



CRAIG CODY

16 Chestnut Street, Suite 420  
Foxboro, MA 02035  
Tel (781) 831-1281  
ccody@trmcom.com

12/1/2015

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

Re: **Notice of Exempt Modification**  
**180 Bayberry Lane, Westport**  
**41.17167 / -73.32881**

Dear Ms. Bachman:

T-Mobile Northeast, LLC (T-Mobile) currently maintains six (6) antennas at the Eighty-Seven feet (87') level of the existing One-Hundred Forty foot tower at 180 Bayberry Lane, Westport, CT. The tower is owned by American Tower Corporation. The property is also owned by American Tower. T-Mobile now intends to add Three (3) 700 MHz antennas. These antennas would be installed at the Eighty-Seven (87') foot level of the tower. T-Mobile does not intend to remove any other equipment on the tower at this time.

This facility was approved by the Connecticut Siting Council on September 14<sup>th</sup>, 1984 in Docket# 45 and the Town of Westport on June 3<sup>rd</sup> 2004. The approval included the conditions that tower antennas shall be no taller than necessary to provide the proposed service and in no event shall exceed 117'. Construction activities shall take place during daylight working hours.

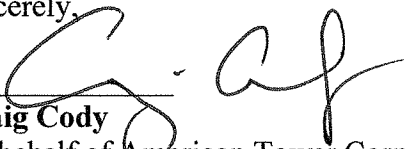
Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73 a copy of this letter to the Chief Elected Official, First Selectman, James Marpe for the Town of Westport, as well as the property owner and the tower owner.

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

- 1) The proposed modification will not result in an increase in the height of the existing structure.
- 2) The modifications will not require an extension of the site boundary.
- 3) The proposed modification will not increase the noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4) The operation and replacement of antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
- 5) The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
- 6) The existing structure and its foundation can support the proposed loading.

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

Sincerely,



**Craig Cody**  
On behalf of American Tower Corporation  
c/o Tower Resource Management, Inc.  
16 Chestnut Street, Suite 420  
Foxboro, MA 02035  
781-831-1281  
ccody@trmcom.com

cc: **Chief Elected Official, First Selectmen, James Marpe, Town of Westport**  
**American Tower Corporation**  
**American Tower Corporation**

Exhibit 1

Site Plan

Exhibit 2

Power Density Report

Exhibit 3

Structural Analysis

# T-MOBILE NORTHEAST LLC

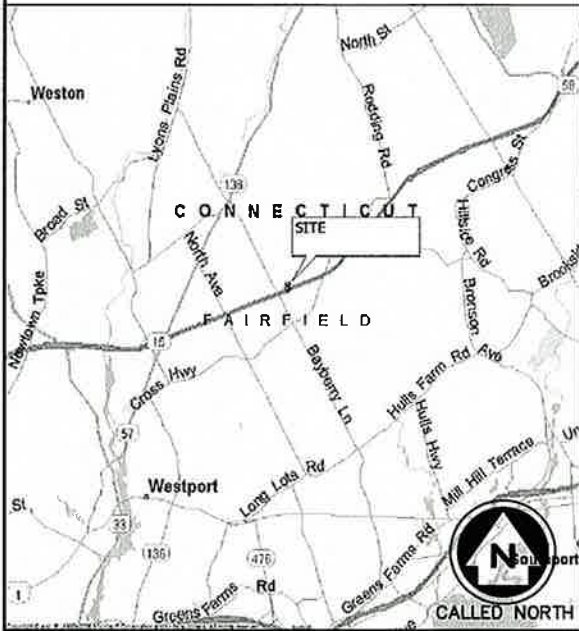
## CT11323A

# CT323/SS TOWER REBUILD

180-182 BAYBERRY LANE  
WESTPORT, CT 06430

(702Cu CONFIGURATION)

VICINITY MAP



**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 PRECAUTIONS 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**
- 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
  - 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.
  - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
  - THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

**PROJECT SUMMARY**

SITE NUMBER:	CT11323A	APPLICANT:	T-MOBILE NORTHEAST LLC 4 SYLVAN WAY PARSIPPANY, NJ 07054
SITE NAME:	CT323/SS TOWER REBUILD		
SITE ADDRESS:	180-182 BAYBERRY LANE WESTPORT, CT 06430	PROJECT MANAGER:	AMERICAN TOWER CORPORATION 319 QUARRY ROAD SPRING CITY, PA 19475
PROPERTY OWNER:	AMERICAN TOWER CORPORATION	CONTACT:	BRUCE HOFFMASTER 484-942-6339
PARCEL:	F15 / / 058/000 /	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING 1033 WATERVLIET SHAKER ROAD ALBANY, NY 12205
CURRENT ZONING:	AAA	CONTACT:	ALEX WELLER 518-690-0790
JURISDICTION:	TOWN OF WESTPORT		
ATC SITE NUMBER:	310968		
LAT./LONG.:	N 41.17167' / W -73.32881'		
CONSTRUCTION TYPE:	-		
USE GROUP:	-		

**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 2106	<input type="checkbox"/> INDOOR
<input type="checkbox"/> EXISTING TRANSMISSION TOWER	<input checked="" type="checkbox"/> EXISTING RBS 3106	<input type="checkbox"/> EXISTING CONCRETE PAD
<input type="checkbox"/> EXISTING WATER TANK	<input checked="" type="checkbox"/> EXISTING SB000	<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 LTE 700 PANEL ANTENNAS & RRUS. REUSE EXISTING HYBRID CABLE, 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

**T-Mobile**  
T-MOBILE NORTHEAST LLC  
4 SYLVAN WAY  
PARSIPPANY, NJ 07054

**INFINIGY**  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

**SUBMITTALS**

DATE	DESCRIPTION	REVISION
9/28/15	FOR PERMIT	0

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

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



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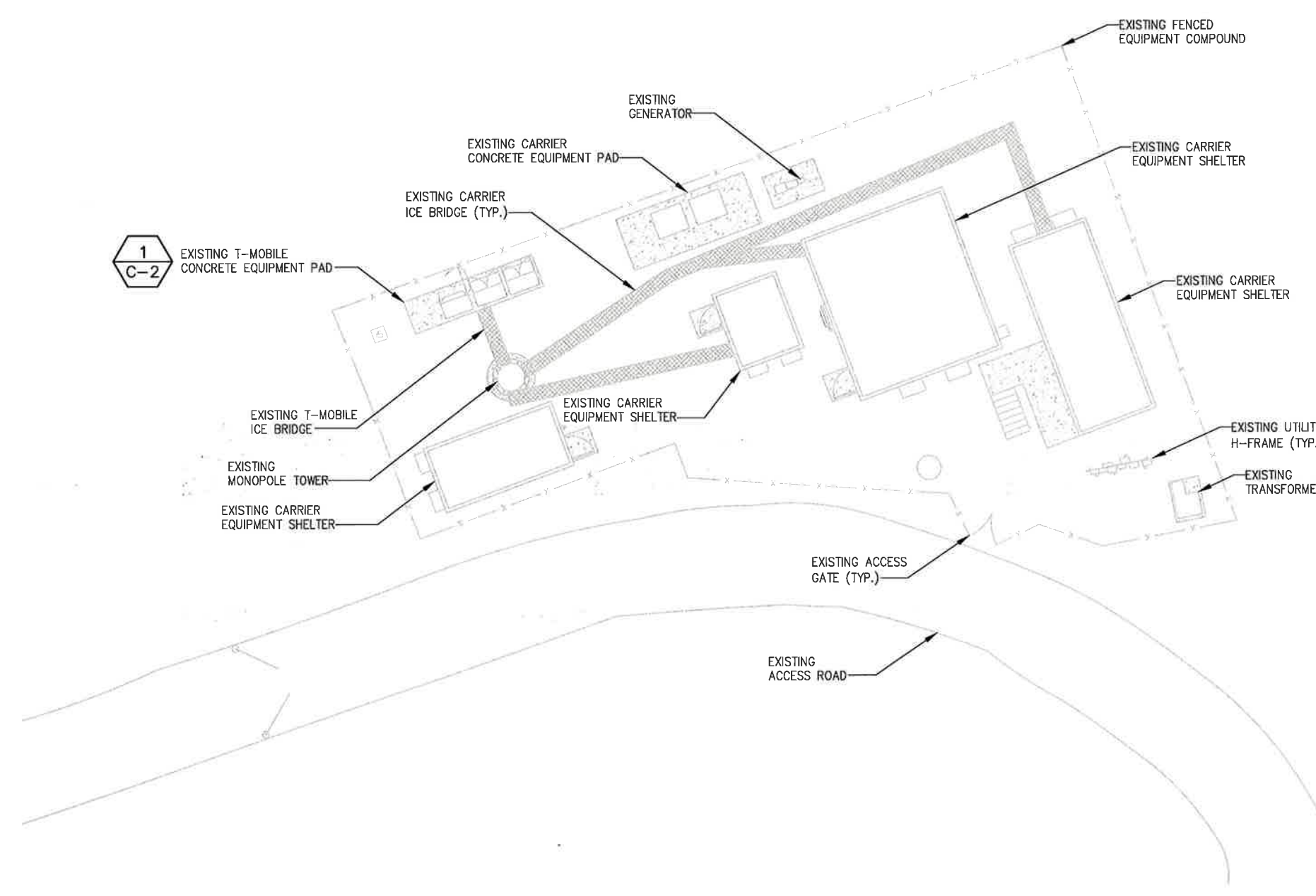
NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:  
**CT11323A**

SITE NAME:  
CT323/SS TOWER REBUILD  
180-182 BAYBERRY LANE  
WESTPORT, CT 06430

SHEET TITLE  
**TITLE SHEET**

SHEET NUMBER  
**T-1**  
SHEET 1 OF 8 SHEETS



1  
C-2



CALLED NORTH

1  
COMPOUND PLAN  
SCALE: AS NOTED

**GENERAL SITE NOTES:**

1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINGY. 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.

**SITE LEGEND**

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



**INFINGY**

T-MOBILE NORTHEAST LLC  
4 SYLVAN WAY  
PARISSEPPANY, NJ 07654  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

**SUBMITTALS**

DATE	DESCRIPTION	REVISION
9/22/15	FOR PERMIT	0

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

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



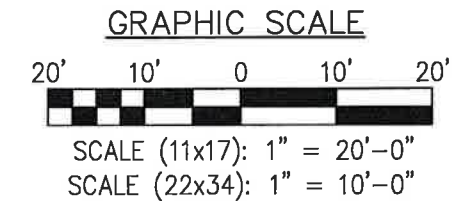
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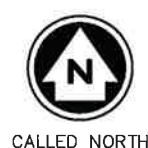
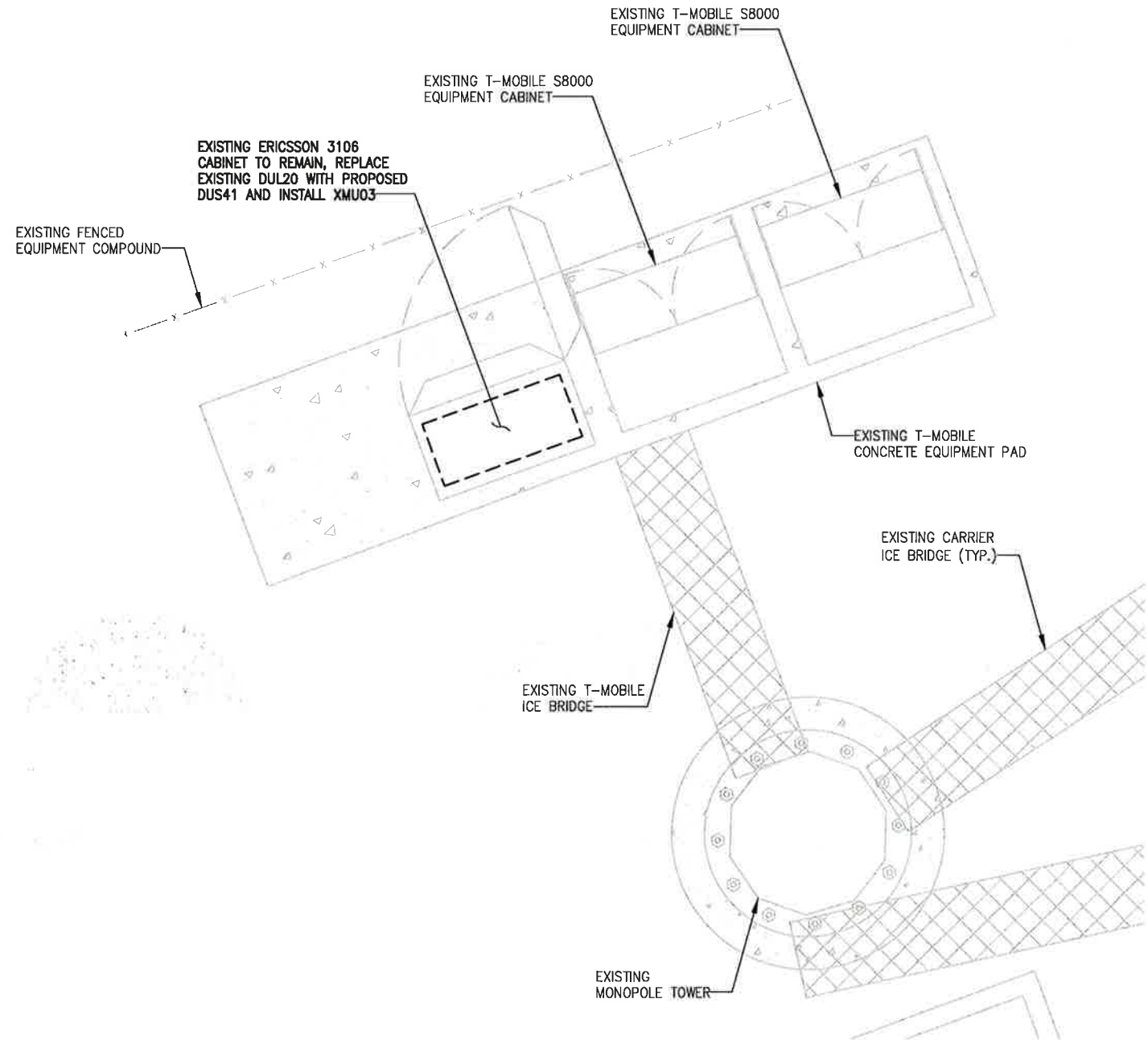
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**SHEET TITLE**  
  
**SITE PLAN**

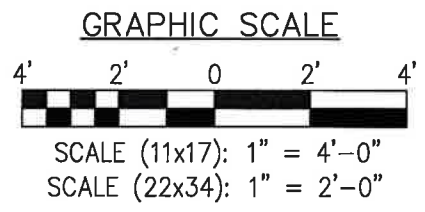
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**C-1**  
  
SHEET 2 OF 8 SHEETS



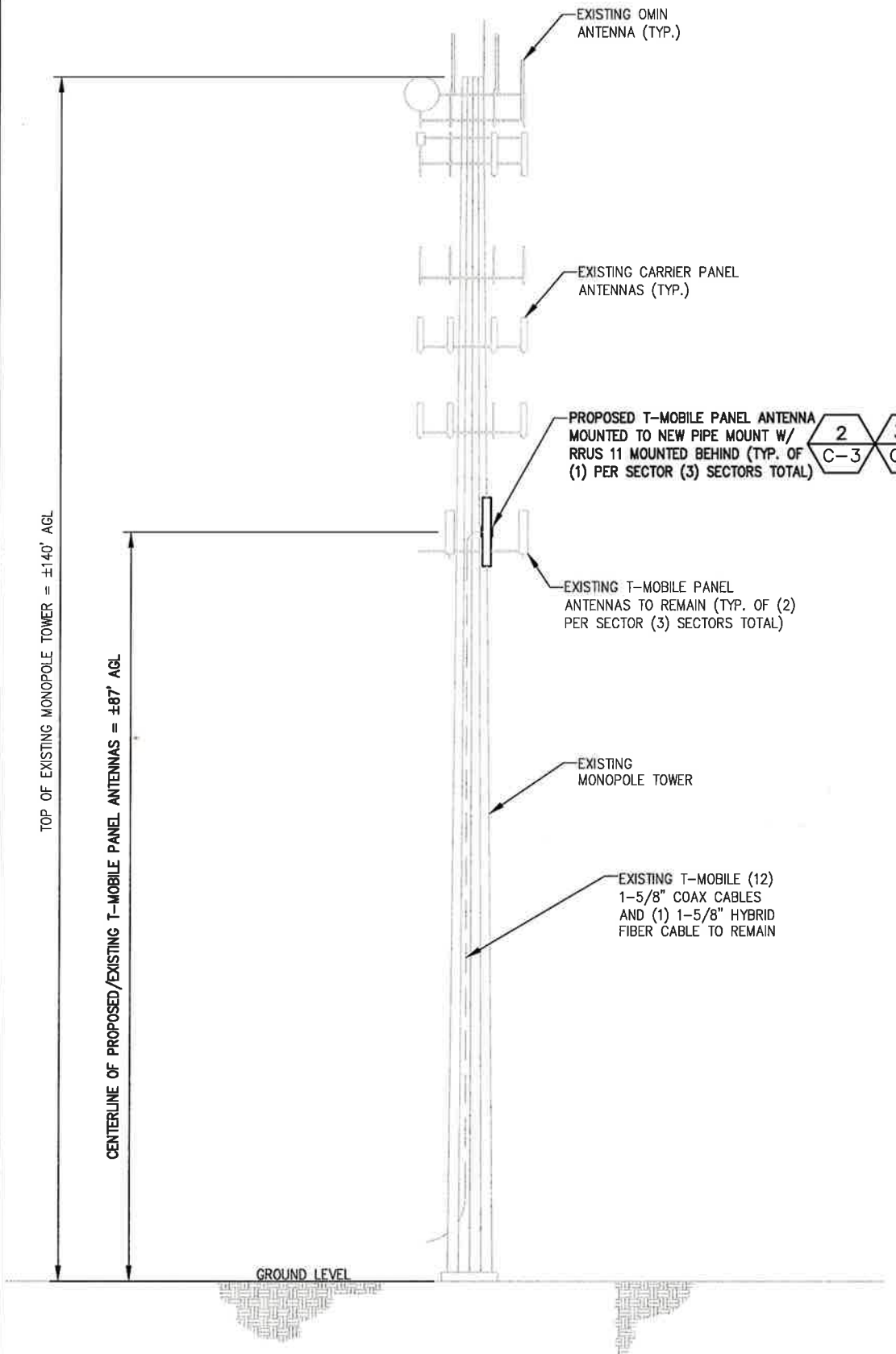




1 COMPOUND PLAN  
SCALE: AS NOTED



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.



2 TOWER ELEVATION  
NOT TO SCALE



T-MOBILE NORTHEAST LLC  
4 SYLVAN WAY  
PARSIPPANY, NJ 07054

INFINIGY  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
9/29/15	FOR PERMIT	0

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

PROJECT NO: 317-000  
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180-182 BAYBERRY LANE  
WESTPORT, CT 06430

SHEET TITLE  
**COMPOUND PLAN & ELEVATION**

SHEET NUMBER  
**C-2**

SHEET 3 OF 8 SHEETS



RF SYSTEM SCHEDULE (702Cu 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	UMTS AWS	RF #1	B4P	AIR21 B2A/B4P	ERICSSON	0	0	60°	0°	2°	87°-0"	-	-	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS AWS A1	-	COAX	-	-								
		RF #2										-	-	-	-	-	-	-	-	-	-	-	-										
	GSM	OPTICAL #1	B2A									-	-	-	-	-	-	-	-	(EXISTING) ATMAA1412D -1A20	RFS	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS AWS A2	-	COAX	-	-
	UMTS	OPTICAL #2										-	-	-	-	-	-	-	-	-	-	-	-										
	LTE 700	TBD	B12P									LNX-6515DS-VTM	COMMSCOPE	0	1	60°	0°	2°	87°-0"	-	-	(PROPOSED) RRUS 11	ERICSSON	-	-	-	-	-	-	-	FIBER	LTE 700 FIBER	-
LTE AWS	OPTICAL #1	B4A	AIR21 B4A/B2P	ERICSSON	0	0	60°	0°	4°	87°-0"	-	-	-	-	-	-	-	-	-	-	-	-	FIBER	-	-								
B	UMTS AWS	RF #1	B4P	AIR21 B2A/B4P	ERICSSON	0	0	160°	0°	7°	87°-0"	-	-	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS AWS A1	-	COAX	-	-								
		RF #2										-	-	-	-	-	-	-	-	-	-	-	-										
	GSM	OPTICAL #1	B2A									-	-	-	-	-	-	-	-	(EXISTING) ATMAA1412D -1A20	RFS	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS AWS A2	-	COAX	-	-
	UMTS	OPTICAL #2										-	-	-	-	-	-	-	-	-	-	-											
	LTE 700	TBD	B12P									LNX-6515DS-VTM	COMMSCOPE	0	1	160°	0°	2°	87°-0"	-	-	(PROPOSED) RRUS 11	ERICSSON	-	-	-	-	-	-	-	FIBER	LTE 700 FIBER	-
LTE AWS	OPTICAL #1	B4A	AIR21 B4A/B2P	ERICSSON	0	0	160°	0°	7°	87°-0"	-	-	-	-	-	-	-	-	-	-	-	-	FIBER	-	-								
C	UMTS AWS	RF #1	B4P	AIR21 B2A/B4P	ERICSSON	0	0	260°	0°	6°	87°-0"	-	-	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS AWS A1	-	COAX	-	-								
		RF #2										-	-	-	-	-	-	-	-	-	-	-	-										
	GSM	OPTICAL #1	B2A									-	-	-	-	-	-	-	-	(EXISTING) ATMAA1412D -1A20	RFS	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS AWS A2	-	COAX	-	-
	UMTS	OPTICAL #2										-	-	-	-	-	-	-	-	-	-	-											
	LTE 700	TBD	B12P									LNX-6515DS-VTM	COMMSCOPE	0	1	260°	0°	2°	87°-0"	-	-	(PROPOSED) RRUS 11	ERICSSON	-	-	-	-	-	-	-	FIBER	LTE 700 FIBER	-
LTE AWS	OPTICAL #1	B4A	AIR21 B4A/B2P	ERICSSON	0	0	260°	0°	6°	87°-0"	-	-	-	-	-	-	-	-	-	-	-	-	FIBER	-	-								

1 RF SCHEDULE  
 NOT TO SCALE

**KEY**

EXISTING	R - RED - GSM
PROPOSED	G - GREEN - UMTS 1900
FIBER CONNECTION	B - BLUE - UMTS AWS
	Y - YELLOW - LTE
	O - ORANGE - FIBER CABLE

**SUBMITTALS**

DATE	DESCRIPTION	REVISION
9/29/15	FOR PERMIT	0

**REVISIONS**

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

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



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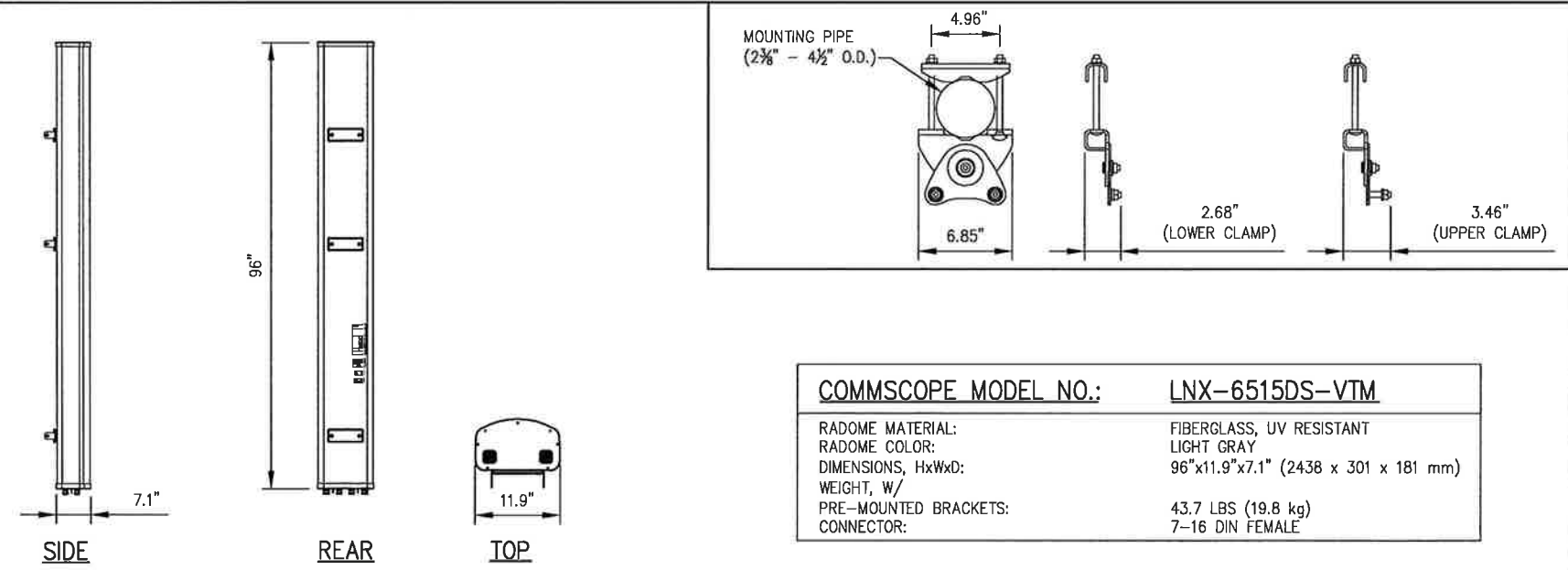
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**CT11323A**

SITE NAME:  
 CT323/SS TOWER REBUILD  
 180-182 BAYBERRY LANE  
 WESTPORT, CT 06430

SHEET TITLE  
**ANTENNA DETAIL & RF SCHEDULE**

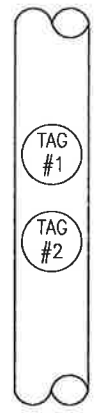
SHEET NUMBER  
**C-3**

SHEET 4 OF 8 SHEETS



**COMMSCOPE MODEL NO.: LNX-6515DS-VTM**

RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	96"x11.9"x7.1" (2438 x 301 x 181 mm)
WEIGHT, w/ PRE-MOUNTED BRACKETS:	43.7 LBS (19.8 kg)
CONNECTOR:	7-16 DIN FEMALE



- 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  
 NOT TO SCALE

2 ANTENNA DETAIL  
 NOT TO SCALE

**SUBMITTALS**

DATE	DESCRIPTION	REVISION
9/29/10	FOR PERMIT	0

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

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



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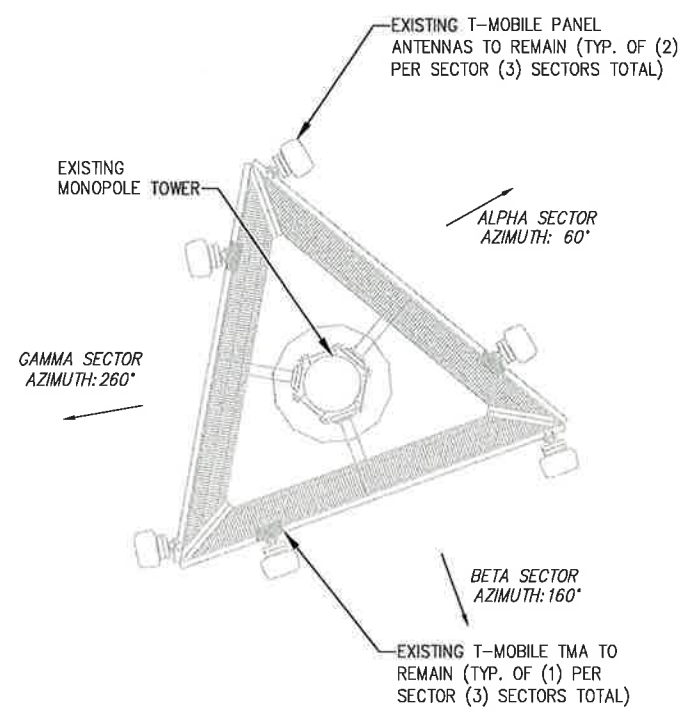
SITE NUMBER:  
**CT11323A**  
SITE NAME:  
CT323/SS TOWER REBUILD  
180-182 BAYBERRY LANE  
WESTPORT, CT 06430

SHEET TITLE  
**EQUIPMENT SPECIFICATIONS**

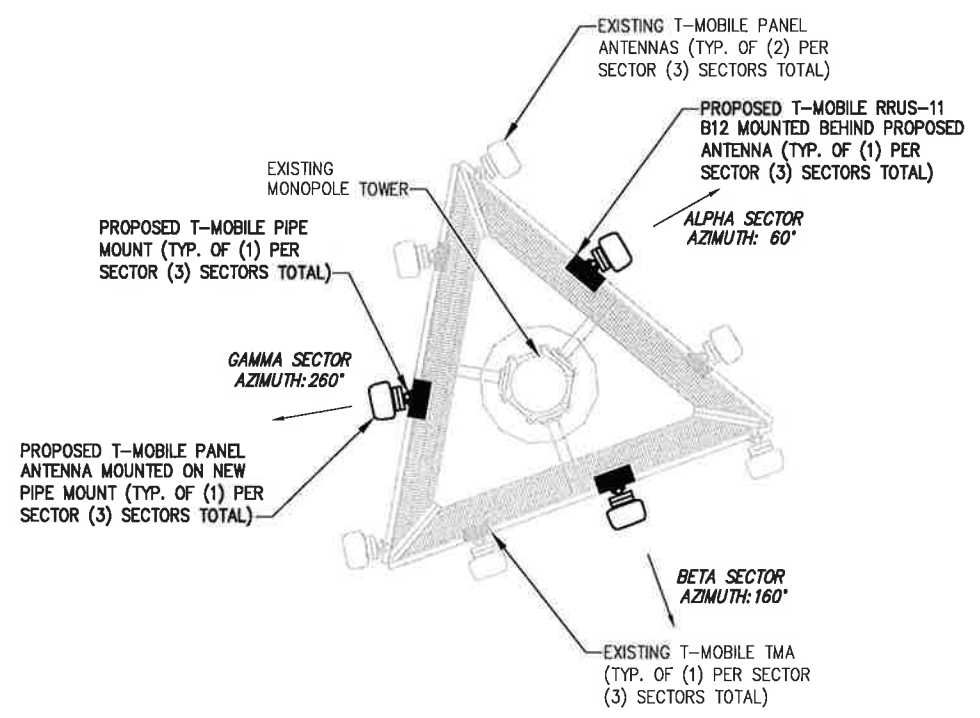
SHEET NUMBER  
**C-4**  
SHEET 5 OF 8 SHEETS

**STRUCTURAL NOTES:**

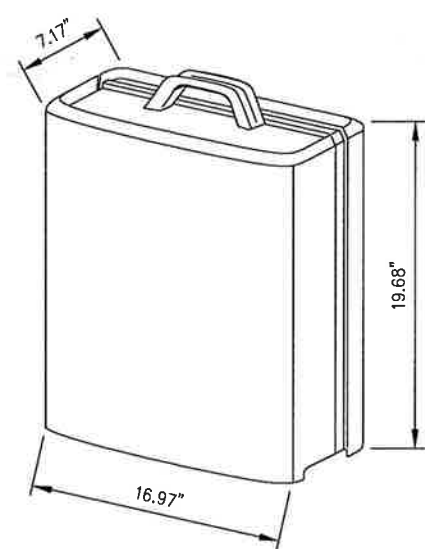
1. SPECIFICATIONS / CODES:
  - CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
  - STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
  - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "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"Øx43/4" EMBEDMENT OR AN APPROVED EQUAL.



**1 EXISTING ANTENNA ORIENTATION PLAN**  
NOT TO SCALE

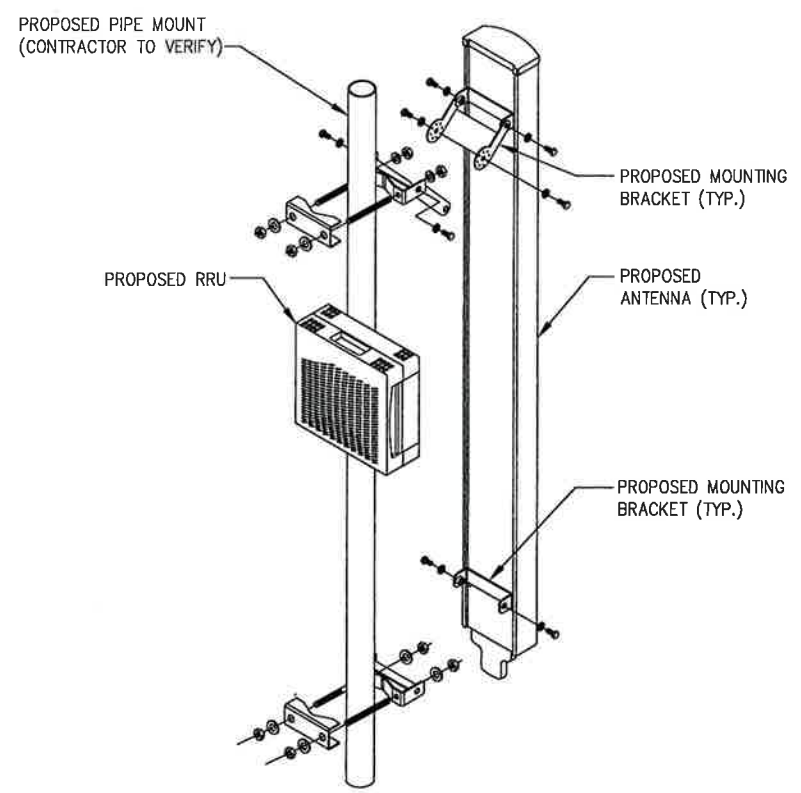


**2 PROPOSED ANTENNA ORIENTATION PLAN**  
NOT TO SCALE



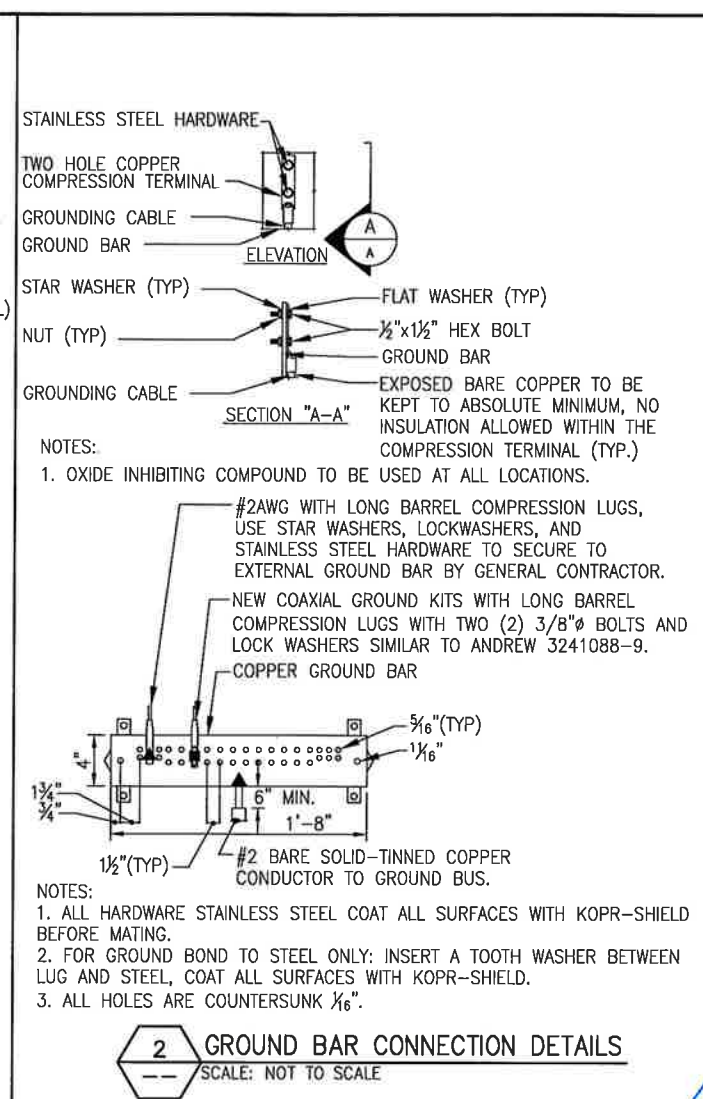
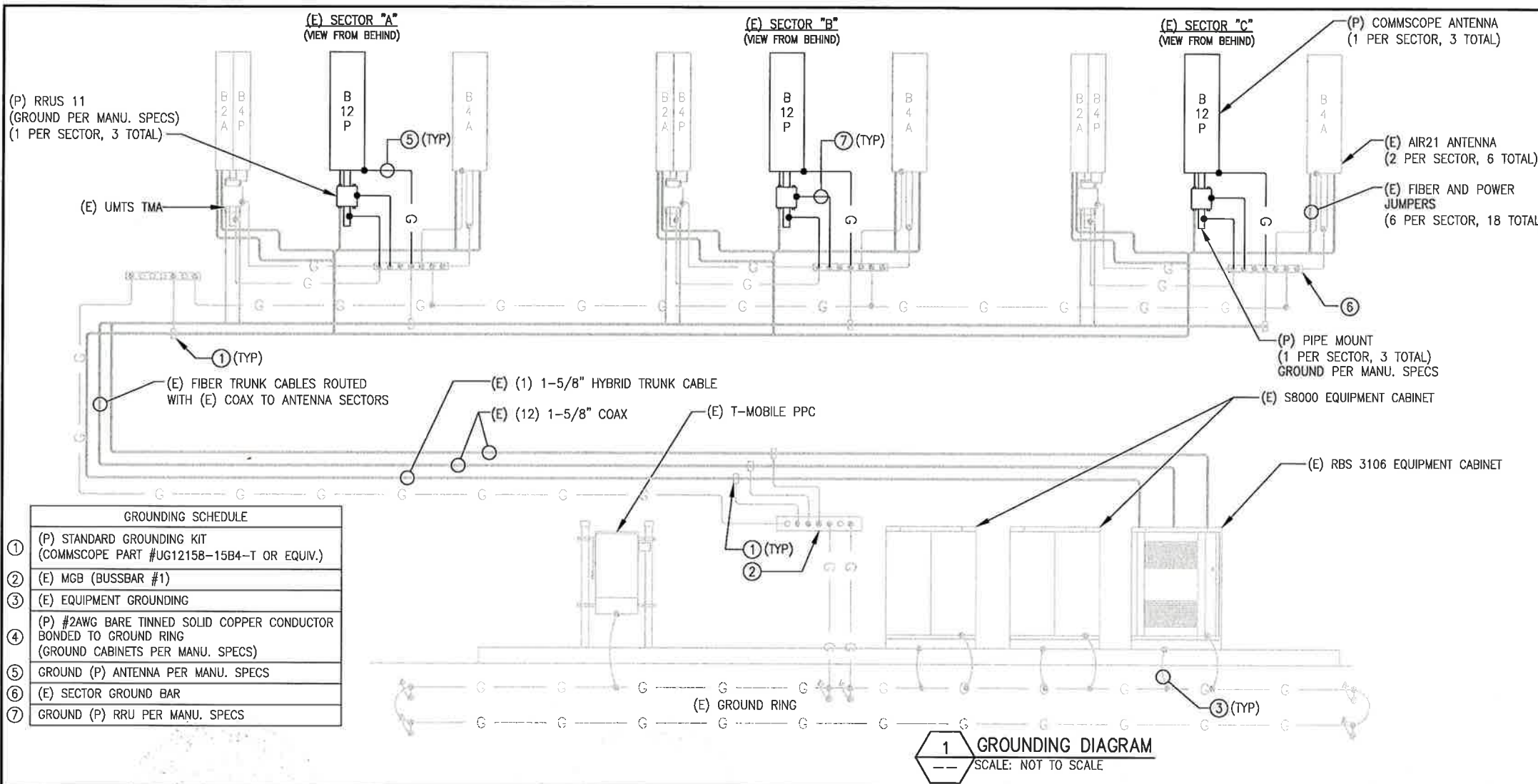
ERICSSON MODEL NO.:	<b>RRUS11 B12</b>
COLOR:	GRAY
DIMENSIONS, HxWxD:	19.68"x16.97"x7.17" (500 x 431 x 182 mm)
WEIGHT:	50.71 LBS (23 kg)

**3 RRUS11 B12 DETAIL**  
NOT TO SCALE

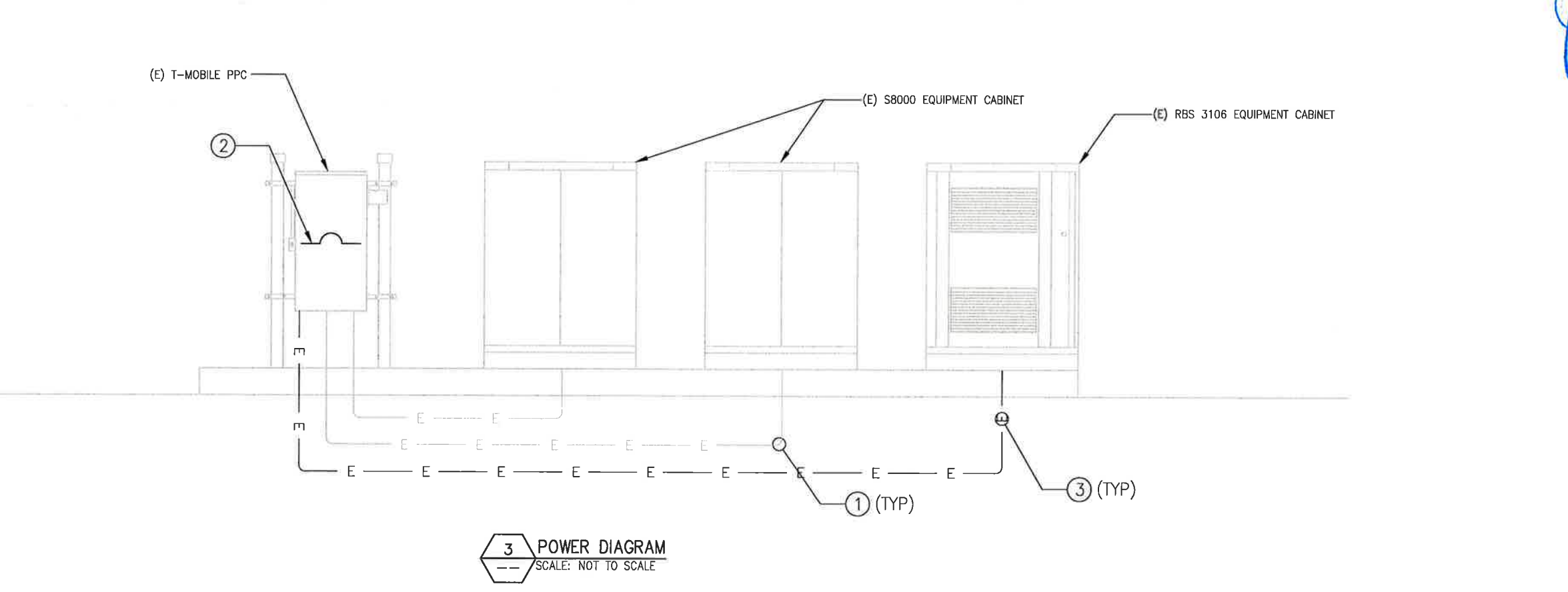


**4 MOUNTING DETAIL**  
NOT TO SCALE





CONDUIT SCHEDULE	
①	(P) WIRE AND CONDUIT UPGRADE FOR POWER
②	(P) 100A BREAKER UPGRADE
③	(P) POWER CONDUIT UPGRADE



SUBMITTALS		
DATE	DESCRIPTION	REVISION
8/29/15	FOR PERMIT	0

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

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



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SITE NUMBER:  
**CT11323A**  
 SITE NAME:  
 CT323/SS TOWER REBUILD  
 180-182 BAYBERRY LANE  
 WESTPORT, CT 06430

SHEET TITLE  
**GROUNDING & POWER DIAGRAMS**

SHEET NUMBER

**E-1**





# ELECTRICAL NOTES:

- WORK INCLUDED**
- INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
    - PREPARE AND SUBMIT SHOP DRAWINGS, DIAGRAMS AND ILLUSTRATIONS.
    - PROCURE ALL NECESSARY PERMITS AND APPROVALS AND PAY ALL REQUIRED FEES AND CHARGES IN CONNECTION WITH THE WORK OF THIS CONTRACT.
    - SUBMIT AS-BUILT DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUALS.
    - EXECUTE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING OF EXISTING OR NEWLY INSTALLED CONSTRUCTION REQUIRED FOR THE WORK OF THIS CONTRACT. FOR SLAB PENETRATIONS THROUGH POST TENSION SLABS, X-RAY EXACT AREA OF PENETRATION PRIOR TO PERFORMING WORK. COORDINATE ALL X-RAY WORK WITH BUILDING ENGINEER.
    - PROVIDE HANGERS, SUPPORTS, FOUNDATIONS, STRUCTURAL FRAMING SUPPORTS, AND BASES FOR CONDUIT AND EQUIPMENT PROVIDED OR INSTALLED UNDER THE WORK OF HIS CONTRACT. PROVIDE COUNTER FLASHING, SLEEVES AND SEALS FOR FLOOR AND WALL PENETRATIONS.
    - MAINTAIN ALL EXISTING ELECTRICAL SERVICES IN THE BUILDING AREAS NOT AFFECTED BY THE ALTERATION DURING THE PROGRESS OF THE WORK INCLUDING PROVIDING ALL TEMPORARY JUMPERS, CONDUITS, CAPS, PROTECTIVE DEVICES, CONNECTIONS AND EQUIPMENT REQUIRED. PROVIDE TEMPORARY LIGHT AND POWER FOR CONSTRUCTION PURPOSES.
  - IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF AN ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT. FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT USUALLY FURNISHED OR NEEDED TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

- GENERAL REQUIREMENTS**
- PROVIDE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL AND STATE ELECTRICAL CODES.
  - THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING.
  - LOAD CALCULATIONS ARE BASED ON EXISTING BUILDING INFORMATION/DRAWINGS PROVIDED TO ENGINEERING. CONTRACTOR IS TO VERIFY ALL EXISTING RATINGS AND LOADS PRIOR TO PURCHASING OF SPECIFIED EQUIPMENT FOR COMPLIANCE TO NEC. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES AND REQUEST FURTHER DIRECTION BY ENGINEER.
  - EXISTING BUILDING EQUIPMENT IS NOTED ON THE DRAWINGS. NEW OR RELOCATED EQUIPMENT IS SHOWN WITH SOLID LINES. FUTURE EQUIPMENT (NOT IN THIS CONTRACT) IS DEPICTED WITH SHADED LINES. REQUEST CLARIFICATION OF DRAWINGS OR SPECIFICATIONS PRIOR TO PRICING OR INSTALLATION.
  - GENERAL
    - AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, MAKE A MANDATORY SITE VISIT TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO NOTIFY THE OWNER, IN WRITING, OF ANY DISCREPANCIES THAT MAY HAVE BEEN NOTED BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS AND SPECIFICATIONS.
    - VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR CORRECTNESS OF SAME.
  - QUALITY, WORKMANSHIP, MATERIALS AND SAFETY
    - PROVIDE NEW MATERIALS AND EQUIPMENT OF A DOMESTIC MANUFACTURER BY THOSE REGULARLY ENGAGED IN THE PRODUCTION AND MANUFACTURE OF SPECIFIED MATERIALS AND EQUIPMENT. WHERE UL, OR OTHER AGENCY, HAS ESTABLISHED STANDARDS FOR MATERIALS, PROVIDE MATERIALS WHICH ARE LISTED AND LABELED ACCORDINGLY. THE COMMERCIAL STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES MENTIONED HEREIN ARE INTENDED FOR THE PROPER FUNCTIONING OF THE WORK.
    - WORK SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE REQUIRED FOR THE WORK. INSTALL MATERIALS AND EQUIPMENT TO PRESENT A NEAT APPEARANCE WHEN COMPLETED AND IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER AND IN ACCORDANCE WITH CONTRACT DOCUMENTS.
    - PROVIDE LABOR, MATERIALS, APPARATUS AND APPLIANCES ESSENTIAL TO THE FUNCTIONING OF THE SYSTEMS DESCRIBED OR INDICATED HEREIN, OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL WHENEVER MENTIONED IN THE CONTRACT DOCUMENT OR NOT.
    - MAKE WRITTEN REQUESTS FOR SUPPLEMENTARY INSTRUCTIONS TO ARCHITECT/ENGINEER IN CASE OF DOUBT AS TO WORK INTENDED OR IN EVENT OF NEED FOR EXPLANATION THEREOF.
    - PERFORMANCE AND MATERIAL REQUIREMENTS SCHEDULED OR SPECIFIED ARE MINIMUM STANDARD ACCEPTABLE. THE RIGHT TO JUDGE THE QUALITY OF EQUIPMENT THAT DEVIATES FROM THE CONTRACT DOCUMENT REMAINS SOLELY WITH ARCHITECT/ENGINEER. CONTRACT DOCUMENT OR NOT.
- GUARANTEE**
- GUARANTEE MATERIALS, PARTS AND LABOR FOR WORK FOR ONE YEAR FROM THE DATE OF ISSUANCE OF OCCUPANCY PERMIT. DURING THAT PERIOD, MAKE GOOD FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIALS OR WORKMANSHIP WITH NO ADDITIONAL COMPENSATION AND AS DIRECTED BY ARCHITECT.

- CLEANING**
- REMOVE ALL CONSTRUCTION DEBRIS RESULTING FROM THE WORK.
  - CLEAN EQUIPMENT AND SYSTEMS FOLLOWING THE COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER.
- COORDINATION AND SUPERVISION**
- CAREFULLY LAY OUT ALL WORK IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, PATCH AND REPAIR THE WORK IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER. RENDER FULL COOPERATION TO OTHER TRADES WHERE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES. ASSIST IN WORKING OUT SPACE CONDITIONS. IF WORK IS INSTALLED BEFORE COORDINATION WITH OTHER TRADES, OR CAUSES INTERFERENCE, MAKE CHANGES NECESSARY TO CORRECT CONDITIONS WITHOUT EXTRA CHARGE.

- SUBMITTALS**
- AS-BUILT DRAWINGS:
    - UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER "AS-BUILT" DRAWINGS.
  - SERVICE MANUALS:
    - UPON COMPLETION OF THE WORK, FULLY INSTRUCT T-MOBILE AS TO THE OPERATION AND MAINTENANCE OF ALL MATERIAL, EQUIPMENT AND SYSTEMS.
    - PROVIDE 3 COMPLETE BOUND SETS OF INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT.

- CUTTING AND PATCHING**
- PROVIDE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING REQUIRED TO COMPLETE THE WORK.
  - OBTAIN OWNER APPROVAL PRIOR TO CUTTING THROUGH FLOORS OR WALLS FOR PIPING OR CONDUIT.

- TESTS, INSPECTION AND APPROVAL**
- BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.
  - PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.

- SPECIAL REQUIREMENTS**
- DO NOT LEAVE ANY WORK INCOMPLETE NOR ANY HAZARDOUS SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. DO NOT INTERFERE WITH OR CUTOFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S WRITTEN PERMISSION.
  - WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING BUILDING UTILITIES AND SERVICE SYSTEMS, INCLUDING FEEDER OR BRANCH CIRCUITING SUPPLYING EXISTING FACILITIES, CONFER WITH THE OWNER AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON. SHUTDOWN NOTE: SCHEDULE AND NOTIFY OWNER 48 HOURS PRIOR TO SHUTDOWN. ALL SHUTDOWN WORK TO BE SCHEDULED AT A TIME CONVENIENT TO OWNER.

- GROUNDING**
- ROUTE ALL GROUNDING CONDUCTORS AS SHOWN ON CONDUIT/GROUNDING RISER.
  - ROUTE 500 KCMIL CU. THIN CONDUCTOR FROM THE MGB LOCATION TO BUILDING STEEL. VERIFY BUILDING STEEL IS EFFECTIVELY GROUNDED PER NEC TO THE MAIN SERVICE GROUNDING ELECTRODE CONDUCTOR (GEC).
  - MAKE ALL GROUND CONNECTIONS FROM MGB TO ELECTRICAL EQUIPMENT WITH 2 HOLE, CRIMP TYPE, BURNDY COMPRESSION TERMINATIONS, SIZED AS REQUIRED.
  - USE 1 HOLE, CRIMP TYPE, BURNDY COMPRESSIONS TERMINATIONS, SIZED AS REQUIRED, AT EQUIPMENT GROUND CONNECTIONS.
  - HIRE AN INDEPENDENT LAB TO PERFORM THE SPECIFIED OHMS TESTING. PROVIDE 4 SETS OF THE CERTIFIED DOCUMENTS TO THE OWNER FOR VERIFICATION PRIOR TO THE PROJECT COMPLETION.

- RACEWAYS**
- ALL WIRING TO BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE FOLLOWING:
    - EXTERIOR FEEDERS AND CONTROL, WHERE UNDERGROUND, TO BE IN SCH 40 PVC.
    - EXTERIOR, ABOVE GROUND POWER CONDUITS TO BE GALVANIZED RIGID STEEL (RGS).
    - ALL TELECOMMUNICATION CONDUITS, INTERIOR/EXTERIOR, TO BE EMT.
    - INSTALL PULL ROPS IN ALL NEW EMPTY CONDUITS INSTALLED ON THIS PROJECT.
    - ALL TELECOM CONDUITS AND PULL BOXES INSTALLED ON THIS PROJECT TO BE LABELED "T-MOBILE". OWNER WILL PROVIDE LABELS FOR CONTRACTOR TO INSTALL.
    - INTERIOR FEEDERS TO BE INSTALLED IN E.M.T. WITH STEEL COMPRESSION FITTINGS.
    - MINIMUM SIZE CONDUIT TO BE 3/4" TRADE SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
    - FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT TO BE INSTALLED IN LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
    - CONDUIT TO BE RUN CONCEALED IN CEILINGS, FINISHED AREAS OR DRYWALL PARTITIONS, UNLESS OTHERWISE NOTED.
    - THE ROUTING OF CONDUITS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. BEFORE INSTALLING ANY WORK, EXAMINE THE WORKING LAYOUTS AND SHOP DRAWINGS OF THE OTHER TRADES TO DETERMINE THE EXACT LOCATIONS AND CLEARANCES.
    - ALL EXTERIOR MOUNTING HARDWARE TO BE GALVANIZED STEEL. COORDINATE WITH BUILDING ENGINEER PRIOR TO ATTACHING TO BUILDING STRUCTURE.

- RACEWAYS CONT'D**
- PENETRATIONS OF WALLS, FLOORS AND ROOFS, FOR THE PASSAGE OF ELECTRICAL RACEWAYS, TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS SO AS TO MAINTAIN THE STRUCTURAL OR WATERPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS OR SMOKE TIGHT CORRIDOR PARTITIONS TO MAINTAIN PROPER RATING OF WALL OR CEILING.
  - PROVIDE ALL CONDUIT ENDS WITH INSULATED METALLIC GROUNDING BUSHINGS.
  - CONDUIT TO BE SUPPORTED AT MAXIMUM DISTANCE OF 8'-0", OR AS REQUIRED BY NEC, IN HORIZONTAL AND VERTICAL DIRECTIONS.
  - PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR ALL JUNCTION BOXES AND/OR OUTLET BOXES NOT USED IN EXPOSED AREAS. PROVIDE ALL OTHER UNUSED BOXES WITH STANDARD STEEL COVER PLATES.
  - WHERE APPLICABLE, PROVIDE ROOFTOP CONDUIT SUPPORT SYSTEM, CONFORMING TO ROOFTOP WARRANTY REQUIREMENTS, PER BUILDING.

- WIRES AND CABLES**
- CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.
  - ALL EQUIPMENT/DEVICES TO BE PROVIDED WITH INSULATED GROUND CONDUCTOR.
  - ALL WIRE AND CABLE TO BE 600VOLT, COPPER, WITH THWN/THHN INSULATION, EXCEPT AS NOTED.
  - WIRE FOR POWER AND LIGHTING WILL NOT BE LESS THAN NO. 12AWG. ALL WIRE NO. 8 AND LARGER TO BE STRANDED.
  - CONTROL WIRING IS NOT TO BE LESS THAN NO. 14AWG, FLEXIBLE IN SINGLE CONDUCTORS OR MULTI-CONDUCTOR CABLES. CONTROL WIRING WILL CONSIST OF MULTI-CONDUCTOR CABLES WHEREVER POSSIBLE. CABLES TO BE PROVIDED WITH AN OVERALL FLAME-RETARDANT, EXTRUDED JACKET AND RATED FOR PLENUM USE. ALL CONTROL WIRE TO BE 600VOLT RATED.
  - WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.
  - HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V CIRCUITS:
 

LENGTH (FT.)	HOME RUN WIRE SIZE
0 TO 50	NO. 12
51 TO 100	NO. 10
101 TO 150	NO. 8
  - VOLTAGE DROP IS NOT TO EXCEED 3%.
  - MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.

- WIRING DEVICES**
- ALL RECEPTACLES INSTALLED IN THIS PROJECT TO BE GROUNDING TYPE, WITH GROUNDING PIN SLOT CONNECTED TO DEVICE GROUND SCREW FOR GROUND WIRE CONNECTION.
- DISCONNECT SWITCHES AND FUSES**
- DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.
  - PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.
  - PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.
  - DISCONNECT SWITCHES TO BE MANUFACTURED BY:
    - GENERAL ELECTRIC COMPANY
    - SQUARE-D
  - PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.
- INSTALLATION**
- INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.
  - INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.
  - FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.
  - FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:
    - THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.
    - TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING. IN NO CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

- GENERAL NOTES:**
- INTENT**
- THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.
  - THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.
  - THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
  - THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
  - MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

- CONFLICTS**
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATIONS OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
  - THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.
  - NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

- CONTRACTS AND WARRANTIES**
- CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.
  - SEE MASTER CONTRACTOR SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

- STORAGE**
- ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

- CLEANUP**
- THE CONTRACTORS SHALL, AT ALL TIMES, KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK. THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY TO USE.
  - EXTERIOR
    - VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
    - REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
    - IF NECESSARY, TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.
  - INTERIOR
    - VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.
    - REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
    - REMOVE PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

- CHANGE ORDER PROCEDURE:**
- REFER TO SECTION 17 OF SIGNED MCSA: SEE PROFESSIONAL SERVICE AGREEMENT FOR MCSA.

- RELATED DOCUMENTS AND COORDINATION**
- GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

- SHOP DRAWINGS**
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.
  - ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

- PRODUCTS AND SUBSTITUTIONS**
- SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST, IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
  - SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

- QUALITY ASSURANCE**
- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE, BUT NOT BE LIMITED TO THE APPLICABLE CODES SET FORTH BY THE LOCAL GOVERNING BODY. SEE "CODE COMPLIANCE" T-1.

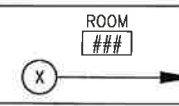
- ADMINISTRATION**
- BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
  - SUBMIT A BAR TYPE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
  - PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
  - CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER, NOR WILL WIRELESS SERVICE BE ARRANGED.
  - DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL WPCS SAFETY REQUIREMENTS IN THEIR AGREEMENT.
  - PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.
  - COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
  - NOTIFY THE OWNER/PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS.

- INSURANCE AND BONDS**
- CONTRACTOR, AT THEIR OWN EXPENSE, SHALL CARRY AND MAINTAIN, FOR THE DURATION OF THE PROJECT, ALL INSURANCE, AS REQUIRED AND LISTED, AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER. REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS.
  - THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.
  - CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

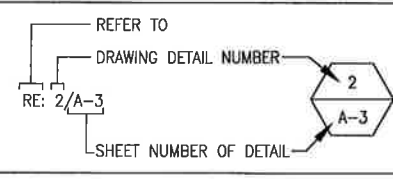
## ABBREVIATIONS

ADJ	ADJUSTABLE
AGL	ABOVE GROUND LINE
&	AND
APPROX	APPROXIMATE
@	AT
BTS	BASE TRANSMISSION STATION
CAB	CABINET
CLG	CEILING
CONC	CONCRETE
CONT	CONTINUOUS
DIA OR Ø	DIAMETER
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EGB	EQUIPMENT GROUND BAR
(E)	EXISTING
EXT	EXTERIOR
FF	FINISHED FLOOR
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GRND	GROUND
LG	LONG
MAX	MAXIMUM
MECH	MECHANICAL
MW	MICROWAVE DISH
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MTL	METAL
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OPP	OPPOSITE
(P)	PROPOSED
PCS	PERSONAL COMMUNICATION SYSTEM
PCC	POWER PROTECTION CABINET
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SS	STAINLESS STEEL
STL	STEEL
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TYP	TYPICAL
VIF	VERIFY IN FIELD
UON	UNLESS OTHERWISE NOTED
WWF	WELDED WIRE FABRIC
W/	WITH

## ARCHITECTURAL SYMBOLS



## DETAIL REFERENCE KEY



T-MOBILE NORTHEAST LLC  
4 SYLVAN WAY  
PARIS, PA NY 07654

**INFINIGY8**  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

SUBMITTALS		
DATE	DESCRIPTION	REVISION
8/29/15	FOR PERMIT	0

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

PROJECT NO: 317-000  
DRAWN BY: JLM  
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:  
**CT11323A**

SITE NAME:  
CT323/SS TOWER REBUILD

180-182 BAYBERRY LANE  
WESTPORT, CT 06430

SHEET TITLE  
**GENERAL AND ELECTRICAL NOTES**

SHEET NUMBER  
**N-1**  
SHEET 8 OF 8 SHEETS

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

**T-Mobile Existing Facility**

**Site ID: CT11323A**

**CT323/ SS Tower Rebuild  
180-182 Bayberry Lane  
Westport, CT 06430**

**November 17, 2015**

**EBI Project Number: 6215005759**

<b>Site Compliance Summary</b>	
Compliance Status:	<b>COMPLIANT</b>
Site total MPE% of FCC general public allowable limit:	<b>14.58 %</b>



November 17, 2015

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

Emissions Analysis for Site: **CT11323A – CT323/ SS Tower Rebuild**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **180-182 Bayberry Lane, Westport, 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 **180-182 Bayberry Lane, Westport, 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) 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.

- 6) 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.
- 7) The antennas used in this modeling are the **Ericsson AIR21 (B4A/B2P & B2A/B4P)** 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 **Ericsson AIR21 (B4A/B2P & B2A/B4P)** have a maximum gain of **15.9 dBd** at their 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.
- 8) The antenna mounting height centerline of the proposed antennas is **87 feet** above ground level (AGL).
- 9) 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:	Ericsson AIR21 B4A/B2P	Make / Model:	Ericsson AIR21 B4A/B2P	Make / Model:	Ericsson AIR21 B4A/B2P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	87	Height (AGL):	87	Height (AGL):	87
Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)
Channel Count	2	Channel Count	2	# PCS Channels:	2
Total TX Power:	120	Total TX Power:	120	# AWS Channels:	120
ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A1 MPE%	2.56	Antenna B1 MPE%	2.56	Antenna C1 MPE%	2.56
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	87	Height (AGL):	87	Height (AGL):	87
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	4	Channel Count	4	Channel Count	4
Total TX Power:	120	Total TX Power:	120	Total TX Power:	120
ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A2 MPE%	2.56	Antenna B2 MPE%	2.56	Antenna C2 MPE%	2.56
Antenna #:	3	Antenna #:	3	Antenna #:	3
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):	87	Height (AGL):	87	Height (AGL):	87
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):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A3 MPE%	1.02	Antenna B3 MPE%	1.02	Antenna C3 MPE%	1.02

Site Composite MPE%	
Carrier	MPE%
T-Mobile (Per Sector Max)	6.13 %
Enertac	0.00 %
Verizon Wireless	3.92 %
AT&T	2.12 %
Sprint	0.74 %
CL&P	0.06 %
Westport Fire	0.96 %
Westport Police	0.42 %
Westport Townwide	0.03 %
FBI	0.20 %
<b>Site Total MPE %:</b>	<b>14.58 %</b>

T-Mobile Sector 1 Total:	6.13 %
T-Mobile Sector 2 Total:	6.13 %
T-Mobile Sector 3 Total:	6.13 %
<b>Site Total:</b>	<b>14.58 %</b>

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	2334.27	87	25.58	2100	1000	2.56 %
T-Mobile 1900 MHz (PCS) GSM/UMTS	2	1167.14	87	12.79	1900	1000	1.28 %
T-Mobile 2100 MHz (AWS) UMTS	2	1167.14	87	12.79	2100	1000	1.28 %
T-Mobile 700 MHz LTE	1	865.21	87	4.74	700	467	1.02 %
						<b>Total:</b>	<b>6.13%</b>

## 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:	6.13 %
Sector 2:	6.13 %
Sector 3 :	6.13 %
T-Mobile Per Sector Maximum:	6.13 %
Site Total:	14.58 %
Site Compliance Status:	<b>COMPLIANT</b>

The anticipated composite MPE value for this site assuming all carriers present is **14.58%** 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

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## Structural Analysis Report

**Structure** : 140 ft Monopole  
**ATC Site Name** : WSPT-Westport Rebuild CT, CT  
**ATC Site Number** : 310968  
**Engineering Number** : 63916321  
**Proposed Carrier** : T-Mobile  
**Carrier Site Name** : N/A  
**Carrier Site Number** : CT11323A  
**Site Location** : 180A Bayberry Lane  
Westport, CT 06880-2844  
41.171667,-73.328467  
**County** : Fairfield  
**Date** : November 6, 2015  
**Max Usage** : 86%  
**Result** : Pass

Reviewed by:  
Scott Wirgau, PE  
Structural Team Leader

Prepared By:  
Nupur Khadilkar

*Nupur S. Khadilkar*



Nov 10 2015 5:31 PM

COA: PEC.0001553





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## Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 140 ft monopole to reflect the change in loading by T-Mobile.

## Supporting Documents

<b>Tower Drawings</b>	PJF, Penn Summit Job #29204-0171, dated July 1, 2004
<b>Foundation Drawing</b>	PJF, Penn Summit Job #29204-0171, dated June 10, 2004
<b>Geotechnical Report</b>	GeoTechnologies Project #1-02-1190-EA, dated September 23, 2002

## 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/EIA-222.

<b>Basic Wind Speed:</b>	85 mph (Fastest Mile)
<b>Basic Wind Speed w/ Ice:</b>	74 mph (Fastest Mile)w/ 1/2" radial ice concurrent
<b>Code:</b>	ANSI/TIA/EIA-222-F / 2003 IBC , Sec. 1609.1.1, Exception (5) & Sec. 3108.4 w/ 2005 CT Supplement & 2009 CT Amendment

## 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](mailto:Engineering@americantower.com). Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



**Existing and Reserved Equipment**

Elevation <sup>1</sup> (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
140.0	144.8	1	Andrew DB589	Flush	(1) 1 1/4" Coax	American Messaging
138.0	141.0	1	2' HP Dish	Platform w/ Handrails	(5) 7/8" Coax (3) 1 5/8" Coax (1) EW90	Town Of Westport
	138.0	3	4' Omni			
		1	6' Dipole			
		2	8' Omni			
		1	6' FM Antenna			
		3	8' Omni		(2) 7/8" Coax	US Treasury
130.0	132.0	3	RFS RFS APXV9TM14-ALU-I20	Low Profile Platform	(6) 1 1/4" Coax (4) 1 1/4" Hybriflex Cable	Sprint Nextel
		6	RFS APXVSP18-C-A20			
	128.0	3	Alcatel-Lucent 800MHz 2X50W RRH w/ Filter			
		3	Alcatel-Lucent 4x40W RRH			
		3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield			
118.0	118.0	1	Andrew DB586	Flush	(2) 1 1/4" Coax (1) 1/2" Coax	Connecticut Light & Power
110.0	110.0	2	Diamond X50A	Low Profile Platform	(12) 1 5/8" Coax (1) 1 5/8" Hybriflex Cable	Verizon
		6	RFS FD9R6004/2C-3L			
		3	Alcatel-Lucent RRH2x40-AWS			
		3	Antel BXA-171063-8BF-EDIN-X			
		3	Antel BXA-171063-12CF-EDIN-X			
		1	RFS DB-T1-6Z-8AB-OZ			
		3	Antel BXA-70080/6CF			
		1	Antel BXA-70063/6CF			
		2	Powerwave P65-16-XL-2			
100.0	100.0	6	Powerwave LGP21901	Low Profile Platform	(12) 1 5/8" Coax (4) 0.74" 8 AWG 7 (1) 0.28" RG-6 (1) 0.32" Coax (1) 3/8" Coax	AT&T Mobility
		6	Powerwave LGP21401			
		1	Raycap DC6-48-60-18-8F			
		6	Ericsson RRUS 11 (Band 12) (55 lb)			
		6	Powerwave 7770.00			
		3	Powerwave P65-16-XLH-RR			
87.0	87.0	3	RFS ATMAA1412D-1A20	Low Profile Platform	(12) 1 5/8" Coax (1) 1 1/4" Fiber	T-Mobile
		3	Ericsson AIR 21, 1.3 M, B2A B4P			
		3	Ericsson AIR 21, 1.3M, B4A B2P			

**Equipment to be Removed**

Elevation <sup>1</sup> (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
No loading considered as to be removed						



**Proposed Equipment**

Elevation <sup>1</sup> (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
87.0	87.0	3	Ericsson RRUS 11 B12	Low Profile Platform	-	T-Mobile
		3	Andrew LNX-6515DS-VTM			

<sup>1</sup>Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

**Structure Usages**

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	86%	Pass
Shaft	82%	Pass
Base Plate	40%	Pass

**Foundations**

Reaction Component	Analysis Reactions
Moment (Kips-Ft)	2,949.6
Axial (Kips)	45.8
Shear (Kips)	29.2

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

**Deflection and Sway\***

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
138.0	2' HP Dish	Town of Westport	2.381	1.815
87.0	Ericsson RRUS 11 B12	T-Mobile	0.974	1.240
	Andrew LNX-6515DS-VTM			

\*Deflection and Sway was evaluated considering a design wind speed of 50 mph (Fastest Mile) per ANSI/TIA/EIA-222-F.



## Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

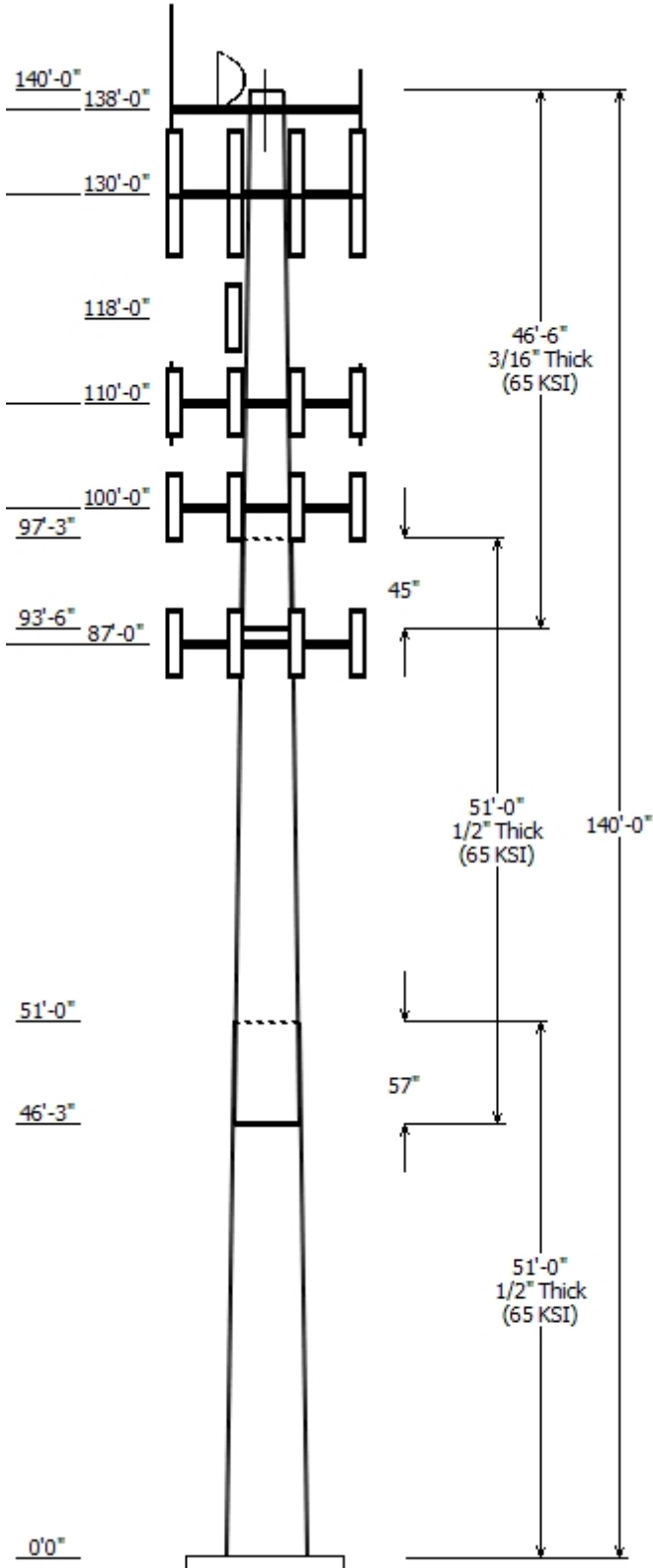
- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

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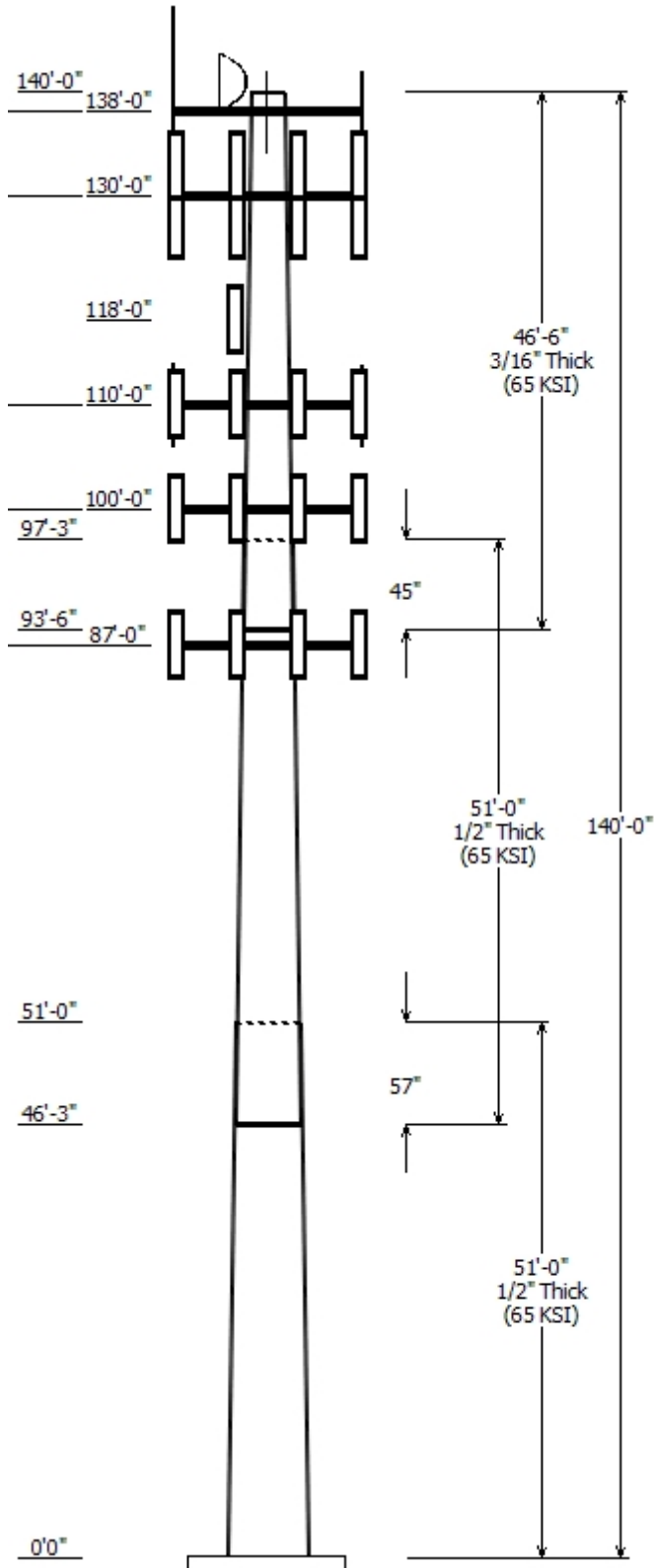
Job Information	
Pole :	310968
Code :	TIA/EIA-222-F
Description :	140 ft Summit Monopole
Client :	T-MOBILE
Location :	WSPT-Westport Rebuild CT, CT
Shape :	18 Sides
Height :	140.00 (ft)
Base Elev (ft):	0.00
Taper:	0.20003(in/ft)

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap		Steel Grade (ksi)
		Top	Bottom			Length (in)	Taper (in/ft)	
1	51.000	36.92	47.13	0.500		0.000	0.200000	65
2	51.000	28.67	38.87	0.500	Slip Joint	57.000	0.200000	65
3	46.500	20.50	29.80	0.188	Slip Joint	45.000	0.200000	65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
140.000	144.800	1	Andrew DB589
138.000	138.000	3	4' Omni
138.000	141.000	1	2' HP Dish
138.000	138.000	1	Flat Platform w/ Handrails
138.000	138.000	2	8' Omni
138.000	138.000	3	8' Omni
138.000	138.000	1	6' FM Antenna
138.000	138.000	1	6' Dipole
130.000	132.000	3	RFS RFS APXV9TM14-ALU-I20
130.000	128.000	3	Alcatel-Lucent TD-RRH8x20-25
130.000	128.000	3	Alcatel-Lucent 4x40W RRH
130.000	128.000	3	Alcatel-Lucent 800 MHz 2X50W
130.000	132.000	6	RFS APXVSP18-C-A20
130.000	130.000	1	Flat Low Profile Platform
118.000	118.000	1	Andrew DB586
110.000	110.000	3	Alcatel-Lucent RRH2x40-AWS
110.000	110.000	1	RFS DB-T1-6Z-8AB-0Z
110.000	110.000	3	Antel BXA-70080/6CF
110.000	110.000	3	Antel BXA-171063-12CF-EDIN-X
110.000	110.000	3	Antel BXA-171063-8BF-EDIN-X
110.000	110.000	1	Antel BXA-70063/6CF
110.000	110.000	6	RFS FD9R6004/2C-3L
110.000	110.000	2	Powerwave P65-16-XL-2
110.000	110.000	1	Round Low Profile Platform
110.000	110.000	2	Diamond X50A
100.000	100.000	6	Powerwave LGP21401
100.000	100.000	6	Powerwave 7770.00
100.000	100.000	1	Raycap DC6-48-60-18-8F
100.000	100.000	3	Powerwave P65-16-XLH-RR
100.000	100.000	6	Ericsson RRUS 11 (Band 12) (55
100.000	100.000	6	Powerwave LGP21901
100.000	100.000	1	Flat Low Profile Platform
87.000	87.000	3	Andrew LNX-6515DS-VTM
87.000	87.000	3	Ericsson RRUS 11 B12
87.000	87.000	3	RFS ATMAA1412D-1A20
87.000	87.000	3	Ericsson AIR 21, 1.3 M, B2A B4
87.000	87.000	3	Ericsson AIR 21, 1.3M, B4A B2P
87.000	87.000	1	Flat Low Profile Platform

Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
5.000	87.000	1 1/4" Fiber	No



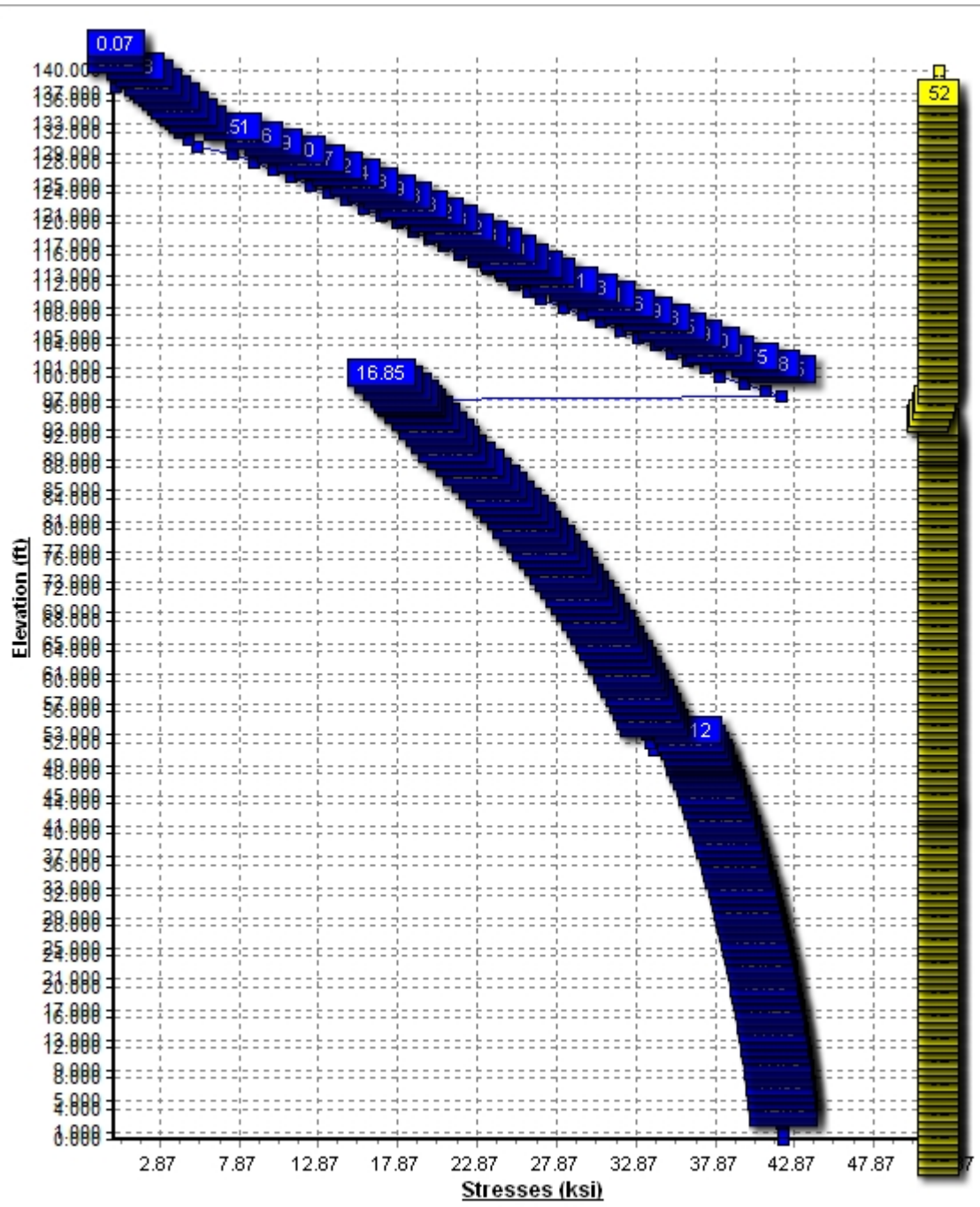


5.000	87.000	1 5/8" Coax	No
5.000	100.0	0.28" RG-6	No
5.000	100.0	0.32" Coax	No
5.000	100.0	0.74" 8 AWG 7	No
5.000	100.0	1 5/8" Coax	No
5.000	100.0	3/8" Coax	No
5.000	110.0	1 5/8" Coax	No
5.000	110.0	1 5/8" Hybriflex	No
5.000	110.0	1/2" Coax	No
5.000	118.0	1 1/4" Coax	No
5.000	118.0	1/2" Coax	No
5.000	130.0	1 1/4" Coax	No
5.000	130.0	1 1/4" Hybriflex	No
5.000	138.0	1 5/8" Coax	No
5.000	138.0	7/8" Coax	No
5.000	138.0	7/8" Coax	No
5.000	138.0	EW90	No
5.000	140.0	1 1/4" Coax	No

Load Cases	
No Ice	85.00 mph Wind with No Ice
Ice	73.61 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
No Ice	2949.64	29.20	38.75
Ice	2502.47	24.14	45.76
Twist/Sway	1021.36	10.10	38.76

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
Twist/Sway	138.00	28.578	1.815



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Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

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Customer: T-MOBILE

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### Analysis Parameters

Location:	Fairfield County, CT	Height (ft):	140
Code:	TIA/EIA-222-F	Base Diameter (in):	47.13
Shape:	18 Sides	Top Diameter (in):	20.50
Pole Type:	Taper	Taper (in/ft) :	0.200
Pole Manufacturer:	PennSummit Tub		

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### Load Cases

No Ice	85.00 mph Wind with No Ice
Ice	73.61 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

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**Shaft Section Properties**

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom						Top						
							Dia (in)	Elev (ft)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	51.000	0.5000	65		0.00	11,437	47.13	0.00	74.00	20328.7	14.86	94.26	36.92	51.00	57.81	9692.3	11.26	73.86	0.200036
2-18	51.000	0.5000	65	Slip	57.00	9,165	38.87	46.25	60.90	11333.7	11.95	77.76	28.67	97.25	44.71	4485.1	8.35	57.35	0.200036
3-18	46.500	0.1875	65	Slip	45.00	2,351	29.80	93.50	17.62	1952.7	26.26	158.94	20.50	140.00	12.09	630.1	17.52	109.33	0.200036
Shaft Weight						22,952													

**Discrete Appurtenance Properties**

Attach Elev (ft)	Description	Qty	No Ice			Ice			Distance From Face (ft)	Vert Ecc (ft)
			Weight (lb)	EPAA (sf)	Orientation Factor	Weight (lb)	EPAA (sf)	Orientation Factor		
140.00	Andrew DB589	1	11.50	1.380	1.00	22.90	2.320	1.00	0.000	4.800
138.00	2' HP Dish	1	90.00	3.960	1.00	128.00	4.300	1.00	0.000	3.000
138.00	4' Omni	3	10.00	1.000	1.00	21.00	1.360	1.00	0.000	0.000
138.00	6' Dipole	1	20.00	2.220	1.00	39.30	3.000	1.00	0.000	0.000
138.00	6' FM Antenna	1	30.00	13.450	1.00	112.70	14.770	1.00	0.000	0.000
138.00	8' Omni	3	25.00	2.400	1.00	62.00	3.230	1.00	0.000	0.000
138.00	8' Omni	2	25.00	2.400	1.00	62.00	3.230	1.00	0.000	0.000
138.00	Flat Platform w/ Handrails	1	1750.00	33.000	0.90	2,450.00	48.400	0.90	0.000	0.000
130.00	Alcatel-Lucent 4x40W RRH	3	91.00	3.830	0.67	122.40	4.230	0.67	0.000	-2.000
130.00	Alcatel-Lucent 800 MHz	3	64.00	2.400	0.67	86.10	2.720	0.67	0.000	-2.000
130.00	Alcatel-Lucent TD-RRH8x20-	3	70.00	4.720	0.67	82.70	4.430	0.67	0.000	-2.000
130.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
130.00	RFS APXVSP18-C-A20	6	57.00	8.260	0.82	106.50	8.260	0.82	0.000	2.000
130.00	RFS RFS APXV9TM14-ALU-I20	3	55.10	6.900	0.76	92.40	6.340	0.76	0.000	2.000
118.00	Andrew DB586	1	8.30	0.740	1.00	19.10	0.920	1.00	0.000	0.000
110.00	Alcatel-Lucent RRH2x40-AWS	3	44.00	2.510	0.67	61.40	2.870	0.67	0.000	0.000
110.00	Antel BXA-171063-12CF-EDIN-	3	15.00	4.790	0.88	42.40	5.460	0.88	0.000	0.000
110.00	Antel BXA-171063-8BF-EDIN-X	3	10.50	2.940	0.87	29.30	3.410	0.87	0.000	0.000
110.00	Antel BXA-70063/6CF	1	14.90	7.740	0.76	58.00	8.540	0.76	0.000	0.000
110.00	Antel BXA-70080/6CF	3	18.00	5.840	0.88	54.09	6.500	0.88	0.000	0.000
110.00	Diamond X50A	2	2.30	1.120	1.00	57.20	1.630	1.00	0.000	0.000
110.00	Powerwave P65-16-XL-2	2	33.00	8.400	0.75	77.53	9.230	0.75	0.000	0.000
110.00	RFS DB-T1-6Z-8AB-0Z	1	44.00	5.600	0.67	144.50	6.080	0.67	0.000	0.000
110.00	RFS FD9R6004/2C-3L	6	2.60	0.370	0.50	5.40	0.500	0.50	0.000	0.000
110.00	Round Low Profile Platform	1	1500.00	21.700	1.00	1,700.00	27.200	1.00	0.000	0.000
100.00	Ericsson RRUS 11 (Band 12)	6	55.00	2.940	0.67	74.30	3.290	0.67	0.000	0.000
100.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
100.00	Powerwave 7770.00	6	35.00	5.880	0.75	67.63	6.530	0.75	0.000	0.000
100.00	Powerwave LGP21401	6	14.10	1.290	0.50	21.26	1.530	0.50	0.000	0.000
100.00	Powerwave LGP21901	6	5.50	0.230	0.50	7.70	0.340	0.50	0.000	0.000
100.00	Powerwave P65-16-XLH-RR	3	53.00	8.400	0.78	100.20	9.220	0.78	0.000	0.000
100.00	Raycap DC6-48-60-18-8F	1	31.80	1.470	1.00	49.50	1.670	1.00	0.000	0.000
87.00	Andrew LNX-6515DS-VTM	3	51.30	11.430	0.84	117.10	12.360	0.84	0.000	0.000
87.00	Ericsson AIR 21, 1.3 M, B2A	3	83.00	6.530	0.83	132.60	7.200	0.83	0.000	0.000
87.00	Ericsson AIR 21, 1.3M, B4A	3	81.50	6.580	0.83	132.60	7.200	0.83	0.000	0.000
87.00	Ericsson RRUS 11 B12	3	50.70	3.260	0.67	0.00	0.000	0.67	0.000	0.000
87.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
87.00	RFS ATMAA1412D-1A20	3	13.00	1.170	0.50	20.60	1.390	0.50	0.000	0.000
Totals		103	11341.60			15,384.87			Number of Loadings : 38	

**Linear Appurtenance Properties**

Elev From (ft)	Elev To (ft)	Qty	Description	No Ice		Ice		Exposed To Wind
				Weight (lb/ft)	CaAa (sf/ft)	Weight (lb/ft)	CaAa (sf/ft)	
5.00	140.00	1	1 1/4" Coax	0.63	0.00	0.00	0.00	N

Site Number: 310968

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5.00	138.00	3	1 5/8" Coax	2.46	0.00	0.00	0.00	N
5.00	138.00	5	7/8" Coax	1.98	0.00	0.00	0.00	N
5.00	138.00	2	7/8" Coax	0.66	0.00	0.00	0.00	N
5.00	138.00	1	EW90	0.32	0.00	0.00	0.00	N
5.00	130.00	6	1 1/4" Coax	0.63	0.00	0.00	0.00	N
5.00	130.00	4	1 1/4" Hybriflex	3.00	0.00	0.00	0.00	N
5.00	118.00	2	1 1/4" Coax	0.63	0.00	0.00	0.00	N
5.00	118.00	1	1/2" Coax	0.15	0.00	0.00	0.00	N
5.00	110.00	12	1 5/8" Coax	9.84	0.00	0.00	0.00	N
5.00	110.00	1	1 5/8" Hybriflex	1.30	0.00	0.00	0.00	N
5.00	110.00	2	1/2" Coax	0.15	0.00	0.00	0.00	N
5.00	100.00	1	0.28" RG-6	0.03	0.00	0.00	0.00	N
5.00	100.00	1	0.32" Coax	0.05	0.00	0.00	0.00	N
5.00	100.00	4	0.74" 8 AWG 7	0.98	0.00	0.00	0.00	N
5.00	100.00	12	1 5/8" Coax	9.84	0.00	0.00	0.00	N
5.00	100.00	1	3/8" Coax	0.08	0.00	0.00	0.00	N
5.00	87.00	1	1 1/4" Fiber	1.05	0.00	0.00	0.00	N
5.00	87.00	12	1 5/8" Coax	9.84	0.00	0.00	0.00	N
			Total Weight	4,469.19 (lb)		0.00 (lb)		

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

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Customer: T-MOBILE

**Segment Properties** (Max Len : 1.ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Fa (ksi)	Weight (lb)
0.00		0.5000	47.130	73.999	20,328.7	14.86	94.26	65	52	0	0.0
1.00		0.5000	46.930	73.682	20,068.2	14.79	93.86	65	52	0	251.3
2.00		0.5000	46.730	73.364	19,810.0	14.72	93.46	65	52	0	250.2
3.00		0.5000	46.530	73.047	19,553.9	14.65	93.06	65	52	0	249.1
4.00		0.5000	46.330	72.729	19,300.1	14.58	92.66	65	52	0	248.0
5.00		0.5000	46.130	72.412	19,048.5	14.50	92.26	65	52	0	246.9
6.00		0.5000	45.930	72.094	18,799.1	14.43	91.86	65	52	0	245.9
7.00		0.5000	45.730	71.777	18,551.8	14.36	91.46	65	52	0	244.8
8.00		0.5000	45.530	71.460	18,306.8	14.29	91.06	65	52	0	243.7
9.00		0.5000	45.330	71.142	18,063.9	14.22	90.66	65	52	0	242.6
10.00		0.5000	45.130	70.825	17,823.2	14.15	90.26	65	52	0	241.5
11.00		0.5000	44.930	70.507	17,584.6	14.08	89.86	65	52	0	240.5
12.00		0.5000	44.730	70.190	17,348.1	14.01	89.46	65	52	0	239.4
13.00		0.5000	44.530	69.872	17,113.8	13.94	89.06	65	52	0	238.3
14.00		0.5000	44.330	69.555	16,881.6	13.87	88.66	65	52	0	237.2
15.00		0.5000	44.129	69.237	16,651.5	13.80	88.26	65	52	0	236.1
16.00		0.5000	43.929	68.920	16,423.5	13.73	87.86	65	52	0	235.1
17.00		0.5000	43.729	68.603	16,197.6	13.66	87.46	65	52	0	234.0
18.00		0.5000	43.529	68.285	15,973.8	13.59	87.06	65	52	0	232.9
19.00		0.5000	43.329	67.968	15,752.1	13.52	86.66	65	52	0	231.8
20.00		0.5000	43.129	67.650	15,532.4	13.45	86.26	65	52	0	230.7
21.00		0.5000	42.929	67.333	15,314.8	13.38	85.86	65	52	0	229.7
22.00		0.5000	42.729	67.015	15,099.2	13.31	85.46	65	52	0	228.6
23.00		0.5000	42.529	66.698	14,885.6	13.23	85.06	65	52	0	227.5
24.00		0.5000	42.329	66.380	14,674.1	13.16	84.66	65	52	0	226.4
25.00		0.5000	42.129	66.063	14,464.6	13.09	84.26	65	52	0	225.3
26.00		0.5000	41.929	65.746	14,257.1	13.02	83.86	65	52	0	224.3
27.00		0.5000	41.729	65.428	14,051.5	12.95	83.46	65	52	0	223.2
28.00		0.5000	41.529	65.111	13,848.0	12.88	83.06	65	52	0	222.1
29.00		0.5000	41.329	64.793	13,646.4	12.81	82.66	65	52	0	221.0
30.00		0.5000	41.129	64.476	13,446.8	12.74	82.26	65	52	0	219.9
31.00		0.5000	40.929	64.158	13,249.2	12.67	81.86	65	52	0	218.9
32.00		0.5000	40.729	63.841	13,053.5	12.60	81.46	65	52	0	217.8
33.00		0.5000	40.529	63.523	12,859.8	12.53	81.06	65	52	0	216.7
34.00		0.5000	40.329	63.206	12,667.9	12.46	80.66	65	52	0	215.6
35.00		0.5000	40.129	62.889	12,478.0	12.39	80.26	65	52	0	214.5
36.00		0.5000	39.929	62.571	12,290.0	12.32	79.86	65	52	0	213.5
37.00		0.5000	39.729	62.254	12,103.9	12.25	79.46	65	52	0	212.4
38.00		0.5000	39.529	61.936	11,919.7	12.18	79.06	65	52	0	211.3
39.00		0.5000	39.329	61.619	11,737.3	12.11	78.66	65	52	0	210.2
40.00		0.5000	39.129	61.301	11,556.9	12.04	78.26	65	52	0	209.1
41.00		0.5000	38.929	60.984	11,378.3	11.97	77.86	65	52	0	208.1
42.00		0.5000	38.729	60.666	11,201.5	11.89	77.46	65	52	0	207.0
43.00		0.5000	38.528	60.349	11,026.6	11.82	77.06	65	52	0	205.9
44.00		0.5000	38.328	60.032	10,853.5	11.75	76.66	65	52	0	204.8
45.00		0.5000	38.128	59.714	10,682.2	11.68	76.26	65	52	0	203.7
46.00		0.5000	37.928	59.397	10,512.8	11.61	75.86	65	52	0	202.7
46.25	Bot - Section 2	0.5000	37.878	59.317	10,470.7	11.59	75.76	65	52	0	50.5
47.00		0.5000	37.728	59.079	10,345.1	11.54	75.46	65	52	0	306.2
48.00		0.5000	37.528	58.762	10,179.2	11.47	75.06	65	52	0	406.4
49.00		0.5000	37.328	58.444	10,015.2	11.40	74.66	65	52	0	404.2
50.00		0.5000	37.128	58.127	9,852.8	11.33	74.26	65	52	0	402.1
51.00	Top - Section 1	0.5000	37.928	59.396	10,512.6	11.61	75.86	65	52	0	399.9
52.00		0.5000	37.728	59.079	10,345.0	11.54	75.46	65	52	0	201.6
53.00		0.5000	37.528	58.761	10,179.1	11.47	75.06	65	52	0	200.5
54.00		0.5000	37.328	58.444	10,015.0	11.40	74.66	65	52	0	199.4
55.00		0.5000	37.128	58.127	9,852.7	11.33	74.26	65	52	0	198.3
56.00		0.5000	36.928	57.809	9,692.2	11.26	73.86	65	52	0	197.3

57.00		0.5000	36.728	57.492	9,533.4	11.19	73.46	65	52	0	196.2
58.00		0.5000	36.528	57.174	9,376.3	11.12	73.06	65	52	0	195.1
59.00		0.5000	36.328	56.857	9,221.0	11.05	72.66	65	52	0	194.0
60.00		0.5000	36.128	56.539	9,067.4	10.98	72.26	65	52	0	192.9
61.00		0.5000	35.928	56.222	8,915.5	10.91	71.86	65	52	0	191.9
62.00		0.5000	35.728	55.904	8,765.4	10.84	71.46	65	52	0	190.8
63.00		0.5000	35.528	55.587	8,616.9	10.77	71.06	65	52	0	189.7
64.00		0.5000	35.328	55.270	8,470.1	10.70	70.66	65	52	0	188.6
65.00		0.5000	35.128	54.952	8,325.0	10.62	70.26	65	52	0	187.5
66.00		0.5000	34.928	54.635	8,181.6	10.55	69.86	65	52	0	186.4
67.00		0.5000	34.728	54.317	8,039.8	10.48	69.46	65	52	0	185.4
68.00		0.5000	34.528	54.000	7,899.6	10.41	69.06	65	52	0	184.3
69.00		0.5000	34.328	53.682	7,761.1	10.34	68.66	65	52	0	183.2
70.00		0.5000	34.128	53.365	7,624.3	10.27	68.26	65	52	0	182.1
71.00		0.5000	33.927	53.047	7,489.0	10.20	67.85	65	52	0	181.0
72.00		0.5000	33.727	52.730	7,355.4	10.13	67.45	65	52	0	180.0
73.00		0.5000	33.527	52.413	7,223.3	10.06	67.05	65	52	0	178.9
74.00		0.5000	33.327	52.095	7,092.9	9.99	66.65	65	52	0	177.8
75.00		0.5000	33.127	51.778	6,964.0	9.92	66.25	65	52	0	176.7
76.00		0.5000	32.927	51.460	6,836.7	9.85	65.85	65	52	0	175.6
77.00		0.5000	32.727	51.143	6,711.0	9.78	65.45	65	52	0	174.6
78.00		0.5000	32.527	50.825	6,586.8	9.71	65.05	65	52	0	173.5
79.00		0.5000	32.327	50.508	6,464.1	9.64	64.65	65	52	0	172.4
80.00		0.5000	32.127	50.190	6,343.0	9.57	64.25	65	52	0	171.3
81.00		0.5000	31.927	49.873	6,223.4	9.50	63.85	65	52	0	170.2
82.00		0.5000	31.727	49.556	6,105.3	9.43	63.45	65	52	0	169.2
83.00		0.5000	31.527	49.238	5,988.7	9.35	63.05	65	52	0	168.1
84.00		0.5000	31.327	48.921	5,873.7	9.28	62.65	65	52	0	167.0
85.00		0.5000	31.127	48.603	5,760.0	9.21	62.25	65	52	0	165.9
86.00		0.5000	30.927	48.286	5,647.9	9.14	61.85	65	52	0	164.8
87.00		0.5000	30.727	47.968	5,537.3	9.07	61.45	65	52	0	163.8
88.00		0.5000	30.527	47.651	5,428.1	9.00	61.05	65	52	0	162.7
89.00		0.5000	30.327	47.333	5,320.3	8.93	60.65	65	52	0	161.6
90.00		0.5000	30.127	47.016	5,214.0	8.86	60.25	65	52	0	160.5
91.00		0.5000	29.927	46.699	5,109.1	8.79	59.85	65	52	0	159.4
92.00		0.5000	29.727	46.381	5,005.6	8.72	59.45	65	52	0	158.4
93.00		0.5000	29.527	46.064	4,903.5	8.65	59.05	65	52	0	157.3
93.50	Bot - Section 3	0.5000	29.427	45.905	4,853.0	8.61	58.85	65	52	0	78.2
94.00		0.5000	29.327	45.746	4,802.8	8.58	58.65	65	52	0	107.9
95.00		0.5000	29.127	45.429	4,703.5	8.51	58.25	65	52	0	214.7
96.00		0.5000	28.927	45.111	4,605.6	8.44	57.85	65	52	0	213.2
97.00		0.5000	28.727	44.794	4,509.1	8.37	57.45	65	52	0	211.7
97.25	Top - Section 2	0.1875	29.052	17.177	1,808.1	25.56	154.94	65	51	0	52.7
98.00		0.1875	28.902	17.088	1,780.0	25.42	154.14	65	51	0	43.7
99.00		0.1875	28.701	16.969	1,743.1	25.23	153.07	65	52	0	57.9
100.0		0.1875	28.501	16.850	1,706.7	25.04	152.01	65	52	0	57.5
101.0		0.1875	28.301	16.731	1,670.7	24.85	150.94	65	52	0	57.1
102.0		0.1875	28.101	16.612	1,635.3	24.66	149.87	65	52	0	56.7
103.0		0.1875	27.901	16.493	1,600.4	24.48	148.81	65	52	0	56.3
104.0		0.1875	27.701	16.374	1,566.0	24.29	147.74	65	52	0	55.9
105.0		0.1875	27.501	16.255	1,532.1	24.10	146.67	65	52	0	55.5
106.0		0.1875	27.301	16.135	1,498.7	23.91	145.61	65	52	0	55.1
107.0		0.1875	27.101	16.016	1,465.8	23.72	144.54	65	52	0	54.7
108.0		0.1875	26.901	15.897	1,433.3	23.53	143.47	65	52	0	54.3
109.0		0.1875	26.701	15.778	1,401.4	23.35	142.41	65	52	0	53.9
110.0		0.1875	26.501	15.659	1,369.9	23.16	141.34	65	52	0	53.5
111.0		0.1875	26.301	15.540	1,338.9	22.97	140.27	65	52	0	53.1
112.0		0.1875	26.101	15.421	1,308.3	22.78	139.21	65	52	0	52.7
113.0		0.1875	25.901	15.302	1,278.3	22.59	138.14	65	52	0	52.3
114.0		0.1875	25.701	15.183	1,248.7	22.41	137.07	65	52	0	51.9
115.0		0.1875	25.501	15.064	1,219.5	22.22	136.00	65	52	0	51.5
116.0		0.1875	25.301	14.945	1,190.9	22.03	134.94	65	52	0	51.1
117.0		0.1875	25.101	14.826	1,162.6	21.84	133.87	65	52	0	50.7
118.0		0.1875	24.901	14.707	1,134.8	21.65	132.80	65	52	0	50.2

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:28:57 PM

Customer: T-MOBILE

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119.0	0.1875	24.701	14.588	1,107.5	21.47	131.74	65	52	0	49.8
120.0	0.1875	24.501	14.469	1,080.6	21.28	130.67	65	52	0	49.4
121.0	0.1875	24.301	14.350	1,054.2	21.09	129.60	65	52	0	49.0
122.0	0.1875	24.101	14.231	1,028.1	20.90	128.54	65	52	0	48.6
123.0	0.1875	23.901	14.112	1,002.6	20.71	127.47	65	52	0	48.2
124.0	0.1875	23.701	13.993	977.4	20.52	126.40	65	52	0	47.8
125.0	0.1875	23.501	13.874	952.7	20.34	125.34	65	52	0	47.4
126.0	0.1875	23.300	13.755	928.4	20.15	124.27	65	52	0	47.0
127.0	0.1875	23.100	13.636	904.5	19.96	123.20	65	52	0	46.6
128.0	0.1875	22.900	13.517	881.0	19.77	122.14	65	52	0	46.2
129.0	0.1875	22.700	13.398	857.9	19.58	121.07	65	52	0	45.8
130.0	0.1875	22.500	13.278	835.2	19.40	120.00	65	52	0	45.4
131.0	0.1875	22.300	13.159	813.0	19.21	118.94	65	52	0	45.0
132.0	0.1875	22.100	13.040	791.1	19.02	117.87	65	52	0	44.6
133.0	0.1875	21.900	12.921	769.6	18.83	116.80	65	52	0	44.2
134.0	0.1875	21.700	12.802	748.6	18.64	115.73	65	52	0	43.8
135.0	0.1875	21.500	12.683	727.9	18.46	114.67	65	52	0	43.4
136.0	0.1875	21.300	12.564	707.6	18.27	113.60	65	52	0	43.0
137.0	0.1875	21.100	12.445	687.7	18.08	112.53	65	52	0	42.6
138.0	0.1875	20.900	12.326	668.1	17.89	111.47	65	52	0	42.1
139.0	0.1875	20.700	12.207	648.9	17.70	110.40	65	52	0	41.7
140.0	0.1875	20.500	12.088	630.1	17.52	109.33	65	52	0	41.3
										22,952.4



Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:28:57 PM

Customer: T-MOBILE

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice	30 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Applied Segment Forces Summary**

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		39.8	0.0					0.0	0.0	39.8	0.0	0.0	0.0
1.00		79.5	251.3					0.0	0.0	79.5	251.3	0.0	0.0
2.00		79.1	250.2					0.0	0.0	79.1	250.2	0.0	0.0
3.00		78.8	249.1					0.0	0.0	78.8	249.1	0.0	0.0
4.00		78.4	248.0					0.0	0.0	78.4	248.0	0.0	0.0
5.00		78.1	246.9					0.0	0.0	78.1	246.9	0.0	0.0
6.00		77.8	245.9					0.0	43.6	77.8	289.5	0.0	0.0
7.00		77.4	244.8					0.0	43.6	77.4	288.4	0.0	0.0
8.00		77.1	243.7					0.0	43.6	77.1	287.3	0.0	0.0
9.00		76.8	242.6					0.0	43.6	76.8	286.2	0.0	0.0
10.00		76.4	241.5					0.0	43.6	76.4	285.2	0.0	0.0
11.00		76.1	240.5					0.0	43.6	76.1	284.1	0.0	0.0
12.00		75.7	239.4					0.0	43.6	75.7	283.0	0.0	0.0
13.00		75.4	238.3					0.0	43.6	75.4	281.9	0.0	0.0
14.00		75.1	237.2					0.0	43.6	75.1	280.8	0.0	0.0
15.00		74.7	236.1					0.0	43.6	74.7	279.8	0.0	0.0
16.00		74.4	235.1					0.0	43.6	74.4	278.7	0.0	0.0
17.00		74.0	234.0					0.0	43.6	74.0	277.6	0.0	0.0
18.00		73.7	232.9					0.0	43.6	73.7	276.5	0.0	0.0
19.00		73.4	231.8					0.0	43.6	73.4	275.4	0.0	0.0
20.00		73.0	230.7					0.0	43.6	73.0	274.4	0.0	0.0
21.00		72.7	229.7					0.0	43.6	72.7	273.3	0.0	0.0
22.00		72.3	228.6					0.0	43.6	72.3	272.2	0.0	0.0
23.00		72.0	227.5					0.0	43.6	72.0	271.1	0.0	0.0
24.00		71.7	226.4					0.0	43.6	71.7	270.0	0.0	0.0
25.00		71.3	225.3					0.0	43.6	71.3	269.0	0.0	0.0
26.00		71.0	224.3					0.0	43.6	71.0	267.9	0.0	0.0
27.00		70.7	223.2					0.0	43.6	70.7	266.8	0.0	0.0
28.00		70.3	222.1					0.0	43.6	70.3	265.7	0.0	0.0
29.00		70.0	221.0					0.0	43.6	70.0	264.6	0.0	0.0
30.00		69.6	219.9					0.0	43.6	69.6	263.6	0.0	0.0
31.00		69.3	218.9					0.0	43.6	69.3	262.5	0.0	0.0
32.00		69.0	217.8					0.0	43.6	69.0	261.4	0.0	0.0
33.00		68.8	216.7					0.0	43.6	68.8	260.3	0.0	0.0
34.00		68.9	215.6					0.0	43.6	68.9	259.2	0.0	0.0
35.00		69.1	214.5					0.0	43.6	69.1	258.2	0.0	0.0
36.00		69.3	213.5					0.0	43.6	69.3	257.1	0.0	0.0
37.00		69.5	212.4					0.0	43.6	69.5	256.0	0.0	0.0
38.00		69.7	211.3					0.0	43.6	69.7	254.9	0.0	0.0
39.00		69.8	210.2					0.0	43.6	69.8	253.8	0.0	0.0
40.00		70.0	209.1					0.0	43.6	70.0	252.8	0.0	0.0
41.00		70.1	208.1					0.0	43.6	70.1	251.7	0.0	0.0
42.00		70.2	207.0					0.0	43.6	70.2	250.6	0.0	0.0
43.00		70.4	205.9					0.0	43.6	70.4	249.5	0.0	0.0
44.00		70.5	204.8					0.0	43.6	70.5	248.4	0.0	0.0
45.00		70.5	203.7					0.0	43.6	70.5	247.4	0.0	0.0
46.00		44.1	202.7					0.0	43.6	44.1	246.3	0.0	0.0
46.25	Bot - Section 2	36.0	50.5					0.0	10.9	36.0	61.4	0.0	0.0

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:08 PM

Customer: T-MOBILE

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice						30 Iterations	
Gust Response Factor : 1.69								
Dead Load Factor : 1.00								
Wind Load Factor : 1.00								

47.00		63.5	306.2				0.0	32.7	63.5	338.9	0.0	0.0	
48.00		72.6	406.4				0.0	43.6	72.6	450.0	0.0	0.0	
49.00		72.7	404.2				0.0	43.6	72.7	447.8	0.0	0.0	
50.00		72.7	402.1				0.0	43.6	72.7	445.7	0.0	0.0	
51.00	Top - Section 1	72.7	399.9				0.0	43.6	72.7	443.5	0.0	0.0	
52.00		72.7	201.6				0.0	43.6	72.7	245.2	0.0	0.0	
53.00		72.8	200.5				0.0	43.6	72.8	244.1	0.0	0.0	
54.00		72.8	199.4				0.0	43.6	72.8	243.0	0.0	0.0	
55.00		72.7	198.3				0.0	43.6	72.7	242.0	0.0	0.0	
56.00		72.7	197.3				0.0	43.6	72.7	240.9	0.0	0.0	
57.00		72.7	196.2				0.0	43.6	72.7	239.8	0.0	0.0	
58.00		72.7	195.1				0.0	43.6	72.7	238.7	0.0	0.0	
59.00		72.6	194.0				0.0	43.6	72.6	237.6	0.0	0.0	
60.00		72.6	192.9				0.0	43.6	72.6	236.5	0.0	0.0	
61.00		72.5	191.9				0.0	43.6	72.5	235.5	0.0	0.0	
62.00		72.4	190.8				0.0	43.6	72.4	234.4	0.0	0.0	
63.00		72.4	189.7				0.0	43.6	72.4	233.3	0.0	0.0	
64.00		72.3	188.6				0.0	43.6	72.3	232.2	0.0	0.0	
65.00		72.2	187.5				0.0	43.6	72.2	231.1	0.0	0.0	
66.00		72.1	186.4				0.0	43.6	72.1	230.1	0.0	0.0	
67.00		72.0	185.4				0.0	43.6	72.0	229.0	0.0	0.0	
68.00		71.9	184.3				0.0	43.6	71.9	227.9	0.0	0.0	
69.00		71.8	183.2				0.0	43.6	71.8	226.8	0.0	0.0	
70.00		71.6	182.1				0.0	43.6	71.6	225.7	0.0	0.0	
71.00		71.5	181.0				0.0	43.6	71.5	224.7	0.0	0.0	
72.00		71.4	180.0				0.0	43.6	71.4	223.6	0.0	0.0	
73.00		71.2	178.9				0.0	43.6	71.2	222.5	0.0	0.0	
74.00		71.1	177.8				0.0	43.6	71.1	221.4	0.0	0.0	
75.00		70.9	176.7				0.0	43.6	70.9	220.3	0.0	0.0	
76.00		70.8	175.6				0.0	43.6	70.8	219.3	0.0	0.0	
77.00		70.6	174.6				0.0	43.6	70.6	218.2	0.0	0.0	
78.00		70.4	173.5				0.0	43.6	70.4	217.1	0.0	0.0	
79.00		70.2	172.4				0.0	43.6	70.2	216.0	0.0	0.0	
80.00		70.1	171.3				0.0	43.6	70.1	214.9	0.0	0.0	
81.00		69.9	170.2				0.0	43.6	69.9	213.9	0.0	0.0	
82.00		69.7	169.2				0.0	43.6	69.7	212.8	0.0	0.0	
83.00		69.5	168.1				0.0	43.6	69.5	211.7	0.0	0.0	
84.00		69.3	167.0				0.0	43.6	69.3	210.6	0.0	0.0	
85.00		69.1	165.9				0.0	43.6	69.1	209.5	0.0	0.0	
86.00		68.8	164.8				0.0	43.6	68.8	208.5	0.0	0.0	
87.00	Appertunance(s)	68.6	163.8	3,952.5	0.0	0.0	2,338.5	0.0	43.6	4,021.1	2,545.9	0.0	0.0
88.00		68.4	162.7					0.0	32.7	68.4	195.4	0.0	0.0
89.00		68.2	161.6					0.0	32.7	68.2	194.3	0.0	0.0
90.00		67.9	160.5					0.0	32.7	67.9	193.3	0.0	0.0
91.00		67.7	159.4					0.0	32.7	67.7	192.2	0.0	0.0
92.00		67.5	158.4					0.0	32.7	67.5	191.1	0.0	0.0
93.00		50.5	157.3					0.0	32.7	50.5	190.0	0.0	0.0
93.50	Bot - Section 3	33.8	78.2					0.0	16.4	33.8	94.6	0.0	0.0
94.00		50.8	107.9					0.0	16.4	50.8	124.3	0.0	0.0
95.00		67.6	214.7					0.0	32.7	67.6	247.4	0.0	0.0
96.00		67.3	213.2					0.0	32.7	67.3	245.9	0.0	0.0
97.00		42.0	211.7					0.0	32.7	42.0	244.4	0.0	0.0
97.25	Top - Section 2	33.5	52.7					0.0	8.2	33.5	60.9	0.0	0.0
98.00		58.4	43.7					0.0	24.5	58.4	68.3	0.0	0.0
99.00		66.5	57.9					0.0	32.7	66.5	90.7	0.0	0.0
100.00	Appertunance(s)	66.2	57.5	3,864.4	0.0	0.0	2,348.4	0.0	32.7	3,930.7	2,438.7	0.0	0.0
101.00		66.0	57.1					0.0	21.7	66.0	78.9	0.0	0.0

<b>Load Case:</b> No Ice		<b>85.00 mph Wind with No Ice</b>						<b>30 Iterations</b>	
Gust Response Factor : 1.69									
Dead Load Factor : 1.00									
Wind Load Factor : 1.00									

102.00		65.7	56.7					0.0	21.7	65.7	78.5	0.0	0.0
103.00		65.4	56.3					0.0	21.7	65.4	78.1	0.0	0.0
104.00		65.1	55.9					0.0	21.7	65.1	77.7	0.0	0.0
105.00		64.8	55.5					0.0	21.7	64.8	77.3	0.0	0.0
106.00		64.5	55.1					0.0	21.7	64.5	76.9	0.0	0.0
107.00		64.2	54.7					0.0	21.7	64.2	76.5	0.0	0.0
108.00		63.9	54.3					0.0	21.7	63.9	76.0	0.0	0.0
109.00		63.6	53.9					0.0	21.7	63.6	75.6	0.0	0.0
110.00	Appertunance(s)	63.3	53.5	3,883.0	0.0	0.0	1,907.6	0.0	21.7	3,946.3	1,982.8	0.0	0.0
111.00		63.0	53.1					0.0	10.5	63.0	63.5	0.0	0.0
112.00		62.7	52.7					0.0	10.5	62.7	63.1	0.0	0.0
113.00		62.3	52.3					0.0	10.5	62.3	62.7	0.0	0.0
114.00		62.0	51.9					0.0	10.5	62.0	62.3	0.0	0.0
115.00		61.7	51.5					0.0	10.5	61.7	61.9	0.0	0.0
116.00		61.3	51.1					0.0	10.5	61.3	61.5	0.0	0.0
117.00		61.0	50.7					0.0	10.5	61.0	61.1	0.0	0.0
118.00	Appertunance(s)	60.7	50.2	33.3	0.0	0.0	8.3	0.0	10.5	94.0	69.0	0.0	0.0
119.00		60.3	49.8					0.0	9.7	60.3	59.5	0.0	0.0
120.00		60.0	49.4					0.0	9.7	60.0	59.1	0.0	0.0
121.00		59.6	49.0					0.0	9.7	59.6	58.7	0.0	0.0
122.00		59.3	48.6					0.0	9.7	59.3	58.3	0.0	0.0
123.00		58.9	48.2					0.0	9.7	58.9	57.9	0.0	0.0
124.00		58.6	47.8					0.0	9.7	58.6	57.5	0.0	0.0
125.00		58.2	47.4					0.0	9.7	58.2	57.1	0.0	0.0
126.00		57.9	47.0					0.0	9.7	57.9	56.7	0.0	0.0
127.00		57.5	46.6					0.0	9.7	57.5	56.3	0.0	0.0
128.00		57.1	46.2					0.0	9.7	57.1	55.9	0.0	0.0
129.00		56.7	45.8					0.0	9.7	56.7	55.5	0.0	0.0
130.00	Appertunance(s)	56.4	45.4	4,838.9	0.0	3,210.1	2,682.3	0.0	9.7	4,895.2	2,737.4	0.0	0.0
131.00		56.0	45.0					0.0	6.0	56.0	51.0	0.0	0.0
132.00		55.6	44.6					0.0	6.0	55.6	50.6	0.0	0.0
133.00		55.2	44.2					0.0	6.0	55.2	50.2	0.0	0.0
134.00		54.8	43.8					0.0	6.0	54.8	49.8	0.0	0.0
135.00		54.4	43.4					0.0	6.0	54.4	49.4	0.0	0.0
136.00		54.1	43.0					0.0	6.0	54.1	49.0	0.0	0.0
137.00		53.7	42.6					0.0	6.0	53.7	48.6	0.0	0.0
138.00	Appertunance(s)	53.3	42.1	3,027.4	0.0	562.3	2,045.0	0.0	6.0	3,080.7	2,093.2	0.0	0.0
139.00		52.9	41.7					0.0	0.6	52.9	42.4	0.0	0.0
140.00	Appertunance(s)	26.3	41.3	65.8	0.0	315.9	11.5	0.0	0.6	92.1	53.5	0.0	0.0
									<b>Totals:</b>	<b>29,223.3</b>	<b>38,763.1</b>	<b>0.00</b>	<b>0.00</b>

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice	30 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Calculated Shaft Forces and Deflections**

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-29.197	-38.752	0.000	0.000	0.000	-2,949.639	0.000	0.000	0.000	0.000
1.00	-29.145	-38.480	0.000	0.000	0.000	-2,920.442	-0.005	0.000	0.005	-0.041
2.00	-29.093	-38.209	0.000	0.000	0.000	-2,891.298	-0.018	0.000	0.018	-0.082
3.00	-29.042	-37.939	0.000	0.000	0.000	-2,862.205	-0.040	0.000	0.040	-0.124
4.00	-28.990	-37.670	0.000	0.000	0.000	-2,833.164	-0.070	0.000	0.070	-0.165
5.00	-28.938	-37.402	0.000	0.000	0.000	-2,804.174	-0.110	0.000	0.110	-0.207
6.00	-28.886	-37.092	0.000	0.000	0.000	-2,775.237	-0.158	0.000	0.158	-0.248
7.00	-28.834	-36.783	0.000	0.000	0.000	-2,746.351	-0.214	0.000	0.214	-0.290
8.00	-28.782	-36.475	0.000	0.000	0.000	-2,717.518	-0.280	0.000	0.280	-0.332
9.00	-28.730	-36.168	0.000	0.000	0.000	-2,688.736	-0.354	0.000	0.354	-0.374
10.00	-28.678	-35.862	0.000	0.000	0.000	-2,660.006	-0.437	0.000	0.437	-0.416
11.00	-28.626	-35.558	0.000	0.000	0.000	-2,631.328	-0.529	0.000	0.529	-0.458
12.00	-28.574	-35.254	0.000	0.000	0.000	-2,602.702	-0.630	0.000	0.630	-0.501
13.00	-28.522	-34.952	0.000	0.000	0.000	-2,574.128	-0.739	0.000	0.739	-0.543
14.00	-28.470	-34.651	0.000	0.000	0.000	-2,545.607	-0.858	0.000	0.858	-0.586
15.00	-28.418	-34.351	0.000	0.000	0.000	-2,517.137	-0.985	0.000	0.985	-0.628
16.00	-28.366	-34.052	0.000	0.000	0.000	-2,488.719	-1.122	0.000	1.122	-0.671
17.00	-28.314	-33.754	0.000	0.000	0.000	-2,460.354	-1.267	0.000	1.267	-0.714
18.00	-28.262	-33.457	0.000	0.000	0.000	-2,432.040	-1.421	0.000	1.421	-0.757
19.00	-28.210	-33.161	0.000	0.000	0.000	-2,403.778	-1.585	0.000	1.585	-0.800
20.00	-28.158	-32.867	0.000	0.000	0.000	-2,375.569	-1.757	0.000	1.757	-0.843
21.00	-28.105	-32.573	0.000	0.000	0.000	-2,347.412	-1.939	0.000	1.939	-0.886
22.00	-28.053	-32.281	0.000	0.000	0.000	-2,319.307	-2.129	0.000	2.129	-0.930
23.00	-28.001	-31.990	0.000	0.000	0.000	-2,291.255	-2.329	0.000	2.329	-0.973
24.00	-27.949	-31.700	0.000	0.000	0.000	-2,263.254	-2.538	0.000	2.538	-1.017
25.00	-27.897	-31.411	0.000	0.000	0.000	-2,235.306	-2.755	0.000	2.755	-1.060
26.00	-27.844	-31.124	0.000	0.000	0.000	-2,207.410	-2.982	0.000	2.982	-1.104
27.00	-27.792	-30.837	0.000	0.000	0.000	-2,179.566	-3.219	0.000	3.219	-1.148
28.00	-27.740	-30.551	0.000	0.000	0.000	-2,151.774	-3.464	0.000	3.464	-1.192
29.00	-27.687	-30.267	0.000	0.000	0.000	-2,124.035	-3.718	0.000	3.718	-1.236
30.00	-27.635	-29.984	0.000	0.000	0.000	-2,096.349	-3.982	0.000	3.982	-1.280
31.00	-27.583	-29.702	0.000	0.000	0.000	-2,068.714	-4.255	0.000	4.255	-1.324
32.00	-27.530	-29.421	0.000	0.000	0.000	-2,041.132	-4.537	0.000	4.537	-1.368
33.00	-27.478	-29.141	0.000	0.000	0.000	-2,013.602	-4.829	0.000	4.829	-1.412
34.00	-27.425	-28.863	0.000	0.000	0.000	-1,986.125	-5.129	0.000	5.129	-1.456
35.00	-27.371	-28.585	0.000	0.000	0.000	-1,958.701	-5.439	0.000	5.439	-1.500
36.00	-27.317	-28.309	0.000	0.000	0.000	-1,931.331	-5.758	0.000	5.758	-1.545
37.00	-27.262	-28.034	0.000	0.000	0.000	-1,904.015	-6.087	0.000	6.087	-1.589
38.00	-27.207	-27.760	0.000	0.000	0.000	-1,876.753	-6.425	0.000	6.425	-1.634
39.00	-27.151	-27.487	0.000	0.000	0.000	-1,849.547	-6.772	0.000	6.772	-1.678
40.00	-27.095	-27.215	0.000	0.000	0.000	-1,822.396	-7.128	0.000	7.128	-1.723
41.00	-27.038	-26.945	0.000	0.000	0.000	-1,795.302	-7.494	0.000	7.494	-1.767
42.00	-26.981	-26.676	0.000	0.000	0.000	-1,768.265	-7.869	0.000	7.869	-1.812
43.00	-26.923	-26.408	0.000	0.000	0.000	-1,741.285	-8.253	0.000	8.253	-1.856
44.00	-26.865	-26.141	0.000	0.000	0.000	-1,714.362	-8.647	0.000	8.647	-1.901
45.00	-26.806	-25.875	0.000	0.000	0.000	-1,687.498	-9.050	0.000	9.050	-1.945
46.00	-26.766	-25.617	0.000	0.000	0.000	-1,660.693	-9.463	0.000	9.463	-1.990
46.25	-26.738	-25.547	0.000	0.000	0.000	-1,654.001	-9.567	0.000	9.567	-2.001
47.00	-26.679	-25.192	0.000	0.000	0.000	-1,633.948	-9.884	0.000	9.884	-2.035
48.00	-26.610	-24.724	0.000	0.000	0.000	-1,607.270	-10.316	0.000	10.316	-2.079
49.00	-26.540	-24.259	0.000	0.000	0.000	-1,580.660	-10.756	0.000	10.756	-2.124

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice	30 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

50.00	-26.469	-23.796	0.000	0.000	0.000	-1,554.120	-11.206	0.000	11.206	-2.168
51.00	-26.397	-23.335	0.000	0.000	0.000	-1,527.652	-11.665	0.000	11.665	-2.213
52.00	-26.332	-23.073	0.000	0.000	0.000	-1,501.255	-12.133	0.000	12.133	-2.257
53.00	-26.266	-22.813	0.000	0.000	0.000	-1,474.923	-12.610	0.000	12.610	-2.298
54.00	-26.200	-22.555	0.000	0.000	0.000	-1,448.657	-13.096	0.000	13.096	-2.339
55.00	-26.133	-22.297	0.000	0.000	0.000	-1,422.458	-13.591	0.000	13.591	-2.380
56.00	-26.066	-22.041	0.000	0.000	0.000	-1,396.325	-14.094	0.000	14.094	-2.421
57.00	-25.999	-21.787	0.000	0.000	0.000	-1,370.259	-14.605	0.000	14.605	-2.461
58.00	-25.931	-21.533	0.000	0.000	0.000	-1,344.261	-15.125	0.000	15.125	-2.502
59.00	-25.863	-21.280	0.000	0.000	0.000	-1,318.331	-15.653	0.000	15.653	-2.542
60.00	-25.794	-21.029	0.000	0.000	0.000	-1,292.468	-16.190	0.000	16.190	-2.582
61.00	-25.726	-20.779	0.000	0.000	0.000	-1,266.674	-16.735	0.000	16.735	-2.622
62.00	-25.657	-20.531	0.000	0.000	0.000	-1,240.949	-17.289	0.000	17.289	-2.662
63.00	-25.588	-20.283	0.000	0.000	0.000	-1,215.292	-17.851	0.000	17.851	-2.702
64.00	-25.519	-20.037	0.000	0.000	0.000	-1,189.705	-18.421	0.000	18.421	-2.742
65.00	-25.449	-19.792	0.000	0.000	0.000	-1,164.186	-19.000	0.000	19.000	-2.782
66.00	-25.379	-19.549	0.000	0.000	0.000	-1,138.738	-19.587	0.000	19.587	-2.821
67.00	-25.309	-19.306	0.000	0.000	0.000	-1,113.359	-20.182	0.000	20.182	-2.860
68.00	-25.239	-19.065	0.000	0.000	0.000	-1,088.050	-20.785	0.000	20.785	-2.899
69.00	-25.168	-18.825	0.000	0.000	0.000	-1,062.812	-21.396	0.000	21.396	-2.938
70.00	-25.098	-18.587	0.000	0.000	0.000	-1,037.644	-22.016	0.000	22.016	-2.976
71.00	-25.027	-18.349	0.000	0.000	0.000	-1,012.547	-22.643	0.000	22.643	-3.015
72.00	-24.955	-18.113	0.000	0.000	0.000	-987.520	-23.279	0.000	23.279	-3.053
73.00	-24.884	-17.879	0.000	0.000	0.000	-962.565	-23.922	0.000	23.922	-3.090
74.00	-24.813	-17.645	0.000	0.000	0.000	-937.681	-24.573	0.000	24.573	-3.128
75.00	-24.741	-17.413	0.000	0.000	0.000	-912.869	-25.232	0.000	25.232	-3.165
76.00	-24.669	-17.182	0.000	0.000	0.000	-888.128	-25.899	0.000	25.899	-3.202
77.00	-24.597	-16.953	0.000	0.000	0.000	-863.460	-26.573	0.000	26.573	-3.238
78.00	-24.525	-16.725	0.000	0.000	0.000	-838.863	-27.255	0.000	27.255	-3.274
79.00	-24.453	-16.498	0.000	0.000	0.000	-814.338	-27.945	0.000	27.945	-3.310
80.00	-24.380	-16.273	0.000	0.000	0.000	-789.885	-28.642	0.000	28.642	-3.345
81.00	-24.308	-16.049	0.000	0.000	0.000	-765.506	-29.346	0.000	29.346	-3.380
82.00	-24.235	-15.826	0.000	0.000	0.000	-741.198	-30.058	0.000	30.058	-3.414
83.00	-24.162	-15.604	0.000	0.000	0.000	-716.963	-30.776	0.000	30.776	-3.448
84.00	-24.089	-15.384	0.000	0.000	0.000	-692.802	-31.502	0.000	31.502	-3.482
85.00	-24.016	-15.166	0.000	0.000	0.000	-668.713	-32.235	0.000	32.235	-3.515
86.00	-23.943	-14.948	0.000	0.000	0.000	-644.697	-32.974	0.000	32.974	-3.547
87.00	-19.778	-12.647	0.000	0.000	0.000	-620.754	-33.720	0.000	33.720	-3.579
88.00	-19.705	-12.445	0.000	0.000	0.000	-600.976	-34.473	0.000	34.473	-3.611
89.00	-19.631	-12.245	0.000	0.000	0.000	-581.272	-35.232	0.000	35.232	-3.642
90.00	-19.557	-12.046	0.000	0.000	0.000	-561.641	-35.998	0.000	35.998	-3.672
91.00	-19.483	-11.849	0.000	0.000	0.000	-542.084	-36.770	0.000	36.770	-3.702
92.00	-19.410	-11.652	0.000	0.000	0.000	-522.601	-37.548	0.000	37.548	-3.732
93.00	-19.351	-11.459	0.000	0.000	0.000	-503.191	-38.333	0.000	38.333	-3.761
93.50	-19.314	-11.362	0.000	0.000	0.000	-493.516	-38.727	0.000	38.727	-3.775
94.00	-19.259	-11.234	0.000	0.000	0.000	-483.859	-39.123	0.000	39.123	-3.790
95.00	-19.181	-10.982	0.000	0.000	0.000	-464.600	-39.920	0.000	39.920	-3.818
96.00	-19.102	-10.732	0.000	0.000	0.000	-445.419	-40.722	0.000	40.722	-3.845
97.00	-19.047	-10.486	0.000	0.000	0.000	-426.317	-41.530	0.000	41.530	-3.872
97.25	-19.012	-10.423	0.000	0.000	0.000	-421.555	-41.733	0.000	41.733	-3.879
98.00	-18.957	-10.344	0.000	0.000	0.000	-407.296	-42.344	0.000	42.344	-3.899
99.00	-18.896	-10.237	0.000	0.000	0.000	-388.339	-43.167	0.000	43.167	-3.962
100.0	-14.813	-8.063	0.000	0.000	0.000	-369.443	-44.004	0.000	44.004	-4.024
101.0	-14.750	-7.974	0.000	0.000	0.000	-354.630	-44.853	0.000	44.853	-4.084
102.0	-14.687	-7.885	0.000	0.000	0.000	-339.880	-45.715	0.000	45.715	-4.144
103.0	-14.624	-7.797	0.000	0.000	0.000	-325.193	-46.588	0.000	46.588	-4.201
104.0	-14.561	-7.711	0.000	0.000	0.000	-310.570	-47.474	0.000	47.474	-4.258

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:08 PM

Customer: T-MOBILE

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice	30 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

105.0	-14.498	-7.625	0.000	0.000	0.000	-296.009	-48.372	0.000	48.372	-4.313
106.0	-14.435	-7.540	0.000	0.000	0.000	-281.511	-49.281	0.000	49.281	-4.367
107.0	-14.371	-7.455	0.000	0.000	0.000	-267.077	-50.200	0.000	50.200	-4.419
108.0	-14.308	-7.372	0.000	0.000	0.000	-252.706	-51.131	0.000	51.131	-4.469
109.0	-14.245	-7.290	0.000	0.000	0.000	-238.398	-52.072	0.000	52.072	-4.518
110.0	-10.158	-5.618	0.000	0.000	0.000	-224.153	-53.023	0.000	53.023	-4.565
111.0	-10.095	-5.552	0.000	0.000	0.000	-213.995	-53.983	0.000	53.983	-4.610
112.0	-10.032	-5.486	0.000	0.000	0.000	-203.900	-54.953	0.000	54.953	-4.655
113.0	-9.968	-5.421	0.000	0.000	0.000	-193.869	-55.932	0.000	55.932	-4.698
114.0	-9.905	-5.357	0.000	0.000	0.000	-183.900	-56.920	0.000	56.920	-4.740
115.0	-9.842	-5.294	0.000	0.000	0.000	-173.995	-57.916	0.000	57.916	-4.781
116.0	-9.780	-5.231	0.000	0.000	0.000	-164.153	-58.921	0.000	58.921	-4.820
117.0	-9.717	-5.169	0.000	0.000	0.000	-154.373	-59.934	0.000	59.934	-4.858
118.0	-9.621	-5.102	0.000	0.000	0.000	-144.656	-60.955	0.000	60.955	-4.895
119.0	-9.559	-5.042	0.000	0.000	0.000	-135.035	-61.983	0.000	61.983	-4.930
120.0	-9.497	-4.983	0.000	0.000	0.000	-125.477	-63.018	0.000	63.018	-4.963
121.0	-9.435	-4.925	0.000	0.000	0.000	-115.980	-64.060	0.000	64.060	-4.995
122.0	-9.373	-4.867	0.000	0.000	0.000	-106.546	-65.109	0.000	65.109	-5.025
123.0	-9.312	-4.810	0.000	0.000	0.000	-97.172	-66.163	0.000	66.163	-5.053
124.0	-9.250	-4.754	0.000	0.000	0.000	-87.861	-67.224	0.000	67.224	-5.080
125.0	-9.189	-4.698	0.000	0.000	0.000	-78.610	-68.289	0.000	68.289	-5.104
126.0	-9.128	-4.644	0.000	0.000	0.000	-69.421	-69.360	0.000	69.360	-5.126
127.0	-9.068	-4.590	0.000	0.000	0.000	-60.293	-70.435	0.000	70.435	-5.146
128.0	-9.007	-4.537	0.000	0.000	0.000	-51.226	-71.513	0.000	71.513	-5.163
129.0	-8.947	-4.485	0.000	0.000	0.000	-42.219	-72.596	0.000	72.596	-5.179
130.0	-3.824	-2.200	0.000	0.000	0.000	-30.062	-73.681	0.000	73.681	-5.191
131.0	-3.764	-2.154	0.000	0.000	0.000	-26.238	-74.768	0.000	74.768	-5.201
132.0	-3.705	-2.108	0.000	0.000	0.000	-22.474	-75.856	0.000	75.856	-5.209
133.0	-3.645	-2.063	0.000	0.000	0.000	-18.769	-76.947	0.000	76.947	-5.217
134.0	-3.586	-2.018	0.000	0.000	0.000	-15.124	-78.039	0.000	78.039	-5.223
135.0	-3.528	-1.973	0.000	0.000	0.000	-11.537	-79.132	0.000	79.132	-5.228
136.0	-3.470	-1.929	0.000	0.000	0.000	-8.010	-80.226	0.000	80.226	-5.232
137.0	-3.412	-1.886	0.000	0.000	0.000	-4.540	-81.321	0.000	81.321	-5.234
138.0	-0.153	-0.082	0.000	0.000	0.000	-0.566	-82.416	0.000	82.416	-5.235
139.0	-0.097	-0.045	0.000	0.000	0.000	-0.413	-83.511	0.000	83.511	-5.236
140.0	-0.092	0.000	0.000	0.000	0.000	-0.316	-84.606	0.000	84.606	-5.236

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:08 PM

Customer: T-MOBILE

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice	30 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Calculated Stresses**

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.52	0.80	0.00	0.00	0.00	41.66	42.21	52.0	0.0	0.812
1.00	0.52	0.80	0.00	0.00	0.00	41.61	42.15	52.0	0.0	0.811
2.00	0.52	0.80	0.00	0.00	0.00	41.55	42.10	52.0	0.0	0.810
3.00	0.52	0.80	0.00	0.00	0.00	41.50	42.04	52.0	0.0	0.809
4.00	0.52	0.80	0.00	0.00	0.00	41.44	41.98	52.0	0.0	0.808
5.00	0.52	0.81	0.00	0.00	0.00	41.37	41.91	52.0	0.0	0.806
6.00	0.51	0.81	0.00	0.00	0.00	41.31	41.85	52.0	0.0	0.805
7.00	0.51	0.81	0.00	0.00	0.00	41.24	41.78	52.0	0.0	0.804
8.00	0.51	0.81	0.00	0.00	0.00	41.18	41.71	52.0	0.0	0.802
9.00	0.51	0.81	0.00	0.00	0.00	41.11	41.64	52.0	0.0	0.801
10.00	0.51	0.82	0.00	0.00	0.00	41.04	41.57	52.0	0.0	0.800
11.00	0.50	0.82	0.00	0.00	0.00	40.96	41.49	52.0	0.0	0.798
12.00	0.50	0.82	0.00	0.00	0.00	40.89	41.41	52.0	0.0	0.797
13.00	0.50	0.82	0.00	0.00	0.00	40.81	41.33	52.0	0.0	0.795
14.00	0.50	0.82	0.00	0.00	0.00	40.73	41.25	52.0	0.0	0.794
15.00	0.50	0.83	0.00	0.00	0.00	40.64	41.16	52.0	0.0	0.792
16.00	0.49	0.83	0.00	0.00	0.00	40.56	41.08	52.0	0.0	0.790
17.00	0.49	0.83	0.00	0.00	0.00	40.47	40.99	52.0	0.0	0.788
18.00	0.49	0.83	0.00	0.00	0.00	40.38	40.89	52.0	0.0	0.787
19.00	0.49	0.84	0.00	0.00	0.00	40.28	40.80	52.0	0.0	0.785
20.00	0.49	0.84	0.00	0.00	0.00	40.19	40.70	52.0	0.0	0.783
21.00	0.48	0.84	0.00	0.00	0.00	40.09	40.60	52.0	0.0	0.781
22.00	0.48	0.84	0.00	0.00	0.00	39.99	40.50	52.0	0.0	0.779
23.00	0.48	0.85	0.00	0.00	0.00	39.88	40.39	52.0	0.0	0.777
24.00	0.48	0.85	0.00	0.00	0.00	39.78	40.28	52.0	0.0	0.775
25.00	0.48	0.85	0.00	0.00	0.00	39.67	40.17	52.0	0.0	0.773
26.00	0.47	0.85	0.00	0.00	0.00	39.55	40.05	52.0	0.0	0.771
27.00	0.47	0.86	0.00	0.00	0.00	39.44	39.93	52.0	0.0	0.768
28.00	0.47	0.86	0.00	0.00	0.00	39.32	39.81	52.0	0.0	0.766
29.00	0.47	0.86	0.00	0.00	0.00	39.19	39.69	52.0	0.0	0.764
30.00	0.47	0.86	0.00	0.00	0.00	39.07	39.56	52.0	0.0	0.761
31.00	0.46	0.87	0.00	0.00	0.00	38.94	39.43	52.0	0.0	0.758
32.00	0.46	0.87	0.00	0.00	0.00	38.80	39.29	52.0	0.0	0.756
33.00	0.46	0.87	0.00	0.00	0.00	38.66	39.15	52.0	0.0	0.753
34.00	0.46	0.87	0.00	0.00	0.00	38.52	39.01	52.0	0.0	0.750
35.00	0.45	0.88	0.00	0.00	0.00	38.38	38.86	52.0	0.0	0.748
36.00	0.45	0.88	0.00	0.00	0.00	38.23	38.71	52.0	0.0	0.745
37.00	0.45	0.88	0.00	0.00	0.00	38.08	38.56	52.0	0.0	0.742
38.00	0.45	0.89	0.00	0.00	0.00	37.92	38.40	52.0	0.0	0.739
39.00	0.45	0.89	0.00	0.00	0.00	37.76	38.23	52.0	0.0	0.736
40.00	0.44	0.89	0.00	0.00	0.00	37.59	38.07	52.0	0.0	0.732
41.00	0.44	0.89	0.00	0.00	0.00	37.42	37.90	52.0	0.0	0.729
42.00	0.44	0.90	0.00	0.00	0.00	37.25	37.72	52.0	0.0	0.726
43.00	0.44	0.90	0.00	0.00	0.00	37.07	37.54	52.0	0.0	0.722
44.00	0.44	0.90	0.00	0.00	0.00	36.89	37.35	52.0	0.0	0.719
45.00	0.43	0.90	0.00	0.00	0.00	36.70	37.16	52.0	0.0	0.715
46.00	0.43	0.91	0.00	0.00	0.00	36.50	36.97	52.0	0.0	0.711
46.25	0.43	0.91	0.00	0.00	0.00	36.45	36.92	52.0	0.0	0.710
47.00	0.43	0.91	0.00	0.00	0.00	36.31	36.77	52.0	0.0	0.707
48.00	0.42	0.91	0.00	0.00	0.00	36.10	36.56	52.0	0.0	0.703
49.00	0.42	0.92	0.00	0.00	0.00	35.89	36.34	52.0	0.0	0.699

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:08 PM

Customer: T-MOBILE

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice								30 Iterations	
Gust Response Factor : 1.69										
Dead Load Factor : 1.00										
Wind Load Factor : 1.00										

50.00	0.41	0.92	0.00	0.00	0.00	35.68	36.12	52.0	0.0	0.695
51.00	0.39	0.90	0.00	0.00	0.00	33.58	34.01	52.0	0.0	0.654
52.00	0.39	0.90	0.00	0.00	0.00	33.36	33.78	52.0	0.0	0.650
53.00	0.39	0.90	0.00	0.00	0.00	33.13	33.55	52.0	0.0	0.646
54.00	0.39	0.90	0.00	0.00	0.00	32.90	33.32	52.0	0.0	0.641
55.00	0.38	0.91	0.00	0.00	0.00	32.66	33.08	52.0	0.0	0.636
56.00	0.38	0.91	0.00	0.00	0.00	32.41	32.83	52.0	0.0	0.632
57.00	0.38	0.91	0.00	0.00	0.00	32.16	32.58	52.0	0.0	0.627
58.00	0.38	0.91	0.00	0.00	0.00	31.91	32.32	52.0	0.0	0.622
59.00	0.37	0.92	0.00	0.00	0.00	31.64	32.06	52.0	0.0	0.617
60.00	0.37	0.92	0.00	0.00	0.00	31.37	31.79	52.0	0.0	0.612
61.00	0.37	0.92	0.00	0.00	0.00	31.10	31.51	52.0	0.0	0.606
62.00	0.37	0.92	0.00	0.00	0.00	30.82	31.23	52.0	0.0	0.601
63.00	0.36	0.93	0.00	0.00	0.00	30.53	30.93	52.0	0.0	0.595
64.00	0.36	0.93	0.00	0.00	0.00	30.23	30.64	52.0	0.0	0.589
65.00	0.36	0.93	0.00	0.00	0.00	29.93	30.33	52.0	0.0	0.584
66.00	0.36	0.94	0.00	0.00	0.00	29.62	30.02	52.0	0.0	0.578
67.00	0.36	0.94	0.00	0.00	0.00	29.30	29.70	52.0	0.0	0.571
68.00	0.35	0.94	0.00	0.00	0.00	28.97	29.37	52.0	0.0	0.565
69.00	0.35	0.94	0.00	0.00	0.00	28.64	29.04	52.0	0.0	0.559
70.00	0.35	0.95	0.00	0.00	0.00	28.30	28.69	52.0	0.0	0.552
71.00	0.35	0.95	0.00	0.00	0.00	27.95	28.34	52.0	0.0	0.545
72.00	0.34	0.95	0.00	0.00	0.00	27.59	27.98	52.0	0.0	0.538
73.00	0.34	0.96	0.00	0.00	0.00	27.22	27.61	52.0	0.0	0.531
74.00	0.34	0.96	0.00	0.00	0.00	26.84	27.23	52.0	0.0	0.524
75.00	0.34	0.96	0.00	0.00	0.00	26.46	26.84	52.0	0.0	0.516
76.00	0.33	0.97	0.00	0.00	0.00	26.06	26.45	52.0	0.0	0.509
77.00	0.33	0.97	0.00	0.00	0.00	25.65	26.04	52.0	0.0	0.501
78.00	0.33	0.97	0.00	0.00	0.00	25.24	25.62	52.0	0.0	0.493
79.00	0.33	0.98	0.00	0.00	0.00	24.81	25.20	52.0	0.0	0.485
80.00	0.32	0.98	0.00	0.00	0.00	24.37	24.76	52.0	0.0	0.476
81.00	0.32	0.98	0.00	0.00	0.00	23.93	24.31	52.0	0.0	0.468
82.00	0.32	0.99	0.00	0.00	0.00	23.47	23.85	52.0	0.0	0.459
83.00	0.32	0.99	0.00	0.00	0.00	23.00	23.38	52.0	0.0	0.450
84.00	0.31	0.99	0.00	0.00	0.00	22.51	22.89	52.0	0.0	0.440
85.00	0.31	1.00	0.00	0.00	0.00	22.02	22.40	52.0	0.0	0.431
86.00	0.31	1.00	0.00	0.00	0.00	21.51	21.89	52.0	0.0	0.421
87.00	0.26	0.83	0.00	0.00	0.00	20.99	21.30	52.0	0.0	0.410
88.00	0.26	0.83	0.00	0.00	0.00	20.59	20.90	52.0	0.0	0.402
89.00	0.26	0.84	0.00	0.00	0.00	20.19	20.50	52.0	0.0	0.394
90.00	0.26	0.84	0.00	0.00	0.00	19.77	20.08	52.0	0.0	0.386
91.00	0.25	0.84	0.00	0.00	0.00	19.35	19.65	52.0	0.0	0.378
92.00	0.25	0.84	0.00	0.00	0.00	18.91	19.22	52.0	0.0	0.370
93.00	0.25	0.85	0.00	0.00	0.00	18.46	18.77	52.0	0.0	0.361
93.50	0.25	0.85	0.00	0.00	0.00	18.23	18.54	52.0	0.0	0.357
94.00	0.25	0.85	0.00	0.00	0.00	18.00	18.31	52.0	0.0	0.352
95.00	0.24	0.85	0.00	0.00	0.00	17.53	17.83	52.0	0.0	0.343
96.00	0.24	0.85	0.00	0.00	0.00	17.04	17.35	52.0	0.0	0.334
97.00	0.23	0.86	0.00	0.00	0.00	16.55	16.85	52.0	0.0	0.324
97.25	0.61	2.23	0.00	0.00	0.00	41.27	42.05	51.3	0.0	0.819
98.00	0.61	2.24	0.00	0.00	0.00	40.29	41.08	51.5	0.0	0.798
99.00	0.60	2.24	0.00	0.00	0.00	38.96	39.75	51.6	0.0	0.770
100.00	0.48	1.77	0.00	0.00	0.00	37.59	38.19	51.8	0.0	0.738
101.00	0.48	1.78	0.00	0.00	0.00	36.60	37.20	51.9	0.0	0.716
102.00	0.47	1.78	0.00	0.00	0.00	35.58	36.19	52.0	0.0	0.696
103.00	0.47	1.79	0.00	0.00	0.00	34.54	35.15	52.0	0.0	0.676
104.00	0.47	1.79	0.00	0.00	0.00	33.47	34.08	52.0	0.0	0.656



Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:08 PM

Customer: T-MOBILE

<b>Load Case:</b> No Ice	85.00 mph Wind with No Ice								30 Iterations	
Gust Response Factor : 1.69										
Dead Load Factor : 1.00										
Wind Load Factor : 1.00										

105.00	0.47	1.80	0.00	0.00	0.00	32.37	32.99	52.0	0.0	0.635
106.00	0.47	1.80	0.00	0.00	0.00	31.24	31.86	52.0	0.0	0.613
107.00	0.47	1.81	0.00	0.00	0.00	30.09	30.71	52.0	0.0	0.591
108.00	0.46	1.81	0.00	0.00	0.00	28.90	29.53	52.0	0.0	0.568
109.00	0.46	1.82	0.00	0.00	0.00	27.67	28.31	52.0	0.0	0.545
110.00	0.36	1.31	0.00	0.00	0.00	26.42	26.87	52.0	0.0	0.517
111.00	0.36	1.31	0.00	0.00	0.00	25.61	26.07	52.0	0.0	0.501
112.00	0.36	1.31	0.00	0.00	0.00	24.78	25.24	52.0	0.0	0.486
113.00	0.35	1.31	0.00	0.00	0.00	23.93	24.39	52.0	0.0	0.469
114.00	0.35	1.31	0.00	0.00	0.00	23.06	23.52	52.0	0.0	0.453
115.00	0.35	1.32	0.00	0.00	0.00	22.17	22.63	52.0	0.0	0.435
116.00	0.35	1.32	0.00	0.00	0.00	21.25	21.72	52.0	0.0	0.418
117.00	0.35	1.32	0.00	0.00	0.00	20.31	20.78	52.0	0.0	0.400
118.00	0.35	1.32	0.00	0.00	0.00	19.34	19.82	52.0	0.0	0.381
119.00	0.35	1.32	0.00	0.00	0.00	18.35	18.83	52.0	0.0	0.362
120.00	0.34	1.32	0.00	0.00	0.00	17.33	17.83	52.0	0.0	0.343
121.00	0.34	1.33	0.00	0.00	0.00	16.29	16.79	52.0	0.0	0.323
122.00	0.34	1.33	0.00	0.00	0.00	15.22	15.73	52.0	0.0	0.303
123.00	0.34	1.33	0.00	0.00	0.00	14.11	14.64	52.0	0.0	0.282
124.00	0.34	1.33	0.00	0.00	0.00	12.98	13.52	52.0	0.0	0.260
125.00	0.34	1.33	0.00	0.00	0.00	11.81	12.37	52.0	0.0	0.238
126.00	0.34	1.34	0.00	0.00	0.00	10.62	11.20	52.0	0.0	0.215
127.00	0.34	1.34	0.00	0.00	0.00	9.38	9.99	52.0	0.0	0.192
128.00	0.34	1.34	0.00	0.00	0.00	8.11	8.76	52.0	0.0	0.169
129.00	0.33	1.35	0.00	0.00	0.00	6.81	7.51	52.0	0.0	0.145
130.00	0.17	0.58	0.00	0.00	0.00	4.93	5.20	52.0	0.0	0.100
131.00	0.16	0.58	0.00	0.00	0.00	4.38	4.66	52.0	0.0	0.090
132.00	0.16	0.57	0.00	0.00	0.00	3.83	4.11	52.0	0.0	0.079
133.00	0.16	0.57	0.00	0.00	0.00	3.25	3.55	52.0	0.0	0.068
134.00	0.16	0.56	0.00	0.00	0.00	2.67	2.99	52.0	0.0	0.058
135.00	0.16	0.56	0.00	0.00	0.00	2.08	2.43	52.0	0.0	0.047
136.00	0.15	0.56	0.00	0.00	0.00	1.47	1.89	52.0	0.0	0.036
137.00	0.15	0.55	0.00	0.00	0.00	0.85	1.38	52.0	0.0	0.027
138.00	0.01	0.03	0.00	0.00	0.00	0.11	0.12	52.0	0.0	0.002
139.00	0.00	0.02	0.00	0.00	0.00	0.08	0.09	52.0	0.0	0.002
140.00	0.00	0.02	0.00	0.00	0.00	0.06	0.07	52.0	0.0	0.001

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:09 PM

Customer: T-MOBILE

**Load Case: Ice**

73.61 mph Wind with Ice

29 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

**Applied Segment Forces Summary**

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		30.5	0.0					0.0	0.0	30.5	0.0	0.0	0.0
1.00		60.9	280.5					0.0	0.0	60.9	280.5	0.0	0.0
2.00		60.6	279.3					0.0	0.0	60.6	279.3	0.0	0.0
3.00		60.4	278.1					0.0	0.0	60.4	278.1	0.0	0.0
4.00		60.1	276.9					0.0	0.0	60.1	276.9	0.0	0.0
5.00		59.8	275.7					0.0	0.0	59.8	275.7	0.0	0.0
6.00		59.6	274.5					0.0	43.6	59.6	318.1	0.0	0.0
7.00		59.3	273.3					0.0	43.6	59.3	316.9	0.0	0.0
8.00		59.1	272.1					0.0	43.6	59.1	315.7	0.0	0.0
9.00		58.8	270.9					0.0	43.6	58.8	314.5	0.0	0.0
10.00		58.6	269.7					0.0	43.6	58.6	313.3	0.0	0.0
11.00		58.3	268.5					0.0	43.6	58.3	312.1	0.0	0.0
12.00		58.1	267.3					0.0	43.6	58.1	310.9	0.0	0.0
13.00		57.8	266.1					0.0	43.6	57.8	309.7	0.0	0.0
14.00		57.6	264.9					0.0	43.6	57.6	308.5	0.0	0.0
15.00		57.3	263.7					0.0	43.6	57.3	307.3	0.0	0.0
16.00		57.1	262.5					0.0	43.6	57.1	306.1	0.0	0.0
17.00		56.8	261.3					0.0	43.6	56.8	304.9	0.0	0.0
18.00		56.5	260.1					0.0	43.6	56.5	303.7	0.0	0.0
19.00		56.3	258.9					0.0	43.6	56.3	302.5	0.0	0.0
20.00		56.0	257.7					0.0	43.6	56.0	301.3	0.0	0.0
21.00		55.8	256.5					0.0	43.6	55.8	300.1	0.0	0.0
22.00		55.5	255.3					0.0	43.6	55.5	298.9	0.0	0.0
23.00		55.3	254.1					0.0	43.6	55.3	297.7	0.0	0.0
24.00		55.0	252.8					0.0	43.6	55.0	296.5	0.0	0.0
25.00		54.8	251.6					0.0	43.6	54.8	295.3	0.0	0.0
26.00		54.5	250.4					0.0	43.6	54.5	294.1	0.0	0.0
27.00		54.3	249.2					0.0	43.6	54.3	292.9	0.0	0.0
28.00		54.0	248.0					0.0	43.6	54.0	291.7	0.0	0.0
29.00		53.7	246.8					0.0	43.6	53.7	290.5	0.0	0.0
30.00		53.5	245.6					0.0	43.6	53.5	289.2	0.0	0.0
31.00		53.2	244.4					0.0	43.6	53.2	288.0	0.0	0.0
32.00		53.0	243.2					0.0	43.6	53.0	286.8	0.0	0.0
33.00		52.8	242.0					0.0	43.6	52.8	285.6	0.0	0.0
34.00		52.9	240.8					0.0	43.6	52.9	284.4	0.0	0.0
35.00		53.1	239.6					0.0	43.6	53.1	283.2	0.0	0.0
36.00		53.3	238.4					0.0	43.6	53.3	282.0	0.0	0.0
37.00		53.4	237.2					0.0	43.6	53.4	280.8	0.0	0.0
38.00		53.6	236.0					0.0	43.6	53.6	279.6	0.0	0.0
39.00		53.7	234.8					0.0	43.6	53.7	278.4	0.0	0.0
40.00		53.8	233.6					0.0	43.6	53.8	277.2	0.0	0.0
41.00		53.9	232.4					0.0	43.6	53.9	276.0	0.0	0.0
42.00		54.0	231.2					0.0	43.6	54.0	274.8	0.0	0.0
43.00		54.1	230.0					0.0	43.6	54.1	273.6	0.0	0.0
44.00		54.2	228.8					0.0	43.6	54.2	272.4	0.0	0.0
45.00		54.3	227.6					0.0	43.6	54.3	271.2	0.0	0.0
46.00		34.0	226.4					0.0	43.6	34.0	270.0	0.0	0.0
46.25	Bot - Section 2	27.7	56.4					0.0	10.9	27.7	67.3	0.0	0.0

<b>Load Case:</b> Ice	73.61 mph Wind with Ice							29 Iterations	
Gust Response Factor : 1.69									
Dead Load Factor : 1.00									
Wind Load Factor : 1.00									

47.00		48.8	324.4				0.0	32.7	48.8	357.1	0.0	0.0	
48.00		55.9	430.5				0.0	43.6	55.9	474.1	0.0	0.0	
49.00		55.9	428.2				0.0	43.6	55.9	471.8	0.0	0.0	
50.00		55.9	425.9				0.0	43.6	55.9	469.5	0.0	0.0	
51.00	Top - Section 1	56.0	423.6				0.0	43.6	56.0	467.2	0.0	0.0	
52.00		56.0	225.2				0.0	43.6	56.0	268.8	0.0	0.0	
53.00		56.0	224.0				0.0	43.6	56.0	267.6	0.0	0.0	
54.00		56.0	222.8				0.0	43.6	56.0	266.4	0.0	0.0	
55.00		56.0	221.6				0.0	43.6	56.0	265.2	0.0	0.0	
56.00		56.0	220.4				0.0	43.6	56.0	264.0	0.0	0.0	
57.00		56.0	219.1				0.0	43.6	56.0	262.8	0.0	0.0	
58.00		56.0	217.9				0.0	43.6	56.0	261.6	0.0	0.0	
59.00		56.0	216.7				0.0	43.6	56.0	260.4	0.0	0.0	
60.00		55.9	215.5				0.0	43.6	55.9	259.2	0.0	0.0	
61.00		55.9	214.3				0.0	43.6	55.9	258.0	0.0	0.0	
62.00		55.8	213.1				0.0	43.6	55.8	256.7	0.0	0.0	
63.00		55.8	211.9				0.0	43.6	55.8	255.5	0.0	0.0	
64.00		55.7	210.7				0.0	43.6	55.7	254.3	0.0	0.0	
65.00		55.7	209.5				0.0	43.6	55.7	253.1	0.0	0.0	
66.00		55.6	208.3				0.0	43.6	55.6	251.9	0.0	0.0	
67.00		55.5	207.1				0.0	43.6	55.5	250.7	0.0	0.0	
68.00		55.5	205.9				0.0	43.6	55.5	249.5	0.0	0.0	
69.00		55.4	204.7				0.0	43.6	55.4	248.3	0.0	0.0	
70.00		55.3	203.5				0.0	43.6	55.3	247.1	0.0	0.0	
71.00		55.2	202.3				0.0	43.6	55.2	245.9	0.0	0.0	
72.00		55.1	201.1				0.0	43.6	55.1	244.7	0.0	0.0	
73.00		55.0	199.9				0.0	43.6	55.0	243.5	0.0	0.0	
74.00		54.9	198.7				0.0	43.6	54.9	242.3	0.0	0.0	
75.00		54.8	197.5				0.0	43.6	54.8	241.1	0.0	0.0	
76.00		54.7	196.3				0.0	43.6	54.7	239.9	0.0	0.0	
77.00		54.6	195.1				0.0	43.6	54.6	238.7	0.0	0.0	
78.00		54.4	193.9				0.0	43.6	54.4	237.5	0.0	0.0	
79.00		54.3	192.7				0.0	43.6	54.3	236.3	0.0	0.0	
80.00		54.2	191.5				0.0	43.6	54.2	235.1	0.0	0.0	
81.00		54.0	190.3				0.0	43.6	54.0	233.9	0.0	0.0	
82.00		53.9	189.1				0.0	43.6	53.9	232.7	0.0	0.0	
83.00		53.8	187.9				0.0	43.6	53.8	231.5	0.0	0.0	
84.00		53.6	186.6				0.0	43.6	53.6	230.3	0.0	0.0	
85.00		53.5	185.4				0.0	43.6	53.5	229.1	0.0	0.0	
86.00		53.3	184.2				0.0	43.6	53.3	227.9	0.0	0.0	
87.00	Appertunance(s)	53.1	183.0	3,113.6	0.0	0.0	2,908.7	0.0	43.6	3,166.8	3,135.4	0.0	0.0
88.00		53.0	181.8					0.0	32.7	53.0	214.6	0.0	0.0
89.00		52.8	180.6					0.0	32.7	52.8	213.4	0.0	0.0
90.00		52.6	179.4					0.0	32.7	52.6	212.2	0.0	0.0
91.00		52.5	178.2					0.0	32.7	52.5	211.0	0.0	0.0
92.00		52.3	177.0					0.0	32.7	52.3	209.7	0.0	0.0
93.00		39.1	175.8					0.0	32.7	39.1	208.5	0.0	0.0
93.50	Bot - Section 3	26.2	87.5					0.0	16.4	26.2	103.8	0.0	0.0
94.00		39.4	117.2					0.0	16.4	39.4	133.6	0.0	0.0
95.00		52.4	233.2					0.0	32.7	52.4	265.9	0.0	0.0
96.00		52.2	231.6					0.0	32.7	52.2	264.3	0.0	0.0
97.00		32.6	230.0					0.0	32.7	32.6	262.7	0.0	0.0
97.25	Top - Section 2	26.0	57.3					0.0	8.2	26.0	65.4	0.0	0.0
98.00		45.3	57.3					0.0	24.5	45.3	81.9	0.0	0.0
99.00		51.6	76.0					0.0	32.7	51.6	108.7	0.0	0.0
100.00	Appertunance(s)	51.4	75.4	3,316.5	0.0	0.0	3,075.4	0.0	32.7	3,367.9	3,183.6	0.0	0.0
101.00		51.2	74.9					0.0	21.7	51.2	96.7	0.0	0.0

<b>Load Case: Ice</b>		<b>73.61 mph Wind with Ice</b>						<b>29 Iterations</b>	
Gust Response Factor : 1.69									
Dead Load Factor : 1.00									
Wind Load Factor : 1.00									

102.00		51.0	74.4					0.0	21.7	51.0	96.1	0.0	0.0
103.00		50.8	73.9					0.0	21.7	50.8	95.6	0.0	0.0
104.00		50.6	73.3					0.0	21.7	50.6	95.1	0.0	0.0
105.00		50.4	72.8					0.0	21.7	50.4	94.5	0.0	0.0
106.00		50.2	72.3					0.0	21.7	50.2	94.0	0.0	0.0
107.00		49.9	71.7					0.0	21.7	49.9	93.5	0.0	0.0
108.00		49.7	71.2					0.0	21.7	49.7	93.0	0.0	0.0
109.00		49.5	70.7					0.0	21.7	49.5	92.4	0.0	0.0
110.00	Appertunance(s)	49.3	70.2	3,393.1	0.0	0.0	2,765.9	0.0	21.7	3,442.3	2,857.8	0.0	0.0
111.00		49.0	69.6					0.0	10.5	49.0	80.1	0.0	0.0
112.00		48.8	69.1					0.0	10.5	48.8	79.6	0.0	0.0
113.00		48.6	68.6					0.0	10.5	48.6	79.0	0.0	0.0
114.00		48.3	68.0					0.0	10.5	48.3	78.5	0.0	0.0
115.00		48.1	67.5					0.0	10.5	48.1	78.0	0.0	0.0
116.00		47.8	67.0					0.0	10.5	47.8	77.4	0.0	0.0
117.00		47.6	66.5					0.0	10.5	47.6	76.9	0.0	0.0
118.00	Appertunance(s)	47.3	65.9	31.0	0.0	0.0	19.1	0.0	10.5	78.4	95.5	0.0	0.0
119.00		47.1	65.4					0.0	9.7	47.1	75.1	0.0	0.0
120.00		46.8	64.9					0.0	9.7	46.8	74.5	0.0	0.0
121.00		46.6	64.3					0.0	9.7	46.6	74.0	0.0	0.0
122.00		46.3	63.8					0.0	9.7	46.3	73.5	0.0	0.0
123.00		46.0	63.3					0.0	9.7	46.0	73.0	0.0	0.0
124.00		45.8	62.8					0.0	9.7	45.8	72.4	0.0	0.0
125.00		45.5	62.2					0.0	9.7	45.5	71.9	0.0	0.0
126.00		45.2	61.7					0.0	9.7	45.2	71.4	0.0	0.0
127.00		45.0	61.2					0.0	9.7	45.0	70.8	0.0	0.0
128.00		44.7	60.6					0.0	9.7	44.7	70.3	0.0	0.0
129.00		44.4	60.1					0.0	9.7	44.4	69.8	0.0	0.0
130.00	Appertunance(s)	44.1	59.6	3,805.1	0.0	2,258.8	3,489.8	0.0	9.7	3,849.2	3,559.1	0.0	0.0
131.00		43.9	59.1					0.0	6.0	43.9	65.1	0.0	0.0
132.00		43.6	58.5					0.0	6.0	43.6	64.6	0.0	0.0
133.00		43.3	58.0					0.0	6.0	43.3	64.0	0.0	0.0
134.00		43.0	57.5					0.0	6.0	43.0	63.5	0.0	0.0
135.00		42.7	56.9					0.0	6.0	42.7	63.0	0.0	0.0
136.00		42.4	56.4					0.0	6.0	42.4	62.5	0.0	0.0
137.00		42.1	55.9					0.0	6.0	42.1	61.9	0.0	0.0
138.00	Appertunance(s)	41.9	55.4	3,030.1	0.0	457.9	3,103.0	0.0	6.0	3,072.0	3,164.4	0.0	0.0
139.00		41.6	54.8					0.0	0.6	41.6	55.5	0.0	0.0
140.00	Appertunance(s)	20.7	54.3	83.0	0.0	398.3	22.9	0.0	0.6	103.7	77.8	0.0	0.0
<b>Totals:</b>										<b>24,158.7</b>	<b>45,771.9</b>	<b>0.00</b>	<b>0.00</b>

<b>Load Case:</b> Ice	73.61 mph Wind with Ice	29 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Calculated Shaft Forces and Deflections**

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-24.140	-45.764	0.000	0.000	0.000	-2,502.468	0.000	0.000	0.000	0.000
1.00	-24.107	-45.469	0.000	0.000	0.000	-2,478.329	-0.004	0.000	0.004	-0.035
2.00	-24.073	-45.175	0.000	0.000	0.000	-2,454.222	-0.015	0.000	0.015	-0.070
3.00	-24.040	-44.882	0.000	0.000	0.000	-2,430.149	-0.034	0.000	0.034	-0.105
4.00	-24.007	-44.590	0.000	0.000	0.000	-2,406.110	-0.060	0.000	0.060	-0.140
5.00	-23.974	-44.300	0.000	0.000	0.000	-2,382.103	-0.093	0.000	0.093	-0.175
6.00	-23.940	-43.967	0.000	0.000	0.000	-2,358.130	-0.134	0.000	0.134	-0.211
7.00	-23.907	-43.636	0.000	0.000	0.000	-2,334.191	-0.182	0.000	0.182	-0.246
8.00	-23.873	-43.305	0.000	0.000	0.000	-2,310.285	-0.237	0.000	0.237	-0.282
9.00	-23.839	-42.976	0.000	0.000	0.000	-2,286.412	-0.300	0.000	0.300	-0.318
10.00	-23.806	-42.649	0.000	0.000	0.000	-2,262.573	-0.371	0.000	0.371	-0.353
11.00	-23.772	-42.322	0.000	0.000	0.000	-2,238.768	-0.449	0.000	0.449	-0.389
12.00	-23.738	-41.996	0.000	0.000	0.000	-2,214.996	-0.535	0.000	0.535	-0.425
13.00	-23.704	-41.672	0.000	0.000	0.000	-2,191.259	-0.628	0.000	0.628	-0.462
14.00	-23.670	-41.349	0.000	0.000	0.000	-2,167.555	-0.729	0.000	0.729	-0.498
15.00	-23.636	-41.027	0.000	0.000	0.000	-2,143.885	-0.837	0.000	0.837	-0.534
16.00	-23.602	-40.707	0.000	0.000	0.000	-2,120.249	-0.953	0.000	0.953	-0.571
17.00	-23.568	-40.388	0.000	0.000	0.000	-2,096.648	-1.076	0.000	1.076	-0.607
18.00	-23.534	-40.070	0.000	0.000	0.000	-2,073.080	-1.208	0.000	1.208	-0.644
19.00	-23.500	-39.753	0.000	0.000	0.000	-2,049.547	-1.347	0.000	1.347	-0.680
20.00	-23.465	-39.437	0.000	0.000	0.000	-2,026.048	-1.493	0.000	1.493	-0.717
21.00	-23.431	-39.123	0.000	0.000	0.000	-2,002.583	-1.648	0.000	1.648	-0.754
22.00	-23.396	-38.809	0.000	0.000	0.000	-1,979.153	-1.810	0.000	1.810	-0.791
23.00	-23.362	-38.497	0.000	0.000	0.000	-1,955.757	-1.980	0.000	1.980	-0.828
24.00	-23.327	-38.187	0.000	0.000	0.000	-1,932.396	-2.157	0.000	2.157	-0.865
25.00	-23.293	-37.877	0.000	0.000	0.000	-1,909.069	-2.343	0.000	2.343	-0.903
26.00	-23.258	-37.569	0.000	0.000	0.000	-1,885.777	-2.536	0.000	2.536	-0.940
27.00	-23.223	-37.262	0.000	0.000	0.000	-1,862.519	-2.737	0.000	2.737	-0.977
28.00	-23.188	-36.956	0.000	0.000	0.000	-1,839.297	-2.946	0.000	2.946	-1.015
29.00	-23.153	-36.651	0.000	0.000	0.000	-1,816.109	-3.163	0.000	3.163	-1.052
30.00	-23.118	-36.348	0.000	0.000	0.000	-1,792.956	-3.387	0.000	3.387	-1.090
31.00	-23.083	-36.046	0.000	0.000	0.000	-1,769.839	-3.620	0.000	3.620	-1.128
32.00	-23.048	-35.745	0.000	0.000	0.000	-1,746.756	-3.860	0.000	3.860	-1.165
33.00	-23.013	-35.445	0.000	0.000	0.000	-1,723.708	-4.108	0.000	4.108	-1.203
34.00	-22.977	-35.147	0.000	0.000	0.000	-1,700.696	-4.365	0.000	4.365	-1.241
35.00	-22.941	-34.849	0.000	0.000	0.000	-1,677.719	-4.629	0.000	4.629	-1.279
36.00	-22.904	-34.554	0.000	0.000	0.000	-1,654.779	-4.901	0.000	4.901	-1.317
37.00	-22.867	-34.259	0.000	0.000	0.000	-1,631.876	-5.181	0.000	5.181	-1.355
38.00	-22.829	-33.965	0.000	0.000	0.000	-1,609.009	-5.469	0.000	5.469	-1.393
39.00	-22.791	-33.673	0.000	0.000	0.000	-1,586.181	-5.765	0.000	5.765	-1.431
40.00	-22.753	-33.382	0.000	0.000	0.000	-1,563.390	-6.069	0.000	6.069	-1.469
41.00	-22.714	-33.093	0.000	0.000	0.000	-1,540.638	-6.381	0.000	6.381	-1.508
42.00	-22.674	-32.804	0.000	0.000	0.000	-1,517.925	-6.701	0.000	6.701	-1.546
43.00	-22.634	-32.517	0.000	0.000	0.000	-1,495.251	-7.029	0.000	7.029	-1.584
44.00	-22.594	-32.231	0.000	0.000	0.000	-1,472.618	-7.365	0.000	7.365	-1.622
45.00	-22.553	-31.947	0.000	0.000	0.000	-1,450.024	-7.709	0.000	7.709	-1.661
46.00	-22.525	-31.668	0.000	0.000	0.000	-1,427.471	-8.061	0.000	8.061	-1.699
46.25	-22.506	-31.594	0.000	0.000	0.000	-1,421.840	-8.151	0.000	8.151	-1.709
47.00	-22.464	-31.226	0.000	0.000	0.000	-1,404.961	-8.421	0.000	8.421	-1.737
48.00	-22.415	-30.739	0.000	0.000	0.000	-1,382.498	-8.790	0.000	8.790	-1.776
49.00	-22.364	-30.254	0.000	0.000	0.000	-1,360.084	-9.166	0.000	9.166	-1.814

**Load Case: Ice**

73.61 mph Wind with Ice

29 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

50.00	-22.313	-29.771	0.000	0.000	0.000	-1,337.720	-9.550	0.000	9.550	-1.852
51.00	-22.261	-29.291	0.000	0.000	0.000	-1,315.407	-9.942	0.000	9.942	-1.891
52.00	-22.215	-29.010	0.000	0.000	0.000	-1,293.146	-10.343	0.000	10.343	-1.929
53.00	-22.168	-28.731	0.000	0.000	0.000	-1,270.932	-10.750	0.000	10.750	-1.964
54.00	-22.120	-28.453	0.000	0.000	0.000	-1,248.765	-11.166	0.000	11.166	-1.999
55.00	-22.072	-28.177	0.000	0.000	0.000	-1,226.645	-11.588	0.000	11.588	-2.035
56.00	-22.024	-27.902	0.000	0.000	0.000	-1,204.573	-12.019	0.000	12.019	-2.070
57.00	-21.975	-27.628	0.000	0.000	0.000	-1,182.550	-12.456	0.000	12.456	-2.105
58.00	-21.926	-27.355	0.000	0.000	0.000	-1,160.576	-12.901	0.000	12.901	-2.140
59.00	-21.877	-27.084	0.000	0.000	0.000	-1,138.650	-13.353	0.000	13.353	-2.175
60.00	-21.827	-26.814	0.000	0.000	0.000	-1,116.774	-13.812	0.000	13.812	-2.209
61.00	-21.778	-26.545	0.000	0.000	0.000	-1,094.947	-14.279	0.000	14.279	-2.244
62.00	-21.727	-26.277	0.000	0.000	0.000	-1,073.170	-14.752	0.000	14.752	-2.279
63.00	-21.677	-26.011	0.000	0.000	0.000	-1,051.443	-15.233	0.000	15.233	-2.313
64.00	-21.627	-25.746	0.000	0.000	0.000	-1,029.766	-15.722	0.000	15.722	-2.348
65.00	-21.576	-25.483	0.000	0.000	0.000	-1,008.140	-16.217	0.000	16.217	-2.382
66.00	-21.525	-25.221	0.000	0.000	0.000	-986.565	-16.720	0.000	16.720	-2.416
67.00	-21.473	-24.960	0.000	0.000	0.000	-965.041	-17.229	0.000	17.229	-2.450
68.00	-21.422	-24.700	0.000	0.000	0.000	-943.568	-17.746	0.000	17.746	-2.484
69.00	-21.370	-24.442	0.000	0.000	0.000	-922.147	-18.270	0.000	18.270	-2.517
70.00	-21.318	-24.185	0.000	0.000	0.000	-900.778	-18.801	0.000	18.801	-2.551
71.00	-21.265	-23.930	0.000	0.000	0.000	-879.461	-19.339	0.000	19.339	-2.584
72.00	-21.213	-23.676	0.000	0.000	0.000	-858.196	-19.883	0.000	19.883	-2.617
73.00	-21.160	-23.423	0.000	0.000	0.000	-836.984	-20.435	0.000	20.435	-2.650
74.00	-21.107	-23.172	0.000	0.000	0.000	-815.824	-20.994	0.000	20.994	-2.682
75.00	-21.054	-22.922	0.000	0.000	0.000	-794.718	-21.559	0.000	21.559	-2.714
76.00	-21.000	-22.673	0.000	0.000	0.000	-773.664	-22.131	0.000	22.131	-2.746
77.00	-20.947	-22.426	0.000	0.000	0.000	-752.664	-22.709	0.000	22.709	-2.778
78.00	-20.893	-22.180	0.000	0.000	0.000	-731.718	-23.295	0.000	23.295	-2.810
79.00	-20.839	-21.935	0.000	0.000	0.000	-710.825	-23.887	0.000	23.887	-2.841
80.00	-20.785	-21.692	0.000	0.000	0.000	-689.987	-24.485	0.000	24.485	-2.872
81.00	-20.730	-21.450	0.000	0.000	0.000	-669.202	-25.090	0.000	25.090	-2.902
82.00	-20.676	-21.210	0.000	0.000	0.000	-648.472	-25.701	0.000	25.701	-2.932
83.00	-20.621	-20.971	0.000	0.000	0.000	-627.797	-26.318	0.000	26.318	-2.962
84.00	-20.566	-20.733	0.000	0.000	0.000	-607.176	-26.942	0.000	26.942	-2.991
85.00	-20.511	-20.497	0.000	0.000	0.000	-586.611	-27.571	0.000	27.571	-3.020
86.00	-20.456	-20.262	0.000	0.000	0.000	-566.100	-28.207	0.000	28.207	-3.049
87.00	-17.134	-17.292	0.000	0.000	0.000	-545.645	-28.848	0.000	28.848	-3.077
88.00	-17.078	-17.072	0.000	0.000	0.000	-528.511	-29.495	0.000	29.495	-3.104
89.00	-17.022	-16.854	0.000	0.000	0.000	-511.433	-30.148	0.000	30.148	-3.132
90.00	-16.965	-16.637	0.000	0.000	0.000	-494.412	-30.807	0.000	30.807	-3.158
91.00	-16.909	-16.422	0.000	0.000	0.000	-477.447	-31.471	0.000	31.471	-3.185
92.00	-16.852	-16.208	0.000	0.000	0.000	-460.539	-32.141	0.000	32.141	-3.211
93.00	-16.807	-15.996	0.000	0.000	0.000	-443.687	-32.816	0.000	32.816	-3.237
93.50	-16.778	-15.890	0.000	0.000	0.000	-435.284	-33.156	0.000	33.156	-3.250
94.00	-16.737	-15.754	0.000	0.000	0.000	-426.895	-33.497	0.000	33.497	-3.262
95.00	-16.676	-15.484	0.000	0.000	0.000	-410.158	-34.183	0.000	34.183	-3.287
96.00	-16.615	-15.216	0.000	0.000	0.000	-393.483	-34.873	0.000	34.873	-3.311
97.00	-16.571	-14.951	0.000	0.000	0.000	-376.868	-35.569	0.000	35.569	-3.335
97.25	-16.544	-14.884	0.000	0.000	0.000	-372.726	-35.744	0.000	35.744	-3.341
98.00	-16.504	-14.794	0.000	0.000	0.000	-360.318	-36.270	0.000	36.270	-3.358
99.00	-16.461	-14.673	0.000	0.000	0.000	-343.814	-36.980	0.000	36.980	-3.415
100.0	-12.918	-11.685	0.000	0.000	0.000	-327.354	-37.701	0.000	37.701	-3.469
101.0	-12.872	-11.580	0.000	0.000	0.000	-314.436	-38.434	0.000	38.434	-3.523
102.0	-12.826	-11.475	0.000	0.000	0.000	-301.564	-39.177	0.000	39.177	-3.575
103.0	-12.779	-11.372	0.000	0.000	0.000	-288.738	-39.932	0.000	39.932	-3.627
104.0	-12.732	-11.269	0.000	0.000	0.000	-275.960	-40.697	0.000	40.697	-3.677

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:20 PM

Customer: T-MOBILE

**Load Case: Ice**

73.61 mph Wind with Ice

29 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

105.0	-12.686	-11.167	0.000	0.000	0.000	-263.228	-41.472	0.000	41.472	-3.726
106.0	-12.638	-11.067	0.000	0.000	0.000	-250.542	-42.257	0.000	42.257	-3.774
107.0	-12.591	-10.967	0.000	0.000	0.000	-237.904	-43.053	0.000	43.053	-3.820
108.0	-12.544	-10.867	0.000	0.000	0.000	-225.314	-43.857	0.000	43.857	-3.865
109.0	-12.496	-10.769	0.000	0.000	0.000	-212.770	-44.672	0.000	44.672	-3.908
110.0	-8.872	-8.148	0.000	0.000	0.000	-200.274	-45.495	0.000	45.495	-3.950
111.0	-8.823	-8.065	0.000	0.000	0.000	-191.403	-46.326	0.000	46.326	-3.991
112.0	-8.774	-7.983	0.000	0.000	0.000	-182.580	-47.166	0.000	47.166	-4.031
113.0	-8.726	-7.902	0.000	0.000	0.000	-173.806	-48.014	0.000	48.014	-4.069
114.0	-8.677	-7.822	0.000	0.000	0.000	-165.080	-48.870	0.000	48.870	-4.107
115.0	-8.628	-7.742	0.000	0.000	0.000	-156.404	-49.734	0.000	49.734	-4.144
116.0	-8.580	-7.663	0.000	0.000	0.000	-147.776	-50.605	0.000	50.605	-4.179
117.0	-8.531	-7.585	0.000	0.000	0.000	-139.196	-51.484	0.000	51.484	-4.214
118.0	-8.450	-7.490	0.000	0.000	0.000	-130.665	-52.369	0.000	52.369	-4.247
119.0	-8.402	-7.415	0.000	0.000	0.000	-122.215	-53.262	0.000	53.262	-4.278
120.0	-8.353	-7.339	0.000	0.000	0.000	-113.814	-54.161	0.000	54.161	-4.309
121.0	-8.305	-7.265	0.000	0.000	0.000	-105.461	-55.066	0.000	55.066	-4.337
122.0	-8.257	-7.191	0.000	0.000	0.000	-97.156	-55.977	0.000	55.977	-4.365
123.0	-8.208	-7.119	0.000	0.000	0.000	-88.900	-56.893	0.000	56.893	-4.391
124.0	-8.160	-7.047	0.000	0.000	0.000	-80.692	-57.815	0.000	57.815	-4.415
125.0	-8.112	-6.975	0.000	0.000	0.000	-72.532	-58.741	0.000	58.741	-4.437
126.0	-8.063	-6.905	0.000	0.000	0.000	-64.420	-59.672	0.000	59.672	-4.457
127.0	-8.015	-6.835	0.000	0.000	0.000	-56.357	-60.607	0.000	60.607	-4.476
128.0	-7.967	-6.767	0.000	0.000	0.000	-48.342	-61.546	0.000	61.546	-4.492
129.0	-7.919	-6.699	0.000	0.000	0.000	-40.376	-62.488	0.000	62.488	-4.507
130.0	-3.802	-3.453	0.000	0.000	0.000	-30.198	-63.433	0.000	63.433	-4.519
131.0	-3.754	-3.391	0.000	0.000	0.000	-26.396	-64.379	0.000	64.379	-4.528
132.0	-3.706	-3.330	0.000	0.000	0.000	-22.643	-65.328	0.000	65.328	-4.537
133.0	-3.658	-3.269	0.000	0.000	0.000	-18.937	-66.278	0.000	66.278	-4.544
134.0	-3.610	-3.208	0.000	0.000	0.000	-15.279	-67.230	0.000	67.230	-4.551
135.0	-3.563	-3.149	0.000	0.000	0.000	-11.669	-68.183	0.000	68.183	-4.556
136.0	-3.516	-3.090	0.000	0.000	0.000	-8.106	-69.137	0.000	69.137	-4.560
137.0	-3.469	-3.031	0.000	0.000	0.000	-4.590	-70.091	0.000	70.091	-4.562
138.0	-0.155	-0.121	0.000	0.000	0.000	-0.663	-71.046	0.000	71.046	-4.564
139.0	-0.109	-0.069	0.000	0.000	0.000	-0.508	-72.001	0.000	72.001	-4.564
140.0	-0.104	0.000	0.000	0.000	0.000	-0.398	-72.956	0.000	72.956	-4.564

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:20 PM

Customer: T-MOBILE

**Load Case: Ice**

73.61 mph Wind with Ice

29 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

**Calculated Stresses**

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.62	0.66	0.00	0.00	0.00	35.35	35.98	52.0	0.0	0.692
1.00	0.62	0.66	0.00	0.00	0.00	35.31	35.95	52.0	0.0	0.692
2.00	0.62	0.66	0.00	0.00	0.00	35.27	35.91	52.0	0.0	0.691
3.00	0.61	0.66	0.00	0.00	0.00	35.23	35.86	52.0	0.0	0.690
4.00	0.61	0.67	0.00	0.00	0.00	35.19	35.82	52.0	0.0	0.689
5.00	0.61	0.67	0.00	0.00	0.00	35.15	35.78	52.0	0.0	0.688
6.00	0.61	0.67	0.00	0.00	0.00	35.10	35.73	52.0	0.0	0.687
7.00	0.61	0.67	0.00	0.00	0.00	35.05	35.68	52.0	0.0	0.686
8.00	0.61	0.67	0.00	0.00	0.00	35.01	35.63	52.0	0.0	0.685
9.00	0.60	0.68	0.00	0.00	0.00	34.96	35.58	52.0	0.0	0.684
10.00	0.60	0.68	0.00	0.00	0.00	34.90	35.53	52.0	0.0	0.683
11.00	0.60	0.68	0.00	0.00	0.00	34.85	35.47	52.0	0.0	0.682
12.00	0.60	0.68	0.00	0.00	0.00	34.79	35.41	52.0	0.0	0.681
13.00	0.60	0.68	0.00	0.00	0.00	34.74	35.35	52.0	0.0	0.680
14.00	0.59	0.69	0.00	0.00	0.00	34.68	35.29	52.0	0.0	0.679
15.00	0.59	0.69	0.00	0.00	0.00	34.62	35.23	52.0	0.0	0.678
16.00	0.59	0.69	0.00	0.00	0.00	34.55	35.16	52.0	0.0	0.676
17.00	0.59	0.69	0.00	0.00	0.00	34.49	35.10	52.0	0.0	0.675
18.00	0.59	0.69	0.00	0.00	0.00	34.42	35.03	52.0	0.0	0.674
19.00	0.58	0.70	0.00	0.00	0.00	34.35	34.95	52.0	0.0	0.672
20.00	0.58	0.70	0.00	0.00	0.00	34.28	34.88	52.0	0.0	0.671
21.00	0.58	0.70	0.00	0.00	0.00	34.20	34.80	52.0	0.0	0.670
22.00	0.58	0.70	0.00	0.00	0.00	34.12	34.72	52.0	0.0	0.668
23.00	0.58	0.71	0.00	0.00	0.00	34.04	34.64	52.0	0.0	0.666
24.00	0.58	0.71	0.00	0.00	0.00	33.96	34.56	52.0	0.0	0.665
25.00	0.57	0.71	0.00	0.00	0.00	33.88	34.47	52.0	0.0	0.663
26.00	0.57	0.71	0.00	0.00	0.00	33.79	34.38	52.0	0.0	0.661
27.00	0.57	0.72	0.00	0.00	0.00	33.70	34.29	52.0	0.0	0.660
28.00	0.57	0.72	0.00	0.00	0.00	33.61	34.20	52.0	0.0	0.658
29.00	0.57	0.72	0.00	0.00	0.00	33.51	34.10	52.0	0.0	0.656
30.00	0.56	0.72	0.00	0.00	0.00	33.41	34.00	52.0	0.0	0.654
31.00	0.56	0.73	0.00	0.00	0.00	33.31	33.90	52.0	0.0	0.652
32.00	0.56	0.73	0.00	0.00	0.00	33.21	33.79	52.0	0.0	0.650
33.00	0.56	0.73	0.00	0.00	0.00	33.10	33.68	52.0	0.0	0.648
34.00	0.56	0.73	0.00	0.00	0.00	32.99	33.57	52.0	0.0	0.646
35.00	0.55	0.74	0.00	0.00	0.00	32.87	33.45	52.0	0.0	0.644
36.00	0.55	0.74	0.00	0.00	0.00	32.75	33.33	52.0	0.0	0.641
37.00	0.55	0.74	0.00	0.00	0.00	32.63	33.21	52.0	0.0	0.639
38.00	0.55	0.74	0.00	0.00	0.00	32.51	33.08	52.0	0.0	0.636
39.00	0.55	0.75	0.00	0.00	0.00	32.38	32.95	52.0	0.0	0.634
40.00	0.54	0.75	0.00	0.00	0.00	32.25	32.82	52.0	0.0	0.631
41.00	0.54	0.75	0.00	0.00	0.00	32.11	32.68	52.0	0.0	0.629
42.00	0.54	0.75	0.00	0.00	0.00	31.97	32.54	52.0	0.0	0.626
43.00	0.54	0.76	0.00	0.00	0.00	31.83	32.40	52.0	0.0	0.623
44.00	0.54	0.76	0.00	0.00	0.00	31.68	32.25	52.0	0.0	0.620
45.00	0.53	0.76	0.00	0.00	0.00	31.53	32.09	52.0	0.0	0.617
46.00	0.53	0.76	0.00	0.00	0.00	31.38	31.94	52.0	0.0	0.614
46.25	0.53	0.76	0.00	0.00	0.00	31.34	31.90	52.0	0.0	0.614
47.00	0.53	0.77	0.00	0.00	0.00	31.22	31.77	52.0	0.0	0.611
48.00	0.52	0.77	0.00	0.00	0.00	31.05	31.60	52.0	0.0	0.608
49.00	0.52	0.77	0.00	0.00	0.00	30.88	31.43	52.0	0.0	0.605



Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:20 PM

Customer: T-MOBILE

**Load Case: Ice**

73.61 mph Wind with Ice

29 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

50.00	0.51	0.77	0.00	0.00	0.00	30.71	31.25	52.0	0.0	0.601
51.00	0.49	0.76	0.00	0.00	0.00	28.91	29.44	52.0	0.0	0.566
52.00	0.49	0.76	0.00	0.00	0.00	28.73	29.25	52.0	0.0	0.563
53.00	0.49	0.76	0.00	0.00	0.00	28.55	29.07	52.0	0.0	0.559
54.00	0.49	0.76	0.00	0.00	0.00	28.36	28.87	52.0	0.0	0.555
55.00	0.48	0.77	0.00	0.00	0.00	28.16	28.68	52.0	0.0	0.552
56.00	0.48	0.77	0.00	0.00	0.00	27.96	28.48	52.0	0.0	0.548
57.00	0.48	0.77	0.00	0.00	0.00	27.76	28.27	52.0	0.0	0.544
58.00	0.48	0.77	0.00	0.00	0.00	27.55	28.06	52.0	0.0	0.540
59.00	0.48	0.78	0.00	0.00	0.00	27.33	27.84	52.0	0.0	0.536
60.00	0.47	0.78	0.00	0.00	0.00	27.11	27.62	52.0	0.0	0.531
61.00	0.47	0.78	0.00	0.00	0.00	26.88	27.39	52.0	0.0	0.527
62.00	0.47	0.78	0.00	0.00	0.00	26.65	27.15	52.0	0.0	0.522
63.00	0.47	0.79	0.00	0.00	0.00	26.41	26.91	52.0	0.0	0.518
64.00	0.47	0.79	0.00	0.00	0.00	26.17	26.67	52.0	0.0	0.513
65.00	0.46	0.79	0.00	0.00	0.00	25.92	26.42	52.0	0.0	0.508
66.00	0.46	0.79	0.00	0.00	0.00	25.66	26.16	52.0	0.0	0.503
67.00	0.46	0.80	0.00	0.00	0.00	25.40	25.89	52.0	0.0	0.498
68.00	0.46	0.80	0.00	0.00	0.00	25.13	25.62	52.0	0.0	0.493
69.00	0.46	0.80	0.00	0.00	0.00	24.85	25.34	52.0	0.0	0.488
70.00	0.45	0.81	0.00	0.00	0.00	24.57	25.06	52.0	0.0	0.482
71.00	0.45	0.81	0.00	0.00	0.00	24.27	24.76	52.0	0.0	0.476
72.00	0.45	0.81	0.00	0.00	0.00	23.98	24.46	52.0	0.0	0.471
73.00	0.45	0.81	0.00	0.00	0.00	23.67	24.16	52.0	0.0	0.465
74.00	0.44	0.82	0.00	0.00	0.00	23.35	23.84	52.0	0.0	0.459
75.00	0.44	0.82	0.00	0.00	0.00	23.03	23.52	52.0	0.0	0.452
76.00	0.44	0.82	0.00	0.00	0.00	22.70	23.19	52.0	0.0	0.446
77.00	0.44	0.83	0.00	0.00	0.00	22.36	22.85	52.0	0.0	0.440
78.00	0.44	0.83	0.00	0.00	0.00	22.01	22.50	52.0	0.0	0.433
79.00	0.43	0.83	0.00	0.00	0.00	21.66	22.14	52.0	0.0	0.426
80.00	0.43	0.83	0.00	0.00	0.00	21.29	21.77	52.0	0.0	0.419
81.00	0.43	0.84	0.00	0.00	0.00	20.92	21.40	52.0	0.0	0.412
82.00	0.43	0.84	0.00	0.00	0.00	20.53	21.01	52.0	0.0	0.404
83.00	0.43	0.84	0.00	0.00	0.00	20.14	20.61	52.0	0.0	0.397
84.00	0.42	0.85	0.00	0.00	0.00	19.73	20.21	52.0	0.0	0.389
85.00	0.42	0.85	0.00	0.00	0.00	19.31	19.79	52.0	0.0	0.381
86.00	0.42	0.85	0.00	0.00	0.00	18.89	19.36	52.0	0.0	0.372
87.00	0.36	0.72	0.00	0.00	0.00	18.45	18.85	52.0	0.0	0.363
88.00	0.36	0.72	0.00	0.00	0.00	18.11	18.51	52.0	0.0	0.356
89.00	0.36	0.72	0.00	0.00	0.00	17.76	18.16	52.0	0.0	0.349
90.00	0.35	0.73	0.00	0.00	0.00	17.40	17.80	52.0	0.0	0.343
91.00	0.35	0.73	0.00	0.00	0.00	17.04	17.44	52.0	0.0	0.335
92.00	0.35	0.73	0.00	0.00	0.00	16.66	17.06	52.0	0.0	0.328
93.00	0.35	0.74	0.00	0.00	0.00	16.28	16.67	52.0	0.0	0.321
93.50	0.35	0.74	0.00	0.00	0.00	16.08	16.48	52.0	0.0	0.317
94.00	0.34	0.74	0.00	0.00	0.00	15.88	16.28	52.0	0.0	0.313
95.00	0.34	0.74	0.00	0.00	0.00	15.47	15.87	52.0	0.0	0.305
96.00	0.34	0.74	0.00	0.00	0.00	15.06	15.45	52.0	0.0	0.297
97.00	0.33	0.75	0.00	0.00	0.00	14.63	15.02	52.0	0.0	0.289
97.25	0.87	1.94	0.00	0.00	0.00	36.49	37.50	51.3	0.0	0.730
98.00	0.87	1.95	0.00	0.00	0.00	35.64	36.66	51.5	0.0	0.712
99.00	0.86	1.96	0.00	0.00	0.00	34.49	35.52	51.6	0.0	0.688
100.00	0.69	1.55	0.00	0.00	0.00	33.31	34.11	51.8	0.0	0.659
101.00	0.69	1.55	0.00	0.00	0.00	32.45	33.25	51.9	0.0	0.640
102.00	0.69	1.56	0.00	0.00	0.00	31.57	32.38	52.0	0.0	0.623
103.00	0.69	1.56	0.00	0.00	0.00	30.67	31.47	52.0	0.0	0.606
104.00	0.69	1.57	0.00	0.00	0.00	29.74	30.55	52.0	0.0	0.588

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:20 PM

Customer: T-MOBILE

**Load Case: Ice**

73.61 mph Wind with Ice

29 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

105.00	0.69	1.57	0.00	0.00	0.00	28.79	29.60	52.0	0.0	0.569
106.00	0.69	1.58	0.00	0.00	0.00	27.81	28.62	52.0	0.0	0.551
107.00	0.68	1.58	0.00	0.00	0.00	26.80	27.62	52.0	0.0	0.531
108.00	0.68	1.59	0.00	0.00	0.00	25.76	26.59	52.0	0.0	0.512
109.00	0.68	1.60	0.00	0.00	0.00	24.70	25.53	52.0	0.0	0.491
110.00	0.52	1.14	0.00	0.00	0.00	23.60	24.21	52.0	0.0	0.466
111.00	0.52	1.14	0.00	0.00	0.00	22.91	23.51	52.0	0.0	0.452
112.00	0.52	1.15	0.00	0.00	0.00	22.19	22.80	52.0	0.0	0.439
113.00	0.52	1.15	0.00	0.00	0.00	21.46	22.06	52.0	0.0	0.424
114.00	0.52	1.15	0.00	0.00	0.00	20.70	21.31	52.0	0.0	0.410
115.00	0.51	1.15	0.00	0.00	0.00	19.93	20.54	52.0	0.0	0.395
116.00	0.51	1.16	0.00	0.00	0.00	19.13	19.74	52.0	0.0	0.380
117.00	0.51	1.16	0.00	0.00	0.00	18.31	18.93	52.0	0.0	0.364
118.00	0.51	1.16	0.00	0.00	0.00	17.47	18.09	52.0	0.0	0.348
119.00	0.51	1.16	0.00	0.00	0.00	16.61	17.23	52.0	0.0	0.332
120.00	0.51	1.16	0.00	0.00	0.00	15.72	16.35	52.0	0.0	0.315
121.00	0.51	1.17	0.00	0.00	0.00	14.81	15.45	52.0	0.0	0.297
122.00	0.51	1.17	0.00	0.00	0.00	13.88	14.52	52.0	0.0	0.279
123.00	0.50	1.17	0.00	0.00	0.00	12.91	13.57	52.0	0.0	0.261
124.00	0.50	1.18	0.00	0.00	0.00	11.92	12.59	52.0	0.0	0.242
125.00	0.50	1.18	0.00	0.00	0.00	10.90	11.58	52.0	0.0	0.223
126.00	0.50	1.18	0.00	0.00	0.00	9.85	10.55	52.0	0.0	0.203
127.00	0.50	1.18	0.00	0.00	0.00	8.77	9.50	52.0	0.0	0.183
128.00	0.50	1.19	0.00	0.00	0.00	7.66	8.41	52.0	0.0	0.162
129.00	0.50	1.19	0.00	0.00	0.00	6.51	7.31	52.0	0.0	0.141
130.00	0.26	0.58	0.00	0.00	0.00	4.96	5.31	52.0	0.0	0.102
131.00	0.26	0.57	0.00	0.00	0.00	4.41	4.77	52.0	0.0	0.092
132.00	0.26	0.57	0.00	0.00	0.00	3.85	4.23	52.0	0.0	0.081
133.00	0.25	0.57	0.00	0.00	0.00	3.28	3.67	52.0	0.0	0.071
134.00	0.25	0.57	0.00	0.00	0.00	2.70	3.11	52.0	0.0	0.060
135.00	0.25	0.57	0.00	0.00	0.00	2.10	2.54	52.0	0.0	0.049
136.00	0.25	0.56	0.00	0.00	0.00	1.49	1.99	52.0	0.0	0.038
137.00	0.24	0.56	0.00	0.00	0.00	0.86	1.47	52.0	0.0	0.028
138.00	0.01	0.03	0.00	0.00	0.00	0.13	0.14	52.0	0.0	0.003
139.00	0.01	0.02	0.00	0.00	0.00	0.10	0.11	52.0	0.0	0.002
140.00	0.00	0.02	0.00	0.00	0.00	0.08	0.08	52.0	0.0	0.002

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:20 PM

Customer: T-MOBILE

<b>Load Case:</b> Twist/Sway	50.00 mph Wind with No Ice	28 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Applied Segment Forces Summary**

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		13.8	0.0					0.0	0.0	13.8	0.0	0.0	0.0
1.00		27.5	251.3					0.0	0.0	27.5	251.3	0.0	0.0
2.00		27.4	250.2					0.0	0.0	27.4	250.2	0.0	0.0
3.00		27.3	249.1					0.0	0.0	27.3	249.1	0.0	0.0
4.00		27.1	248.0					0.0	0.0	27.1	248.0	0.0	0.0
5.00		27.0	246.9					0.0	0.0	27.0	246.9	0.0	0.0
6.00		26.9	245.9					0.0	43.6	26.9	289.5	0.0	0.0
7.00		26.8	244.8					0.0	43.6	26.8	288.4	0.0	0.0
8.00		26.7	243.7					0.0	43.6	26.7	287.3	0.0	0.0
9.00		26.6	242.6					0.0	43.6	26.6	286.2	0.0	0.0
10.00		26.4	241.5					0.0	43.6	26.4	285.2	0.0	0.0
11.00		26.3	240.5					0.0	43.6	26.3	284.1	0.0	0.0
12.00		26.2	239.4					0.0	43.6	26.2	283.0	0.0	0.0
13.00		26.1	238.3					0.0	43.6	26.1	281.9	0.0	0.0
14.00		26.0	237.2					0.0	43.6	26.0	280.8	0.0	0.0
15.00		25.9	236.1					0.0	43.6	25.9	279.8	0.0	0.0
16.00		25.7	235.1					0.0	43.6	25.7	278.7	0.0	0.0
17.00		25.6	234.0					0.0	43.6	25.6	277.6	0.0	0.0
18.00		25.5	232.9					0.0	43.6	25.5	276.5	0.0	0.0
19.00		25.4	231.8					0.0	43.6	25.4	275.4	0.0	0.0
20.00		25.3	230.7					0.0	43.6	25.3	274.4	0.0	0.0
21.00		25.2	229.7					0.0	43.6	25.2	273.3	0.0	0.0
22.00		25.0	228.6					0.0	43.6	25.0	272.2	0.0	0.0
23.00		24.9	227.5					0.0	43.6	24.9	271.1	0.0	0.0
24.00		24.8	226.4					0.0	43.6	24.8	270.0	0.0	0.0
25.00		24.7	225.3					0.0	43.6	24.7	269.0	0.0	0.0
26.00		24.6	224.3					0.0	43.6	24.6	267.9	0.0	0.0
27.00		24.4	223.2					0.0	43.6	24.4	266.8	0.0	0.0
28.00		24.3	222.1					0.0	43.6	24.3	265.7	0.0	0.0
29.00		24.2	221.0					0.0	43.6	24.2	264.6	0.0	0.0
30.00		24.1	219.9					0.0	43.6	24.1	263.6	0.0	0.0
31.00		24.0	218.9					0.0	43.6	24.0	262.5	0.0	0.0
32.00		23.9	217.8					0.0	43.6	23.9	261.4	0.0	0.0
33.00		23.8	216.7					0.0	43.6	23.8	260.3	0.0	0.0
34.00		23.8	215.6					0.0	43.6	23.8	259.2	0.0	0.0
35.00		23.9	214.5					0.0	43.6	23.9	258.2	0.0	0.0
36.00		24.0	213.5					0.0	43.6	24.0	257.1	0.0	0.0
37.00		24.0	212.4					0.0	43.6	24.0	256.0	0.0	0.0
38.00		24.1	211.3					0.0	43.6	24.1	254.9	0.0	0.0
39.00		24.2	210.2					0.0	43.6	24.2	253.8	0.0	0.0
40.00		24.2	209.1					0.0	43.6	24.2	252.8	0.0	0.0
41.00		24.3	208.1					0.0	43.6	24.3	251.7	0.0	0.0
42.00		24.3	207.0					0.0	43.6	24.3	250.6	0.0	0.0
43.00		24.3	205.9					0.0	43.6	24.3	249.5	0.0	0.0
44.00		24.4	204.8					0.0	43.6	24.4	248.4	0.0	0.0
45.00		24.4	203.7					0.0	43.6	24.4	247.4	0.0	0.0
46.00		15.3	202.7					0.0	43.6	15.3	246.3	0.0	0.0
46.25	Bot - Section 2	12.5	50.5					0.0	10.9	12.5	61.4	0.0	0.0

<b>Load Case:</b> Twist/Sway	<b>50.00 mph Wind with No Ice</b>	<b>28 Iterations</b>
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

47.00	22.0	306.2	0.0	32.7	22.0	338.9	0.0	0.0					
48.00	25.1	406.4	0.0	43.6	25.1	450.0	0.0	0.0					
49.00	25.1	404.2	0.0	43.6	25.1	447.8	0.0	0.0					
50.00	25.2	402.1	0.0	43.6	25.2	445.7	0.0	0.0					
51.00	Top - Section 1	25.2	399.9	0.0	43.6	25.2	443.5	0.0	0.0				
52.00		25.2	201.6	0.0	43.6	25.2	245.2	0.0	0.0				
53.00		25.2	200.5	0.0	43.6	25.2	244.1	0.0	0.0				
54.00		25.2	199.4	0.0	43.6	25.2	243.0	0.0	0.0				
55.00		25.2	198.3	0.0	43.6	25.2	242.0	0.0	0.0				
56.00		25.2	197.3	0.0	43.6	25.2	240.9	0.0	0.0				
57.00		25.2	196.2	0.0	43.6	25.2	239.8	0.0	0.0				
58.00		25.1	195.1	0.0	43.6	25.1	238.7	0.0	0.0				
59.00		25.1	194.0	0.0	43.6	25.1	237.6	0.0	0.0				
60.00		25.1	192.9	0.0	43.6	25.1	236.5	0.0	0.0				
61.00		25.1	191.9	0.0	43.6	25.1	235.5	0.0	0.0				
62.00		25.1	190.8	0.0	43.6	25.1	234.4	0.0	0.0				
63.00		25.0	189.7	0.0	43.6	25.0	233.3	0.0	0.0				
64.00		25.0	188.6	0.0	43.6	25.0	232.2	0.0	0.0				
65.00		25.0	187.5	0.0	43.6	25.0	231.1	0.0	0.0				
66.00		24.9	186.4	0.0	43.6	24.9	230.1	0.0	0.0				
67.00		24.9	185.4	0.0	43.6	24.9	229.0	0.0	0.0				
68.00		24.9	184.3	0.0	43.6	24.9	227.9	0.0	0.0				
69.00		24.8	183.2	0.0	43.6	24.8	226.8	0.0	0.0				
70.00		24.8	182.1	0.0	43.6	24.8	225.7	0.0	0.0				
71.00		24.7	181.0	0.0	43.6	24.7	224.7	0.0	0.0				
72.00		24.7	180.0	0.0	43.6	24.7	223.6	0.0	0.0				
73.00		24.6	178.9	0.0	43.6	24.6	222.5	0.0	0.0				
74.00		24.6	177.8	0.0	43.6	24.6	221.4	0.0	0.0				
75.00		24.5	176.7	0.0	43.6	24.5	220.3	0.0	0.0				
76.00		24.5	175.6	0.0	43.6	24.5	219.3	0.0	0.0				
77.00		24.4	174.6	0.0	43.6	24.4	218.2	0.0	0.0				
78.00		24.4	173.5	0.0	43.6	24.4	217.1	0.0	0.0				
79.00		24.3	172.4	0.0	43.6	24.3	216.0	0.0	0.0				
80.00		24.2	171.3	0.0	43.6	24.2	214.9	0.0	0.0				
81.00		24.2	170.2	0.0	43.6	24.2	213.9	0.0	0.0				
82.00		24.1	169.2	0.0	43.6	24.1	212.8	0.0	0.0				
83.00		24.0	168.1	0.0	43.6	24.0	211.7	0.0	0.0				
84.00		24.0	167.0	0.0	43.6	24.0	210.6	0.0	0.0				
85.00		23.9	165.9	0.0	43.6	23.9	209.5	0.0	0.0				
86.00		23.8	164.8	0.0	43.6	23.8	208.5	0.0	0.0				
87.00	Appertunance(s)	23.7	163.8	1,367.6	0.0	0.0	2,338.5	0.0	43.6	1,391.4	2,545.9	0.0	0.0
88.00		23.7	162.7	0.0	32.7	23.7	195.4	0.0	0.0				
89.00		23.6	161.6	0.0	32.7	23.6	194.3	0.0	0.0				
90.00		23.5	160.5	0.0	32.7	23.5	193.3	0.0	0.0				
91.00		23.4	159.4	0.0	32.7	23.4	192.2	0.0	0.0				
92.00		23.3	158.4	0.0	32.7	23.3	191.1	0.0	0.0				
93.00		17.5	157.3	0.0	32.7	17.5	190.0	0.0	0.0				
93.50	Bot - Section 3	11.7	78.2	0.0	16.4	11.7	94.6	0.0	0.0				
94.00		17.6	107.9	0.0	16.4	17.6	124.3	0.0	0.0				
95.00		23.4	214.7	0.0	32.7	23.4	247.4	0.0	0.0				
96.00		23.3	213.2	0.0	32.7	23.3	245.9	0.0	0.0				
97.00		14.5	211.7	0.0	32.7	14.5	244.4	0.0	0.0				
97.25	Top - Section 2	11.6	52.7	0.0	8.2	11.6	60.9	0.0	0.0				
98.00		20.2	43.7	0.0	24.5	20.2	68.3	0.0	0.0				
99.00		23.0	57.9	0.0	32.7	23.0	90.7	0.0	0.0				
100.00	Appertunance(s)	22.9	57.5	1,337.2	0.0	0.0	2,348.4	0.0	32.7	1,360.1	2,438.7	0.0	0.0
101.00		22.8	57.1	0.0	21.7	22.8	78.9	0.0	0.0				

<b>Load Case: Twist/Sway</b>		<b>50.00 mph Wind with No Ice</b>						<b>28 Iterations</b>	
Gust Response Factor : 1.69									
Dead Load Factor : 1.00									
Wind Load Factor : 1.00									

102.00		22.7	56.7				0.0	21.7	22.7	78.5	0.0	0.0	
103.00		22.6	56.3				0.0	21.7	22.6	78.1	0.0	0.0	
104.00		22.5	55.9				0.0	21.7	22.5	77.7	0.0	0.0	
105.00		22.4	55.5				0.0	21.7	22.4	77.3	0.0	0.0	
106.00		22.3	55.1				0.0	21.7	22.3	76.9	0.0	0.0	
107.00		22.2	54.7				0.0	21.7	22.2	76.5	0.0	0.0	
108.00		22.1	54.3				0.0	21.7	22.1	76.0	0.0	0.0	
109.00		22.0	53.9				0.0	21.7	22.0	75.6	0.0	0.0	
110.00	Appertunance(s)	21.9	53.5	1,343.6	0.0	0.0	1,907.6	0.0	21.7	1,365.5	1,982.8	0.0	0.0
111.00		21.8	53.1					0.0	10.5	21.8	63.5	0.0	0.0
112.00		21.7	52.7					0.0	10.5	21.7	63.1	0.0	0.0
113.00		21.6	52.3					0.0	10.5	21.6	62.7	0.0	0.0
114.00		21.5	51.9					0.0	10.5	21.5	62.3	0.0	0.0
115.00		21.3	51.5					0.0	10.5	21.3	61.9	0.0	0.0
116.00		21.2	51.1					0.0	10.5	21.2	61.5	0.0	0.0
117.00		21.1	50.7					0.0	10.5	21.1	61.1	0.0	0.0
118.00	Appertunance(s)	21.0	50.2	11.5	0.0	0.0	8.3	0.0	10.5	32.5	69.0	0.0	0.0
119.00		20.9	49.8					0.0	9.7	20.9	59.5	0.0	0.0
120.00		20.8	49.4					0.0	9.7	20.8	59.1	0.0	0.0
121.00		20.6	49.0					0.0	9.7	20.6	58.7	0.0	0.0
122.00		20.5	48.6					0.0	9.7	20.5	58.3	0.0	0.0
123.00		20.4	48.2					0.0	9.7	20.4	57.9	0.0	0.0
124.00		20.3	47.8					0.0	9.7	20.3	57.5	0.0	0.0
125.00		20.1	47.4					0.0	9.7	20.1	57.1	0.0	0.0
126.00		20.0	47.0					0.0	9.7	20.0	56.7	0.0	0.0
127.00		19.9	46.6					0.0	9.7	19.9	56.3	0.0	0.0
128.00		19.8	46.2					0.0	9.7	19.8	55.9	0.0	0.0
129.00		19.6	45.8					0.0	9.7	19.6	55.5	0.0	0.0
130.00	Appertunance(s)	19.5	45.4	1,674.3	0.0	1,110.8	2,682.3	0.0	9.7	1,693.8	2,737.4	0.0	0.0
131.00		19.4	45.0					0.0	6.0	19.4	51.0	0.0	0.0
132.00		19.2	44.6					0.0	6.0	19.2	50.6	0.0	0.0
133.00		19.1	44.2					0.0	6.0	19.1	50.2	0.0	0.0
134.00		19.0	43.8					0.0	6.0	19.0	49.8	0.0	0.0
135.00		18.8	43.4					0.0	6.0	18.8	49.4	0.0	0.0
136.00		18.7	43.0					0.0	6.0	18.7	49.0	0.0	0.0
137.00		18.6	42.6					0.0	6.0	18.6	48.6	0.0	0.0
138.00	Appertunance(s)	18.4	42.1	1,047.6	0.0	194.6	2,045.0	0.0	6.0	1,066.0	2,093.2	0.0	0.0
139.00		18.3	41.7					0.0	0.6	18.3	42.4	0.0	0.0
140.00	Appertunance(s)	9.1	41.3	22.8	0.0	109.3	11.5	0.0	0.6	31.9	53.5	0.0	0.0
									<b>Totals:</b>	<b>10,111.8</b>	<b>38,763.1</b>	<b>0.00</b>	<b>0.00</b>

**Load Case:** Twist/Sway

50.00 mph Wind with No Ice

28 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

**Calculated Shaft Forces and Deflections**

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-10.100	-38.762	0.000	0.000	0.000	-1,021.360	0.000	0.000	0.000	0.000
1.00	-10.082	-38.508	0.000	0.000	0.000	-1,011.261	-0.002	0.000	0.002	-0.014
2.00	-10.064	-38.255	0.000	0.000	0.000	-1,001.179	-0.006	0.000	0.006	-0.028
3.00	-10.046	-38.004	0.000	0.000	0.000	-991.115	-0.014	0.000	0.014	-0.043
4.00	-10.028	-37.753	0.000	0.000	0.000	-981.069	-0.024	0.000	0.024	-0.057
5.00	-10.010	-37.504	0.000	0.000	0.000	-971.041	-0.038	0.000	0.038	-0.072
6.00	-9.993	-37.212	0.000	0.000	0.000	-961.030	-0.055	0.000	0.055	-0.086
7.00	-9.975	-36.921	0.000	0.000	0.000	-951.038	-0.074	0.000	0.074	-0.100
8.00	-9.957	-36.631	0.000	0.000	0.000	-941.064	-0.097	0.000	0.097	-0.115
9.00	-9.939	-36.343	0.000	0.000	0.000	-931.107	-0.123	0.000	0.123	-0.129
10.00	-9.921	-36.055	0.000	0.000	0.000	-921.169	-0.151	0.000	0.151	-0.144
11.00	-9.903	-35.768	0.000	0.000	0.000	-911.248	-0.183	0.000	0.183	-0.159
12.00	-9.885	-35.483	0.000	0.000	0.000	-901.345	-0.218	0.000	0.218	-0.173
13.00	-9.867	-35.199	0.000	0.000	0.000	-891.461	-0.256	0.000	0.256	-0.188
14.00	-9.849	-34.915	0.000	0.000	0.000	-881.594	-0.297	0.000	0.297	-0.203
15.00	-9.831	-34.633	0.000	0.000	0.000	-871.745	-0.341	0.000	0.341	-0.218
16.00	-9.813	-34.352	0.000	0.000	0.000	-861.914	-0.388	0.000	0.388	-0.232
17.00	-9.795	-34.072	0.000	0.000	0.000	-852.101	-0.439	0.000	0.439	-0.247
18.00	-9.777	-33.793	0.000	0.000	0.000	-842.306	-0.492	0.000	0.492	-0.262
19.00	-9.759	-33.515	0.000	0.000	0.000	-832.529	-0.549	0.000	0.549	-0.277
20.00	-9.741	-33.238	0.000	0.000	0.000	-822.769	-0.609	0.000	0.609	-0.292
21.00	-9.723	-32.963	0.000	0.000	0.000	-813.028	-0.671	0.000	0.671	-0.307
22.00	-9.706	-32.688	0.000	0.000	0.000	-803.305	-0.737	0.000	0.737	-0.322
23.00	-9.688	-32.415	0.000	0.000	0.000	-793.600	-0.806	0.000	0.806	-0.337
24.00	-9.670	-32.142	0.000	0.000	0.000	-783.912	-0.879	0.000	0.879	-0.352
25.00	-9.652	-31.871	0.000	0.000	0.000	-774.243	-0.954	0.000	0.954	-0.367
26.00	-9.634	-31.600	0.000	0.000	0.000	-764.591	-1.033	0.000	1.033	-0.382
27.00	-9.616	-31.331	0.000	0.000	0.000	-754.958	-1.115	0.000	1.115	-0.397
28.00	-9.598	-31.063	0.000	0.000	0.000	-745.342	-1.200	0.000	1.200	-0.413
29.00	-9.580	-30.796	0.000	0.000	0.000	-735.745	-1.288	0.000	1.288	-0.428
30.00	-9.562	-30.530	0.000	0.000	0.000	-726.165	-1.379	0.000	1.379	-0.443
31.00	-9.544	-30.265	0.000	0.000	0.000	-716.604	-1.474	0.000	1.474	-0.458
32.00	-9.526	-30.002	0.000	0.000	0.000	-707.060	-1.571	0.000	1.571	-0.474
33.00	-9.508	-29.739	0.000	0.000	0.000	-697.534	-1.672	0.000	1.672	-0.489
34.00	-9.490	-29.478	0.000	0.000	0.000	-688.027	-1.776	0.000	1.776	-0.504
35.00	-9.471	-29.217	0.000	0.000	0.000	-678.537	-1.884	0.000	1.884	-0.520
36.00	-9.453	-28.958	0.000	0.000	0.000	-669.066	-1.994	0.000	1.994	-0.535
37.00	-9.434	-28.699	0.000	0.000	0.000	-659.613	-2.108	0.000	2.108	-0.550
38.00	-9.415	-28.442	0.000	0.000	0.000	-650.180	-2.225	0.000	2.225	-0.566
39.00	-9.396	-28.186	0.000	0.000	0.000	-640.765	-2.345	0.000	2.345	-0.581
40.00	-9.377	-27.931	0.000	0.000	0.000	-631.369	-2.469	0.000	2.469	-0.597
41.00	-9.357	-27.677	0.000	0.000	0.000	-621.993	-2.596	0.000	2.596	-0.612
42.00	-9.338	-27.424	0.000	0.000	0.000	-612.636	-2.725	0.000	2.725	-0.627
43.00	-9.318	-27.173	0.000	0.000	0.000	-603.299	-2.859	0.000	2.859	-0.643
44.00	-9.298	-26.922	0.000	0.000	0.000	-593.981	-2.995	0.000	2.995	-0.658
45.00	-9.278	-26.672	0.000	0.000	0.000	-584.683	-3.135	0.000	3.135	-0.674
46.00	-9.264	-26.425	0.000	0.000	0.000	-575.406	-3.277	0.000	3.277	-0.689
46.25	-9.254	-26.362	0.000	0.000	0.000	-573.090	-3.314	0.000	3.314	-0.693
47.00	-9.234	-26.022	0.000	0.000	0.000	-566.149	-3.424	0.000	3.424	-0.705
48.00	-9.211	-25.569	0.000	0.000	0.000	-556.915	-3.573	0.000	3.573	-0.720
49.00	-9.187	-25.119	0.000	0.000	0.000	-547.705	-3.726	0.000	3.726	-0.736

**Load Case:** Twist/Sway 50.00 mph Wind with No Ice 28 Iterations

Gust Response Factor : 1.69  
Dead Load Factor : 1.00  
Wind Load Factor : 1.00

50.00	-9.162	-24.672	0.000	0.000	0.000	-538.519	-3.881	0.000	3.881	-0.751
51.00	-9.138	-24.226	0.000	0.000	0.000	-529.356	-4.040	0.000	4.040	-0.766
52.00	-9.115	-23.979	0.000	0.000	0.000	-520.219	-4.203	0.000	4.203	-0.782
53.00	-9.093	-23.733	0.000	0.000	0.000	-511.104	-4.368	0.000	4.368	-0.796
54.00	-9.070	-23.488	0.000	0.000	0.000	-502.011	-4.536	0.000	4.536	-0.810
55.00	-9.047	-23.244	0.000	0.000	0.000	-492.941	-4.708	0.000	4.708	-0.824
56.00	-9.024	-23.001	0.000	0.000	0.000	-483.894	-4.882	0.000	4.882	-0.838
57.00	-9.001	-22.760	0.000	0.000	0.000	-474.870	-5.059	0.000	5.059	-0.853
58.00	-8.978	-22.519	0.000	0.000	0.000	-465.869	-5.239	0.000	5.239	-0.867
59.00	-8.955	-22.280	0.000	0.000	0.000	-456.892	-5.422	0.000	5.422	-0.881
60.00	-8.931	-22.042	0.000	0.000	0.000	-447.937	-5.608	0.000	5.608	-0.895
61.00	-8.908	-21.804	0.000	0.000	0.000	-439.006	-5.797	0.000	5.797	-0.908
62.00	-8.884	-21.568	0.000	0.000	0.000	-430.099	-5.989	0.000	5.989	-0.922
63.00	-8.860	-21.333	0.000	0.000	0.000	-421.215	-6.184	0.000	6.184	-0.936
64.00	-8.837	-21.099	0.000	0.000	0.000	-412.355	-6.382	0.000	6.382	-0.950
65.00	-8.813	-20.867	0.000	0.000	0.000	-403.518	-6.582	0.000	6.582	-0.964
66.00	-8.789	-20.635	0.000	0.000	0.000	-394.706	-6.785	0.000	6.785	-0.977
67.00	-8.765	-20.404	0.000	0.000	0.000	-385.917	-6.992	0.000	6.992	-0.991
68.00	-8.741	-20.175	0.000	0.000	0.000	-377.152	-7.201	0.000	7.201	-1.004
69.00	-8.717	-19.946	0.000	0.000	0.000	-368.412	-7.413	0.000	7.413	-1.018
70.00	-8.692	-19.719	0.000	0.000	0.000	-359.695	-7.627	0.000	7.627	-1.031
71.00	-8.668	-19.493	0.000	0.000	0.000	-351.003	-7.845	0.000	7.845	-1.044
72.00	-8.644	-19.268	0.000	0.000	0.000	-342.335	-8.065	0.000	8.065	-1.057
73.00	-8.619	-19.044	0.000	0.000	0.000	-333.691	-8.288	0.000	8.288	-1.071
74.00	-8.595	-18.821	0.000	0.000	0.000	-325.072	-8.514	0.000	8.514	-1.084
75.00	-8.570	-18.599	0.000	0.000	0.000	-316.477	-8.742	0.000	8.742	-1.096
76.00	-8.546	-18.379	0.000	0.000	0.000	-307.907	-8.973	0.000	8.973	-1.109
77.00	-8.521	-18.159	0.000	0.000	0.000	-299.362	-9.207	0.000	9.207	-1.122
78.00	-8.496	-17.941	0.000	0.000	0.000	-290.841	-9.443	0.000	9.443	-1.134
79.00	-8.472	-17.723	0.000	0.000	0.000	-282.345	-9.682	0.000	9.682	-1.147
80.00	-8.447	-17.507	0.000	0.000	0.000	-273.873	-9.924	0.000	9.924	-1.159
81.00	-8.422	-17.292	0.000	0.000	0.000	-265.427	-10.168	0.000	10.168	-1.171
82.00	-8.397	-17.078	0.000	0.000	0.000	-257.005	-10.415	0.000	10.415	-1.183
83.00	-8.372	-16.865	0.000	0.000	0.000	-248.608	-10.664	0.000	10.664	-1.195
84.00	-8.347	-16.653	0.000	0.000	0.000	-240.236	-10.915	0.000	10.915	-1.206
85.00	-8.322	-16.443	0.000	0.000	0.000	-231.889	-11.169	0.000	11.169	-1.218
86.00	-8.297	-16.233	0.000	0.000	0.000	-223.568	-11.426	0.000	11.426	-1.229
87.00	-6.854	-13.717	0.000	0.000	0.000	-215.271	-11.684	0.000	11.684	-1.240
88.00	-6.828	-13.521	0.000	0.000	0.000	-208.418	-11.945	0.000	11.945	-1.251
89.00	-6.803	-13.325	0.000	0.000	0.000	-201.590	-12.208	0.000	12.208	-1.262
90.00	-6.778	-13.132	0.000	0.000	0.000	-194.787	-12.474	0.000	12.474	-1.272
91.00	-6.752	-12.939	0.000	0.000	0.000	-188.009	-12.742	0.000	12.742	-1.283
92.00	-6.727	-12.747	0.000	0.000	0.000	-181.257	-13.011	0.000	13.011	-1.293
93.00	-6.707	-12.557	0.000	0.000	0.000	-174.531	-13.283	0.000	13.283	-1.303
93.50	-6.694	-12.462	0.000	0.000	0.000	-171.177	-13.420	0.000	13.420	-1.308
94.00	-6.675	-12.337	0.000	0.000	0.000	-167.830	-13.557	0.000	13.557	-1.313
95.00	-6.648	-12.089	0.000	0.000	0.000	-161.155	-13.834	0.000	13.834	-1.323
96.00	-6.621	-11.843	0.000	0.000	0.000	-154.507	-14.112	0.000	14.112	-1.332
97.00	-6.602	-11.598	0.000	0.000	0.000	-147.886	-14.392	0.000	14.392	-1.342
97.25	-6.590	-11.537	0.000	0.000	0.000	-146.235	-14.462	0.000	14.462	-1.344
98.00	-6.572	-11.467	0.000	0.000	0.000	-141.293	-14.674	0.000	14.674	-1.351
99.00	-6.551	-11.375	0.000	0.000	0.000	-134.722	-14.960	0.000	14.960	-1.373
100.0	-5.135	-8.968	0.000	0.000	0.000	-128.171	-15.250	0.000	15.250	-1.394
101.0	-5.114	-8.888	0.000	0.000	0.000	-123.036	-15.544	0.000	15.544	-1.415
102.0	-5.092	-8.808	0.000	0.000	0.000	-117.922	-15.843	0.000	15.843	-1.436
103.0	-5.071	-8.729	0.000	0.000	0.000	-112.830	-16.146	0.000	16.146	-1.456
104.0	-5.049	-8.650	0.000	0.000	0.000	-107.760	-16.453	0.000	16.453	-1.476

**Load Case:** Twist/Sway 50.00 mph Wind with No Ice 28 Iterations

Gust Response Factor : 1.69  
 Dead Load Factor : 1.00  
 Wind Load Factor : 1.00

105.0	-5.028	-8.572	0.000	0.000	0.000	-102.710	-16.765	0.000	16.765	-1.495
106.0	-5.006	-8.494	0.000	0.000	0.000	-97.683	-17.080	0.000	17.080	-1.513
107.0	-4.985	-8.416	0.000	0.000	0.000	-92.677	-17.399	0.000	17.399	-1.531
108.0	-4.963	-8.339	0.000	0.000	0.000	-87.693	-17.722	0.000	17.722	-1.549
109.0	-4.941	-8.263	0.000	0.000	0.000	-82.730	-18.048	0.000	18.048	-1.566
110.0	-3.524	-6.317	0.000	0.000	0.000	-77.789	-18.378	0.000	18.378	-1.582
111.0	-3.502	-6.254	0.000	0.000	0.000	-74.265	-18.711	0.000	18.711	-1.598
112.0	-3.480	-6.190	0.000	0.000	0.000	-70.764	-19.047	0.000	19.047	-1.613
113.0	-3.458	-6.127	0.000	0.000	0.000	-67.284	-19.387	0.000	19.387	-1.628
114.0	-3.437	-6.065	0.000	0.000	0.000	-63.826	-19.730	0.000	19.730	-1.643
115.0	-3.415	-6.003	0.000	0.000	0.000	-60.389	-20.075	0.000	20.075	-1.657
116.0	-3.393	-5.941	0.000	0.000	0.000	-56.974	-20.424	0.000	20.424	-1.671
117.0	-3.372	-5.880	0.000	0.000	0.000	-53.581	-20.776	0.000	20.776	-1.684
118.0	-3.339	-5.811	0.000	0.000	0.000	-50.209	-21.130	0.000	21.130	-1.697
119.0	-3.317	-5.751	0.000	0.000	0.000	-46.870	-21.486	0.000	21.486	-1.709
120.0	-3.296	-5.692	0.000	0.000	0.000	-43.553	-21.846	0.000	21.846	-1.720
121.0	-3.275	-5.634	0.000	0.000	0.000	-40.257	-22.207	0.000	22.207	-1.731
122.0	-3.253	-5.575	0.000	0.000	0.000	-36.983	-22.571	0.000	22.571	-1.742
123.0	-3.232	-5.517	0.000	0.000	0.000	-33.729	-22.937	0.000	22.937	-1.752
124.0	-3.211	-5.460	0.000	0.000	0.000	-30.497	-23.305	0.000	23.305	-1.761
125.0	-3.190	-5.403	0.000	0.000	0.000	-27.286	-23.675	0.000	23.675	-1.769
126.0	-3.169	-5.347	0.000	0.000	0.000	-24.096	-24.046	0.000	24.046	-1.777
127.0	-3.148	-5.291	0.000	0.000	0.000	-20.927	-24.419	0.000	24.419	-1.784
128.0	-3.127	-5.235	0.000	0.000	0.000	-17.780	-24.794	0.000	24.794	-1.790
129.0	-3.106	-5.180	0.000	0.000	0.000	-14.653	-25.169	0.000	25.169	-1.795
130.0	-1.328	-2.497	0.000	0.000	0.000	-10.436	-25.546	0.000	25.546	-1.799
131.0	-1.307	-2.447	0.000	0.000	0.000	-9.108	-25.923	0.000	25.923	-1.803
132.0	-1.286	-2.397	0.000	0.000	0.000	-7.801	-26.301	0.000	26.301	-1.806
133.0	-1.266	-2.347	0.000	0.000	0.000	-6.515	-26.680	0.000	26.680	-1.808
134.0	-1.245	-2.298	0.000	0.000	0.000	-5.250	-27.059	0.000	27.059	-1.810
135.0	-1.225	-2.249	0.000	0.000	0.000	-4.005	-27.438	0.000	27.438	-1.812
136.0	-1.205	-2.201	0.000	0.000	0.000	-2.780	-27.818	0.000	27.818	-1.814
137.0	-1.185	-2.153	0.000	0.000	0.000	-1.575	-28.198	0.000	28.198	-1.814
138.0	-0.053	-0.094	0.000	0.000	0.000	-0.196	-28.578	0.000	28.578	-1.815
139.0	-0.033	-0.052	0.000	0.000	0.000	-0.143	-28.958	0.000	28.958	-1.815
140.0	-0.032	0.000	0.000	0.000	0.000	-0.109	-29.338	0.000	29.338	-1.815



Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:31 PM

Customer: T-MOBILE

**Load Case:** Twist/Sway

50.00 mph Wind with No Ice

28 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

**Calculated Stresses**

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.52	0.28	0.00	0.00	0.00	14.43	14.96	52.0	0.0	0.288
1.00	0.52	0.28	0.00	0.00	0.00	14.41	14.94	52.0	0.0	0.287
2.00	0.52	0.28	0.00	0.00	0.00	14.39	14.92	52.0	0.0	0.287
3.00	0.52	0.28	0.00	0.00	0.00	14.37	14.90	52.0	0.0	0.287
4.00	0.52	0.28	0.00	0.00	0.00	14.35	14.88	52.0	0.0	0.286
5.00	0.52	0.28	0.00	0.00	0.00	14.33	14.85	52.0	0.0	0.286
6.00	0.52	0.28	0.00	0.00	0.00	14.31	14.83	52.0	0.0	0.285
7.00	0.51	0.28	0.00	0.00	0.00	14.28	14.81	52.0	0.0	0.285
8.00	0.51	0.28	0.00	0.00	0.00	14.26	14.78	52.0	0.0	0.284
9.00	0.51	0.28	0.00	0.00	0.00	14.24	14.75	52.0	0.0	0.284
10.00	0.51	0.28	0.00	0.00	0.00	14.21	14.73	52.0	0.0	0.283
11.00	0.51	0.28	0.00	0.00	0.00	14.19	14.70	52.0	0.0	0.283
12.00	0.51	0.28	0.00	0.00	0.00	14.16	14.67	52.0	0.0	0.282
13.00	0.50	0.28	0.00	0.00	0.00	14.13	14.64	52.0	0.0	0.282
14.00	0.50	0.29	0.00	0.00	0.00	14.10	14.61	52.0	0.0	0.281
15.00	0.50	0.29	0.00	0.00	0.00	14.08	14.58	52.0	0.0	0.281
16.00	0.50	0.29	0.00	0.00	0.00	14.05	14.55	52.0	0.0	0.280
17.00	0.50	0.29	0.00	0.00	0.00	14.02	14.52	52.0	0.0	0.279
18.00	0.49	0.29	0.00	0.00	0.00	13.98	14.49	52.0	0.0	0.279
19.00	0.49	0.29	0.00	0.00	0.00	13.95	14.45	52.0	0.0	0.278
20.00	0.49	0.29	0.00	0.00	0.00	13.92	14.42	52.0	0.0	0.277
21.00	0.49	0.29	0.00	0.00	0.00	13.89	14.38	52.0	0.0	0.277
22.00	0.49	0.29	0.00	0.00	0.00	13.85	14.35	52.0	0.0	0.276
23.00	0.49	0.29	0.00	0.00	0.00	13.81	14.31	52.0	0.0	0.275
24.00	0.48	0.29	0.00	0.00	0.00	13.78	14.27	52.0	0.0	0.275
25.00	0.48	0.29	0.00	0.00	0.00	13.74	14.23	52.0	0.0	0.274
26.00	0.48	0.30	0.00	0.00	0.00	13.70	14.19	52.0	0.0	0.273
27.00	0.48	0.30	0.00	0.00	0.00	13.66	14.15	52.0	0.0	0.272
28.00	0.48	0.30	0.00	0.00	0.00	13.62	14.10	52.0	0.0	0.271
29.00	0.48	0.30	0.00	0.00	0.00	13.58	14.06	52.0	0.0	0.270
30.00	0.47	0.30	0.00	0.00	0.00	13.53	14.02	52.0	0.0	0.270
31.00	0.47	0.30	0.00	0.00	0.00	13.49	13.97	52.0	0.0	0.269
32.00	0.47	0.30	0.00	0.00	0.00	13.44	13.92	52.0	0.0	0.268
33.00	0.47	0.30	0.00	0.00	0.00	13.39	13.87	52.0	0.0	0.267
34.00	0.47	0.30	0.00	0.00	0.00	13.34	13.82	52.0	0.0	0.266
35.00	0.46	0.30	0.00	0.00	0.00	13.29	13.77	52.0	0.0	0.265
36.00	0.46	0.30	0.00	0.00	0.00	13.24	13.72	52.0	0.0	0.264
37.00	0.46	0.31	0.00	0.00	0.00	13.19	13.66	52.0	0.0	0.263
38.00	0.46	0.31	0.00	0.00	0.00	13.14	13.61	52.0	0.0	0.262
39.00	0.46	0.31	0.00	0.00	0.00	13.08	13.55	52.0	0.0	0.261
40.00	0.46	0.31	0.00	0.00	0.00	13.02	13.49	52.0	0.0	0.260
41.00	0.45	0.31	0.00	0.00	0.00	12.97	13.43	52.0	0.0	0.258
42.00	0.45	0.31	0.00	0.00	0.00	12.90	13.37	52.0	0.0	0.257
43.00	0.45	0.31	0.00	0.00	0.00	12.84	13.30	52.0	0.0	0.256
44.00	0.45	0.31	0.00	0.00	0.00	12.78	13.24	52.0	0.0	0.255
45.00	0.45	0.31	0.00	0.00	0.00	12.71	13.17	52.0	0.0	0.253
46.00	0.44	0.31	0.00	0.00	0.00	12.65	13.10	52.0	0.0	0.252
46.25	0.44	0.31	0.00	0.00	0.00	12.63	13.09	52.0	0.0	0.252
47.00	0.44	0.32	0.00	0.00	0.00	12.58	13.03	52.0	0.0	0.251
48.00	0.44	0.32	0.00	0.00	0.00	12.51	12.96	52.0	0.0	0.249
49.00	0.43	0.32	0.00	0.00	0.00	12.44	12.88	52.0	0.0	0.248

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:32 PM

Customer: T-MOBILE

<b>Load Case:</b> Twist/Sway	50.00 mph Wind with No Ice								28 Iterations	
Gust Response Factor : 1.69										
Dead Load Factor : 1.00										
Wind Load Factor : 1.00										

50.00	0.42	0.32	0.00	0.00	0.00	12.36	12.80	52.0	0.0	0.246
51.00	0.41	0.31	0.00	0.00	0.00	11.64	12.06	52.0	0.0	0.232
52.00	0.41	0.31	0.00	0.00	0.00	11.56	11.98	52.0	0.0	0.230
53.00	0.40	0.31	0.00	0.00	0.00	11.48	11.90	52.0	0.0	0.229
54.00	0.40	0.31	0.00	0.00	0.00	11.40	11.81	52.0	0.0	0.227
55.00	0.40	0.31	0.00	0.00	0.00	11.32	11.73	52.0	0.0	0.226
56.00	0.40	0.31	0.00	0.00	0.00	11.23	11.64	52.0	0.0	0.224
57.00	0.40	0.32	0.00	0.00	0.00	11.15	11.55	52.0	0.0	0.222
58.00	0.39	0.32	0.00	0.00	0.00	11.06	11.46	52.0	0.0	0.221
59.00	0.39	0.32	0.00	0.00	0.00	10.97	11.37	52.0	0.0	0.219
60.00	0.39	0.32	0.00	0.00	0.00	10.87	11.28	52.0	0.0	0.217
61.00	0.39	0.32	0.00	0.00	0.00	10.78	11.18	52.0	0.0	0.215
62.00	0.39	0.32	0.00	0.00	0.00	10.68	11.08	52.0	0.0	0.213
63.00	0.38	0.32	0.00	0.00	0.00	10.58	10.98	52.0	0.0	0.211
64.00	0.38	0.32	0.00	0.00	0.00	10.48	10.87	52.0	0.0	0.209
65.00	0.38	0.32	0.00	0.00	0.00	10.37	10.77	52.0	0.0	0.207
66.00	0.38	0.32	0.00	0.00	0.00	10.27	10.66	52.0	0.0	0.205
67.00	0.38	0.33	0.00	0.00	0.00	10.16	10.55	52.0	0.0	0.203
68.00	0.37	0.33	0.00	0.00	0.00	10.04	10.43	52.0	0.0	0.201
69.00	0.37	0.33	0.00	0.00	0.00	9.93	10.31	52.0	0.0	0.198
70.00	0.37	0.33	0.00	0.00	0.00	9.81	10.19	52.0	0.0	0.196
71.00	0.37	0.33	0.00	0.00	0.00	9.69	10.07	52.0	0.0	0.194
72.00	0.37	0.33	0.00	0.00	0.00	9.56	9.95	52.0	0.0	0.191
73.00	0.36	0.33	0.00	0.00	0.00	9.44	9.82	52.0	0.0	0.189
74.00	0.36	0.33	0.00	0.00	0.00	9.31	9.68	52.0	0.0	0.186
75.00	0.36	0.33	0.00	0.00	0.00	9.17	9.55	52.0	0.0	0.184
76.00	0.36	0.33	0.00	0.00	0.00	9.04	9.41	52.0	0.0	0.181
77.00	0.36	0.34	0.00	0.00	0.00	8.89	9.27	52.0	0.0	0.178
78.00	0.35	0.34	0.00	0.00	0.00	8.75	9.12	52.0	0.0	0.175
79.00	0.35	0.34	0.00	0.00	0.00	8.60	8.97	52.0	0.0	0.173
80.00	0.35	0.34	0.00	0.00	0.00	8.45	8.82	52.0	0.0	0.170
81.00	0.35	0.34	0.00	0.00	0.00	8.30	8.66	52.0	0.0	0.167
82.00	0.34	0.34	0.00	0.00	0.00	8.14	8.50	52.0	0.0	0.164
83.00	0.34	0.34	0.00	0.00	0.00	7.97	8.34	52.0	0.0	0.160
84.00	0.34	0.34	0.00	0.00	0.00	7.81	8.17	52.0	0.0	0.157
85.00	0.34	0.35	0.00	0.00	0.00	7.63	8.00	52.0	0.0	0.154
86.00	0.34	0.35	0.00	0.00	0.00	7.46	7.82	52.0	0.0	0.150
87.00	0.29	0.29	0.00	0.00	0.00	7.28	7.58	52.0	0.0	0.146
88.00	0.28	0.29	0.00	0.00	0.00	7.14	7.44	52.0	0.0	0.143
89.00	0.28	0.29	0.00	0.00	0.00	7.00	7.30	52.0	0.0	0.140
90.00	0.28	0.29	0.00	0.00	0.00	6.86	7.15	52.0	0.0	0.138
91.00	0.28	0.29	0.00	0.00	0.00	6.71	7.00	52.0	0.0	0.135
92.00	0.27	0.29	0.00	0.00	0.00	6.56	6.85	52.0	0.0	0.132
93.00	0.27	0.29	0.00	0.00	0.00	6.40	6.69	52.0	0.0	0.129
93.50	0.27	0.29	0.00	0.00	0.00	6.32	6.61	52.0	0.0	0.127
94.00	0.27	0.29	0.00	0.00	0.00	6.24	6.53	52.0	0.0	0.126
95.00	0.27	0.29	0.00	0.00	0.00	6.08	6.37	52.0	0.0	0.122
96.00	0.26	0.30	0.00	0.00	0.00	5.91	6.20	52.0	0.0	0.119
97.00	0.26	0.30	0.00	0.00	0.00	5.74	6.02	52.0	0.0	0.116
97.25	0.67	0.77	0.00	0.00	0.00	14.32	15.05	51.3	0.0	0.293
98.00	0.67	0.78	0.00	0.00	0.00	13.98	14.71	51.5	0.0	0.286
99.00	0.67	0.78	0.00	0.00	0.00	13.52	14.25	51.6	0.0	0.276
100.00	0.53	0.61	0.00	0.00	0.00	13.04	13.61	51.8	0.0	0.263
101.00	0.53	0.62	0.00	0.00	0.00	12.70	13.27	51.9	0.0	0.256
102.00	0.53	0.62	0.00	0.00	0.00	12.35	12.92	52.0	0.0	0.249
103.00	0.53	0.62	0.00	0.00	0.00	11.98	12.56	52.0	0.0	0.242
104.00	0.53	0.62	0.00	0.00	0.00	11.61	12.19	52.0	0.0	0.234

Site Number: 310968

Code: TIA/EIA-222-F

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

11/10/2015 4:29:32 PM

Customer: T-MOBILE

**Load Case:** Twist/Sway **50.00 mph Wind with No Ice** **28 Iterations**

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

105.00	0.53	0.62	0.00	0.00	0.00	11.23	11.81	52.0	0.0	0.227
106.00	0.53	0.63	0.00	0.00	0.00	10.84	11.42	52.0	0.0	0.220
107.00	0.53	0.63	0.00	0.00	0.00	10.44	11.02	52.0	0.0	0.212
108.00	0.52	0.63	0.00	0.00	0.00	10.03	10.61	52.0	0.0	0.204
109.00	0.52	0.63	0.00	0.00	0.00	9.60	10.19	52.0	0.0	0.196
110.00	0.40	0.45	0.00	0.00	0.00	9.17	9.60	52.0	0.0	0.185
111.00	0.40	0.45	0.00	0.00	0.00	8.89	9.32	52.0	0.0	0.179
112.00	0.40	0.45	0.00	0.00	0.00	8.60	9.04	52.0	0.0	0.174
113.00	0.40	0.46	0.00	0.00	0.00	8.31	8.74	52.0	0.0	0.168
114.00	0.40	0.46	0.00	0.00	0.00	8.00	8.44	52.0	0.0	0.162
115.00	0.40	0.46	0.00	0.00	0.00	7.69	8.13	52.0	0.0	0.156
116.00	0.40	0.46	0.00	0.00	0.00	7.37	7.81	52.0	0.0	0.150
117.00	0.40	0.46	0.00	0.00	0.00	7.05	7.49	52.0	0.0	0.144
118.00	0.40	0.46	0.00	0.00	0.00	6.71	7.15	52.0	0.0	0.138
119.00	0.39	0.46	0.00	0.00	0.00	6.37	6.81	52.0	0.0	0.131
120.00	0.39	0.46	0.00	0.00	0.00	6.02	6.46	52.0	0.0	0.124
121.00	0.39	0.46	0.00	0.00	0.00	5.65	6.10	52.0	0.0	0.117
122.00	0.39	0.46	0.00	0.00	0.00	5.28	5.73	52.0	0.0	0.110
123.00	0.39	0.46	0.00	0.00	0.00	4.90	5.35	52.0	0.0	0.103
124.00	0.39	0.46	0.00	0.00	0.00	4.51	4.96	52.0	0.0	0.095
125.00	0.39	0.46	0.00	0.00	0.00	4.10	4.56	52.0	0.0	0.088
126.00	0.39	0.46	0.00	0.00	0.00	3.68	4.15	52.0	0.0	0.080
127.00	0.39	0.47	0.00	0.00	0.00	3.26	3.73	52.0	0.0	0.072
128.00	0.39	0.47	0.00	0.00	0.00	2.82	3.30	52.0	0.0	0.064
129.00	0.39	0.47	0.00	0.00	0.00	2.36	2.87	52.0	0.0	0.055
130.00	0.19	0.20	0.00	0.00	0.00	1.71	1.93	52.0	0.0	0.037
131.00	0.19	0.20	0.00	0.00	0.00	1.52	1.74	52.0	0.0	0.034
132.00	0.18	0.20	0.00	0.00	0.00	1.33	1.55	52.0	0.0	0.030
133.00	0.18	0.20	0.00	0.00	0.00	1.13	1.36	52.0	0.0	0.026
134.00	0.18	0.20	0.00	0.00	0.00	0.93	1.16	52.0	0.0	0.022
135.00	0.18	0.19	0.00	0.00	0.00	0.72	0.96	52.0	0.0	0.018
136.00	0.18	0.19	0.00	0.00	0.00	0.51	0.76	52.0	0.0	0.015
137.00	0.17	0.19	0.00	0.00	0.00	0.29	0.57	52.0	0.0	0.011
138.00	0.01	0.01	0.00	0.00	0.00	0.04	0.05	52.0	0.0	0.001
139.00	0.00	0.01	0.00	0.00	0.00	0.03	0.03	52.0	0.0	0.001
140.00	0.00	0.01	0.00	0.00	0.00	0.02	0.02	52.0	0.0	0.000

Site Number: 310968

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Site Name: WSPT-Westport Rebuild CT, CT

Engineering Number: 63916321

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Customer: T-MOBILE

### Analysis Summary

Load Case	Reactions						Combined Stress (ksi)	Max Stresses		
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)		Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	29.2	0.00	38.75	0.00	0.00	2949.64	42.05	51.3	97.25	0.819
Ice	24.1	0.00	45.76	0.00	0.00	2502.47	37.50	51.3	97.25	0.730
Twist/Sway	10.1	0.00	38.76	0.00	0.00	1021.36	15.05	51.3	97.25	0.293

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**Base Summary**

**Reactions**

Original Design			Analysis			Moment Design %
Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment (kip-ft)	Axial (kip)	Shear (kip)	
2,753.00	37.00	27.30	2,949.64	45.76	29.20	107.14

**Base Plate**

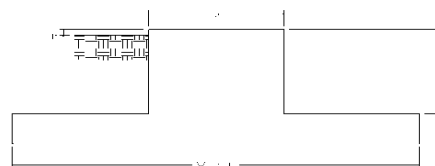
Yield (ksi)	Thick (in)	Width (in)	Style	Poly Sides	Clip Len (in)	Effective Len (in)	Moment (kip-in)	Allow Stress (ksi)	Applied Stress (ksi)	Stress Ratio
50.0	3.250	54.000	Clipped	0	12.00	9.349	333.03	50.00	20.24	0.40

**Anchor Bolts**

Bolt Circle	Num Bolts	Bolt Type	Bolt Dia (in)	Yield (ksi)	Ultimate (ksi)	Arrange	Cluster Dist (in)	Start Angle (deg)	Compression			Tension		
									Force (kip)	Allow (kip)	Ratio	Force (kip)	Allow (kip)	Ratio
54.00	16	2.25" 18J	2.25	75.00	100.00	Clustered	6.00	45.0	166.73	195.00	0.86	161.01	195.00	0.83

Site Name: WSPT - Westport Rebuild CT, Ct  
 Site Number: 310968  
 Engineering Number: 63916321  
 Engineer: NSK  
 Date: 11/06/15  
 Tower Type: MP

Program Last Updated: 5/13/2014



**Design Loads (Unfactored)**

Design / Analysis / Mapping:

	Analysis
Compression/Leg:	38.7 k
Uplift/Leg:	0.0 k
Total Shear:	29.0 k
Moment:	2919.7 k-ft
Tower + Appurtenance Weight:	38.7 k
Depth to Base of Foundation:	7.00 ft
Diameter of Pier (d):	6.00 ft
Height of Pier above Ground (h):	0.50
Width of Pad (W):	23.00 ft
Length of Pad (L):	23.00 ft
Thickness of Pad (t):	4.00 ft
Tower Leg Center to Center:	0.00 ft
Number of Tower Legs:	1.0 (1 if MP or GT)
Tower Center from Mat Center:	0.00 ft
Depth Below Ground Surface to Water Table:	99.00 ft
Unit Weight of Concrete:	150.0 pcf
Unit Weight of Soil Above Water Table:	120.0 pcf
Unit Weight of Water:	62.4 pcf
Unit Weight of Soil Below Water Table:	50.0 pcf
Friction Angle of Uplift:	0.00 Degrees
Ultimate Coefficient of Shear Friction:	0.35
Allowable Compressive Bearing Pressure:	10000.0 psf
Ultimate Passive Pressure on Pad Face:	0.0 psf
Allowable Capacity Increase:	1.00

Concrete Strength ( $f'_c$ ):	3000 psi
Pad Tension Steel Depth:	44.00 in
Wind Load Factor:	1.3
$\phi_{\text{Shear}}$ :	0.75
$\phi_{\text{Flexure / Tension}}$ :	0.90
$\phi_{\text{Compression}}$ :	0.65
$\beta$ :	0.85
Bottom Pad Rebar Size #:	9
# of Bottom Pad Rebar:	11
Pad Bottom Steel Area:	11.00 in <sup>2</sup>
Pad Steel $F_y$ :	60000 psi
Top Pad Rebar Size #:	9
# of Top Pad Rebar:	11
Pad Top Steel Area:	11.00 in <sup>2</sup>
Pier Rebar Size #:	11
Pier Steel Area (Single Bar):	1.56 in <sup>2</sup>
# of Pier Rebar:	40
Pier Steel $F_y$ :	60000 psi
Pier Cage Diameter:	64.0 in
Rebar Strain Limit:	0.008
Steel Elastic Modulus:	29000 ksi
Tie Rebar Size #:	4
Tie Steel Area (Single Bar):	0.20 in <sup>2</sup>
Tie Spacing:	12 in
Tie Steel $F_y$ :	60000 psi

**Overturning Factor of Safety**

Design OTM:	3137.2 k-ft
OTM Resistance:	6338.9 k-ft
OTM Resistance / Design OTM Factor of Safety:	2.02 Result: OK

**Soil Bearing Pressure Usage:**

Net Bearing Pressure:	2671 psf
Allowable Bearing Pressure:	10000 psf
Net Bearing Pressure/Allowable Bearing Pressure:	0.27 Result: OK
Load Direction Controlling Design Bearing Pressure:	Diagonal to Pad Edge

**Sliding Factor of Safety**

Total Ultimate Sliding Resistance:	192.9 k
Sliding Resistance/Sliding Design Factor of Safety:	6.65 Result: OK

## One Way Shear, Flexural Capacity, and Punching Shear

Factored One Way Shear ( $V_u$ ):	198.2 k
One Way Shear Capacity ( $\phi V_c$ ):	832.6 k - ACI11.3.1.1
$V_u / \phi V_c$ :	0.24 Result: OK
Load Direction Controlling Shear Capacity:	Diagonal to Pad Edge
Lower Pad Steel Factored Moment ( $M_u$ ):	1564.4 k-ft
Lower Steel Pad Moment Capacity ( $\phi M_n$ ):	2158.3 k-ft - ACI10.3
$M_u / \phi M_n$ :	0.72 Result: OK
Load Direction Controlling Flexural Capacity:	Parallel to Pad Edge
Upper Steel Pad Factored Moment ( $M_u$ ):	949.8 k-ft
Upper Steel Pad Moment Capacity ( $\phi M_n$ ):	2158.3 k-ft
$M_u / \phi M_n$ :	0.44 Result: OK
Upper Pad Flexural Reinforcement Ratio:	0.0009 OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Factored Punching Shear ( $V_u$ ):	0.0 k
Nominal Punching Shear Capacity ( $\phi_c V_n$ ):	2634.8 k - ACI11.12.2.1
$V_u / \phi V_c$ :	0.00 Result: OK
Factored Moment in Pier ( $M_u$ ):	3927.6 k-ft
Pier Moment Capacity ( $\phi M_n$ ):	8789.4 k-ft
$M_u / \phi M_n$ :	0.45 Result: OK
Factored Shear in Pier ( $V_u$ ):	37.7 k
Pier Shear Capacity ( $\phi V_n$ ):	336.1 k
$V_u / \phi V_c$ :	0.11 Result: OK
Pier Shear Reinforcement Ratio:	0.0005 No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier ( $T_u$ ):	0.0 k
Pier Tension Capacity ( $\phi T_n$ ):	3369.6 k
$T_u / \phi T_n$ :	0.00 Result: OK
Factored Compression in Pier ( $P_u$ ):	50.4 k
Pier Compression Capacity ( $\phi P_n$ ):	5316.1 k - ACI10.3.6.2
$P_u / \phi P_n$ :	0.01 Result: OK
Pier Compression Reinforcement Ratio:	0.015 OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
$M_u / \phi_B M_n + T_u / \phi_T T_n$ :	0.45 Result: OK

Nominal and Design Moment Capacity and Factored Design Loads

