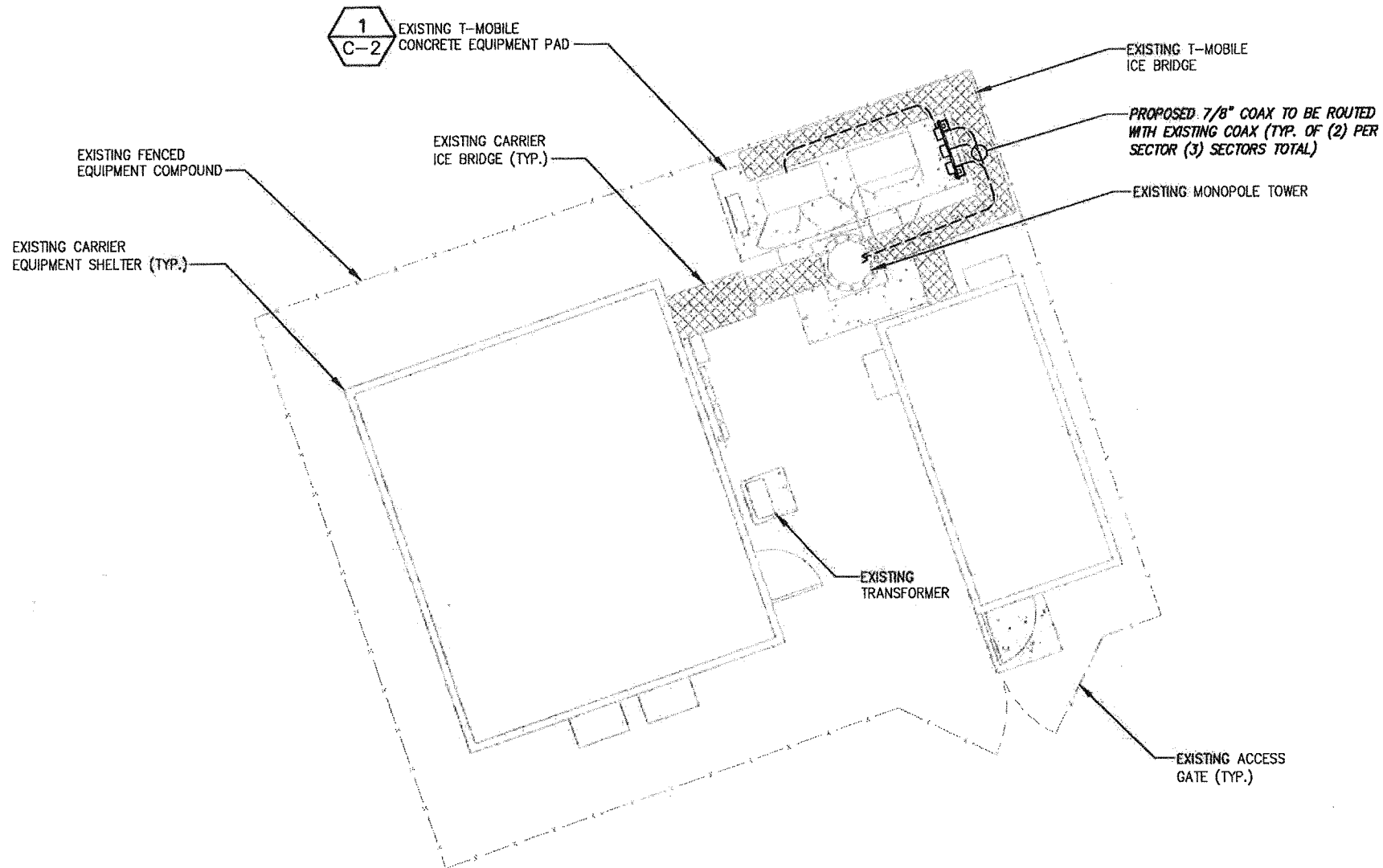
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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CT11318F
 SITE NAME:
CT318/SPECTRA_DEVON
 438 BRIDGEPORT AVE
MILFORD, CT 06460

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1
SHEET 1 OF 8 SHEETS



- GENERAL SITE NOTES:
1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINIGY. BOUNDARY INFORMATION IF SHOWN WAS OBTAINED FROM INFORMATION PROVIDED BY OTHERS. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
 2. BASEMAPPING INFORMATION BASED ON PROVIDED INFORMATION.
 3. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
 4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
 5. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
 6. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
 7. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
 8. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT MISS UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
 9. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

T-Mobile
 T-MOBILE NORTHEAST LLC
 103 MONARCH DR
 LIVERPOOL, NY 13088

INFINIGY
 1033 WaterVine Shaker Rd
 Albany, NY 12205
 Office # (518) 890-0790
 Fax # (518) 890-0793

SUBMITTALS

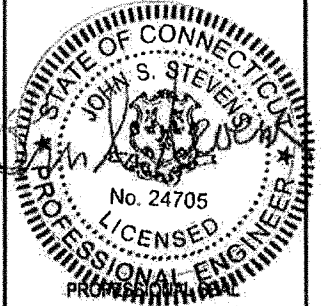
DATE	DESCRIPTION	REVISION
8/02/15	REVISED FOR PERMIT	0

SITE LEGEND

- SITE PROPERTY LINE
- STREET OR ROAD
- x - x - CHAIN LINK FENCE
- □ OPAQUE WOODEN FENCE
- ⊙ TREES/SHRUBS
- ~ TREE LINE
- ⊗ UTILITY POLE
- (E) EXISTING
- (N) NEW
- (P) PROPOSED
- (F) FUTURE

DEPT.	DATE	APP'D	REVISIONS

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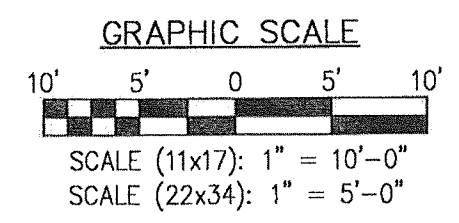
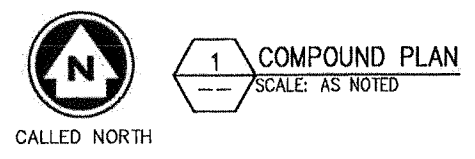
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 MILFORD, CT 08460

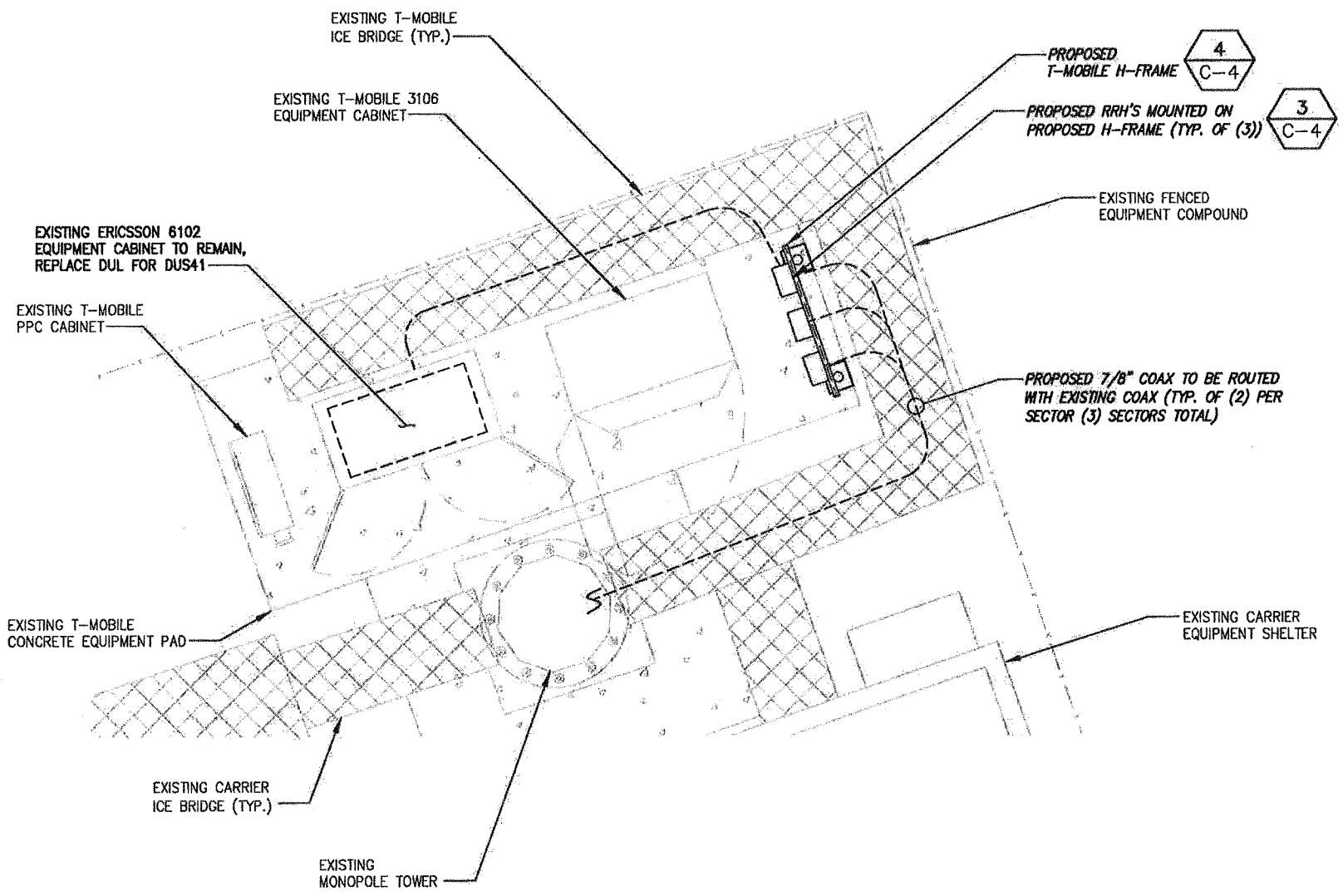
SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1

SHEET 2 OF 8 SHEETS

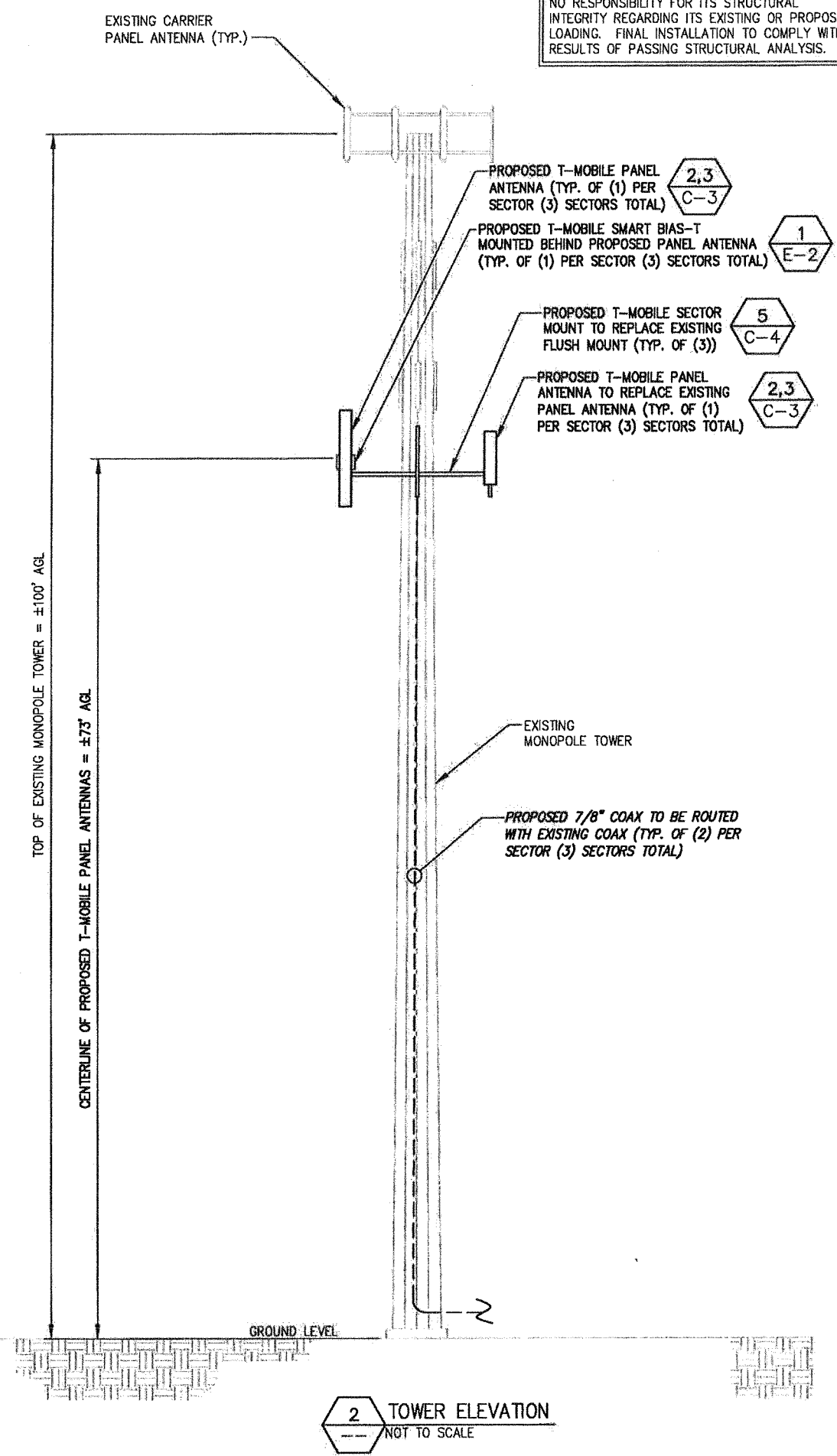
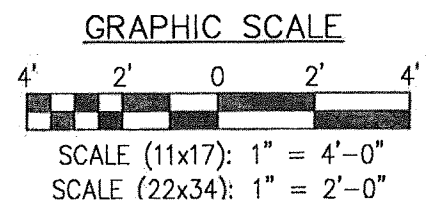


NOTE:
 INFINIGY ENGINEERING HAS NOT EVALUATED THE
 TOWER OR LOADING FOR THIS SITE, AND ASSUMES
 NO RESPONSIBILITY FOR ITS STRUCTURAL
 INTEGRITY REGARDING ITS EXISTING OR PROPOSED
 LOADING. FINAL INSTALLATION TO COMPLY WITH
 RESULTS OF PASSING STRUCTURAL ANALYSIS.



CALLLED NORTH

1 COMPOUND PLAN
 SCALE: AS NOTED

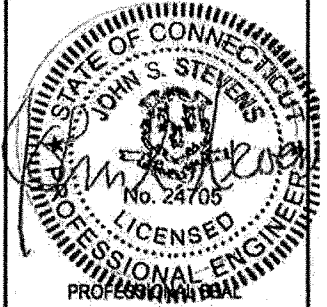


2 TOWER ELEVATION
 NOT TO SCALE

SUBMITTALS		
DATE	DESCRIPTION	REVISION
9/02/15	REVISED FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
R/E			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

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SITE NUMBER:
 CT11318F
 SITE NAME:
 CT318/SPECTRA_DEVON
 438 BRIDGEPORT AVE
 MILFORD, CT 08480

SHEET TITLE
**COMPOUND PLAN
 & ELEVATION**

SHEET NUMBER
C-2
 SHEET 3 OF 8 SHEETS

RF SYSTEM SCHEDULE (704BU CONFIGURATION)

SECTOR	TECHNOLOGY	ANTENNA PORT	BAND	ANTENNA MODEL #	VENDOR	QTY (REMOVED)	QTY (NEW)	AZIMUTH	M-TILT	E-TILT	ANTENNA CENTERLINE	TMA MODEL #	VENDOR	RRU MODEL #	VENDOR	CABLE LENGTH	CABLE DIAMETER	CABLE TYPE	CABLE MODEL #	VENDOR	CABLE TAGGING	COLOR CODING	JUMPER TYPE	JUMPER TAGGING	COLOR CODING
A	GSM/UMTS	TBD	B2P	APX16PV-16PVL	RFS	1	1	60°	0°	4°	73°-0°	E15S08P80	ANDREW	-	-	(2)EXISTING	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
	UMTS/LTE	TBD	B4P									E15S08P80	ANDREW	-	-	(2)EXISTING	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	0	1	60°	0°	2°	73°-0°	-	-	---	---	(2)±115'	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
B	GSM/UMTS	TBD	B2P	APX16PV-16PVL	RFS	1	1	180°	0°	4°	73°-0°	E15S08P80	ANDREW	-	-	(2)EXISTING	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
	UMTS/LTE	TBD	B4P									E15S08P80	ANDREW	-	-	(2)EXISTING	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	0	1	180°	0°	2°	73°-0°	-	-	---	---	(2)±115'	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
C	GSM/UMTS	TBD	B2P	APX16PV-16PVL	RFS	1	1	300°	0°	6°	73°-0°	E15S08P80	ANDREW	-	-	(2)EXISTING	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
	UMTS/LTE	TBD	B4P									E15S08P80	ANDREW	-	-	(2)EXISTING	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	0	1	300°	0°	2°	73°-0°	-	-	---	---	(2)±115'	7/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	---

KEY		
EXISTING	R - RED - GSM	G - GREEN - UMTS 1900
PROPOSED	B - BLUE - UMTS AWS	P - PURPLE - LTE
FIBER CONNECTION	O - ORANGE - FIBER CABLE	

1 RF SYSTEM SCHEDULE
NOT TO SCALE

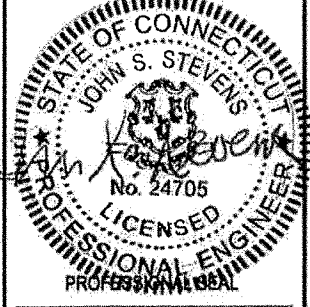
T-Mobile
T-MOBILE NORTHEAST LLC
103 MONARCH DR
LIVERPOOL, NY 13088

INFINIGY
1033 Waterfield Shaker Rd
Albany, NY 12205
Office #: (518) 660-0790
Fax #: (518) 660-0795

SUBMITTALS		
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8/02/15	REVISED FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
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SITE AC.			

PROJECT NO: 317-000
DRAWN BY: MAP
CHECKED BY: ASW



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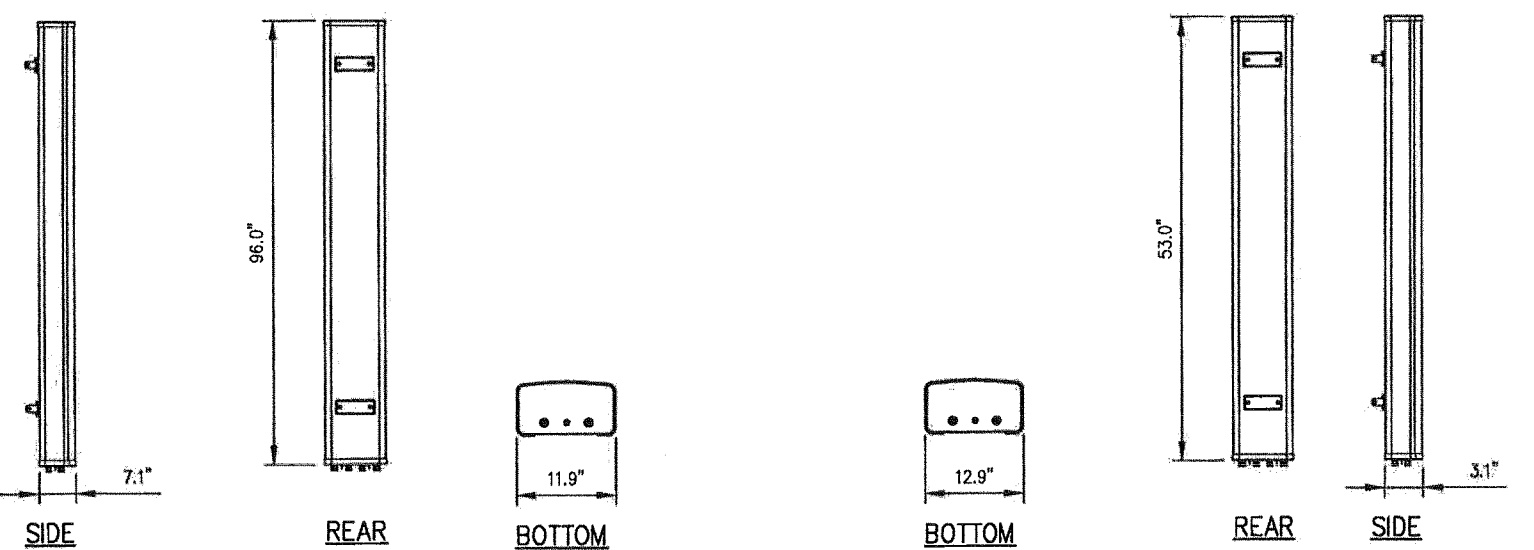
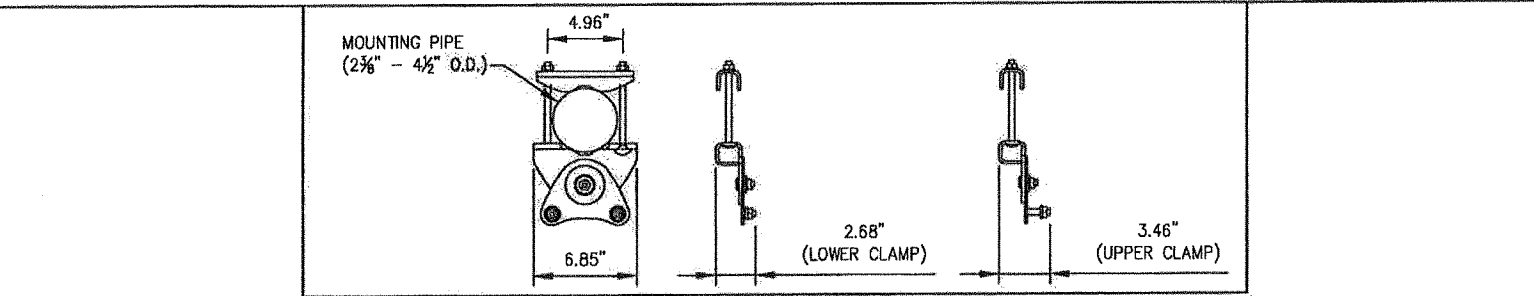
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438 BRIDGEPORT AVE
MILFORD, CT 06460

SHEET TITLE
ANTENNA DETAIL & RF SCHEDULE

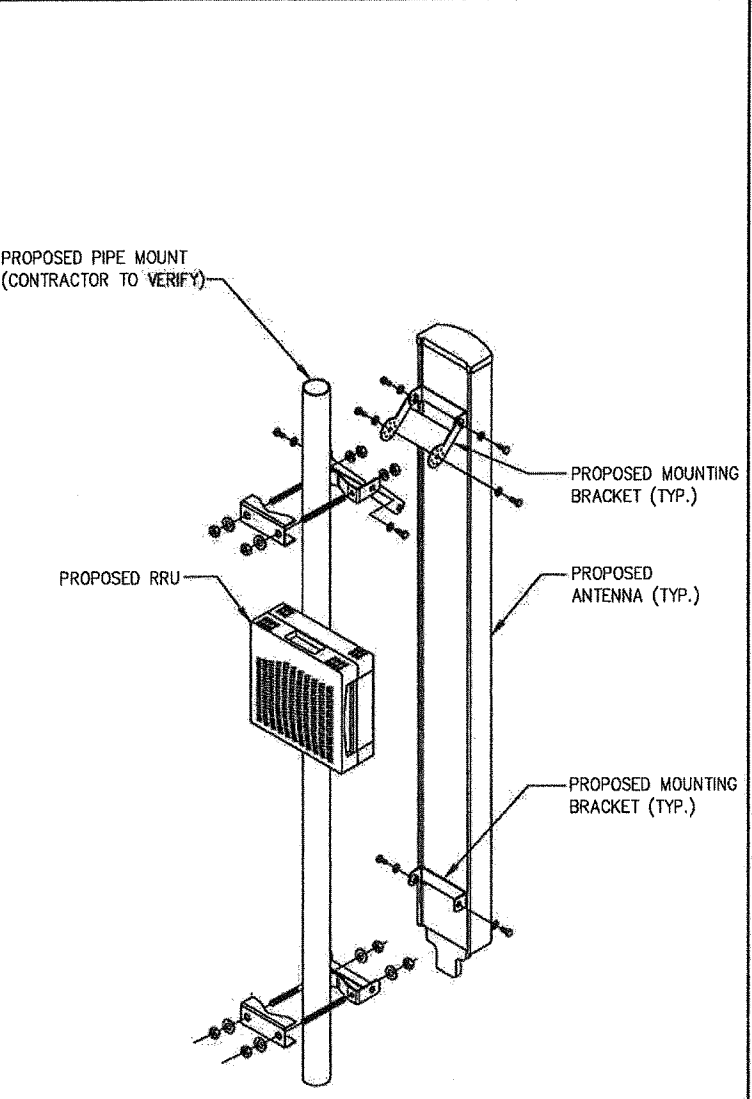
SHEET NUMBER
C-3

SHEET 4 OF 8 SHEETS

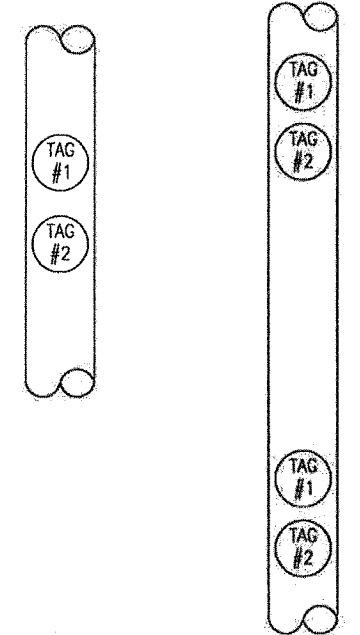


COMMSCOPE MODEL NO.:	LNX-6515DS-VTM	RFS MODEL NO.:	APX16PV-16PVL-A
RADOME MATERIAL:	FIBERGLASS, UV RESISTANT	RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	LIGHT GRAY	RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	96.0"x11.9"x7.1" (2438 x 301 x 181 mm)	DIMENSIONS, HxWxD:	53.0"x12.9"x3.1" (1346 x 328 x 79 mm)
WEIGHT, W/ PRE-MOUNTED BRACKETS:	50.3 LBS (19.8 kg)	WEIGHT, W/ PRE-MOUNTED BRACKETS:	31.6 LBS (14.3 kg)
CONNECTOR:	(2) 7-16 DIN FEMALE/BOTTOM	CONNECTOR:	(2) 7-16 DIN FEMALE/BOTTOM

2 ANTENNA DETAILS
NOT TO SCALE



3 MOUNTING DETAIL
NOT TO SCALE



- METALLIC TAG NOTES:**
- TWO METALLIC TAGS SHALL BE ATTACHED AT EACH END OF EVERY CABLE LONGER THAN (3) THREE FEET.
 - CABLES LESS THAN (3) THREE FEET WILL HAVE TWO METALLIC TAGS ATTACHED AT THE CENTER OF THE CABLE.
 - TAGS WILL BE FASTENED WITH STAINLESS STEEL ZIP TIES APPROPRIATE FOR CABLE DIAMETER.
 - STANDARDIZED METALLIC TAG KITS WILL BE ASSEMBLED WITH TAGS ALREADY ENGRAVED TO ACCOMMODATE ALL CONFIGURATIONS.

3 METALLIC TAG DETAIL
4 NOT TO SCALE

STRUCTURAL NOTES:

1. SPECIFICATIONS / CODES:
 - CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
 - STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
 - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING" CODE-STEEL.
 - REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE."
2. MATERIALS:
 - CONCRETE: $f_c' - 3000\text{psi}$ (MIN. U.N.O.)
 - REINFORCING STEEL: ASTM A615, GRADE 60.
 - WIRE MESH: ASTM A185.
 - STRUCTURAL STEEL: ASTM A36.
 - ELECTRODES FOR WELDING: E 70xx.
 - GALVANIZING: ASTM A153 (BOLTS) OR ASTM A123 (SHAPES, PLATES).
 - EXPANSION BOLTS: HILTI KWIK BOLT II, STAINLESS STEEL, 3/4" ϕ x 3/4" EMBEDMENT OR AN APPROVED EQUAL.

SUBMITTALS		
DATE	DESCRIPTION	REVISION
6/22/15	REVISED FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	317-000
DRAWN BY:	MAP
CHECKED BY:	ASW



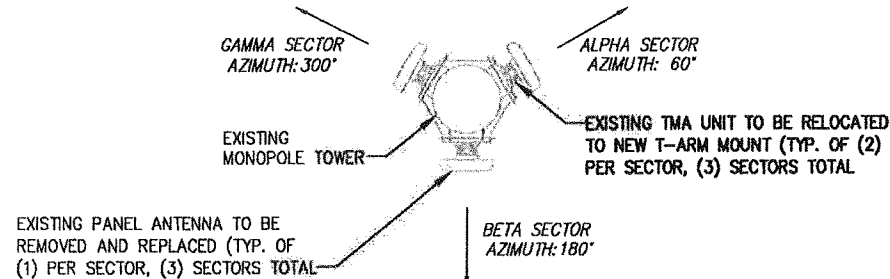
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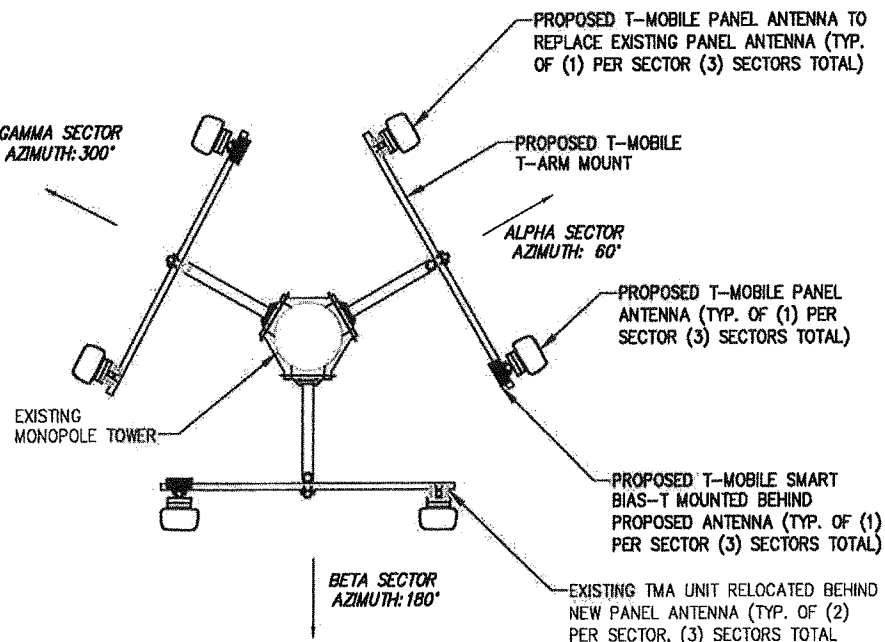
SITE NUMBER:
CT11318F
SITE NAME:
CT318/SPECTRA_DEVON
438 BRIDGEPORT AVE
MILFORD, CT 06480

SHEET TITLE
EQUIPMENT SPECIFICATIONS

SHEET NUMBER
C-4
SHEET 5 OF 8 SHEETS

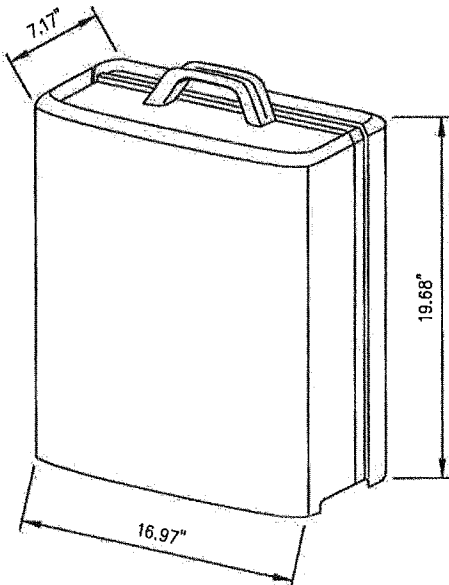


1 EXISTING ANTENNA ORIENTATION PLAN
NOT TO SCALE
CALLED NORTH

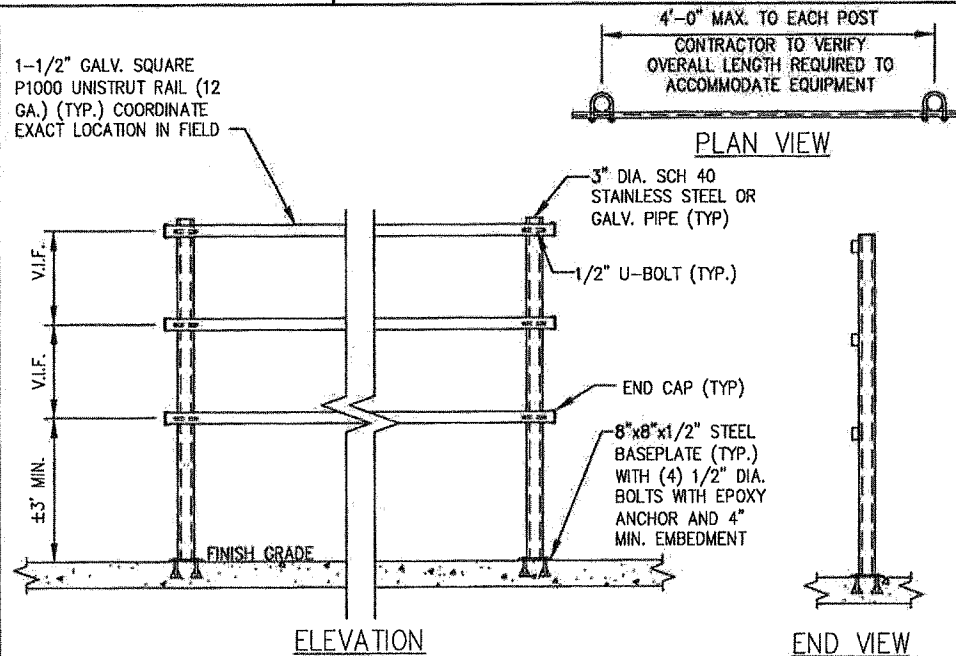


2 PROPOSED ANTENNA ORIENTATION PLAN
NOT TO SCALE
CALLED NORTH

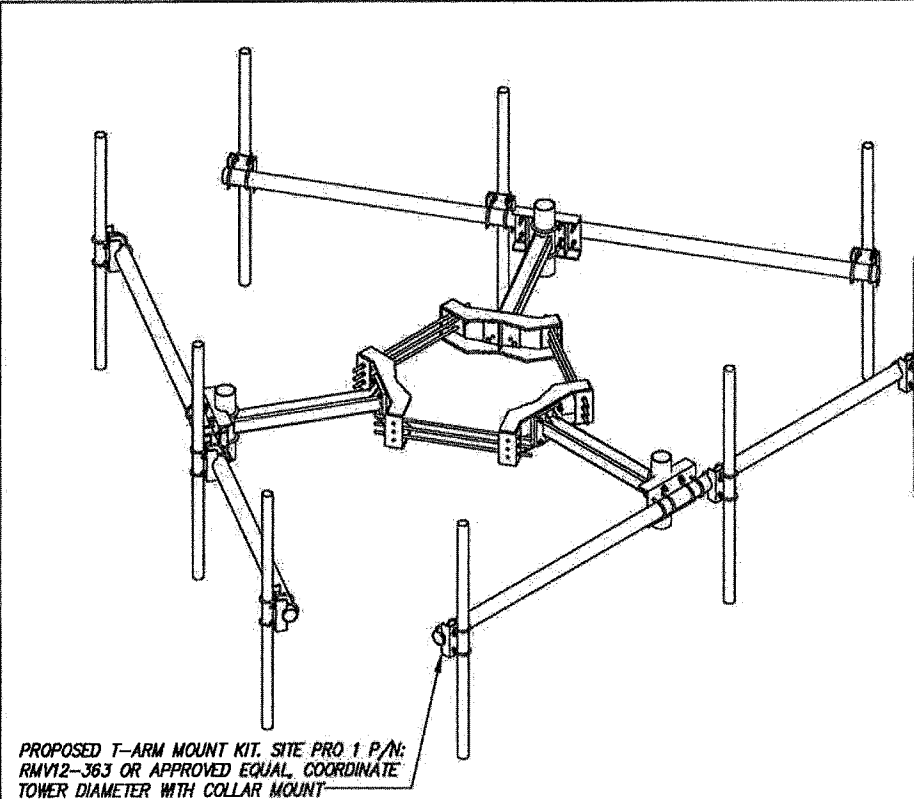
ERICSSON MODEL NO.:	RRUS11
COLOR:	GRAY
DIMENSIONS, HxWxD:	19.68"x16.97"x7.17" (50 x 431 x 182 mm)
WEIGHT:	50.71 LBS (23 kg)



3 RRUS 11 DETAIL
NOT TO SCALE



4 H-FRAME DETAIL
NOT TO SCALE

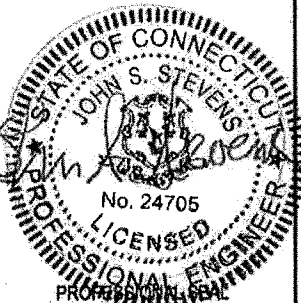


5 SECTOR MOUNT DETAIL
NOT TO SCALE

SUBMITTALS		
DATE	DESCRIPTION	REVISION
9/02/16	REVISED FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 317-000
 DRAWN BY: MAP
 CHECKED BY: ASW



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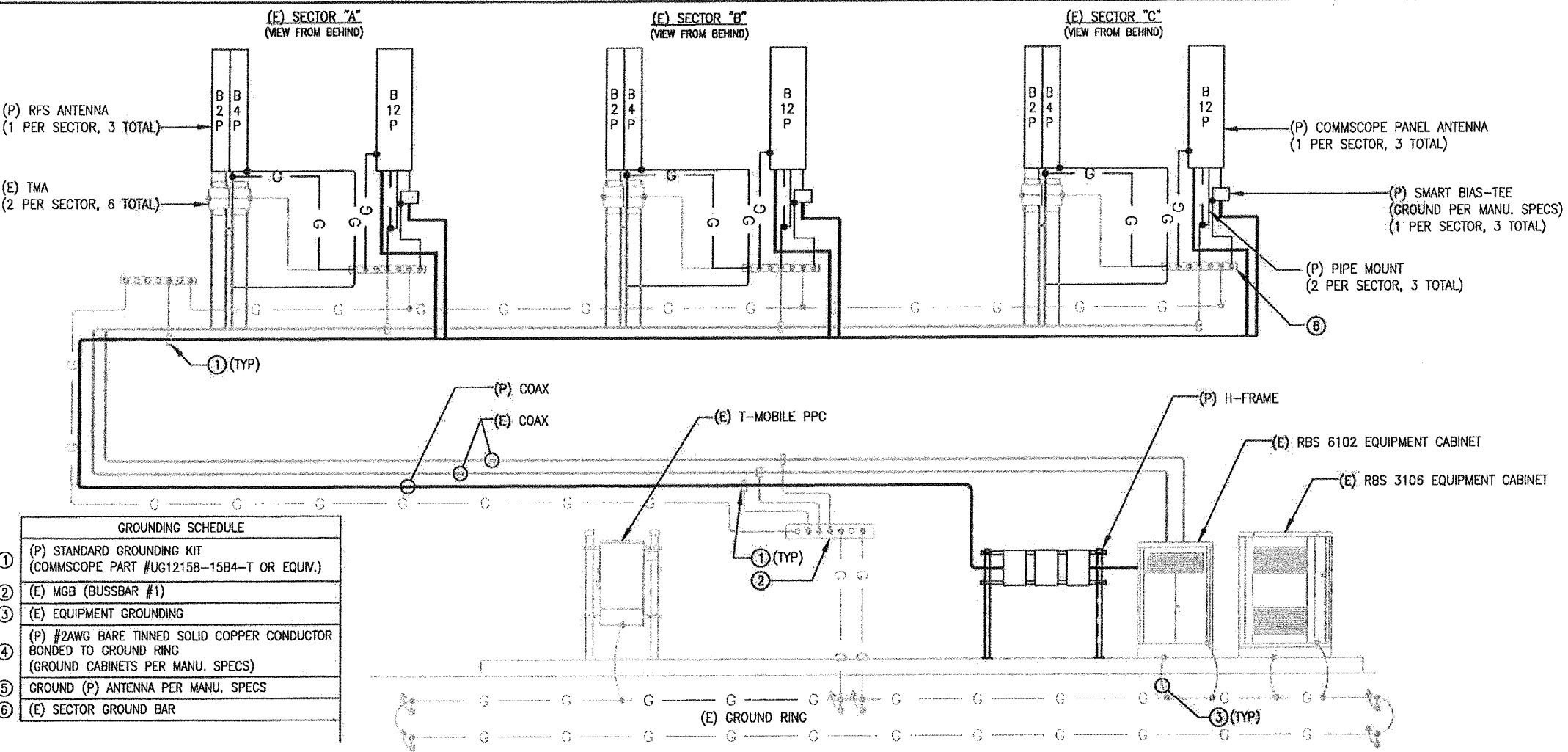
SITE NUMBER: CT11318F
 SITE NAME: CT318/SPECTRA_DEVON
 438 BRIDGEPORT AVE
 MILFORD, CT 06460

SHEET TITLE
GROUNDING & POWER DIAGRAMS

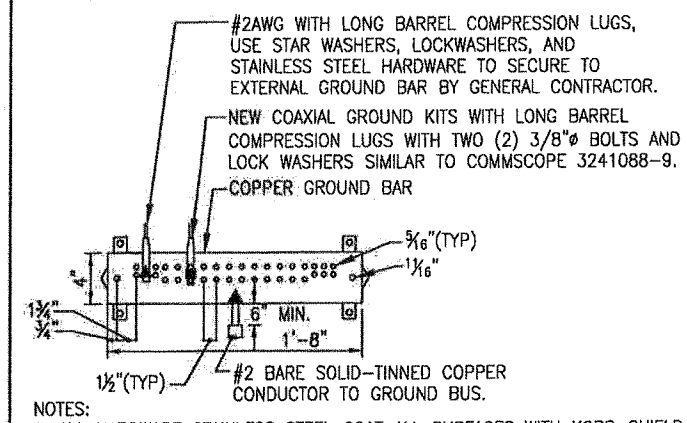
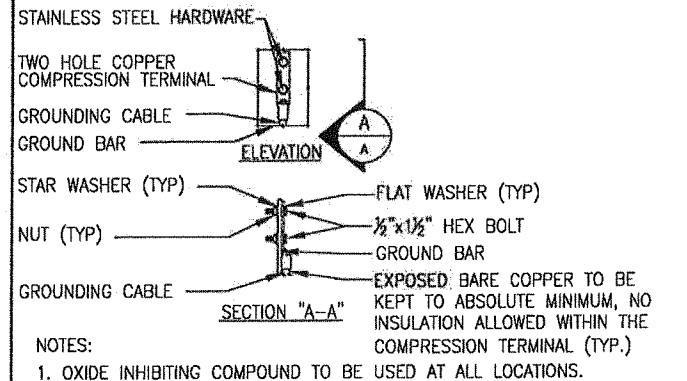
SHEET NUMBER

E-1

SHEET 6 OF 8 SHEETS

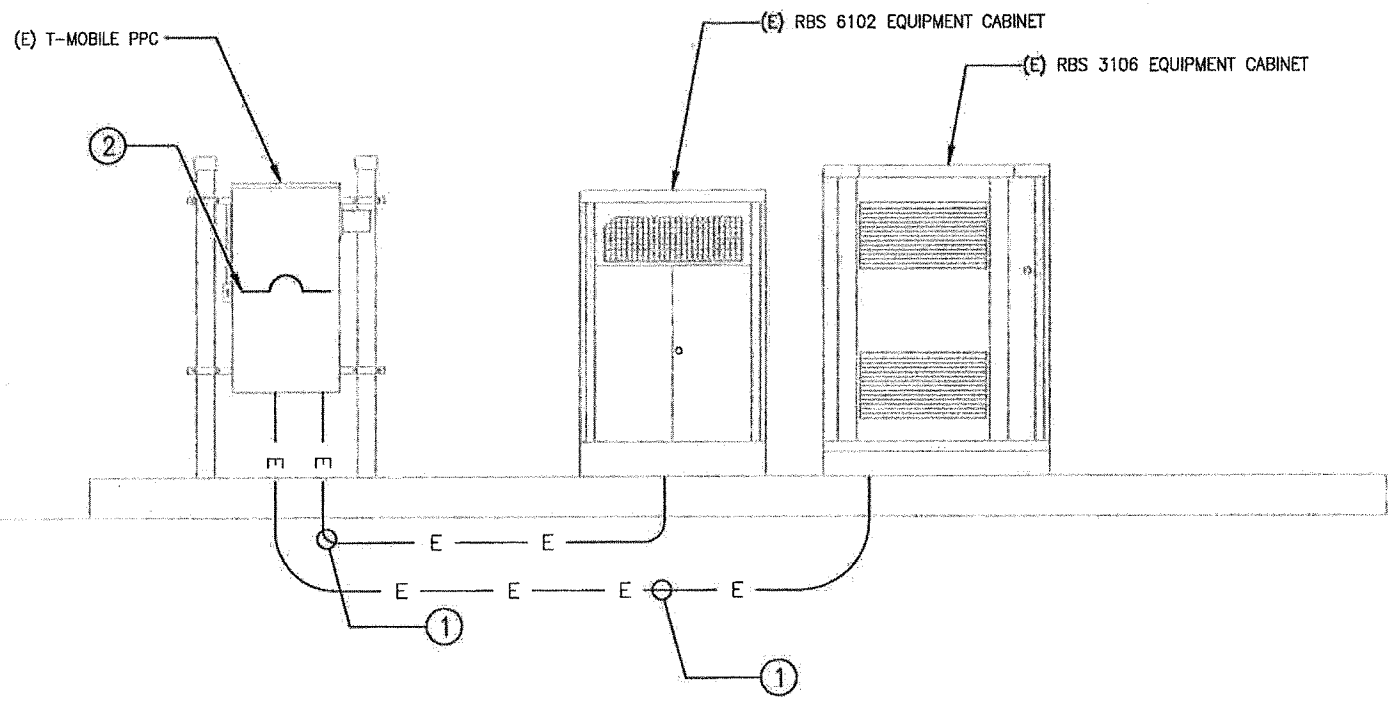


GROUNDING SCHEDULE	
①	(P) STANDARD GROUNDING KIT (COMMSCOPE PART #UG12158-15B4-T OR EQUIV.)
②	(E) MGB (BUSSBAR #1)
③	(E) EQUIPMENT GROUNDING
④	(P) #2AWG BARE TINNED SOLID COPPER CONDUCTOR BONDED TO GROUND RING (GROUND CABINETS PER MANU. SPECS)
⑤	GROUND (P) ANTENNA PER MANU. SPECS
⑥	(E) SECTOR GROUND BAR



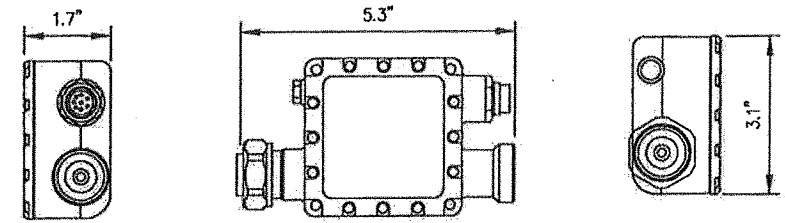
2 GROUND BAR CONNECTION DETAILS
 SCALE: NOT TO SCALE

CONDUIT SCHEDULE	
①	(P) WIRE AND CONDUIT UPGRADE FOR POWER
②	(P) 100A BREAKER UPGRADE



3 POWER DIAGRAM
 SCALE: NOT TO SCALE

CONTRACTOR NOTE:
 CONTRACTOR TO VERIFY THAT THE EXISTING CONDUITS AND WIRE SIZES ARE ADEQUATE FOR THE PROPOSED LOADING IN ACCORDANCE WITH NEC AND INCLUDE ELECTRICAL UPGRADES IN THE SCOPE OF WORK AS REQUIRED.



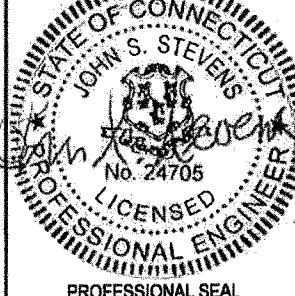
KATHREIN SCALA SMART BIAS-T
 WEIGHT: 3.3 LBS

1 SMART BIAS-T DETAIL
 NOT TO SCALE

SUBMITTALS		
DATE	DESCRIPTION	REVISION
8/02/15	REVISED FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
R/E			
RF MAN.			
ZONING			
GPS			
CONSTR.			
SITE AG.			

PROJECT NO: 317-000
 DRAWN BY: MAP
 CHECKED BY: ASW



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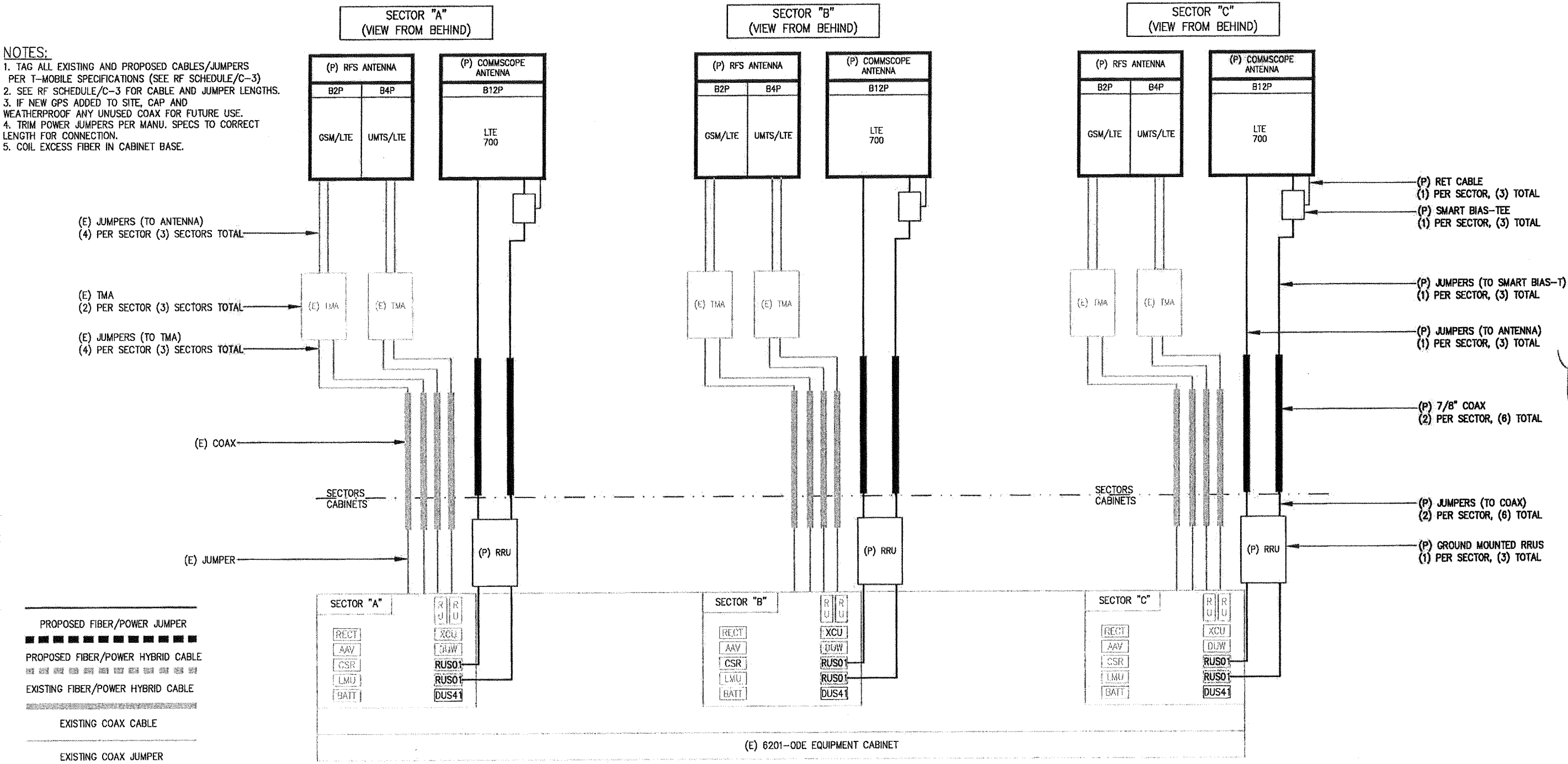
NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER: CT11318F
 SITE NAME: CT318/SPECTRA_DEVON
 438 BRIDGEPORT AVE
 MILFORD, CT 06460

SHEET TITLE
COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER
E-2
 SHEET 7 OF 8 SHEETS

- NOTES:**
1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER T-MOBILE SPECIFICATIONS (SEE RF SCHEDULE/C-3)
 2. SEE RF SCHEDULE/C-3 FOR CABLE AND JUMPER LENGTHS.
 3. IF NEW GPS ADDED TO SITE, CAP AND WEATHERPROOF ANY UNUSED COAX FOR FUTURE USE.
 4. TRIM POWER JUMPERS PER MANU. SPECS TO CORRECT LENGTH FOR CONNECTION.
 5. COIL EXCESS FIBER IN CABINET BASE.



2 704Bu CONFIGURATION COAX/FIBER PLUMBING DIAGRAM
 NOT TO SCALE

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL
TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CT11318F

Spectra_Devon
438 Bridgeport Avenue
Milford, CT 06460

September 10, 2015

EBI Project Number: 6215004685

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	18.05 %

September 10, 2015

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Emissions Analysis for Site: **CT11318F – Spectra_Devon**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **438 Bridgeport Avenue, Milford, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 MHz Band is approximately 467 $\mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS and AWS bands is 1000 $\mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **438 Bridgeport Avenue, Milford, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

- 1) 2 GSM / UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel
- 2) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 5) Since the radios are ground mounted there are additional cabling losses accounted for. For each RF path the following losses were calculated. 1.99 dB of additional cable loss for all 1900 MHz and 2100 MHz channels and 1.09 dB of additional cable loss at 700 MHz. This is based on manufacturers Specifications for 115 feet of 7/8" coax cable on each path.

- 6) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 7) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antennas used in this modeling are the **RFS APX16PV-16PVL-A** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **RFS APX16PV-16PVL-A** has a maximum gain of **16.3 dBd** at its main lobe. The **Commscope LNX-6515DS-VTM** has a maximum gain of **14.6 dBd** at its main lobe. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 9) The antenna mounting height centerline of the proposed antennas is **73 feet** above ground level (AGL).
- 10) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	RFS APX16PV-16PVL-A	Make / Model:	RFS APX16PV-16PVL-A	Make / Model:	RFS APX16PV-16PVL-A
Gain:	16.3 dBd	Gain:	16.3 dBd	Gain:	16.3 dBd
Height (AGL):	73	Height (AGL):	73	Height (AGL):	73
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	6	Channel Count	6	# PCS Channels:	6
Total TX Power:	240	Total TX Power:	240	# AWS Channels:	240
ERP (W):	6,474.57	ERP (W):	6,474.57	ERP (W):	6,474.57
Antenna A1 MPE%	5.19	Antenna B1 MPE%	5.19	Antenna C1 MPE%	5.19
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	73	Height (AGL):	73	Height (AGL):	73
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power:	30	Total TX Power:	30	Total TX Power:	30
ERP (W):	673.16	ERP (W):	673.16	ERP (W):	673.16
Antenna A2 MPE%	1.15	Antenna B2 MPE%	1.15	Antenna C2 MPE%	1.15

Site Composite MPE%	
Carrier	MPE%
T-Mobile (Per Sector Max)	6.34 %
Paging Omni	6.65 %
AT&T	1.66 %
Sprint	3.40 %
Site Total MPE %:	18.05 %

T-Mobile Sector 1 Total:	6.34 %
T-Mobile Sector 2 Total:	6.34 %
T-Mobile Sector 3 Total:	6.34 %
Site Total:	18.05 %

T-Mobile_per sector	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile 2100 MHz (AWS) LTE	2	1618.64	73	25.93	2100	1000	2.59 %
T-Mobile 700 MHz LTE	1	673.16	73	5.39	700	467	1.15 %
T-Mobile 1900 MHz (PCS) UMTS	2	809.32	73	12.96	1900	1000	1.30 %
T-Mobile 2100 MHz (AWS) UMTS	2	809.32	73	12.96	2100	1000	1.30 %
						Total:	6.34%

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public exposure to RF Emissions.

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector 1:	6.34 %
Sector 2:	6.34 %
Sector 3 :	6.34 %
T-Mobile Per Sector Maximum:	6.34 %
Site Total:	18.05 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **18.05%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

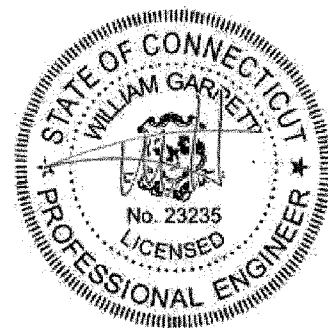


AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 100.5 ft Monopole
ATC Site Name : Mlfd - Milford, CT
ATC Site Number : 302516
Engineering Number : 63531021
Proposed Carrier : T-Mobile
Carrier Site Name : CT318/Spectra_Devon
Carrier Site Number : CT11318F
Site Location : 438 Bridgeport Ave
Milford, CT 06460-4105
41.206611,-73.093400
County : New Haven
Date : August 28, 2015
Max Usage : 79%
Result : Pass

Reviewed by:
William Garrett, PE
Chief Engineer



Aug 31 2015 4:13 PM

COA: PEC.0001553

Prepared By:
Rachel Huang



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Equipment to be Removed.....	2
Proposed Equipment	2
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Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 100.5 ft monopole to reflect the change in loading by T-Mobile.

Supporting Documents

Tower Drawings	Mapping by Smith Cullum Inc., dated May 31, 2002
Foundation Drawing	Spectra Site #CT-0052, dated January, 2003
Geotechnical Report	AET Job #002GT03, dated January 7, 2003
Modifications	Spectra Site #CT-0052, dated January 14, 2003 ATC Project #40870132, dated September 20,2007

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	110 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2003 IBC / 2005 CT Supplement & 2009 CT Amendment
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.20, S_1 = 0.06$
Site Class:	D - Stiff Soil

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

TOWER RESOURCE MANAGEMENT INC 03/13
BOSTON ACCT
16 CHESTNUT ST STE 220
FOXBOROUGH, MA 02035-1464

2756
65-330/550

Date 9/16/15

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