



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**
Shuttle Meadow Road, Southington CT
41.638555 / -72.841084

Dear Ms. Bachman:

T-Mobile Northeast, LLC (T-Mobile) currently maintains three (3) antennas at the One-Hundred Thirty foot (130') level of the existing One-Hundred Fifty Three (153') foot tower at Shuttle Meadow Road, Southington, CT. The tower is owned by American Tower Corporation. The property is also owned by American Tower. T-Mobile now intends to add six (6) new 700MHz antennas. These antennas would be installed at the One-Hundred Thirty (130') foot level of the tower. T-Mobile does not intend to remove any other equipment at this time.

This facility was approved by the Connecticut Siting Council and the Town of Southington on May 15th, 1984 in Docket# 40. 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 150'. 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 is being sent to the Chief Elected Official, Town Manager, Garry Brumback for the Town of Southington, 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 of the Town of Southington, Garry Brumback**
American Tower Corporation
American Tower Corporation

Exhibit 1

Site Plan

Exhibit 2

Power Density Report

Exhibit 3
Structural Analysis

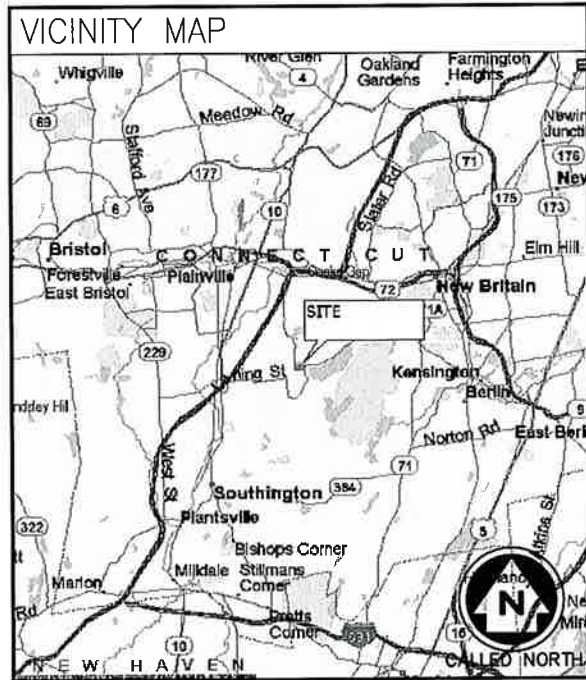
T-MOBILE NORTHEAST LLC

CTHA527A

ATC SOUTHLINGTON MONOPOLE

SHUTTLE MEADOW RD
SOUTHLINGTON, CT 06489

(705F CONFIGURATION)



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:	CTHA527A	APPLICANT:	T-MOBILE NORTHEAST LLC 35 GRIFFIN RD SOUTH BLOOMFIELD, CT 06002
SITE NAME:	ATC SOUTHLINGTON MONOPOLE	PROJECT MANAGER:	AMERICAN TOWER CORPORATION 319 QUARRY ROAD SPRING CITY, PA 19475
SITE ADDRESS:	SHUTTLE MEADOW RD SOUTHLINGTON, CT 06489	CONTACT:	BRUCE HOFFMASTER 484-942-6339
PROPERTY OWNER:	AMERICAN TOWER CORPORATION	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING 1033 WATERVLIT SHAKER ROAD ALBANY, NY 12205
PARCEL:	184//019	CONTACT:	ALEX WELLER 518-690-0790
CURRENT ZONING:	R-80		
JURISDICTION:	TOWN OF SOUTHLINGTON		
ATC SITE NUMBER:	302475		
LAT./LONG.:	N 41.638555' / W -72.841084'		
CONSTRUCTION TYPE:	L700 UPGRADE		

PROJECT DESCRIPTION

<input checked="" type="checkbox"/> EXISTING MONOPOLE	<input checked="" type="checkbox"/> EXISTING CABINET(S)	<input type="checkbox"/> OUTDOOR
<input type="checkbox"/> EXISTING LATTICE TOWER	<input checked="" type="checkbox"/> PROPOSED RBS 6201	<input type="checkbox"/> INDOOR
<input type="checkbox"/> EXISTING TRANSMISSION TOWER	<input checked="" type="checkbox"/> EXISTING RBS 6201	<input checked="" type="checkbox"/> EXISTING CONCRETE PAD
<input type="checkbox"/> EXISTING WATER TANK	<input type="checkbox"/> EXISTING S8000	<input type="checkbox"/> EXISTING STEEL PLATFORM
<input type="checkbox"/> EXISTING BUILDING	<input type="checkbox"/> SITE SUPPORT KIT	<input type="checkbox"/> EXISTING PPC
<input type="checkbox"/> EXISTING FLAGPOLE	<input type="checkbox"/> SITE SUPPORT CABINET	<input checked="" type="checkbox"/> EXISTING PFC
<input type="checkbox"/> EXISTING FORT WORTH	<input checked="" type="checkbox"/> GPS	<input type="checkbox"/> PANELBOARD

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.

2005 CONNECTICUT BUILDING CODE WITH 2013 AMENDMENT
2011 NATIONAL ELECTRIC CODE
2009 INTERNATIONAL RESIDENTIAL CODE

SHEET INDEX

SHEET	DESCRIPTION	REVISION
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E-2	COAX/FIBER PLUMBING DIAGRAM	1
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T-Mobile
T-MOBILE NORTHEAST LLC
35 Griffin Rd South
Bloomfield, CT 06002

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

SUBMITTALS

DATE	DESCRIPTION	REVISION
10/23/15	FOR PERMIT	0
11/4/15	REVISED FOR PERMIT	1

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

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



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

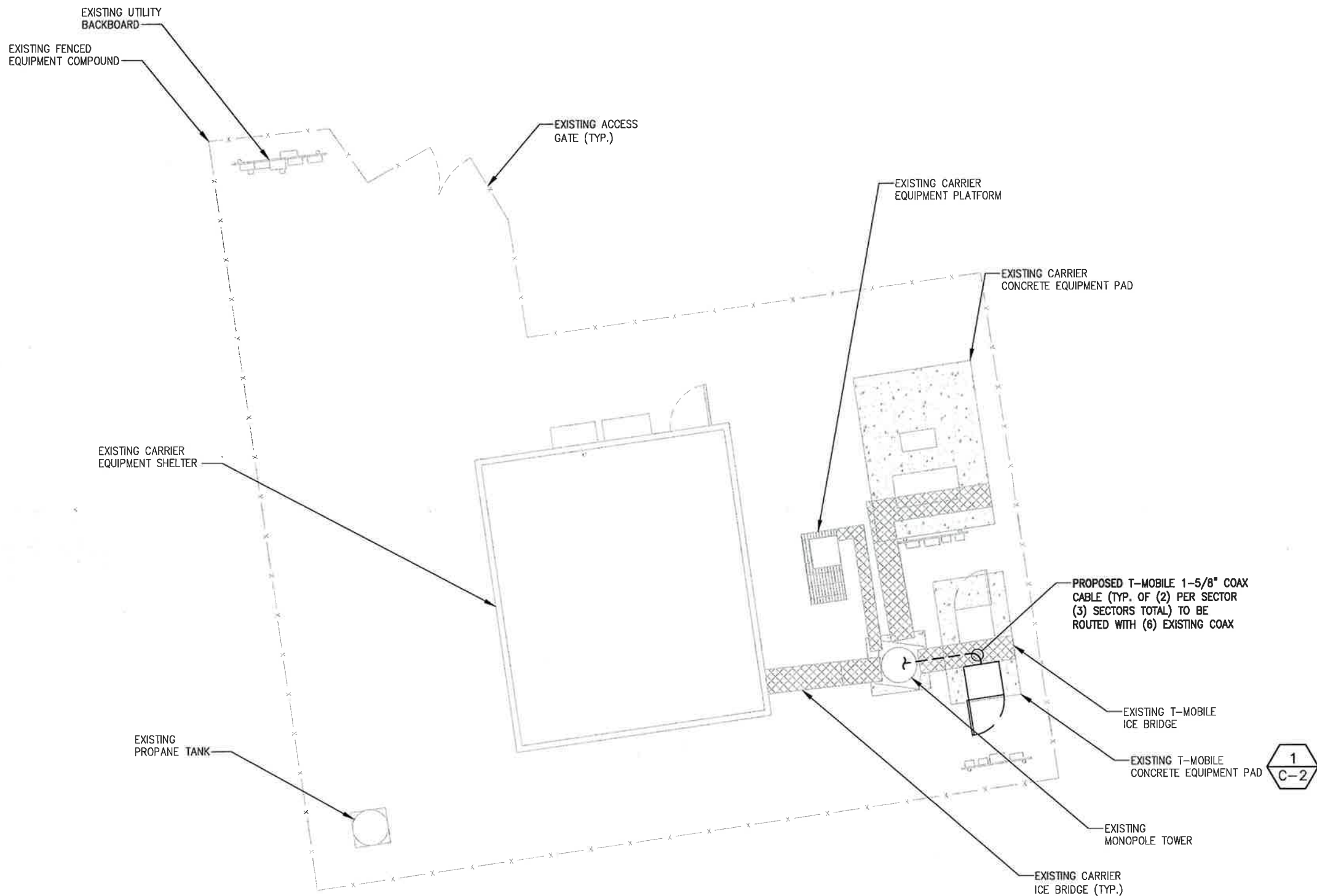
SITE NUMBER:
CTHA527A

SITE NAME:
ATC SOUTHLINGTON MONOPOLE
80 SHUTTLE MEADOW RD
SOUTHLINGTON, CT 06489

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

SHEET 1 OF 8 SHEETS



GENERAL SITE NOTES:

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



INFINGY
 1033 Watervliet Shaker Rd
 Albany, NY 12205
 Office # (518) 685-0790
 Fax # (518) 685-0793

SUBMITTALS		
DATE	DESCRIPTION	REVISION
10/23/15	FOR PERMIT	0
11/4/15	REVISED/FOR PERMIT	1

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

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

SITE LEGEND

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



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ATC SOUTHTON MONOPOLE
 80 SHUTTLE MEADOW RD
 SOUTHTON, CT 06489

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1

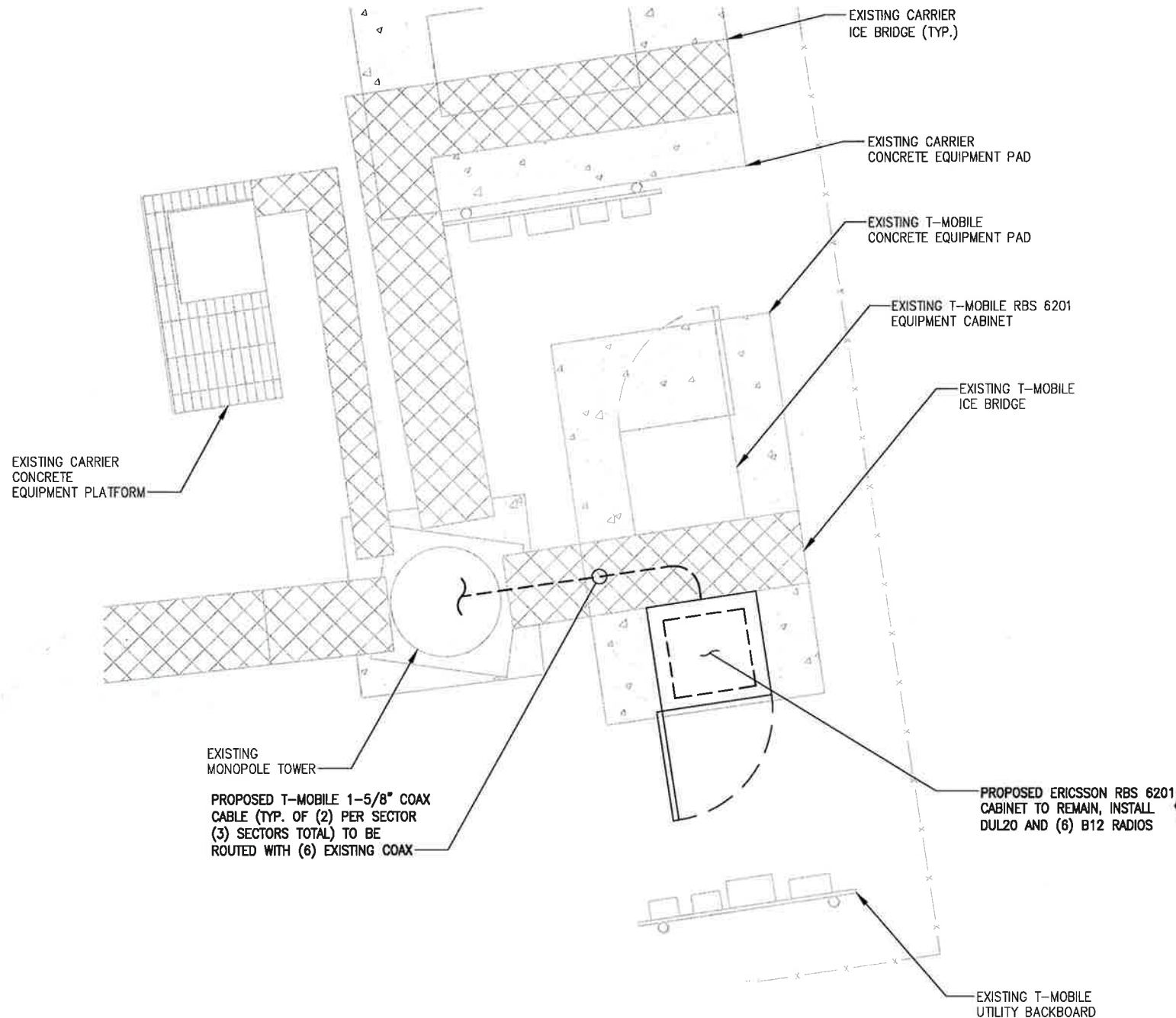
SHEET 2 OF 8 SHEETS

CALLED NORTH

COMPOUND PLAN
 SCALE: AS NOTED

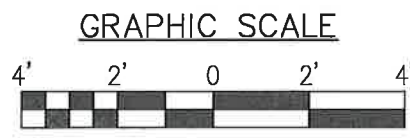
GRAPHIC SCALE

SCALE (11x17): 1" = 10'-0"
 SCALE (22x34): 1" = 5'-0"



CALLED NORTH

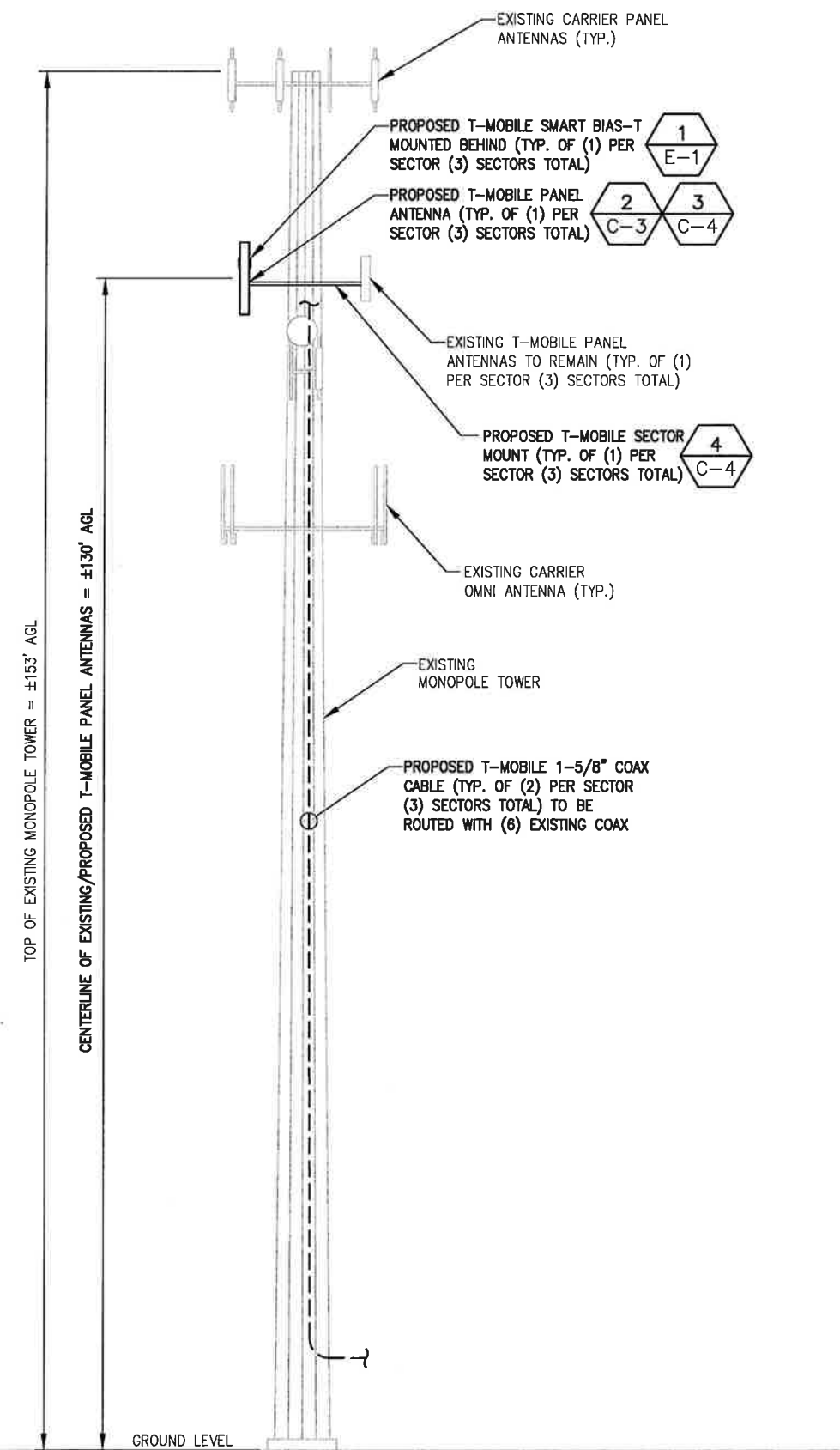
1 COMPOUND PLAN
SCALE: AS NOTED



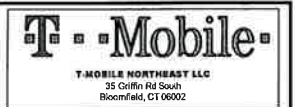
GRAPHIC SCALE

SCALE (11x17): 1" = 4'-0"
SCALE (22x34): 1" = 2'-0"

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



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

SUBMITTALS

DATE	DESCRIPTION	REVISION
10/23/15	FOR PERMIT	0
11/4/15	REVISED/FOR PERMIT	1

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

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



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SITE NUMBER:
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ATC SOUTHWINGTON MONOPOLE
80 SHUTTLE MEADOW RD
SOUTHWINGTON, CT 06489

SHEET TITLE
COMPOUND PLAN & ELEVATION

SHEET NUMBER
C-2
SHEET 3 OF 8 SHEETS

RF SYSTEM SCHEDULE (705F 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 PCS + LTE 2100	OPTICAL #1	B2/B4P	APXV18-206517S	RFS	0	0	310°	0°	2'	130'-0"	-	-	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS PCS A2	-	COAX	-	-
		OPTICAL #2																							
B	UMTS PCS + LTE 2100	OPTICAL #1	B2/B4P	APXV18-206517S	RFS	0	0	150°	0°	2'	130'-0"	-	-	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS PCS A2	-	COAX	-	-
		OPTICAL #2																							
C	UMTS PCS + LTE 2100	OPTICAL #1	B2/B4P	APXV18-206517S	RFS	0	0	255°	0°	2'	130'-0"	-	-	-	-	EXISTING	1 1/8"	COAX	EXISTING	N/A	UMTS PCS A2	-	COAX	-	-
		OPTICAL #2																							
	LTE 700	TBD	B12P	LNx-6515DS-VTM	COMMSCOPE	0	1	310°	0°	2'	130'-0"	-	-	-	-	(2) ±175'	1 1/8"	COAX	N/A	N/A	LTE 700	-	COAX	-	LTE 700 COAX
	LTE 700	TBD	B12P	LNx-6515DS-VTM	COMMSCOPE	0	1	150°	0°	2'	130'-0"	-	-	-	-	(2) ±175'	1 1/8"	COAX	N/A	N/A	LTE 700	-	COAX	-	LTE 700 COAX
	LTE 700	TBD	B12P	LNx-6515DS-VTM	COMMSCOPE	0	1	255°	0°	2'	130'-0"	-	-	-	-	(2) ±175'	1 1/8"	COAX	N/A	N/A	LTE 700	-	COAX	-	LTE 700 COAX

KEY

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

1 RF SCHEDULE
--- NOT TO SCALE

SUBMITTALS

DATE	DESCRIPTION	REVISION
10/23/13	FOR PERMIT	0
11/4/13	REVISED FOR PERMIT	1

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

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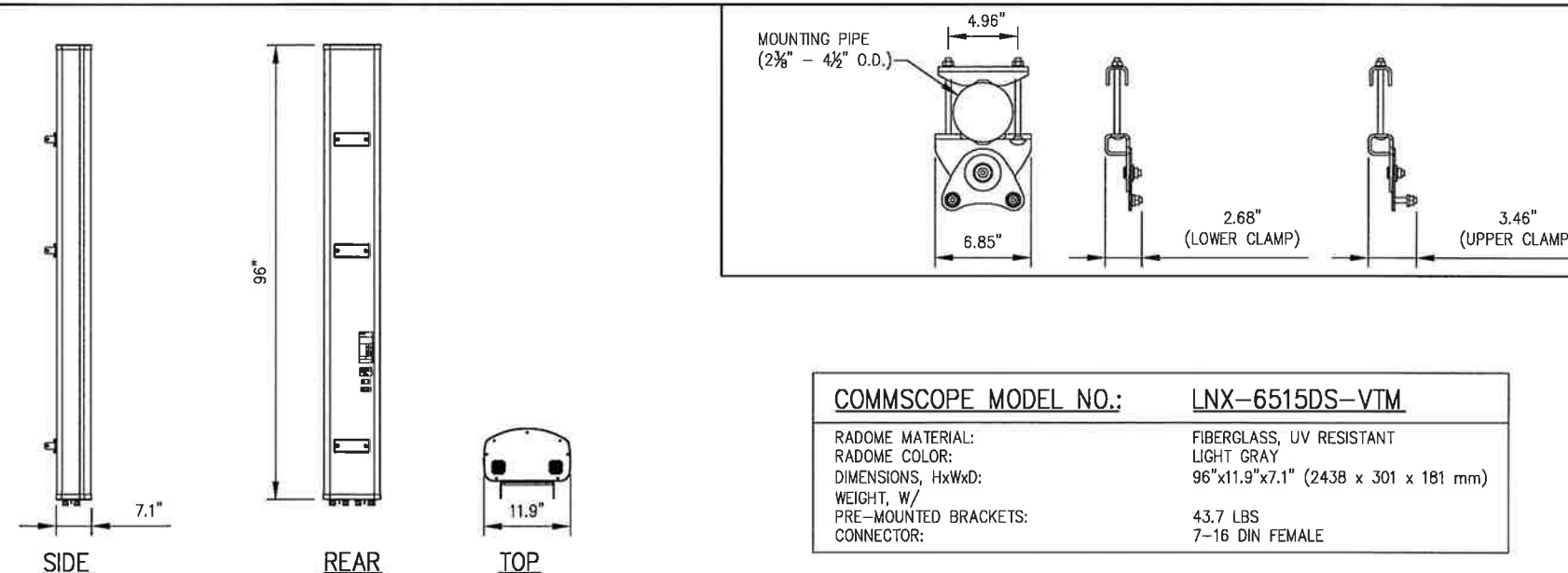
SITE NUMBER: CTHA527A
SITE NAME: ATC SOUTHLINGTON MONOPOLE
80 SHUTTLE MEADOW RD
SOUTHLINGTON, CT 06489

SHEET TITLE
ANTENNA DETAIL & RF SCHEDULE

SHEET NUMBER

C-3

SHEET 4 OF 8 SHEETS



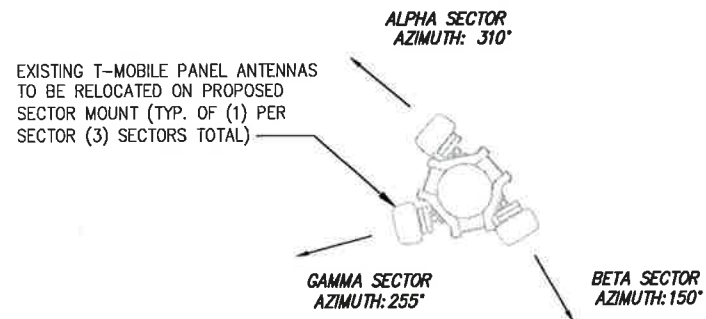
2 ANTENNA DETAIL
--- NOT TO SCALE



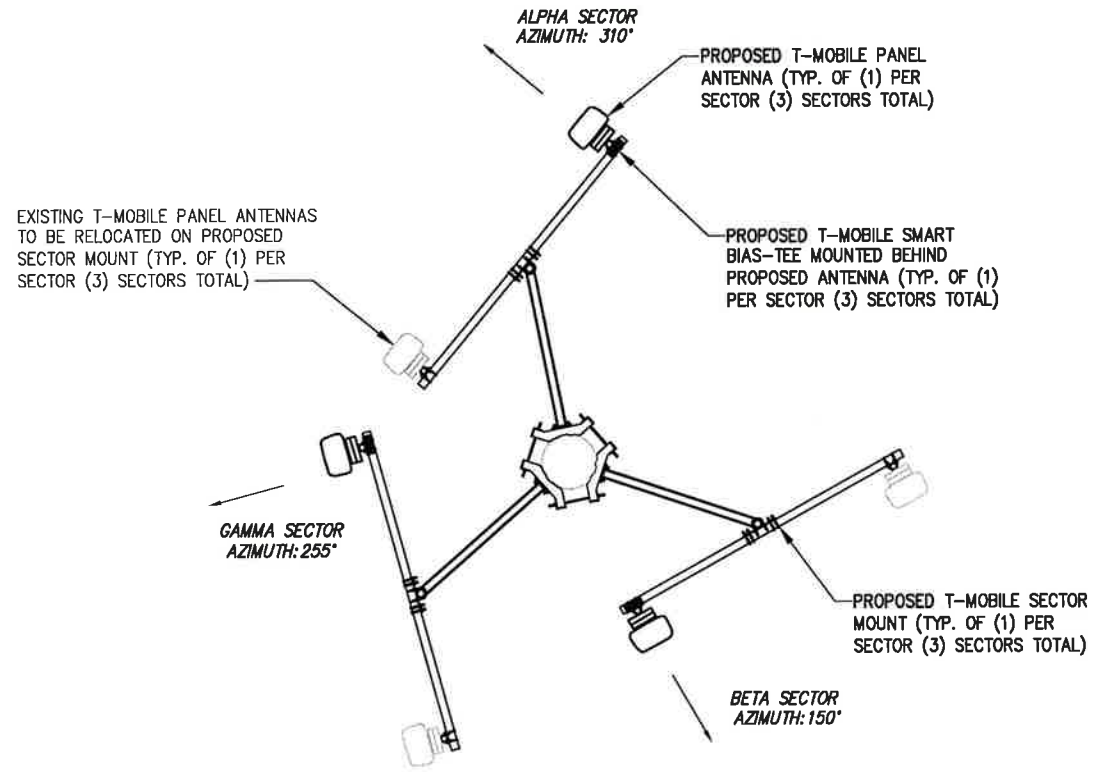
METALLIC TAG NOTES:

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

3 METALLIC TAG DETAIL
--- NOT TO SCALE



1 EXISTING ANTENNA ORIENTATION PLAN
NOT TO SCALE

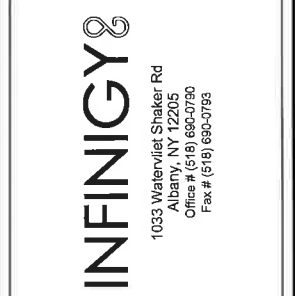


2 PROPOSED ANTENNA ORIENTATION PLAN
NOT TO SCALE

STRUCTURAL NOTES:

1. SPECIFICATIONS / CODES:
 - CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
 - STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
 - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING" CODE-STEEL.
 - REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE."

2. MATERIALS:
 - CONCRETE: $f_c' = 3000$ 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.



SUBMITTALS		
DATE	DESCRIPTION	REVISION
10/23/19	FOR PERMIT	0
11/4/19	REVISED FOR PERMIT	1

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

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



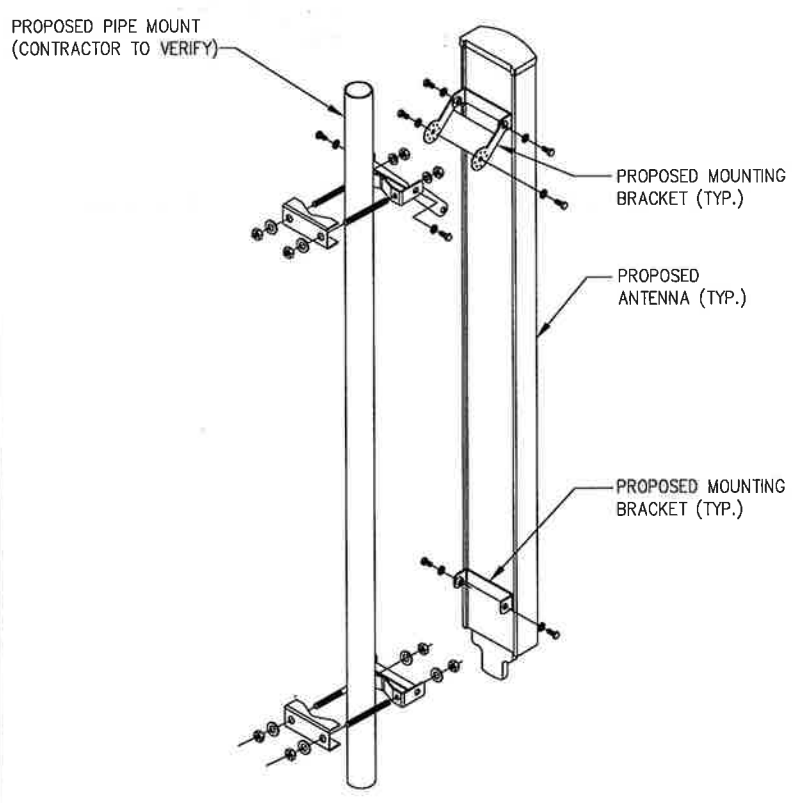
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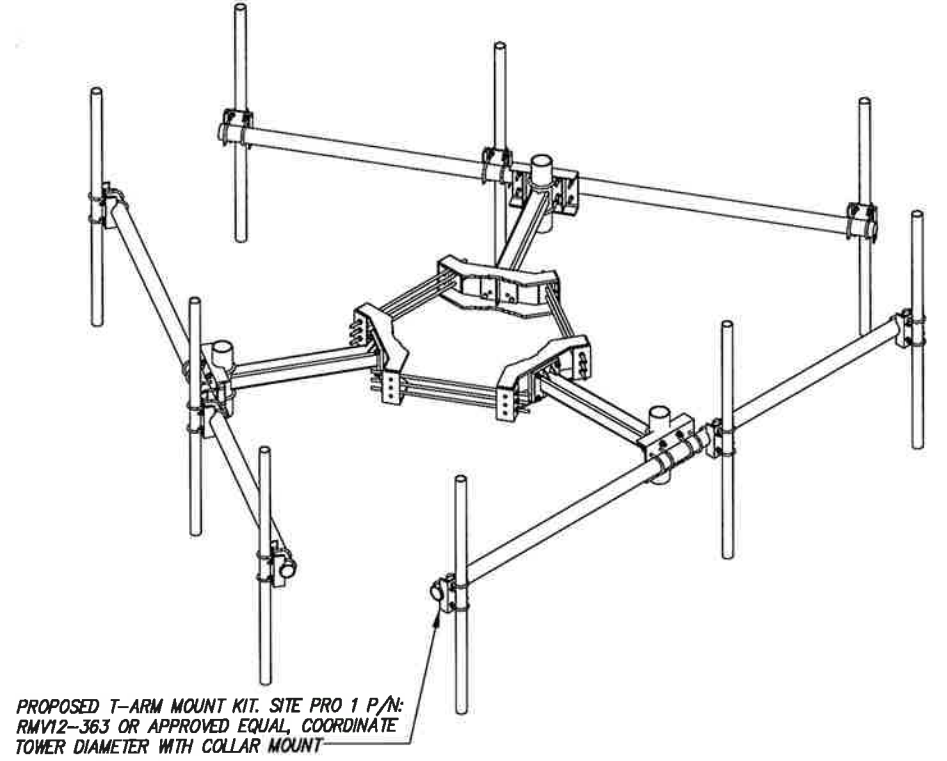
SITE NUMBER: CTHA527A
 SITE NAME: ATC SOUTHTON MONOPOLE
 80 SHUTTLE MEADOW RD
 SOUTHTON, CT 06489

SHEET TITLE
EQUIPMENT SPECIFICATIONS

SHEET NUMBER
C-4
 SHEET 5 OF 8 SHEETS



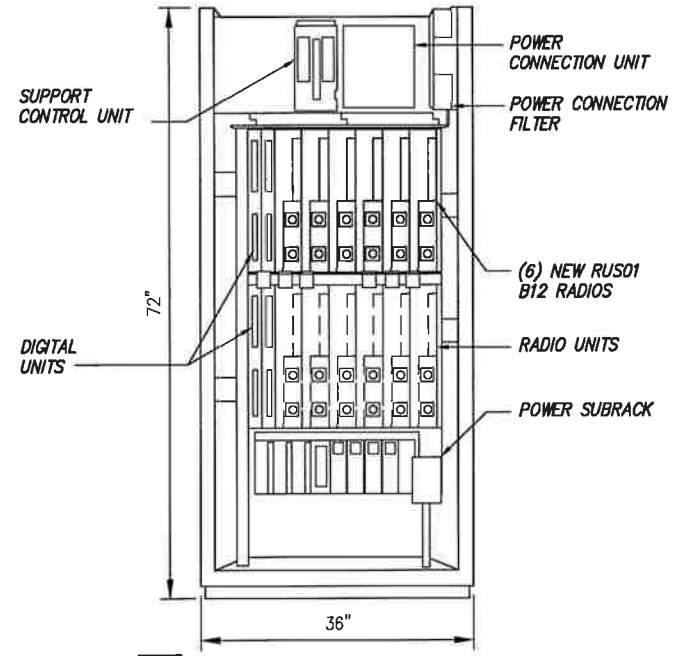
3 MOUNTING DETAIL
NOT TO SCALE



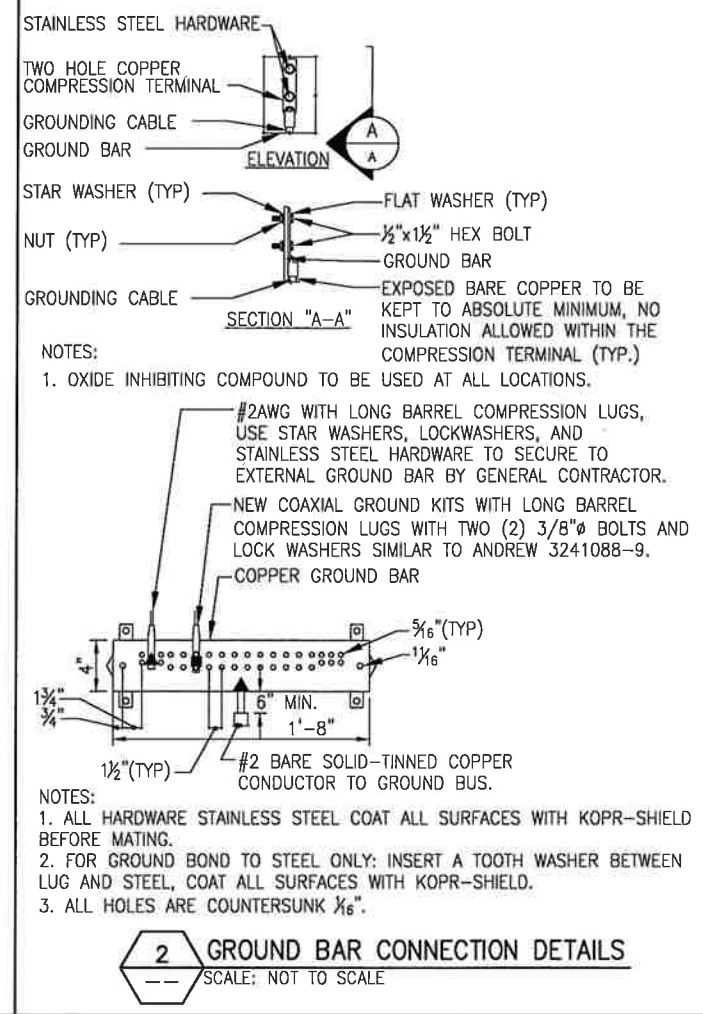
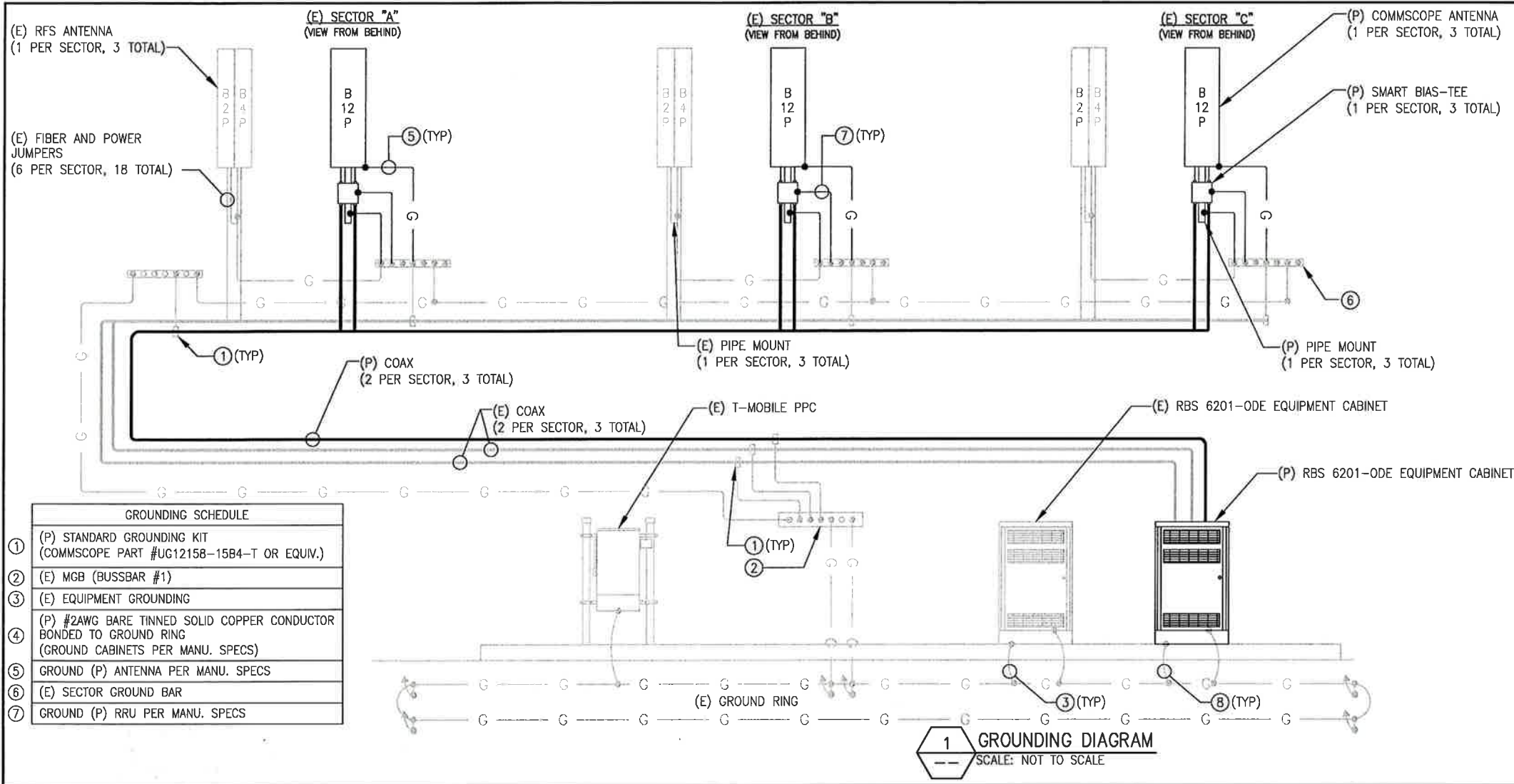
4 SECTOR MOUNT DETAIL
NOT TO SCALE

ERICSSON - RBS 6201-ODE

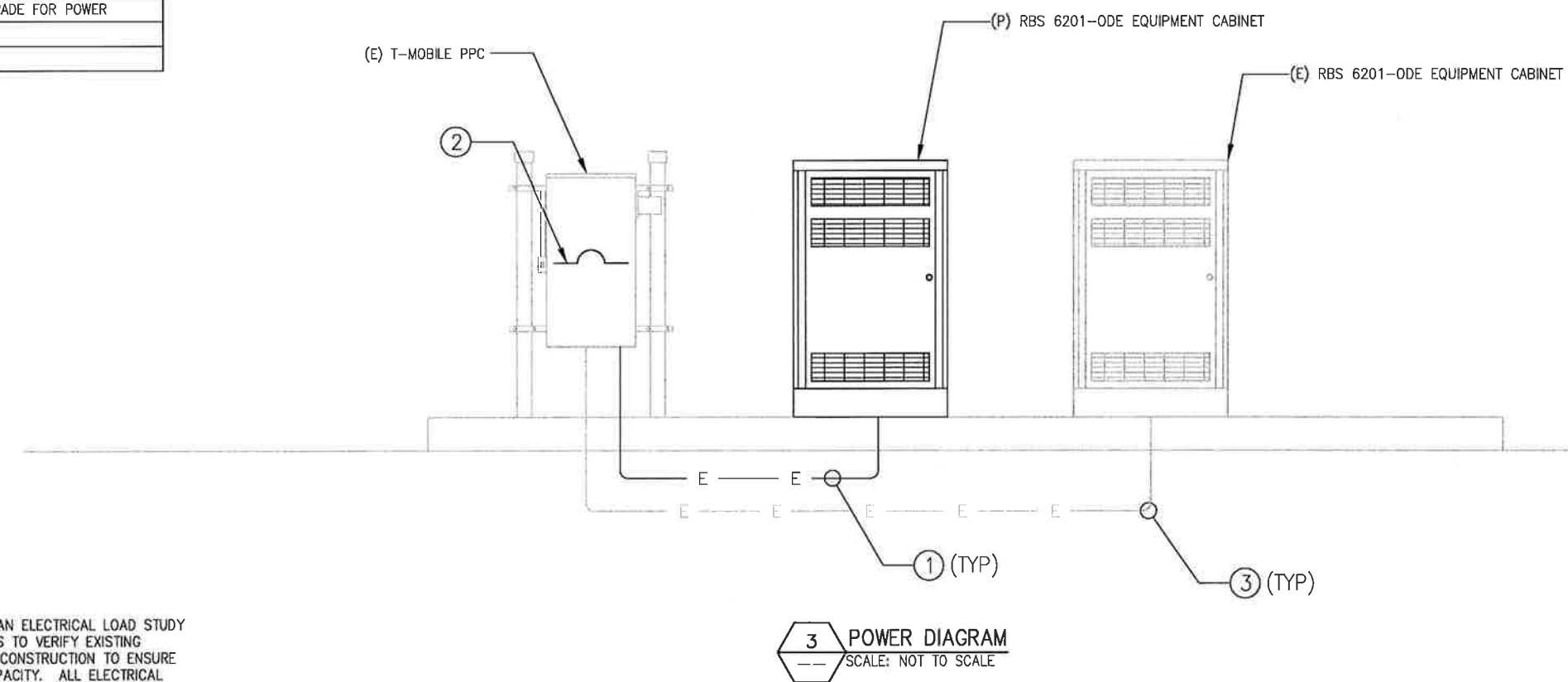
CABINET COLOR: LIGHT GRAY
 DIMENSIONS (HxWxD IN): 72x36x36 IN
 V1 WEIGHT (FULLY EQUIPPED): 715 LBS
 340 LBS (ENCLOSURE + SUPPORT)
 374 LBS (RBS 6201)
 V2 WEIGHT (FULLY EQUIPPED): 1100 LBS
 470 LBS (ENCLOSURE + CLIMATE SYSTEM + LOAD CENTER)
 630 LBS (RBS + TRANSMISSION + SUPPORT EQUIPMENT)



5 EQUIPMENT CABINET DETAIL
NOT TO SCALE



CONDUIT SCHEDULE	
1	(P) WIRE AND CONDUIT UPGRADE FOR POWER
2	(P) 60A BREAKER UPGRADE
3	(E) POWER CONDUIT



NOTE:
INFINIGY HAS NOT CONDUCTED AN ELECTRICAL LOAD STUDY FOR THIS SITE. CONTRACTOR IS TO VERIFY EXISTING ELECTRICAL LOADING PRIOR TO CONSTRUCTION TO ENSURE EXISTING INCOMING SERVICE CAPACITY. ALL ELECTRICAL INSTALLATION IS TO COMPLY WITH NEC, ADOPTED VERSION.

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

SUBMITTALS		
DATE	DESCRIPTION	REVISION
10/22/15	FOR PERMIT	0
11/4/15	REVISED FOR PERMIT	1

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

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



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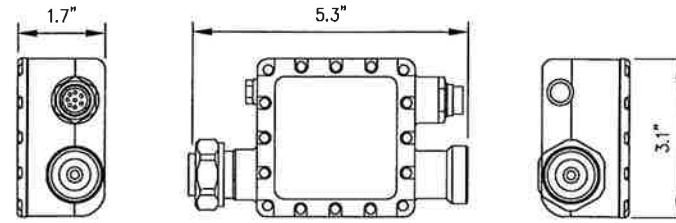
NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CTHA527A
SITE NAME:
ATC SOUTHLINGTON MONOPOLE
80 SHUTTLE MEADOW RD
SOUTHLINGTON, CT 06489

SHEET TITLE
GROUNDING & POWER DIAGRAMS

SHEET NUMBER

E-1

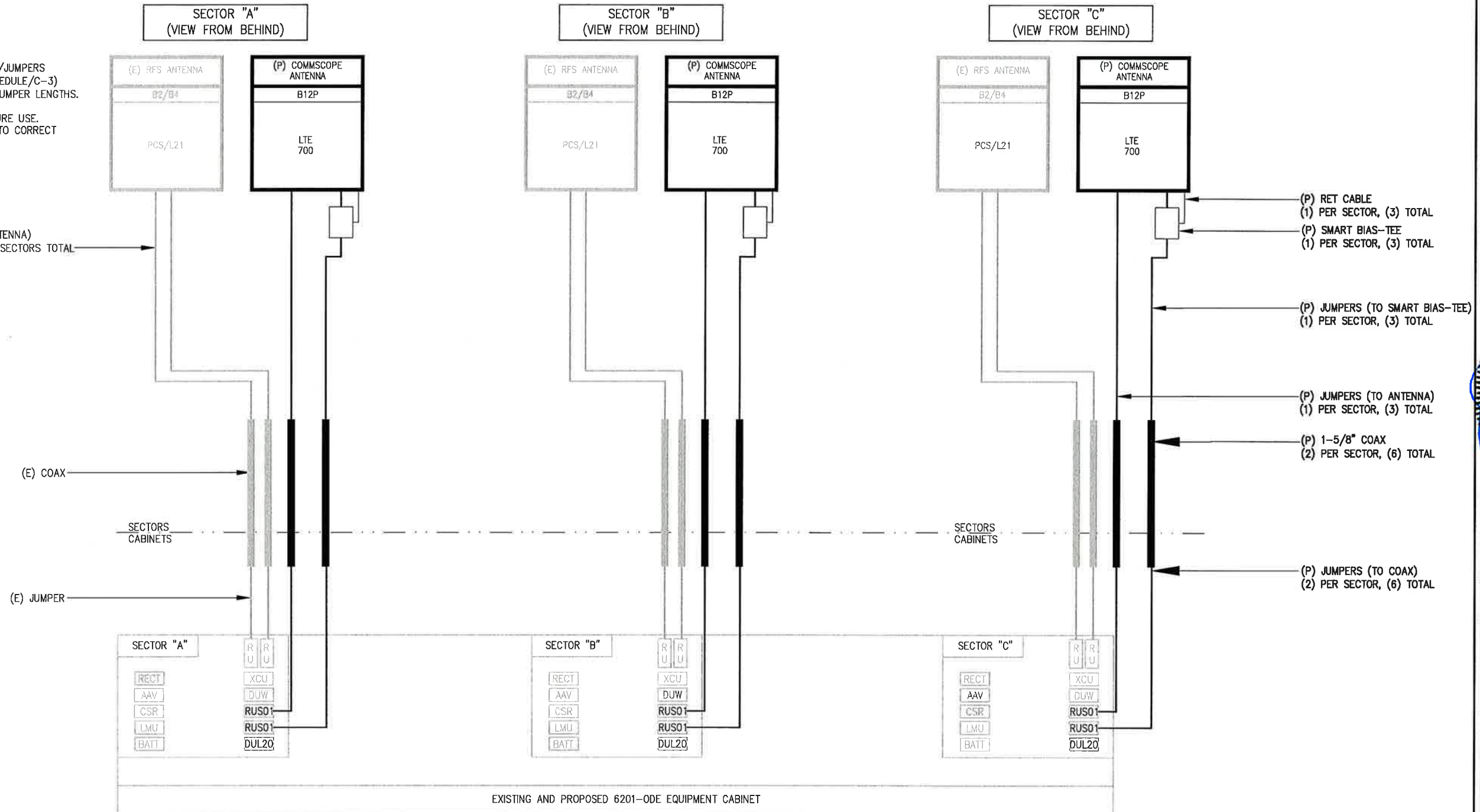


KATHREIN SCALA SMART BIAS TEE
WEIGHT: 3.3 LBS

1 SMART BIAS-TEE DETAIL
NOT TO SCALE

NOTES:

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



2 705F CONFIGURATION COAX/FIBER PLUMBING DIAGRAM
NOT TO SCALE

SUBMITTALS		
DATE	DESCRIPTION	REVISION
10/23/15	FOR PERMIT	0
11/4/15	REVISED FOR PERMIT	1

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

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



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

SITE NUMBER: CTHA527A
SITE NAME: ATC SOUTHWINGTON MONOPOLE
80 SHUTTLE MEADOW RD
SOUTHWINGTON, CT 06489

SHEET TITLE
COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER
E-2
SHEET 7 OF 8 SHEETS

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

T-Mobile Existing Facility

Site ID: CTHA527A

ATC Southington Monopole
80 Shuttle Meadow Road
Southington, CT 06489

November 23, 2015

EBI Project Number: 6215006100

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	4.57 %

November 23, 2015

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

Emissions Analysis for Site: **CTHA527A – ATC Southington Monopole**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **80 Shuttle Meadow Road, Southington, 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 **80 Shuttle Meadow Road, Southington, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

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

- 1) 2 GSM / UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel
- 2) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 5) Since the radios are ground mounted there are additional cabling losses accounted for. For each RF path the following losses were calculated. 0.98 dB of additional cable loss at 700 MHz, 1.80 dB of additional cable loss at 1900 MHz and 1.86 dB of additional cable loss at 2100 MHz. This is based on manufacturers Specifications for 175 feet of 1-5/8” coax cable on each path.

- 6) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 7) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antennas used in this modeling are the **RFS APXV18-206517S-C-A20** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **RFS APXV18-206517S-C-A20** has a maximum gain of **16.7 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.
- 9) The antenna mounting height centerlines of the proposed antennas are **130 & 132 feet** above ground level (AGL).
- 10) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	RFS APXV18-206517S-C-A20	Make / Model:	RFS APXV18-206517S-C-A20	Make / Model:	RFS APXV18-206517S-C-A20
Gain:	16.7 dBd	Gain:	16.7 dBd	Gain:	16.7 dBd
Height (AGL):	132	Height (AGL):	132	Height (AGL):	132
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	6	Channel Count	6	# PCS Channels:	6
Total TX Power:	240	Total TX Power:	240	# AWS Channels:	240
ERP (W):	7,340.39	ERP (W):	7,340.39	ERP (W):	7,340.39
Antenna A1 MPE%	1.66	Antenna B1 MPE%	1.66	Antenna C1 MPE%	1.66
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	132	Height (AGL):	132	Height (AGL):	132
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):	690.43	ERP (W):	690.43	ERP (W):	690.43
Antenna A2 MPE%	0.35	Antenna B2 MPE%	0.35	Antenna C2 MPE%	0.35

Site Composite MPE%	
Carrier	MPE%
T-Mobile (Per Sector Max)	2.01 %
AT&T	1.71 %
Clearwire	0.13 %
MetroPCS	0.72 %
Site Total MPE %:	4.57 %

T-Mobile Sector 1 Total:	2.01 %
T-Mobile Sector 2 Total:	2.01 %
T-Mobile Sector 3 Total:	2.01 %
Site Total:	4.57 %

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	1828.74	132	8.28	2100	1000	0.83 %
T-Mobile 1900 MHz (PCS) GSM/UMTS	2	927.09	132	4.20	1900	1000	0.42 %
T-Mobile 2100 MHz (AWS) UMTS	2	914.37	132	4.14	2100	1000	0.41 %
T-Mobile 700 MHz LTE	1	690.43	130	1.61	700	467	0.35 %
						Total:	2.01%

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:	2.01 %
Sector 2:	2.01 %
Sector 3 :	2.01 %
T-Mobile Per Sector Maximum:	2.01 %
Site Total:	4.57 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **4.57%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 150 ft Monopole
ATC Site Name : Sttn - Southington, CT
ATC Site Number : 302475
Engineering Number : 64022822
Proposed Carrier : Metro PCS
Carrier Site Name : N/A
Carrier Site Number : CTHA527A
Site Location : 80 Shuttle Meadow Road
Southington, CT 06489-1313
41.638583,-72.841100
County : Hartford
Date : November 18, 2015
Max Usage : 96%
Result : Pass

Reviewed by:
William Garrett, PE
Chief Engineer

Prepared By:
Brendan M. Smith, E.I.
Structural Engineer I



Nov 19 2015 5:20 PM

COA: PEC.0001553



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
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Existing and Reserved Equipment.....	2
Equipment to be Removed.....	2
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Foundations	3
Deflection, Twist, and Sway.....	3
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Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 150 ft monopole to reflect the change in loading by Metro PCS.

Supporting Documents

Tower Drawings	SpectraSite Mapping Site #CT-0011, dated May 29, 2002 AT&T Technologies Project #AT-8935, dated April 13, 1984
Foundation Drawing	Girard & Co. Engineers Project #38922, dated May 18, 1983
Geotechnical Report	GeoTechnologies Project #1-02-0934-EA, dated July 12, 2002
Modifications	ATC Job #40480332, dated May 25, 2007 ATC Job #42608538, dated April 22, 2009

Analysis

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

Basic Wind Speed:	100 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.18, S_1 = 0.06$
Site Class:	D - Stiff Soil

Conclusion

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

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



Existing and Reserved Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
150.0	157.0	1	10' Omni	Platform w/ Handrails	(13) 7/8" Coax (3) 3" Conduit (2) 0.78" 8 AWG 6 (1) 0.39" Cable (1) 1 5/8" Coax	AT&T Mobility
	153.0	3	Powerwave TT08-19DB111-001			
	152.0	6	Powerwave LGP13519			
		6	Ericsson RRUS 11 (Band 12)			
		3	Kathrein 800 10764			
		4	KMW AM-X-CD-16-65-00T-RET			
	150.0	2	Andrew SBNH-1D6565C (60.8 lbs)			
150.0	1	Raycap DC6-48-60-18-8F (23.5" Height)				
130.0	132.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8" Coax	Metro PCS
120.0	118.0	1	DragonWave Horizon Compact	Leg	(6) 5/16" Coax (1) 1/2" Coax	Clearwire
		3	NextNet BTS-2500			
		3	Argus LLPX310R			
		1	DragonWave A-ANT-11G-2.5-C			
116.0		1	18" x 12" Junction Box	Flush	(1) 2" Conduit	
100.0	104.0	1	DB Systems 5100A	Side Arms	(6) 7/8" Coax	ITT
		1	VertexRSI 101V VPD			
		4	DB Systems 5100A-D			

Equipment to be Removed

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

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
130.0	130.0	3	Kathrein Smart Bias Tee	Flush	(6) 1 5/8" Coax	Metro PCS
		3	Andrew LNX-6515DS-VTM			

¹Mount 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).

Install proposed coax outside the pole shaft, alongside existing. Stacking coax is not allowed.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	69%	Pass
Shaft	96%	Pass
Base Plate	56%	Pass
Flanges	79%	Pass
Reinforcement	74%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	2,203.7	82%
Axial (Kips)	69.3	47%
Shear (Kips)	23.8	25%

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. A factor of safety greater than 2 is included.

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
130.0	Kathrein Smart Bias Tee	Metro PCS	1.968	2.055
	Andrew LNX-6515DS-VTM			
120.0	DragonWave A-ANT-11G-2.5-C	Clearwire Corporation	1.626	1.864

*Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G



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:

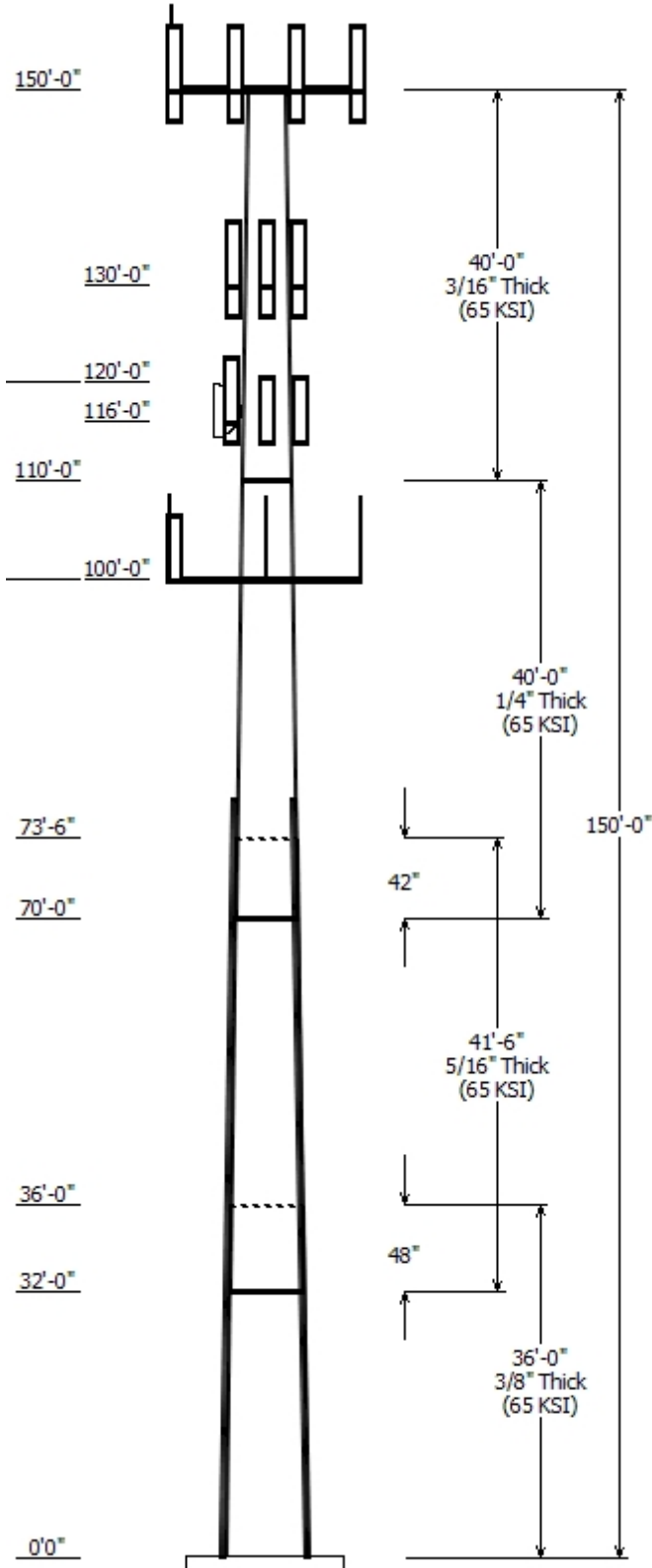
- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements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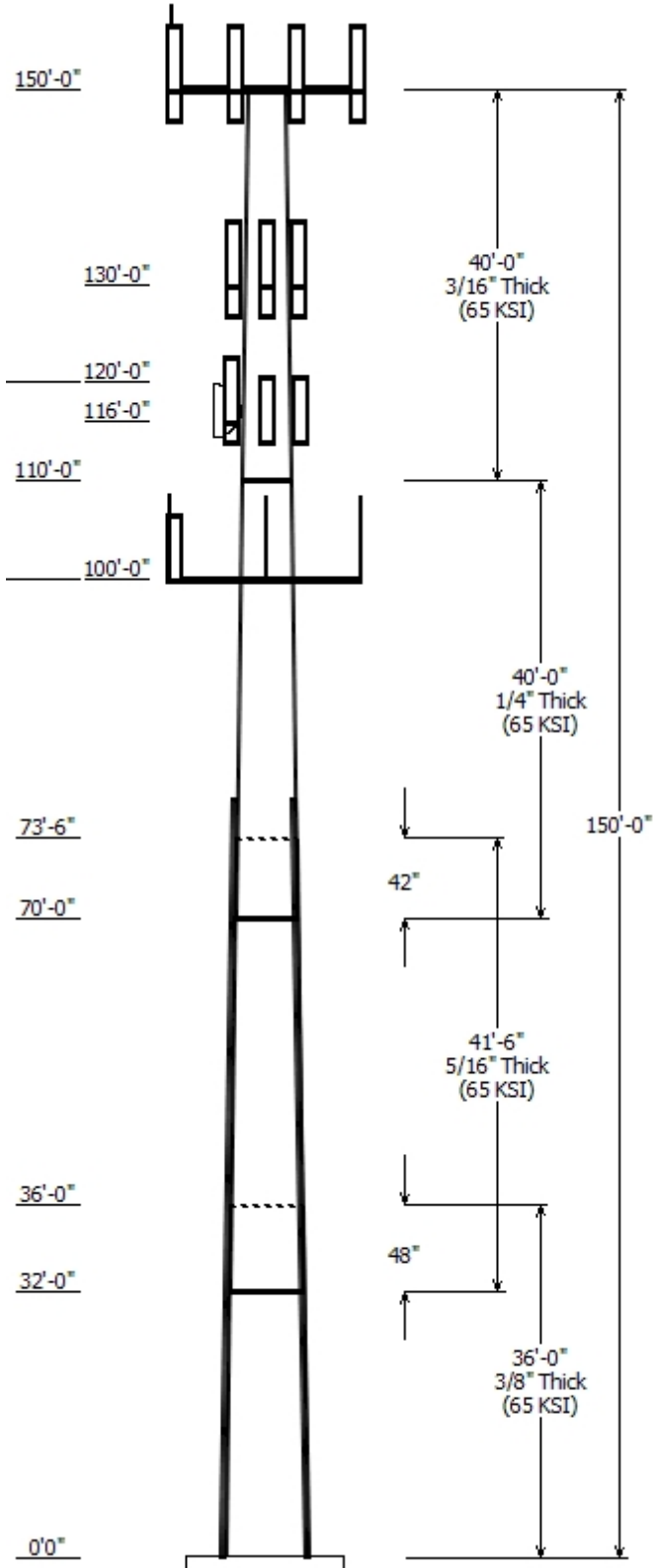


Job Information	
Pole :	302475
Code :	ANSI/TIA-222-G
Description :	150' ITT Meyer Type "B" Monopole
Client :	Metro PCS
Struct Class :	II
Location :	Sttn - Southington, CT
Shape :	12 Sides
Exposure :	B
Height :	150.00 (ft)
Topo :	1
Base Elev (ft):	0.00
Taper:	0.15083(in/ft)

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap		Steel Grade (ksi)
		Across Flats Top	Across Flats Bottom			Length (in)	Taper (in/ft)	
1	36.000	30.57	36.00	0.375		0.000	0.150800	65
2	41.500	25.53	31.79	0.313	Slip Joint	48.000	0.150800	65
3	40.000	20.53	26.56	0.250	Slip Joint	42.000	0.150800	65
4	40.000	14.50	20.53	0.188	Butt Joint	0.000	0.150800	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
150.000	157.000	1	10' Omni	
150.000	153.000	6	Powerwave TT08-19DB111-001	
150.000	152.000	6	Powerwave LGP13519	
150.000	152.000	2	Andrew SBNH-1D6565C (60.8	
150.000	152.000	6	Ericsson RRUS 11 (Band 12)	
150.000	150.000	1	Raycap DC6-48-60-18-8F (23.5"	
150.000	152.000	3	Kathrein Scala 800 10764	
150.000	152.000	4	KMW AM-X-CD-16-65-00T-RET	
150.000	150.000	1	Round Platform w/ Handrails	
130.000	132.000	3	Andrew LNX-6515DS-VTM	
130.000	130.000	3	Kathrein Smart Bias Tee	
130.000	132.000	3	RFS APXV18-206517S-C	
120.000	118.000	1	DragonWave A-ANT-11G-2.5-C	
120.000	118.000	3	Argus LLPX310R	
120.000	118.000	1	DragonWave Horizon Compact	
120.000	118.000	3	NextNet BTS-2500	
120.000	120.000	1	Clearwire Mount	
116.000	118.000	1	18" x 12" Junction Box	
100.000	104.000	1	DB Systems 5100A	
100.000	104.000	1	VertexRSI 101V VPD	
100.000	104.000	4	DB Systems 5100A-D	
100.000	100.000	3	Round Side Arm	

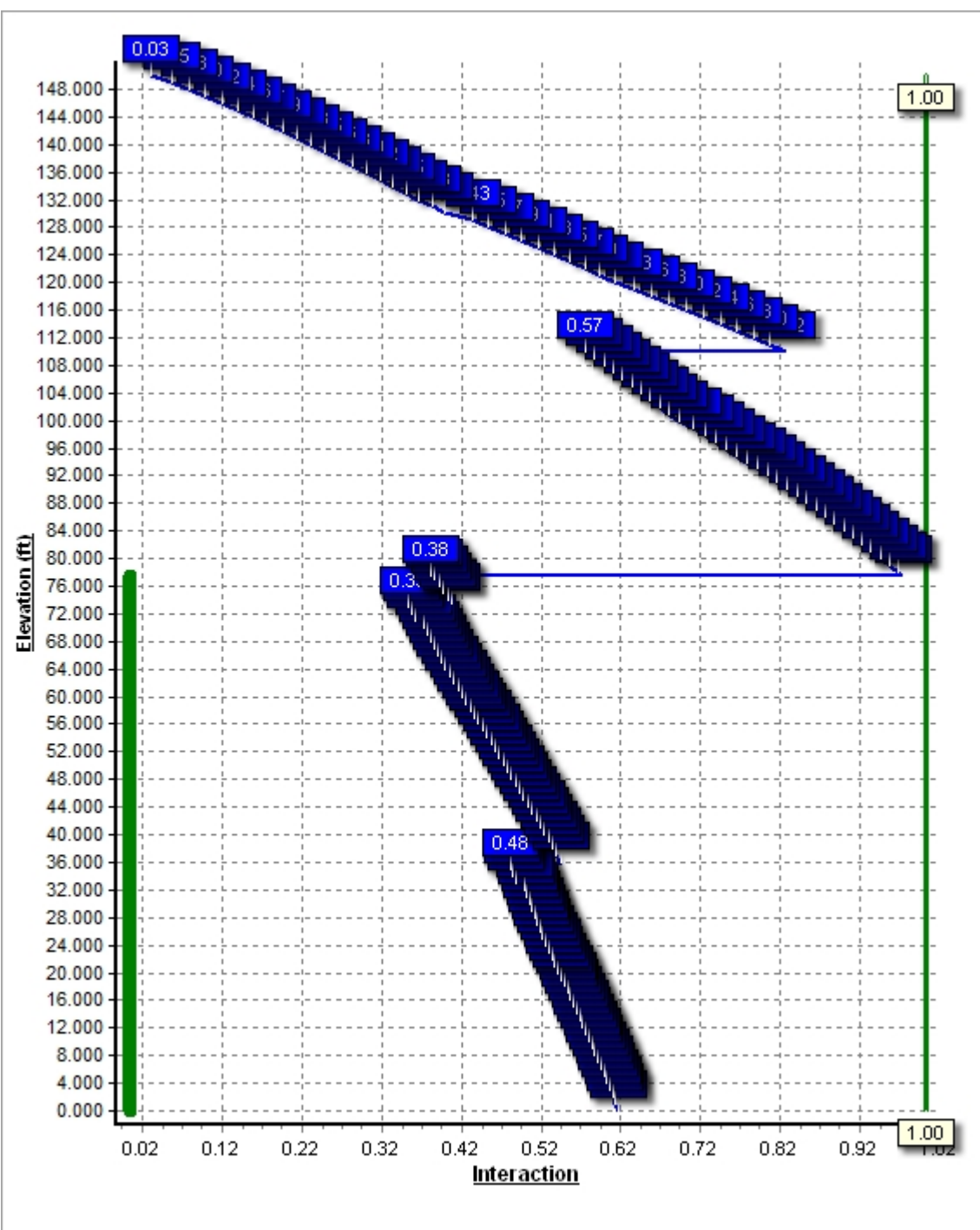
Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
0.000	82.500	#20 Dywidag Bars	Yes
0.000	100.0	7/8" Coax	Yes
0.000	116.0	2" Conduit	Yes
0.000	120.0	1/2" Coax	Yes
0.000	120.0	5/16" Coax	Yes
0.000	130.0	1 5/8" Coax	Yes
0.000	130.0	1 5/8" Coax	Yes
0.000	150.0	0.39" Cable	No
0.000	150.0	0.78" 8 AWG 6	No
0.000	150.0	1 5/8" Coax	No
0.000	150.0	3" Conduit	No
0.000	150.0	7/8" Coax	No



Load Cases	
1.2D + 1.6W	100 mph with No Ice
0.9D + 1.6W	100 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Lateral
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Modal
1.0D + 1.0W	Serviceability 60 mph

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	2216.03	23.88	34.83
0.9D + 1.6W	2132.37	23.37	26.12
1.2D + 1.0Di + 1.0Wi	563.13	5.37	69.54
(1.2 + 0.2Sds) * DL + E ELFM	141.97	1.13	35.66
(1.2 + 0.2Sds) * DL + E EMAM	210.62	1.80	35.66
(0.9 - 0.2Sds) * DL + E ELFM	138.98	1.13	24.77
(0.9 - 0.2Sds) * DL + E EMAM	205.50	1.79	24.77
1.0D + 1.0W	483.44	5.26	29.04

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	120.00	19.679	1.887



Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

Analysis Parameters

Location:	Hartford County, CT	Height (ft):	150
Code:	ANSI/TIA-222-G	Base Diameter (in):	36.00
Shape:	12 Sides	Top Diameter (in):	14.50
Pole Type:	Taper	Taper (in/ft) :	0.151
Pole Manufacturer:	ITT Meyer		

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	100 mph
Exposure Category:	B	Design Wind Speed With Ice:	50 mph
Topographic Category:	1	Operational Wind Speed:	60 mph
Crest Height:	0.0 ft	Design Ice Thickness:	1.00 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	2.76		
T _L (sec):	6	p:	1.3
S _s :	0.184	S ₁ :	0.064
F _a :	1.600	F _v :	2.400
S _{ds} :	0.196	S _{d1} :	0.102
		C _s :	0.030
		C _s Max:	0.030
		C _s Min:	0.030

Load Cases

1.2D + 1.6W	100 mph with No Ice
0.9D + 1.6W	100 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
(1.2 + 0.2Sds) * DL + E ELFM	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E EMAM	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E ELFM	Seismic (Reduced DL) Equivalent Lateral Forces Method
(0.9 - 0.2Sds) * DL + E EMAM	Seismic (Reduced DL) Equivalent Modal Analysis Method
1.0D + 1.0W	Serviceability 60 mph

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

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 ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-12	36.000	0.3750	65		0.00	4,868	36.00	0.00	43.02	6968.5	23.58	96.00	30.57	36.00	36.46	4243.1	19.70	81.52	0.150830
2-12	41.500	0.3125	65	Slip	48.00	4,029	31.79	32.00	31.68	4009.1	25.12	101.76	25.53	73.50	25.38	2061.9	19.75	81.72	0.150830
3-12	40.000	0.2500	65	Slip	42.00	2,553	26.56	70.00	21.19	1872.8	26.33	106.27	20.53	110.00	16.33	857.5	19.86	82.13	0.150830
4-12	40.000	0.1875	65	Butt	0.00	1,424	20.53	110.00	12.28	649.1	27.20	109.51	14.50	150.00	8.64	226.0	18.58	77.34	0.150830
Shaft Weight						12,874													

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		
150.00	10' Omni	1	25.00	3.000	1.00	226.56	6.667	1.00	0.000	7.000
150.00	Andrew SBNH-1D6565C (60.8	2	60.80	11.440	0.70	433.76	13.676	0.70	0.000	2.000
150.00	Ericsson RRUS 11 (Band 12)	6	50.00	2.570	0.50	167.46	3.465	0.50	0.000	2.000
150.00	Kathrein Scala 800 10764	3	40.80	5.870	0.67	254.08	7.336	0.67	0.000	2.000
150.00	KMW AM-X-CD-16-65-00T-	4	48.50	8.020	0.67	317.32	9.784	0.67	0.000	2.000
150.00	Powerwave LGP13519	6	5.30	0.340	0.50	29.37	0.674	0.50	0.000	2.000
150.00	Powerwave TT08-19DB111-	6	22.00	0.920	0.50	74.97	1.368	0.50	0.000	3.000
150.00	Raycap DC6-48-60-18-8F	1	20.00	1.110	0.67	136.26	2.755	0.67	0.000	0.000
150.00	Round Platform w/ Handrails	1	2000.00	27.200	1.00	3,730.68	59.848	1.00	0.000	0.000
130.00	Andrew LNX-6515DS-VTM	3	51.30	11.430	0.70	417.50	13.633	0.70	0.000	2.000
130.00	Kathrein Smart Bias Tee	3	3.31	0.090	0.50	14.86	0.321	0.50	0.000	0.000
130.00	RFS APXV18-206517S-C	3	26.40	5.160	0.68	195.66	6.827	0.68	0.000	2.000
120.00	Argus LLPX310R	3	28.60	4.290	0.63	179.51	5.488	0.63	0.000	-2.000
120.00	Clearwire Mount	1	560.00	8.500	1.00	1,171.43	17.781	1.00	0.000	0.000
120.00	DragonWave A-ANT-11G-2.5-	1	47.60	8.670	1.00	214.12	10.926	1.00	0.000	-2.000
120.00	DragonWave Horizon	1	10.60	0.430	0.50	54.93	0.775	0.50	0.000	-2.000
120.00	NextNet BTS-2500	3	35.00	1.820	0.50	117.22	2.597	0.50	0.000	-2.000
116.00	18" x 12" Junction Box	1	15.00	1.800	0.50	110.33	2.561	0.50	0.000	2.000
100.00	DB Systems 5100A	1	21.00	2.070	1.00	151.83	3.865	1.00	0.000	4.000
100.00	DB Systems 5100A-D	4	38.00	3.110	1.00	244.33	4.969	1.00	0.000	4.000
100.00	Round Side Arm	3	150.00	5.200	0.67	243.80	8.684	0.67	0.000	0.000
100.00	VertexRSI 101V VPD	1	4.00	2.540	0.90	102.32	3.253	0.90	0.000	4.000
Totals		58	4640.83			14,911.26			Number of Loadings : 22	

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Diameter (in)	Coax Weight (lb/ft)	Flat	Projected Width (in)	Exposed To Wind	Carrier
0.00	150.00	1	0.39" Cable	0.39	0.07	N	0.00	N	AT&T Mobility
0.00	150.00	2	0.78" 8 AWG 6	0.78	0.59	N	0.00	N	AT&T Mobility
0.00	150.00	1	1 5/8" Coax	1.98	1.04	N	0.00	N	AT&T Mobility
0.00	150.00	3	3" Conduit	3.50	7.58	N	0.00	N	AT&T Mobility
0.00	150.00	13	7/8" Coax	1.09	0.33	N	0.00	N	AT&T Mobility
0.00	130.00	6	1 5/8" Coax	1.98	0.82	N	1.98	Y	Metro PCS
0.00	130.00	6	1 5/8" Coax	1.98	0.82	N	0.00	Y	Metro PCS
0.00	120.00	1	1/2" Coax	0.63	0.15	N	0.00	Y	Clearwire Corporation
0.00	120.00	6	5/16" Coax	0.31	0.05	N	0.00	Y	Clearwire Corporation
0.00	116.00	1	2" Conduit	2.38	3.65	N	2.38	Y	Clearwire Corporation
0.00	100.00	6	7/8" Coax	1.09	0.33	N	0.00	Y	ITT Corporation
0.00	82.50	4	#20 Dywidag Bars	2.72	0.00	N	3.64	Y	

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Site Name: Sttn - Southington, CT

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Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	— Intermediate Connections —			Connectors	Continuation?
						Description	Spacing (in)	Len (in)		
0.00	77.44	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Segment Properties (Max Len : 1.ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Fy (ksi)	S (in ³)	Z (in ³)	Weight (lb)	Additional Reinforcing		
												Area (in ²)	Ix (in ⁴)	Weight (lb)
0.00		0.3750	36.000	43.017	6,968.5	23.58	96.00	79.0	373.9	0.0	0.0	19.64	4,521	0.0
1.00		0.3750	35.849	42.835	6,880.3	23.47	95.60	79.1	370.8	0.0	146.1	19.64	4,490	66.8
2.00		0.3750	35.698	42.653	6,793.0	23.36	95.20	79.2	367.6	0.0	145.4	19.64	4,458	66.8
3.00		0.3750	35.548	42.471	6,706.3	23.26	94.79	79.4	364.5	0.0	144.8	19.64	4,426	66.8
4.00		0.3750	35.397	42.289	6,620.4	23.15	94.39	79.5	361.3	0.0	144.2	19.64	4,395	66.8
5.00		0.3750	35.246	42.107	6,535.2	23.04	93.99	79.6	358.2	0.0	143.6	19.64	4,364	66.8
6.00		0.3750	35.095	41.924	6,450.8	22.93	93.59	79.7	355.1	0.0	143.0	19.64	4,333	66.8
7.00		0.3750	34.944	41.742	6,367.1	22.83	93.18	79.8	352.0	0.0	142.3	19.64	4,302	66.8
8.00		0.3750	34.793	41.560	6,284.1	22.72	92.78	79.9	348.9	0.0	141.7	19.64	4,271	66.8
9.00		0.3750	34.643	41.378	6,201.9	22.61	92.38	80.1	345.8	0.0	141.1	19.64	4,240	66.8
10.00		0.3750	34.492	41.196	6,120.3	22.50	91.98	80.2	342.8	0.0	140.5	19.64	4,209	66.8
11.00		0.3750	34.341	41.014	6,039.5	22.39	91.58	80.3	339.8	0.0	139.9	19.64	4,179	66.8
12.00		0.3750	34.190	40.832	5,959.4	22.29	91.17	80.4	336.7	0.0	139.3	19.64	4,148	66.8
13.00		0.3750	34.039	40.650	5,880.0	22.18	90.77	80.5	333.7	0.0	138.6	19.64	4,118	66.8
14.00		0.3750	33.888	40.467	5,801.3	22.07	90.37	80.6	330.7	0.0	138.0	19.64	4,088	66.8
15.00		0.3750	33.738	40.285	5,723.4	21.96	89.97	80.8	327.7	0.0	137.4	19.64	4,057	66.8
16.00		0.3750	33.587	40.103	5,646.1	21.86	89.56	80.9	324.8	0.0	136.8	19.64	4,027	66.8
17.00		0.3750	33.436	39.921	5,569.5	21.75	89.16	81.0	321.8	0.0	136.2	19.64	3,998	66.8
18.00		0.3750	33.285	39.739	5,493.6	21.64	88.76	81.1	318.8	0.0	135.5	19.64	3,968	66.8
19.00		0.3750	33.134	39.557	5,418.4	21.53	88.36	81.2	315.9	0.0	134.9	19.64	3,938	66.8
20.00		0.3750	32.983	39.375	5,343.9	21.42	87.96	81.3	313.0	0.0	134.3	19.64	3,908	66.8
21.00		0.3750	32.833	39.193	5,270.1	21.32	87.55	81.5	310.1	0.0	133.7	19.64	3,879	66.8
22.00		0.3750	32.682	39.010	5,197.0	21.21	87.15	81.6	307.2	0.0	133.1	19.64	3,850	66.8
23.00		0.3750	32.531	38.828	5,124.5	21.10	86.75	81.7	304.3	0.0	132.4	19.64	3,820	66.8
24.00		0.3750	32.380	38.646	5,052.8	20.99	86.35	81.8	301.5	0.0	131.8	19.64	3,791	66.8
25.00		0.3750	32.229	38.464	4,981.7	20.89	85.94	81.9	298.6	0.0	131.2	19.64	3,762	66.8
26.00		0.3750	32.078	38.282	4,911.2	20.78	85.54	81.9	295.8	0.0	130.6	19.64	3,733	66.8
27.00		0.3750	31.928	38.100	4,841.5	20.67	85.14	81.9	292.9	0.0	130.0	19.64	3,705	66.8
28.00		0.3750	31.777	37.918	4,772.4	20.56	84.74	81.9	290.1	0.0	129.3	19.64	3,676	66.8
29.00		0.3750	31.626	37.736	4,703.9	20.45	84.34	81.9	287.3	0.0	128.7	19.64	3,647	66.8
30.00		0.3750	31.475	37.553	4,636.2	20.35	83.93	81.9	284.6	0.0	128.1	19.64	3,619	66.8
31.00		0.3750	31.324	37.371	4,569.0	20.24	83.53	81.9	281.8	0.0	127.5	19.64	3,590	66.8
32.00	Bot - Section 2	0.3750	31.173	37.189	4,502.6	20.13	83.13	81.9	279.0	0.0	126.9	19.64	3,562	66.8
33.00		0.3750	31.023	37.007	4,436.7	20.02	82.73	81.9	276.3	0.0	126.3	19.64	3,534	66.8
34.00		0.3750	30.872	36.825	4,371.5	19.92	82.32	81.9	273.6	0.0	125.7	19.64	3,506	66.8
35.00		0.3750	30.721	36.643	4,307.0	19.81	81.92	81.9	270.8	0.0	125.1	19.64	3,478	66.8
36.00	Top - Section 1	0.3125	31.195	31.076	3,783.0	24.60	99.82	77.9	234.3	0.0	230.4	19.64	3,566	66.8
37.00		0.3125	31.044	30.924	3,727.8	24.47	99.34	78.0	232.0	0.0	105.5	19.64	3,538	66.8
38.00		0.3125	30.893	30.772	3,673.2	24.35	98.86	78.2	229.7	0.0	105.0	19.64	3,510	66.8
39.00		0.3125	30.743	30.620	3,619.1	24.22	98.38	78.3	227.4	0.0	104.5	19.64	3,482	66.8
40.00		0.3125	30.592	30.469	3,565.6	24.09	97.89	78.4	225.2	0.0	103.9	19.64	3,454	66.8
41.00		0.3125	30.441	30.317	3,512.6	23.96	97.41	78.6	222.9	0.0	103.4	19.64	3,427	66.8
42.00		0.3125	30.290	30.165	3,460.1	23.83	96.93	78.7	220.7	0.0	102.9	19.64	3,399	66.8
43.00		0.3125	30.139	30.013	3,408.1	23.70	96.45	78.9	218.5	0.0	102.4	19.64	3,372	66.8
44.00		0.3125	29.988	29.861	3,356.7	23.57	95.96	79.0	216.2	0.0	101.9	19.64	3,344	66.8
45.00		0.3125	29.838	29.710	3,305.7	23.44	95.48	79.1	214.0	0.0	101.4	19.64	3,317	66.8
46.00		0.3125	29.687	29.558	3,255.3	23.31	95.00	79.3	211.8	0.0	100.8	19.64	3,290	66.8
47.00		0.3125	29.536	29.406	3,205.4	23.18	94.52	79.4	209.7	0.0	100.3	19.64	3,263	66.8
48.00		0.3125	29.385	29.254	3,156.1	23.05	94.03	79.6	207.5	0.0	99.8	19.64	3,236	66.8
49.00		0.3125	29.234	29.103	3,107.2	22.92	93.55	79.7	205.3	0.0	99.3	19.64	3,209	66.8
50.00		0.3125	29.083	28.951	3,058.8	22.79	93.07	79.9	203.2	0.0	98.8	19.64	3,182	66.8
51.00		0.3125	28.933	28.799	3,011.0	22.66	92.58	80.0	201.0	0.0	98.3	19.64	3,156	66.8
52.00		0.3125	28.782	28.647	2,963.6	22.54	92.10	80.1	198.9	0.0	97.7	19.64	3,129	66.8
53.00		0.3125	28.631	28.495	2,916.8	22.41	91.62	80.3	196.8	0.0	97.2	19.64	3,103	66.8
54.00		0.3125	28.480	28.344	2,870.4	22.28	91.14	80.4	194.7	0.0	96.7	19.64	3,077	66.8
55.00		0.3125	28.329	28.192	2,824.6	22.15	90.65	80.6	192.6	0.0	96.2	19.64	3,051	66.8
56.00		0.3125	28.179	28.040	2,779.2	22.02	90.17	80.7	190.5	0.0	95.7	19.64	3,025	66.8
57.00		0.3125	28.028	27.888	2,734.3	21.89	89.69	80.8	188.5	0.0	95.2	19.64	2,999	66.8

58.00		0.3125	27.877	27.737	2,689.9	21.76	89.21	81.0	186.4	0.0	94.6	19.64	2,973	66.8
59.00		0.3125	27.726	27.585	2,646.0	21.63	88.72	81.1	184.4	0.0	94.1	19.64	2,947	66.8
60.00		0.3125	27.575	27.433	2,602.5	21.50	88.24	81.3	182.3	0.0	93.6	19.64	2,922	66.8
61.00		0.3125	27.424	27.281	2,559.6	21.37	87.76	81.4	180.3	0.0	93.1	19.64	2,896	66.8
62.00		0.3125	27.274	27.130	2,517.1	21.24	87.28	81.5	178.3	0.0	92.6	19.64	2,871	66.8
63.00		0.3125	27.123	26.978	2,475.1	21.11	86.79	81.7	176.3	0.0	92.1	19.64	2,846	66.8
64.00		0.3125	26.972	26.826	2,433.6	20.98	86.31	81.8	174.3	0.0	91.5	19.64	2,821	66.8
65.00		0.3125	26.821	26.674	2,392.5	20.85	85.83	81.9	172.3	0.0	91.0	19.64	2,796	66.8
66.00		0.3125	26.670	26.522	2,351.9	20.72	85.34	81.9	170.4	0.0	90.5	19.64	2,771	66.8
67.00		0.3125	26.519	26.371	2,311.7	20.60	84.86	81.9	168.4	0.0	90.0	19.64	2,746	66.8
68.00		0.3125	26.369	26.219	2,272.1	20.47	84.38	81.9	166.5	0.0	89.5	19.64	2,721	66.8
69.00		0.3125	26.218	26.067	2,232.8	20.34	83.90	81.9	164.5	0.0	89.0	19.64	2,697	66.8
70.00	Bot - Section 3	0.3125	26.067	25.915	2,194.0	20.21	83.41	81.9	162.6	0.0	88.4	19.64	2,672	66.8
71.00		0.3125	25.916	25.764	2,155.7	20.08	82.93	81.9	160.7	0.0	159.8	19.64	2,729	66.8
72.00		0.3125	25.765	25.612	2,117.9	19.95	82.45	81.9	158.8	0.0	158.9	19.64	2,704	66.8
73.00		0.3125	25.614	25.460	2,080.4	19.82	81.97	81.9	156.9	0.0	157.9	19.64	2,680	66.8
73.50	Top - Section 2	0.2500	26.039	20.760	1,762.3	25.76	104.16	76.6	130.7	0.0	78.6	19.64	2,668	33.4
74.00		0.2500	25.964	20.699	1,746.9	25.68	103.85	76.7	130.0	0.0	35.3	19.64	2,655	33.4
75.00		0.2500	25.813	20.578	1,716.3	25.52	103.25	76.9	128.5	0.0	70.2	19.64	2,631	66.8
76.00		0.2500	25.662	20.457	1,686.1	25.36	102.65	77.1	126.9	0.0	69.8	19.64	2,607	66.8
77.00		0.2500	25.511	20.335	1,656.3	25.20	102.04	77.2	125.4	0.0	69.4	19.64	2,583	66.8
77.44	Reinf. Top	0.2500	25.445	20.282	1,643.3	25.13	101.78	77.3	124.8	0.0	30.4	19.64	2,572	29.4
78.00		0.2500	25.360	20.214	1,626.8	25.04	101.44	77.4	123.9	0.0	38.6			
79.00		0.2500	25.209	20.092	1,597.7	24.88	100.84	77.6	122.4	0.0	68.6			
80.00		0.2500	25.059	19.971	1,568.9	24.71	100.23	77.8	120.9	0.0	68.2			
81.00		0.2500	24.908	19.850	1,540.4	24.55	99.63	77.9	119.5	0.0	67.8			
82.00		0.2500	24.757	19.728	1,512.3	24.39	99.03	78.1	118.0	0.0	67.3			
83.00		0.2500	24.606	19.607	1,484.6	24.23	98.42	78.3	116.6	0.0	66.9			
84.00		0.2500	24.455	19.485	1,457.2	24.07	97.82	78.5	115.1	0.0	66.5			
85.00		0.2500	24.304	19.364	1,430.1	23.91	97.22	78.6	113.7	0.0	66.1			
86.00		0.2500	24.154	19.242	1,403.4	23.74	96.61	78.8	112.2	0.0	65.7			
87.00		0.2500	24.003	19.121	1,377.0	23.58	96.01	79.0	110.8	0.0	65.3			
88.00		0.2500	23.852	19.000	1,350.9	23.42	95.41	79.2	109.4	0.0	64.9			
89.00		0.2500	23.701	18.878	1,325.2	23.26	94.80	79.3	108.0	0.0	64.4			
90.00		0.2500	23.550	18.757	1,299.8	23.10	94.20	79.5	106.6	0.0	64.0			
91.00		0.2500	23.399	18.635	1,274.7	22.94	93.60	79.7	105.2	0.0	63.6			
92.00		0.2500	23.249	18.514	1,249.9	22.77	92.99	79.9	103.9	0.0	63.2			
93.00		0.2500	23.098	18.392	1,225.5	22.61	92.39	80.1	102.5	0.0	62.8			
94.00		0.2500	22.947	18.271	1,201.4	22.45	91.79	80.2	101.1	0.0	62.4			
95.00		0.2500	22.796	18.150	1,177.6	22.29	91.18	80.4	99.8	0.0	62.0			
96.00		0.2500	22.645	18.028	1,154.1	22.13	90.58	80.6	98.5	0.0	61.6			
97.00		0.2500	22.494	17.907	1,131.0	21.97	89.98	80.8	97.1	0.0	61.1			
98.00		0.2500	22.344	17.785	1,108.1	21.80	89.37	80.9	95.8	0.0	60.7			
99.00		0.2500	22.193	17.664	1,085.6	21.64	88.77	81.1	94.5	0.0	60.3			
100.0		0.2500	22.042	17.543	1,063.3	21.48	88.17	81.3	93.2	0.0	59.9			
101.0		0.2500	21.891	17.421	1,041.4	21.32	87.56	81.5	91.9	0.0	59.5			
102.0		0.2500	21.740	17.300	1,019.8	21.16	86.96	81.6	90.6	0.0	59.1			
103.0		0.2500	21.590	17.178	998.5	21.00	86.36	81.8	89.3	0.0	58.7			
104.0		0.2500	21.439	17.057	977.4	20.83	85.75	81.9	88.1	0.0	58.2			
105.0		0.2500	21.288	16.935	956.7	20.67	85.15	81.9	86.8	0.0	57.8			
106.0		0.2500	21.137	16.814	936.3	20.51	84.55	81.9	85.6	0.0	57.4			
107.0		0.2500	20.986	16.693	916.2	20.35	83.94	81.9	84.3	0.0	57.0			
108.0		0.2500	20.835	16.571	896.3	20.19	83.34	81.9	83.1	0.0	56.6			
109.0		0.2500	20.685	16.450	876.7	20.03	82.74	81.9	81.9	0.0	56.2			
110.0	Top - Section 3	0.2500	20.534	16.328	857.5	19.86	82.13	81.9	80.7	0.0	55.8			
110.0	Bot - Section 4	0.1875	20.534	12.284	649.1	27.20	109.51	75.0	61.1	0.0				
111.0		0.1875	20.383	12.193	634.7	26.98	108.71	75.3	60.2	0.0	41.6			
112.0		0.1875	20.232	12.102	620.6	26.77	107.90	75.5	59.3	0.0	41.3			
113.0		0.1875	20.081	12.011	606.7	26.55	107.10	75.8	58.4	0.0	41.0			
114.0		0.1875	19.930	11.920	593.0	26.34	106.30	76.0	57.5	0.0	40.7			
115.0		0.1875	19.780	11.829	579.5	26.12	105.49	76.2	56.6	0.0	40.4			
116.0		0.1875	19.629	11.738	566.3	25.91	104.69	76.5	55.7	0.0	40.1			
117.0		0.1875	19.478	11.647	553.2	25.69	103.88	76.7	54.9	0.0	39.8			
118.0		0.1875	19.327	11.556	540.3	25.48	103.08	76.9	54.0	0.0	39.5			

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

119.0	0.1875	19.176	11.464	527.6	25.26	102.27	77.2	53.2	0.0	39.2
120.0	0.1875	19.025	11.373	515.2	25.04	101.47	77.4	52.3	0.0	38.9
121.0	0.1875	18.875	11.282	502.9	24.83	100.66	77.6	51.5	0.0	38.5
122.0	0.1875	18.724	11.191	490.8	24.61	99.86	77.9	50.6	0.0	38.2
123.0	0.1875	18.573	11.100	478.9	24.40	99.06	78.1	49.8	0.0	37.9
124.0	0.1875	18.422	11.009	467.2	24.18	98.25	78.3	49.0	0.0	37.6
125.0	0.1875	18.271	10.918	455.7	23.97	97.45	78.6	48.2	0.0	37.3
126.0	0.1875	18.120	10.827	444.4	23.75	96.64	78.8	47.4	0.0	37.0
127.0	0.1875	17.970	10.736	433.3	23.54	95.84	79.0	46.6	0.0	36.7
128.0	0.1875	17.819	10.645	422.4	23.32	95.03	79.3	45.8	0.0	36.4
129.0	0.1875	17.668	10.554	411.6	23.10	94.23	79.5	45.0	0.0	36.1
130.0	0.1875	17.517	10.463	401.1	22.89	93.42	79.8	44.2	0.0	35.8
131.0	0.1875	17.366	10.372	390.7	22.67	92.62	80.0	43.5	0.0	35.4
132.0	0.1875	17.215	10.281	380.5	22.46	91.82	80.2	42.7	0.0	35.1
133.0	0.1875	17.065	10.190	370.5	22.24	91.01	80.5	41.9	0.0	34.8
134.0	0.1875	16.914	10.098	360.6	22.03	90.21	80.7	41.2	0.0	34.5
135.0	0.1875	16.763	10.007	350.9	21.81	89.40	80.9	40.4	0.0	34.2
136.0	0.1875	16.612	9.916	341.5	21.60	88.60	81.2	39.7	0.0	33.9
137.0	0.1875	16.461	9.825	332.1	21.38	87.79	81.4	39.0	0.0	33.6
138.0	0.1875	16.310	9.734	323.0	21.17	86.99	81.6	38.3	0.0	33.3
139.0	0.1875	16.160	9.643	314.0	20.95	86.18	81.9	37.5	0.0	33.0
140.0	0.1875	16.009	9.552	305.2	20.73	85.38	81.9	36.8	0.0	32.7
141.0	0.1875	15.858	9.461	296.5	20.52	84.58	81.9	36.1	0.0	32.3
142.0	0.1875	15.707	9.370	288.1	20.30	83.77	81.9	35.4	0.0	32.0
143.0	0.1875	15.556	9.279	279.7	20.09	82.97	81.9	34.7	0.0	31.7
144.0	0.1875	15.405	9.188	271.6	19.87	82.16	81.9	34.1	0.0	31.4
145.0	0.1875	15.255	9.097	263.6	19.66	81.36	81.9	33.4	0.0	31.1
146.0	0.1875	15.104	9.006	255.8	19.44	80.55	81.9	32.7	0.0	30.8
147.0	0.1875	14.953	8.915	248.1	19.23	79.75	81.9	32.1	0.0	30.5
148.0	0.1875	14.802	8.824	240.6	19.01	78.94	81.9	31.4	0.0	30.2
149.0	0.1875	14.651	8.733	233.2	18.79	78.14	81.9	30.7	0.0	29.9
150.0	0.1875	14.500	8.641	226.0	18.58	77.34	81.9	30.1	0.0	29.6
										12,874.5

5,173.0

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:13 PM

Customer: Metro PCS

Load Case: 1.2D + 1.6W	100 mph with No Ice	36 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

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		55.7	0.0					0.0	0.0	55.7	0.0	0.0	0.0
1.00		111.2	175.3					24.0	134.4	135.2	309.7	0.0	0.0
2.00		110.7	174.5					24.0	134.4	134.7	308.9	0.0	0.0
3.00		110.3	173.8					24.0	134.4	134.2	308.2	0.0	0.0
4.00		109.8	173.1					24.0	134.4	133.8	307.5	0.0	0.0
5.00		109.3	172.3					24.0	134.4	133.3	306.7	0.0	0.0
6.00		108.9	171.6					24.0	134.4	132.8	306.0	0.0	0.0
7.00		108.4	170.8					24.0	134.4	132.4	305.2	0.0	0.0
8.00		107.9	170.1					24.0	134.4	131.9	304.5	0.0	0.0
9.00		107.5	169.3					24.0	134.4	131.4	303.7	0.0	0.0
10.00		107.0	168.6					24.0	134.4	131.0	303.0	0.0	0.0
11.00		106.5	167.8					24.0	134.4	130.5	302.3	0.0	0.0
12.00		106.1	167.1					24.0	134.4	130.0	301.5	0.0	0.0
13.00		105.6	166.4					24.0	134.4	129.6	300.8	0.0	0.0
14.00		105.1	165.6					24.0	134.4	129.1	300.0	0.0	0.0
15.00		104.7	164.9					24.0	134.4	128.6	299.3	0.0	0.0
16.00		104.2	164.1					24.0	134.4	128.2	298.5	0.0	0.0
17.00		103.7	163.4					24.0	134.4	127.7	297.8	0.0	0.0
18.00		103.2	162.6					24.0	134.4	127.2	297.1	0.0	0.0
19.00		102.8	161.9					24.0	134.4	126.7	296.3	0.0	0.0
20.00		102.3	161.2					24.0	134.4	126.3	295.6	0.0	0.0
21.00		101.8	160.4					24.0	134.4	125.8	294.8	0.0	0.0
22.00		101.4	159.7					24.0	134.4	125.3	294.1	0.0	0.0
23.00		100.9	158.9					24.0	134.4	124.9	293.3	0.0	0.0
24.00		100.4	158.2					24.0	134.4	124.4	292.6	0.0	0.0
25.00		100.0	157.4					24.0	134.4	123.9	291.8	0.0	0.0
26.00		99.5	156.7					24.0	134.4	123.5	291.1	0.0	0.0
27.00		99.0	155.9					24.0	134.4	123.0	290.4	0.0	0.0
28.00		98.6	155.2					24.0	134.4	122.5	289.6	0.0	0.0
29.00		98.1	154.5					24.0	134.4	122.1	288.9	0.0	0.0
30.00		97.9	153.7					24.0	134.4	121.9	288.1	0.0	0.0
31.00		98.2	153.0					24.1	134.4	122.3	287.4	0.0	0.0
32.00	Bot - Section 2	99.6	152.2					24.3	134.4	123.9	286.6	0.0	0.0
33.00		101.0	280.5					24.5	134.4	125.5	415.0	0.0	0.0
34.00		101.3	279.2					24.8	134.4	126.1	413.6	0.0	0.0
35.00		101.7	277.8					25.0	134.4	126.7	412.2	0.0	0.0
36.00	Top - Section 1	102.0	276.5					25.2	134.4	127.2	410.9	0.0	0.0
37.00		102.3	276.6					25.4	134.4	127.7	410.0	0.0	0.0
38.00		102.6	276.0					25.6	134.4	128.2	409.0	0.0	0.0
39.00		102.9	275.3					25.8	134.4	128.6	408.0	0.0	0.0
40.00		103.1	274.7					26.0	134.4	129.1	407.0	0.0	0.0
41.00		103.3	274.1					26.1	134.4	129.5	406.0	0.0	0.0
42.00		103.5	273.5					26.3	134.4	129.8	405.0	0.0	0.0
43.00		103.7	272.9					26.5	134.4	130.2	404.0	0.0	0.0
44.00		103.9	272.2					26.7	134.4	130.5	403.0	0.0	0.0
45.00		104.0	271.6					26.9	134.4	130.9	402.0	0.0	0.0
46.00		104.1	271.0					27.0	134.4	131.2	401.0	0.0	0.0
47.00		104.2	270.4					27.2	134.4	131.4	400.0	0.0	0.0

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:21 PM

Customer: Metro PCS

Load Case: 1.2D + 1.6W

100 mph with No Ice

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

48.00		104.3	119.8	27.4	134.4	131.7	254.2	0.0	0.0
49.00		104.4	119.1	27.5	134.4	131.9	253.6	0.0	0.0
50.00		104.5	118.5	27.7	134.4	132.2	252.9	0.0	0.0
51.00		104.5	117.9	27.8	134.4	132.4	252.3	0.0	0.0
52.00		104.6	117.3	28.0	134.4	132.6	251.7	0.0	0.0
53.00		104.6	116.7	28.1	134.4	132.7	251.1	0.0	0.0
54.00		104.6	116.0	28.3	134.4	132.9	250.5	0.0	0.0
55.00		104.6	115.4	28.5	134.4	133.0	249.8	0.0	0.0
56.00		104.6	114.8	28.6	134.4	133.2	249.2	0.0	0.0
57.00		104.5	114.2	28.7	134.4	133.3	248.6	0.0	0.0
58.00		104.5	113.6	28.9	134.4	133.4	248.0	0.0	0.0
59.00		104.4	112.9	29.0	134.4	133.5	247.4	0.0	0.0
60.00		104.4	112.3	29.2	134.4	133.5	246.7	0.0	0.0
61.00		104.3	111.7	29.3	134.4	133.6	246.1	0.0	0.0
62.00		104.2	111.1	29.5	134.4	133.6	245.5	0.0	0.0
63.00		104.1	110.5	29.6	134.4	133.7	244.9	0.0	0.0
64.00		104.0	109.8	29.7	134.4	133.7	244.3	0.0	0.0
65.00		103.9	109.2	29.9	134.4	133.7	243.6	0.0	0.0
66.00		103.7	108.6	30.0	134.4	133.7	243.0	0.0	0.0
67.00		103.6	108.0	30.1	134.4	133.7	242.4	0.0	0.0
68.00		103.4	107.4	30.2	134.4	133.7	241.8	0.0	0.0
69.00		103.3	106.8	30.4	134.4	133.6	241.2	0.0	0.0
70.00	Bot - Section 3	104.1	106.1	30.5	134.4	134.6	240.5	0.0	0.0
71.00		104.9	191.8	30.6	134.4	135.5	326.2	0.0	0.0
72.00		104.7	190.7	30.7	134.4	135.5	325.1	0.0	0.0
73.00		78.4	189.5	30.9	134.4	109.3	323.9	0.0	0.0
73.50	Top - Section 2	52.2	94.4	15.5	67.2	67.7	161.6	0.0	0.0
74.00		78.2	42.3	15.5	67.2	93.7	109.5	0.0	0.0
75.00		104.1	84.3	31.1	134.4	135.2	218.7	0.0	0.0
76.00		103.9	83.8	31.2	134.4	135.1	218.2	0.0	0.0
77.00		74.7	83.3	31.3	134.4	106.0	217.7	0.0	0.0
77.44	Reinf. Top	51.8	36.5	13.8	59.1	65.6	95.6	0.0	0.0
78.00		80.6	46.3	17.6	30.4	98.3	76.7	0.0	0.0
79.00		103.2	82.3	31.6	54.3	134.8	136.5	0.0	0.0
80.00		103.0	81.8	31.7	54.3	134.6	136.0	0.0	0.0
81.00		102.7	81.3	31.8	54.3	134.5	135.6	0.0	0.0
82.00		102.4	80.8	31.9	54.3	134.4	135.1	0.0	0.0
83.00		102.8	80.3	24.7	54.3	127.5	134.6	0.0	0.0
84.00		103.3	79.8	0.0	54.3	103.3	134.1	0.0	0.0
85.00		103.3	79.3	0.0	54.3	103.3	133.6	0.0	0.0
86.00		103.3	78.8	0.0	54.3	103.3	133.1	0.0	0.0
87.00		103.2	78.3	0.0	54.3	103.2	132.6	0.0	0.0
88.00		103.2	77.8	0.0	54.3	103.2	132.1	0.0	0.0
89.00		103.2	77.3	0.0	54.3	103.2	131.6	0.0	0.0
90.00		103.1	76.8	0.0	54.3	103.1	131.1	0.0	0.0
91.00		103.1	76.3	0.0	54.3	103.1	130.6	0.0	0.0
92.00		103.0	75.8	0.0	54.3	103.0	130.1	0.0	0.0
93.00		103.0	75.4	0.0	54.3	103.0	129.6	0.0	0.0
94.00		102.9	74.9	0.0	54.3	102.9	129.1	0.0	0.0
95.00		102.8	74.4	0.0	54.3	102.8	128.6	0.0	0.0
96.00		102.7	73.9	0.0	54.3	102.7	128.1	0.0	0.0
97.00		102.7	73.4	0.0	54.3	102.7	127.6	0.0	0.0
98.00		102.6	72.9	0.0	54.3	102.6	127.1	0.0	0.0
99.00		102.5	72.4	0.0	54.3	102.5	126.6	0.0	0.0
100.00	Appertunance(s)	102.4	71.9	1,016.9	0.0	2,299.1	752.4	0.0	0.0
101.00		102.3	71.4	0.0	51.9	102.3	123.3	0.0	0.0
102.00		102.2	70.9	0.0	51.9	102.2	122.8	0.0	0.0

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:21 PM

Customer: Metro PCS

Load Case: 1.2D + 1.6W	100 mph with No Ice				36 Iterations			
Gust Response Factor : 1.10					Wind Importance Factor : 1.00			
Dead Load Factor : 1.20								
Wind Load Factor : 1.60								

103.00	102.1	70.4					0.0	51.9	102.1	122.3	0.0	0.0	
104.00	102.0	69.9					0.0	51.9	102.0	121.8	0.0	0.0	
105.00	101.9	69.4					0.0	51.9	101.9	121.3	0.0	0.0	
106.00	101.8	68.9					0.0	51.9	101.8	120.8	0.0	0.0	
107.00	97.6	68.4					0.0	51.9	97.6	120.3	0.0	0.0	
108.00	93.3	67.9					18.8	51.9	112.1	119.8	0.0	0.0	
109.00	92.8	67.4					18.9	51.9	111.7	119.3	0.0	0.0	
110.00	Top - Section 3	92.4	66.9				18.9	51.9	111.3	118.8	0.0	0.0	
111.00		92.0	50.0				19.0	51.9	110.9	101.8	0.0	0.0	
112.00		91.5	49.6				19.0	51.9	110.5	101.5	0.0	0.0	
113.00		91.1	49.2				19.1	51.9	110.1	101.1	0.0	0.0	
114.00		90.6	48.9				19.1	51.9	109.7	100.7	0.0	0.0	
115.00		90.1	48.5				19.2	51.9	109.3	100.4	0.0	0.0	
116.00	Appertunance(s)	82.2	48.1	31.9	0.0	63.9	18.0	19.2	51.9	133.4	118.0	0.0	0.0
117.00		74.3	47.7					0.0	47.5	74.3	95.2	0.0	0.0
118.00		73.9	47.4					0.0	47.5	73.9	94.9	0.0	0.0
119.00		73.5	47.0					0.0	47.5	73.5	94.5	0.0	0.0
120.00	Appertunance(s)	73.2	46.6	1,078.5	0.0	-1,399.5	970.8	0.0	47.5	1,151.8	1,064.9	0.0	0.0
121.00		73.0	46.3					0.0	47.0	73.0	93.2	0.0	0.0
122.00		72.8	45.9					0.0	47.0	72.8	92.9	0.0	0.0
123.00		72.5	45.5					0.0	47.0	72.5	92.5	0.0	0.0
124.00		72.3	45.1					0.0	47.0	72.3	92.1	0.0	0.0
125.00		72.1	44.8					0.0	47.0	72.1	91.8	0.0	0.0
126.00		71.8	44.4					0.0	47.0	71.8	91.4	0.0	0.0
127.00		71.6	44.0					0.0	47.0	71.6	91.0	0.0	0.0
128.00		71.3	43.7					0.0	47.0	71.3	90.6	0.0	0.0
129.00		71.1	43.3					0.0	47.0	71.1	90.3	0.0	0.0
130.00	Appertunance(s)	69.8	42.9	1,587.3	0.0	3,162.3	291.6	0.0	47.0	1,657.1	381.5	0.0	0.0
131.00		68.5	42.5					0.0	35.2	68.5	77.7	0.0	0.0
132.00		68.0	42.2					0.0	35.2	68.0	77.3	0.0	0.0
133.00		67.6	41.8					0.0	35.2	67.6	77.0	0.0	0.0
134.00		67.1	41.4					0.0	35.2	67.1	76.6	0.0	0.0
135.00		66.6	41.0					0.0	35.2	66.6	76.2	0.0	0.0
136.00		66.2	40.7					0.0	35.2	66.2	75.9	0.0	0.0
137.00		65.7	40.3					0.0	35.2	65.7	75.5	0.0	0.0
138.00		65.3	39.9					0.0	35.2	65.3	75.1	0.0	0.0
139.00		64.8	39.6					0.0	35.2	64.8	74.7	0.0	0.0
140.00		64.3	39.2					0.0	35.2	64.3	74.4	0.0	0.0
141.00		63.8	38.8					0.0	35.2	63.8	74.0	0.0	0.0
142.00		63.4	38.4					0.0	35.2	63.4	73.6	0.0	0.0
143.00		62.9	38.1					0.0	35.2	62.9	73.3	0.0	0.0
144.00		62.4	37.7					0.0	35.2	62.4	72.9	0.0	0.0
145.00		61.9	37.3					0.0	35.2	61.9	72.5	0.0	0.0
146.00		61.4	37.0					0.0	35.2	61.4	72.1	0.0	0.0
147.00		60.9	36.6					0.0	35.2	60.9	71.8	0.0	0.0
148.00		60.4	36.2					0.0	35.2	60.4	71.4	0.0	0.0
149.00		59.9	35.8					0.0	35.2	59.9	71.0	0.0	0.0
150.00	Appertunance(s)	29.8	35.5	3,600.7	0.0	5,204.9	3,536.2	0.0	35.2	3,630.5	3,606.8	0.0	0.0
								Totals:	23,924.8	34,844.7	0.00	0.00	

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:22 PM

Customer: Metro PCS

Load Case: 1.2D + 1.6W

100 mph with No Ice

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-34.83	-23.88	0.00	-2,216.03	0.00	2,216.03	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.615
1.00	-34.50	-23.78	0.00	-2,192.15	0.00	2,192.15	3,050.02	1,525.01	4,454.72	2,200.02	0.01	-0.05	0.611
2.00	-34.17	-23.68	0.00	-2,168.37	0.00	2,168.37	3,041.56	1,520.78	4,423.28	2,184.49	0.02	-0.11	0.607
3.00	-33.84	-23.58	0.00	-2,144.69	0.00	2,144.69	3,033.07	1,516.53	4,391.90	2,168.99	0.05	-0.16	0.603
4.00	-33.51	-23.47	0.00	-2,121.12	0.00	2,121.12	3,024.53	1,512.27	4,360.56	2,153.52	0.09	-0.22	0.600
5.00	-33.18	-23.37	0.00	-2,097.64	0.00	2,097.64	3,015.96	1,507.98	4,329.28	2,138.07	0.15	-0.27	0.596
6.00	-32.85	-23.27	0.00	-2,074.27	0.00	2,074.27	3,007.35	1,503.68	4,298.05	2,122.64	0.21	-0.33	0.592
7.00	-32.53	-23.16	0.00	-2,051.01	0.00	2,051.01	2,998.70	1,499.35	4,266.87	2,107.25	0.28	-0.38	0.588
8.00	-32.20	-23.06	0.00	-2,027.84	0.00	2,027.84	2,990.02	1,495.01	4,235.75	2,091.88	0.37	-0.44	0.585
9.00	-31.88	-22.96	0.00	-2,004.79	0.00	2,004.79	2,981.29	1,490.65	4,204.68	2,076.53	0.47	-0.49	0.581
10.00	-31.55	-22.85	0.00	-1,981.83	0.00	1,981.83	2,972.53	1,486.26	4,173.67	2,061.22	0.58	-0.54	0.577
11.00	-31.23	-22.75	0.00	-1,958.98	0.00	1,958.98	2,963.72	1,481.86	4,142.71	2,045.93	0.70	-0.60	0.573
12.00	-30.91	-22.64	0.00	-1,936.23	0.00	1,936.23	2,954.88	1,477.44	4,111.81	2,030.67	0.83	-0.65	0.569
13.00	-30.59	-22.54	0.00	-1,913.59	0.00	1,913.59	2,946.00	1,473.00	4,080.97	2,015.44	0.97	-0.71	0.566
14.00	-30.27	-22.44	0.00	-1,891.05	0.00	1,891.05	2,937.08	1,468.54	4,050.18	2,000.23	1.12	-0.76	0.562
15.00	-29.95	-22.33	0.00	-1,868.61	0.00	1,868.61	2,928.13	1,464.06	4,019.46	1,985.06	1.29	-0.82	0.558
16.00	-29.63	-22.23	0.00	-1,846.28	0.00	1,846.28	2,919.13	1,459.57	3,988.79	1,969.91	1.47	-0.87	0.554
17.00	-29.32	-22.12	0.00	-1,824.05	0.00	1,824.05	2,910.10	1,455.05	3,958.19	1,954.80	1.66	-0.92	0.550
18.00	-29.00	-22.02	0.00	-1,801.93	0.00	1,801.93	2,901.03	1,450.51	3,927.64	1,939.72	1.85	-0.98	0.546
19.00	-28.69	-21.91	0.00	-1,779.92	0.00	1,779.92	2,891.92	1,445.96	3,897.16	1,924.66	2.07	-1.03	0.542
20.00	-28.37	-21.81	0.00	-1,758.01	0.00	1,758.01	2,882.77	1,441.38	3,866.74	1,909.64	2.29	-1.08	0.538
21.00	-28.06	-21.70	0.00	-1,736.20	0.00	1,736.20	2,873.58	1,436.79	3,836.39	1,894.65	2.52	-1.14	0.535
22.00	-27.75	-21.60	0.00	-1,714.50	0.00	1,714.50	2,864.35	1,432.18	3,806.10	1,879.69	2.77	-1.19	0.531
23.00	-27.44	-21.49	0.00	-1,692.90	0.00	1,692.90	2,855.09	1,427.54	3,775.87	1,864.76	3.02	-1.25	0.527
24.00	-27.13	-21.39	0.00	-1,671.41	0.00	1,671.41	2,845.78	1,422.89	3,745.71	1,849.87	3.29	-1.30	0.523
25.00	-26.82	-21.28	0.00	-1,650.03	0.00	1,650.03	2,835.18	1,417.59	3,713.97	1,834.19	3.57	-1.35	0.519
26.00	-26.51	-21.17	0.00	-1,628.75	0.00	1,628.75	2,821.76	1,410.88	3,678.67	1,816.76	3.86	-1.41	0.516
27.00	-26.21	-21.07	0.00	-1,607.57	0.00	1,607.57	2,808.33	1,404.17	3,643.55	1,799.41	4.16	-1.46	0.512
28.00	-25.90	-20.96	0.00	-1,586.51	0.00	1,586.51	2,794.91	1,397.45	3,608.60	1,782.15	4.47	-1.51	0.509
29.00	-25.59	-20.86	0.00	-1,565.54	0.00	1,565.54	2,781.48	1,390.74	3,573.81	1,764.97	4.79	-1.57	0.506
30.00	-25.29	-20.75	0.00	-1,544.69	0.00	1,544.69	2,768.06	1,384.03	3,539.19	1,747.87	5.12	-1.62	0.503
31.00	-24.99	-20.64	0.00	-1,523.94	0.00	1,523.94	2,754.63	1,377.32	3,504.74	1,730.86	5.47	-1.67	0.499
32.00	-24.69	-20.53	0.00	-1,503.30	0.00	1,503.30	2,741.21	1,370.60	3,470.46	1,713.93	5.83	-1.72	0.496
33.00	-24.26	-20.42	0.00	-1,482.77	0.00	1,482.77	2,727.78	1,363.89	3,436.35	1,697.08	6.19	-1.78	0.485
34.00	-23.83	-20.30	0.00	-1,462.35	0.00	1,462.35	2,714.36	1,357.18	3,402.41	1,680.32	6.57	-1.83	0.482
35.00	-23.40	-20.18	0.00	-1,442.05	0.00	1,442.05	2,700.94	1,350.47	3,368.63	1,663.64	6.96	-1.88	0.478
36.00	-22.98	-20.06	0.00	-1,421.87	0.00	1,421.87	2,178.16	1,089.08	2,770.79	1,368.39	7.36	-1.93	0.542
37.00	-22.70	-19.94	0.00	-1,401.81	0.00	1,401.81	2,171.44	1,085.72	2,748.62	1,357.44	7.77	-1.98	0.537
38.00	-22.43	-19.83	0.00	-1,381.87	0.00	1,381.87	2,164.69	1,082.35	2,726.49	1,346.51	8.19	-2.04	0.531
39.00	-22.16	-19.71	0.00	-1,362.04	0.00	1,362.04	2,157.90	1,078.95	2,704.40	1,335.60	8.62	-2.09	0.526
40.00	-21.88	-19.59	0.00	-1,342.33	0.00	1,342.33	2,151.08	1,075.54	2,682.35	1,324.71	9.07	-2.15	0.521
41.00	-21.61	-19.47	0.00	-1,322.73	0.00	1,322.73	2,144.21	1,072.10	2,660.33	1,313.84	9.52	-2.20	0.516
42.00	-21.34	-19.36	0.00	-1,303.26	0.00	1,303.26	2,137.30	1,068.65	2,638.35	1,302.98	9.99	-2.25	0.511
43.00	-21.07	-19.23	0.00	-1,283.91	0.00	1,283.91	2,130.36	1,065.18	2,616.41	1,292.15	10.47	-2.31	0.506
44.00	-20.80	-19.11	0.00	-1,264.67	0.00	1,264.67	2,123.38	1,061.69	2,594.51	1,281.33	10.96	-2.36	0.501
45.00	-20.53	-18.99	0.00	-1,245.56	0.00	1,245.56	2,116.36	1,058.18	2,572.65	1,270.54	11.46	-2.41	0.495
46.00	-20.27	-18.87	0.00	-1,226.57	0.00	1,226.57	2,109.30	1,054.65	2,550.84	1,259.76	11.97	-2.47	0.490
47.00	-20.00	-18.74	0.00	-1,207.70	0.00	1,207.70	2,102.20	1,051.10	2,529.06	1,249.01	12.49	-2.52	0.485
48.00	-19.74	-18.62	0.00	-1,188.96	0.00	1,188.96	2,095.06	1,047.53	2,507.33	1,238.28	13.03	-2.57	0.480
49.00	-19.47	-18.49	0.00	-1,170.34	0.00	1,170.34	2,087.89	1,043.95	2,485.64	1,227.56	13.57	-2.63	0.475
50.00	-19.21	-18.37	0.00	-1,151.85	0.00	1,151.85	2,080.68	1,040.34	2,464.00	1,216.88	14.13	-2.68	0.470

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:22 PM

Customer: Metro PCS

Load Case: 1.2D + 1.6W

100 mph with No Ice

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

51.00	-18.95	-18.24	0.00	-1,133.48	0.00	1,133.48	2,073.42	1,036.71	2,442.40	1,206.21	14.69	-2.73	0.465
52.00	-18.68	-18.11	0.00	-1,115.24	0.00	1,115.24	2,066.13	1,033.07	2,420.85	1,195.57	15.27	-2.78	0.459
53.00	-18.42	-17.98	0.00	-1,097.13	0.00	1,097.13	2,058.81	1,029.40	2,399.34	1,184.94	15.86	-2.83	0.454
54.00	-18.16	-17.86	0.00	-1,079.14	0.00	1,079.14	2,051.44	1,025.72	2,377.88	1,174.35	16.46	-2.89	0.449
55.00	-17.91	-17.73	0.00	-1,061.29	0.00	1,061.29	2,044.03	1,022.02	2,356.47	1,163.77	17.07	-2.94	0.444
56.00	-17.65	-17.60	0.00	-1,043.56	0.00	1,043.56	2,036.59	1,018.29	2,335.11	1,153.22	17.69	-2.99	0.439
57.00	-17.39	-17.46	0.00	-1,025.97	0.00	1,025.97	2,029.10	1,014.55	2,313.80	1,142.70	18.32	-3.04	0.434
58.00	-17.14	-17.33	0.00	-1,008.50	0.00	1,008.50	2,021.58	1,010.79	2,292.54	1,132.20	18.96	-3.09	0.428
59.00	-16.88	-17.20	0.00	-991.17	0.00	991.17	2,014.02	1,007.01	2,271.32	1,121.72	19.62	-3.14	0.423
60.00	-16.63	-17.07	0.00	-973.97	0.00	973.97	2,006.42	1,003.21	2,250.16	1,111.27	20.28	-3.19	0.418
61.00	-16.37	-16.94	0.00	-956.90	0.00	956.90	1,998.79	999.39	2,229.06	1,100.85	20.95	-3.24	0.413
62.00	-16.12	-16.80	0.00	-939.97	0.00	939.97	1,991.11	995.56	2,208.00	1,090.45	21.63	-3.29	0.408
63.00	-15.87	-16.67	0.00	-923.16	0.00	923.16	1,983.40	991.70	2,187.00	1,080.08	22.33	-3.34	0.402
64.00	-15.62	-16.53	0.00	-906.50	0.00	906.50	1,975.64	987.82	2,166.06	1,069.73	23.03	-3.39	0.397
65.00	-15.37	-16.40	0.00	-889.96	0.00	889.96	1,966.16	983.08	2,143.32	1,058.50	23.75	-3.43	0.392
66.00	-15.12	-16.26	0.00	-873.56	0.00	873.56	1,954.97	977.49	2,118.86	1,046.42	24.47	-3.48	0.388
67.00	-14.88	-16.13	0.00	-857.30	0.00	857.30	1,943.78	971.89	2,094.54	1,034.41	25.21	-3.53	0.383
68.00	-14.63	-15.99	0.00	-841.17	0.00	841.17	1,932.60	966.30	2,070.35	1,022.47	25.95	-3.58	0.379
69.00	-14.39	-15.85	0.00	-825.18	0.00	825.18	1,921.41	960.70	2,046.31	1,010.60	26.71	-3.63	0.374
70.00	-14.14	-15.72	0.00	-809.33	0.00	809.33	1,910.22	955.11	2,022.41	998.79	27.47	-3.67	0.370
71.00	-13.81	-15.57	0.00	-793.61	0.00	793.61	1,899.03	949.52	1,998.65	987.06	28.24	-3.72	0.359
72.00	-13.48	-15.43	0.00	-778.04	0.00	778.04	1,887.85	943.92	1,975.03	975.39	29.03	-3.77	0.355
73.00	-13.16	-15.30	0.00	-762.61	0.00	762.61	1,876.66	938.33	1,951.55	963.80	29.82	-3.81	0.350
73.50	-13.00	-15.23	0.00	-754.96	0.00	754.96	1,431.47	715.74	1,521.25	751.29	30.22	-3.83	0.405
74.00	-12.88	-15.14	0.00	-747.35	0.00	747.35	1,428.93	714.46	1,514.06	747.74	30.62	-3.86	0.402
75.00	-12.66	-15.00	0.00	-732.21	0.00	732.21	1,423.81	711.90	1,499.70	740.65	31.44	-3.90	0.395
76.00	-12.44	-14.86	0.00	-717.21	0.00	717.21	1,418.66	709.33	1,485.37	733.57	32.26	-3.95	0.389
77.00	-12.22	-14.75	0.00	-702.35	0.00	702.35	1,413.46	706.73	1,471.06	726.50	33.09	-4.00	0.383
77.44	-12.13	-14.68	0.00	-695.86	0.00	695.86	1,411.16	705.58	1,464.78	723.40	33.46	-4.02	0.380
77.44	-12.13	-14.68	0.00	-695.86	0.00	695.86	1,411.16	705.58	1,464.78	723.40	33.46	-4.02	0.971
78.00	-12.04	-14.59	0.00	-687.64	0.00	687.64	1,408.23	704.11	1,456.78	719.45	33.93	-4.05	0.965
79.00	-11.88	-14.47	0.00	-673.05	0.00	673.05	1,402.96	701.48	1,442.53	712.41	34.79	-4.16	0.954
80.00	-11.73	-14.35	0.00	-658.58	0.00	658.58	1,397.65	698.83	1,428.30	705.38	35.68	-4.28	0.942
81.00	-11.57	-14.23	0.00	-644.23	0.00	644.23	1,392.30	696.15	1,414.10	698.37	36.59	-4.40	0.931
82.00	-11.42	-14.11	0.00	-630.00	0.00	630.00	1,386.92	693.46	1,399.92	691.37	37.52	-4.52	0.920
83.00	-11.27	-13.99	0.00	-615.90	0.00	615.90	1,381.49	690.75	1,385.78	684.38	38.48	-4.64	0.908
84.00	-11.11	-13.90	0.00	-601.90	0.00	601.90	1,376.03	688.01	1,371.66	677.41	39.46	-4.75	0.897
85.00	-10.96	-13.81	0.00	-588.00	0.00	588.00	1,370.53	685.26	1,357.58	670.46	40.47	-4.87	0.885
86.00	-10.81	-13.72	0.00	-574.19	0.00	574.19	1,364.99	682.49	1,343.53	663.52	41.50	-4.98	0.874
87.00	-10.66	-13.63	0.00	-560.47	0.00	560.47	1,359.41	679.70	1,329.50	656.59	42.56	-5.10	0.862
88.00	-10.51	-13.53	0.00	-546.85	0.00	546.85	1,353.79	676.90	1,315.52	649.68	43.64	-5.21	0.850
89.00	-10.36	-13.44	0.00	-533.32	0.00	533.32	1,348.13	674.07	1,301.56	642.79	44.74	-5.33	0.838
90.00	-10.21	-13.34	0.00	-519.88	0.00	519.88	1,342.44	671.22	1,287.64	635.92	45.87	-5.44	0.826
91.00	-10.07	-13.25	0.00	-506.54	0.00	506.54	1,336.71	668.35	1,273.75	629.06	47.02	-5.55	0.813
92.00	-9.92	-13.15	0.00	-493.29	0.00	493.29	1,330.94	665.47	1,259.90	622.22	48.19	-5.66	0.801
93.00	-9.78	-13.05	0.00	-480.14	0.00	480.14	1,325.13	662.56	1,246.09	615.40	49.39	-5.78	0.788
94.00	-9.64	-12.96	0.00	-467.09	0.00	467.09	1,319.28	659.64	1,232.31	608.59	50.61	-5.89	0.775
95.00	-9.50	-12.86	0.00	-454.13	0.00	454.13	1,313.39	656.70	1,218.57	601.80	51.85	-5.99	0.762
96.00	-9.36	-12.76	0.00	-441.27	0.00	441.27	1,307.47	653.73	1,204.87	595.04	53.11	-6.10	0.749
97.00	-9.22	-12.66	0.00	-428.51	0.00	428.51	1,301.50	650.75	1,191.20	588.29	54.40	-6.21	0.736
98.00	-9.08	-12.56	0.00	-415.85	0.00	415.85	1,295.50	647.75	1,177.58	581.56	55.71	-6.32	0.722
99.00	-8.94	-12.46	0.00	-403.28	0.00	403.28	1,289.46	644.73	1,164.00	574.85	57.04	-6.42	0.709
100.00	-8.17	-11.27	0.00	-388.52	0.00	388.52	1,283.38	641.69	1,150.46	568.17	58.40	-6.53	0.690
101.00	-8.04	-11.17	0.00	-377.25	0.00	377.25	1,277.26	638.63	1,136.96	561.50	59.77	-6.63	0.678
102.00	-7.91	-11.07	0.00	-366.08	0.00	366.08	1,271.10	635.55	1,123.50	554.85	61.17	-6.73	0.666
103.00	-7.78	-10.96	0.00	-355.02	0.00	355.02	1,264.91	632.45	1,110.09	548.23	62.58	-6.83	0.654
104.00	-7.66	-10.86	0.00	-344.06	0.00	344.06	1,257.26	628.63	1,095.49	541.02	64.02	-6.93	0.642

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:22 PM

Customer: Metro PCS

Load Case: 1.2D + 1.6W

100 mph with No Ice

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

105.00	-7.53	-10.76	0.00	-333.20	0.00	333.20	1,248.31	624.16	1,079.86	533.30	65.48	-7.03	0.631
106.00	-7.41	-10.65	0.00	-322.44	0.00	322.44	1,239.36	619.68	1,064.34	525.64	66.96	-7.13	0.620
107.00	-7.28	-10.55	0.00	-311.79	0.00	311.79	1,230.41	615.21	1,048.93	518.03	68.46	-7.22	0.608
108.00	-7.16	-10.44	0.00	-301.23	0.00	301.23	1,221.46	610.73	1,033.64	510.48	69.98	-7.32	0.596
109.00	-7.04	-10.33	0.00	-290.79	0.00	290.79	1,212.51	606.26	1,018.46	502.98	71.52	-7.41	0.584
110.00	-6.92	-10.21	0.00	-280.47	0.00	280.47	1,203.56	601.78	1,003.39	495.54	73.07	-7.50	0.572
110.00	-6.92	-10.21	0.00	-280.47	0.00	280.47	829.71	414.85	695.98	343.72	73.07	-7.50	0.825
111.00	-6.81	-10.10	0.00	-270.26	0.00	270.26	826.14	413.07	687.80	339.68	74.65	-7.60	0.804
112.00	-6.71	-9.99	0.00	-260.16	0.00	260.16	822.53	411.26	679.64	335.65	76.25	-7.71	0.784
113.00	-6.60	-9.88	0.00	-250.17	0.00	250.17	818.88	409.44	671.48	331.62	77.87	-7.83	0.763
114.00	-6.50	-9.77	0.00	-240.29	0.00	240.29	815.19	407.60	663.34	327.60	79.52	-7.95	0.742
115.00	-6.39	-9.66	0.00	-230.51	0.00	230.51	811.47	405.73	655.22	323.59	81.19	-8.06	0.721
116.00	-6.28	-9.53	0.00	-220.79	0.00	220.79	807.71	403.85	647.11	319.59	82.89	-8.17	0.699
117.00	-6.18	-9.45	0.00	-211.26	0.00	211.26	803.90	401.95	639.02	315.59	84.61	-8.28	0.678
118.00	-6.08	-9.37	0.00	-201.81	0.00	201.81	800.06	400.03	630.95	311.60	86.34	-8.38	0.656
119.00	-5.98	-9.30	0.00	-192.44	0.00	192.44	796.18	398.09	622.89	307.62	88.11	-8.49	0.634
120.00	-5.08	-8.01	0.00	-183.14	0.00	183.14	792.27	396.13	614.86	303.65	89.89	-8.59	0.610
121.00	-4.99	-7.93	0.00	-175.13	0.00	175.13	788.31	394.15	606.84	299.70	91.69	-8.69	0.591
122.00	-4.89	-7.85	0.00	-167.20	0.00	167.20	784.31	392.16	598.84	295.75	93.52	-8.79	0.572
123.00	-4.80	-7.78	0.00	-159.34	0.00	159.34	780.28	390.14	590.87	291.81	95.36	-8.88	0.553
124.00	-4.71	-7.70	0.00	-151.57	0.00	151.57	776.21	388.10	582.91	287.88	97.22	-8.97	0.533
125.00	-4.62	-7.62	0.00	-143.87	0.00	143.87	772.10	386.05	574.98	283.96	99.10	-9.06	0.513
126.00	-4.53	-7.54	0.00	-136.25	0.00	136.25	767.95	383.97	567.07	280.06	101.00	-9.15	0.493
127.00	-4.44	-7.46	0.00	-128.71	0.00	128.71	763.76	381.88	559.19	276.16	102.92	-9.23	0.472
128.00	-4.35	-7.38	0.00	-121.25	0.00	121.25	759.54	379.77	551.33	272.28	104.85	-9.32	0.451
129.00	-4.26	-7.31	0.00	-113.86	0.00	113.86	755.27	377.64	543.49	268.41	106.81	-9.40	0.430
130.00	-4.15	-5.61	0.00	-103.40	0.00	103.40	750.97	375.48	535.68	264.55	108.77	-9.47	0.397
131.00	-4.08	-5.54	0.00	-97.78	0.00	97.78	746.63	373.31	527.90	260.71	110.76	-9.54	0.381
132.00	-4.01	-5.46	0.00	-92.25	0.00	92.25	742.25	371.12	520.15	256.88	112.75	-9.61	0.365
133.00	-3.94	-5.39	0.00	-86.78	0.00	86.78	737.83	368.91	512.42	253.07	114.76	-9.68	0.348
134.00	-3.86	-5.31	0.00	-81.39	0.00	81.39	733.37	366.68	504.72	249.26	116.79	-9.74	0.332
135.00	-3.80	-5.24	0.00	-76.08	0.00	76.08	728.87	364.44	497.06	245.48	118.83	-9.81	0.315
136.00	-3.73	-5.16	0.00	-70.84	0.00	70.84	724.34	362.17	489.42	241.71	120.88	-9.87	0.298
137.00	-3.66	-5.09	0.00	-65.68	0.00	65.68	719.77	359.88	481.81	237.95	122.94	-9.92	0.281
138.00	-3.59	-5.02	0.00	-60.59	0.00	60.59	715.15	357.58	474.24	234.21	125.01	-9.98	0.264
139.00	-3.52	-4.94	0.00	-55.57	0.00	55.57	710.80	355.40	466.89	230.58	127.10	-10.03	0.246
140.00	-3.46	-4.87	0.00	-50.63	0.00	50.63	704.09	352.04	458.06	226.22	129.19	-10.08	0.229
141.00	-3.39	-4.80	0.00	-45.76	0.00	45.76	697.37	348.69	449.32	221.90	131.30	-10.12	0.211
142.00	-3.33	-4.72	0.00	-40.97	0.00	40.97	690.66	345.33	440.66	217.63	133.41	-10.16	0.193
143.00	-3.27	-4.65	0.00	-36.24	0.00	36.24	683.95	341.97	432.09	213.39	135.53	-10.20	0.175
144.00	-3.20	-4.58	0.00	-31.59	0.00	31.59	677.24	338.62	423.60	209.20	137.66	-10.24	0.156
145.00	-3.14	-4.51	0.00	-27.02	0.00	27.02	670.52	335.26	415.19	205.05	139.80	-10.27	0.137
146.00	-3.08	-4.43	0.00	-22.51	0.00	22.51	663.81	331.91	406.87	200.94	141.94	-10.29	0.117
147.00	-3.02	-4.36	0.00	-18.08	0.00	18.08	657.10	328.55	398.63	196.87	144.09	-10.32	0.097
148.00	-2.96	-4.29	0.00	-13.72	0.00	13.72	650.39	325.19	390.48	192.84	146.24	-10.33	0.076
149.00	-2.90	-4.22	0.00	-9.42	0.00	9.42	643.68	321.84	382.41	188.86	148.39	-10.35	0.055
150.00	0.00	-3.63	0.00	-5.20	0.00	5.20	636.96	318.48	374.43	184.91	150.55	-10.36	0.028

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:22 PM

Customer: Metro PCS

Load Case: 0.9D + 1.6W

100 mph with No Ice (Reduced DL)

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

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		55.7	0.0					0.0	0.0	55.7	0.0	0.0	0.0
1.00		111.2	131.5					24.0	100.8	135.2	232.3	0.0	0.0
2.00		110.7	130.9					24.0	100.8	134.7	231.7	0.0	0.0
3.00		110.3	130.3					24.0	100.8	134.2	231.2	0.0	0.0
4.00		109.8	129.8					24.0	100.8	133.8	230.6	0.0	0.0
5.00		109.3	129.2					24.0	100.8	133.3	230.0	0.0	0.0
6.00		108.9	128.7					24.0	100.8	132.8	229.5	0.0	0.0
7.00		108.4	128.1					24.0	100.8	132.4	228.9	0.0	0.0
8.00		107.9	127.6					24.0	100.8	131.9	228.4	0.0	0.0
9.00		107.5	127.0					24.0	100.8	131.4	227.8	0.0	0.0
10.00		107.0	126.4					24.0	100.8	131.0	227.3	0.0	0.0
11.00		106.5	125.9					24.0	100.8	130.5	226.7	0.0	0.0
12.00		106.1	125.3					24.0	100.8	130.0	226.1	0.0	0.0
13.00		105.6	124.8					24.0	100.8	129.6	225.6	0.0	0.0
14.00		105.1	124.2					24.0	100.8	129.1	225.0	0.0	0.0
15.00		104.7	123.7					24.0	100.8	128.6	224.5	0.0	0.0
16.00		104.2	123.1					24.0	100.8	128.2	223.9	0.0	0.0
17.00		103.7	122.5					24.0	100.8	127.7	223.3	0.0	0.0
18.00		103.2	122.0					24.0	100.8	127.2	222.8	0.0	0.0
19.00		102.8	121.4					24.0	100.8	126.7	222.2	0.0	0.0
20.00		102.3	120.9					24.0	100.8	126.3	221.7	0.0	0.0
21.00		101.8	120.3					24.0	100.8	125.8	221.1	0.0	0.0
22.00		101.4	119.7					24.0	100.8	125.3	220.6	0.0	0.0
23.00		100.9	119.2					24.0	100.8	124.9	220.0	0.0	0.0
24.00		100.4	118.6					24.0	100.8	124.4	219.4	0.0	0.0
25.00		100.0	118.1					24.0	100.8	123.9	218.9	0.0	0.0
26.00		99.5	117.5					24.0	100.8	123.5	218.3	0.0	0.0
27.00		99.0	117.0					24.0	100.8	123.0	217.8	0.0	0.0
28.00		98.6	116.4					24.0	100.8	122.5	217.2	0.0	0.0
29.00		98.1	115.8					24.0	100.8	122.1	216.7	0.0	0.0
30.00		97.9	115.3					24.0	100.8	121.9	216.1	0.0	0.0
31.00		98.2	114.7					24.1	100.8	122.3	215.5	0.0	0.0
32.00	Bot - Section 2	99.6	114.2					24.3	100.8	123.9	215.0	0.0	0.0
33.00		101.0	210.4					24.5	100.8	125.5	311.2	0.0	0.0
34.00		101.3	209.4					24.8	100.8	126.1	310.2	0.0	0.0
35.00		101.7	208.4					25.0	100.8	126.7	309.2	0.0	0.0
36.00	Top - Section 1	102.0	207.3					25.2	100.8	127.2	308.1	0.0	0.0
37.00		102.3	94.9					25.4	100.8	127.7	195.7	0.0	0.0
38.00		102.6	94.5					25.6	100.8	128.2	195.3	0.0	0.0
39.00		102.9	94.0					25.8	100.8	128.6	194.8	0.0	0.0
40.00		103.1	93.5					26.0	100.8	129.1	194.4	0.0	0.0
41.00		103.3	93.1					26.1	100.8	129.5	193.9	0.0	0.0
42.00		103.5	92.6					26.3	100.8	129.8	193.4	0.0	0.0
43.00		103.7	92.1					26.5	100.8	130.2	193.0	0.0	0.0
44.00		103.9	91.7					26.7	100.8	130.5	192.5	0.0	0.0
45.00		104.0	91.2					26.9	100.8	130.9	192.0	0.0	0.0
46.00		104.1	90.8					27.0	100.8	131.2	191.6	0.0	0.0
47.00		104.2	90.3					27.2	100.8	131.4	191.1	0.0	0.0

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:31 PM

Customer: Metro PCS

Load Case: 0.9D + 1.6W	100 mph with No Ice (Reduced DL)	36 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

48.00		104.3	89.8	27.4	100.8	131.7	190.6	0.0	0.0
49.00		104.4	89.4	27.5	100.8	131.9	190.2	0.0	0.0
50.00		104.5	88.9	27.7	100.8	132.2	189.7	0.0	0.0
51.00		104.5	88.4	27.8	100.8	132.4	189.2	0.0	0.0
52.00		104.6	88.0	28.0	100.8	132.6	188.8	0.0	0.0
53.00		104.6	87.5	28.1	100.8	132.7	188.3	0.0	0.0
54.00		104.6	87.0	28.3	100.8	132.9	187.8	0.0	0.0
55.00		104.6	86.6	28.5	100.8	133.0	187.4	0.0	0.0
56.00		104.6	86.1	28.6	100.8	133.2	186.9	0.0	0.0
57.00		104.5	85.6	28.7	100.8	133.3	186.4	0.0	0.0
58.00		104.5	85.2	28.9	100.8	133.4	186.0	0.0	0.0
59.00		104.4	84.7	29.0	100.8	133.5	185.5	0.0	0.0
60.00		104.4	84.2	29.2	100.8	133.5	185.1	0.0	0.0
61.00		104.3	83.8	29.3	100.8	133.6	184.6	0.0	0.0
62.00		104.2	83.3	29.5	100.8	133.6	184.1	0.0	0.0
63.00		104.1	82.9	29.6	100.8	133.7	183.7	0.0	0.0
64.00		104.0	82.4	29.7	100.8	133.7	183.2	0.0	0.0
65.00		103.9	81.9	29.9	100.8	133.7	182.7	0.0	0.0
66.00		103.7	81.5	30.0	100.8	133.7	182.3	0.0	0.0
67.00		103.6	81.0	30.1	100.8	133.7	181.8	0.0	0.0
68.00		103.4	80.5	30.2	100.8	133.7	181.3	0.0	0.0
69.00		103.3	80.1	30.4	100.8	133.6	180.9	0.0	0.0
70.00	Bot - Section 3	104.1	79.6	30.5	100.8	134.6	180.4	0.0	0.0
71.00		104.9	143.8	30.6	100.8	135.5	244.6	0.0	0.0
72.00		104.7	143.0	30.7	100.8	135.5	243.8	0.0	0.0
73.00		78.4	142.2	30.9	100.8	109.3	243.0	0.0	0.0
73.50	Top - Section 2	52.2	70.8	15.5	50.4	67.7	121.2	0.0	0.0
74.00		78.2	31.7	15.5	50.4	93.7	82.1	0.0	0.0
75.00		104.1	63.2	31.1	100.8	135.2	164.0	0.0	0.0
76.00		103.9	62.8	31.2	100.8	135.1	163.6	0.0	0.0
77.00		74.7	62.5	31.3	100.8	106.0	163.3	0.0	0.0
77.44	Reinf. Top	51.8	27.4	13.8	44.4	65.6	71.7	0.0	0.0
78.00		80.6	34.7	17.6	22.8	98.3	57.5	0.0	0.0
79.00		103.2	61.7	31.6	40.7	134.8	102.4	0.0	0.0
80.00		103.0	61.3	31.7	40.7	134.6	102.0	0.0	0.0
81.00		102.7	61.0	31.8	40.7	134.5	101.7	0.0	0.0
82.00		102.4	60.6	31.9	40.7	134.4	101.3	0.0	0.0
83.00		93.7	60.2	24.7	40.7	118.4	100.9	0.0	0.0
84.00		84.9	59.9	0.0	40.7	84.9	100.5	0.0	0.0
85.00		84.7	59.5	0.0	40.7	84.7	100.2	0.0	0.0
86.00		84.4	59.1	0.0	40.7	84.4	99.8	0.0	0.0
87.00		84.2	58.7	0.0	40.7	84.2	99.4	0.0	0.0
88.00		83.9	58.4	0.0	40.7	83.9	99.1	0.0	0.0
89.00		83.7	58.0	0.0	40.7	83.7	98.7	0.0	0.0
90.00		83.4	57.6	0.0	40.7	83.4	98.3	0.0	0.0
91.00		83.1	57.3	0.0	40.7	83.1	97.9	0.0	0.0
92.00		82.8	56.9	0.0	40.7	82.8	97.6	0.0	0.0
93.00		82.6	56.5	0.0	40.7	82.6	97.2	0.0	0.0
94.00		82.3	56.1	0.0	40.7	82.3	96.8	0.0	0.0
95.00		82.0	55.8	0.0	40.7	82.0	96.5	0.0	0.0
96.00		81.7	55.4	0.0	40.7	81.7	96.1	0.0	0.0
97.00		81.4	55.0	0.0	40.7	81.4	95.7	0.0	0.0
98.00		81.1	54.7	0.0	40.7	81.1	95.3	0.0	0.0
99.00		80.8	54.3	0.0	40.7	80.8	95.0	0.0	0.0
100.00	Appertunance(s)	80.4	53.9	1,016.9	0.0	2,299.1	564.3	0.0	0.0
101.00		80.1	53.5	0.0	38.9	80.1	92.4	0.0	0.0
102.00		79.8	53.2	0.0	38.9	79.8	92.1	0.0	0.0

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:31 PM

Customer: Metro PCS

Load Case: 0.9D + 1.6W	100 mph with No Ice (Reduced DL)						36 Iterations			
Gust Response Factor : 1.10							Wind Importance Factor : 1.00			
Dead Load Factor : 0.90										
Wind Load Factor : 1.60										

103.00		79.5	52.8				0.0	38.9	79.5	91.7	0.0	0.0	
104.00		79.1	52.4				0.0	38.9	79.1	91.3	0.0	0.0	
105.00		78.8	52.1				0.0	38.9	78.8	91.0	0.0	0.0	
106.00		78.4	51.7				0.0	38.9	78.4	90.6	0.0	0.0	
107.00		85.9	51.3				0.0	38.9	85.9	90.2	0.0	0.0	
108.00		93.3	50.9				18.8	38.9	112.1	89.8	0.0	0.0	
109.00		92.8	50.6				18.9	38.9	111.7	89.5	0.0	0.0	
110.00	Top - Section 3	92.4	50.2				18.9	38.9	111.3	89.1	0.0	0.0	
111.00		92.0	37.5				19.0	38.9	110.9	76.4	0.0	0.0	
112.00		91.5	37.2				19.0	38.9	110.5	76.1	0.0	0.0	
113.00		91.1	36.9				19.1	38.9	110.1	75.8	0.0	0.0	
114.00		90.6	36.6				19.1	38.9	109.7	75.6	0.0	0.0	
115.00		90.1	36.4				19.2	38.9	109.3	75.3	0.0	0.0	
116.00	Appertunance(s)	82.2	36.1	31.9	0.0	63.9	13.5	19.2	38.9	133.4	88.5	0.0	0.0
117.00		74.3	35.8					0.0	35.6	74.3	71.4	0.0	0.0
118.00		73.9	35.5					0.0	35.6	73.9	71.2	0.0	0.0
119.00		73.5	35.2					0.0	35.6	73.5	70.9	0.0	0.0
120.00	Appertunance(s)	73.1	35.0	1,078.5	0.0	-1,399.5	728.1	0.0	35.6	1,151.7	798.7	0.0	0.0
121.00		72.7	34.7					0.0	35.2	72.7	69.9	0.0	0.0
122.00		72.3	34.4					0.0	35.2	72.3	69.7	0.0	0.0
123.00		71.9	34.1					0.0	35.2	71.9	69.4	0.0	0.0
124.00		71.5	33.9					0.0	35.2	71.5	69.1	0.0	0.0
125.00		71.1	33.6					0.0	35.2	71.1	68.8	0.0	0.0
126.00		70.6	33.3					0.0	35.2	70.6	68.5	0.0	0.0
127.00		70.2	33.0					0.0	35.2	70.2	68.3	0.0	0.0
128.00		69.8	32.7					0.0	35.2	69.8	68.0	0.0	0.0
129.00		69.3	32.5					0.0	35.2	69.3	67.7	0.0	0.0
130.00	Appertunance(s)	68.9	32.2	1,587.3	0.0	3,162.3	218.7	0.0	35.2	1,656.2	286.2	0.0	0.0
131.00		68.5	31.9					0.0	26.4	68.5	58.3	0.0	0.0
132.00		68.0	31.6					0.0	26.4	68.0	58.0	0.0	0.0
133.00		67.6	31.3					0.0	26.4	67.6	57.7	0.0	0.0
134.00		67.1	31.1					0.0	26.4	67.1	57.5	0.0	0.0
135.00		66.6	30.8					0.0	26.4	66.6	57.2	0.0	0.0
136.00		66.2	30.5					0.0	26.4	66.2	56.9	0.0	0.0
137.00		65.7	30.2					0.0	26.4	65.7	56.6	0.0	0.0
138.00		65.3	30.0					0.0	26.4	65.3	56.3	0.0	0.0
139.00		64.8	29.7					0.0	26.4	64.8	56.1	0.0	0.0
140.00		64.3	29.4					0.0	26.4	64.3	55.8	0.0	0.0
141.00		63.8	29.1					0.0	26.4	63.8	55.5	0.0	0.0
142.00		63.4	28.8					0.0	26.4	63.4	55.2	0.0	0.0
143.00		62.9	28.6					0.0	26.4	62.9	54.9	0.0	0.0
144.00		62.4	28.3					0.0	26.4	62.4	54.7	0.0	0.0
145.00		61.9	28.0					0.0	26.4	61.9	54.4	0.0	0.0
146.00		61.4	27.7					0.0	26.4	61.4	54.1	0.0	0.0
147.00		60.9	27.4					0.0	26.4	60.9	53.8	0.0	0.0
148.00		60.4	27.2					0.0	26.4	60.4	53.5	0.0	0.0
149.00		59.9	26.9					0.0	26.4	59.9	53.3	0.0	0.0
150.00	Appertunance(s)	29.8	26.6	3,600.7	0.0	5,204.9	2,652.1	0.0	26.4	3,630.5	2,705.1	0.0	0.0
									Totals:	23,414.3	26,133.5	0.00	0.00

Load Case: 0.9D + 1.6W

100 mph with No Ice (Reduced DL)

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-26.12	-23.37	0.00	-2,132.37	0.00	2,132.37	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.590
1.00	-25.87	-23.26	0.00	-2,109.00	0.00	2,109.00	3,050.02	1,525.01	4,454.72	2,200.02	0.01	-0.05	0.586
2.00	-25.62	-23.15	0.00	-2,085.75	0.00	2,085.75	3,041.56	1,520.78	4,423.28	2,184.49	0.02	-0.10	0.582
3.00	-25.36	-23.03	0.00	-2,062.60	0.00	2,062.60	3,033.07	1,516.53	4,391.90	2,168.99	0.05	-0.16	0.579
4.00	-25.11	-22.92	0.00	-2,039.57	0.00	2,039.57	3,024.53	1,512.27	4,360.56	2,153.52	0.09	-0.21	0.575
5.00	-24.86	-22.81	0.00	-2,016.64	0.00	2,016.64	3,015.96	1,507.98	4,329.28	2,138.07	0.14	-0.26	0.571
6.00	-24.61	-22.70	0.00	-1,993.83	0.00	1,993.83	3,007.35	1,503.68	4,298.05	2,122.64	0.20	-0.31	0.568
7.00	-24.36	-22.59	0.00	-1,971.13	0.00	1,971.13	2,998.70	1,499.35	4,266.87	2,107.25	0.27	-0.37	0.564
8.00	-24.12	-22.48	0.00	-1,948.55	0.00	1,948.55	2,990.02	1,495.01	4,235.75	2,091.88	0.36	-0.42	0.560
9.00	-23.87	-22.37	0.00	-1,926.07	0.00	1,926.07	2,981.29	1,490.65	4,204.68	2,076.53	0.45	-0.47	0.557
10.00	-23.62	-22.25	0.00	-1,903.71	0.00	1,903.71	2,972.53	1,486.26	4,173.67	2,061.22	0.55	-0.52	0.553
11.00	-23.38	-22.14	0.00	-1,881.45	0.00	1,881.45	2,963.72	1,481.86	4,142.71	2,045.93	0.67	-0.58	0.549
12.00	-23.13	-22.03	0.00	-1,859.31	0.00	1,859.31	2,954.88	1,477.44	4,111.81	2,030.67	0.80	-0.63	0.545
13.00	-22.89	-21.92	0.00	-1,837.28	0.00	1,837.28	2,946.00	1,473.00	4,080.97	2,015.44	0.93	-0.68	0.542
14.00	-22.65	-21.81	0.00	-1,815.36	0.00	1,815.36	2,937.08	1,468.54	4,050.18	2,000.23	1.08	-0.73	0.538
15.00	-22.40	-21.70	0.00	-1,793.55	0.00	1,793.55	2,928.13	1,464.06	4,019.46	1,985.06	1.24	-0.78	0.534
16.00	-22.16	-21.59	0.00	-1,771.86	0.00	1,771.86	2,919.13	1,459.57	3,988.79	1,969.91	1.41	-0.84	0.530
17.00	-21.92	-21.47	0.00	-1,750.27	0.00	1,750.27	2,910.10	1,455.05	3,958.19	1,954.80	1.59	-0.89	0.526
18.00	-21.68	-21.36	0.00	-1,728.80	0.00	1,728.80	2,901.03	1,450.51	3,927.64	1,939.72	1.78	-0.94	0.523
19.00	-21.44	-21.25	0.00	-1,707.43	0.00	1,707.43	2,891.92	1,445.96	3,897.16	1,924.66	1.99	-0.99	0.519
20.00	-21.20	-21.14	0.00	-1,686.18	0.00	1,686.18	2,882.77	1,441.38	3,866.74	1,909.64	2.20	-1.04	0.515
21.00	-20.97	-21.03	0.00	-1,665.04	0.00	1,665.04	2,873.58	1,436.79	3,836.39	1,894.65	2.42	-1.09	0.511
22.00	-20.73	-20.92	0.00	-1,644.01	0.00	1,644.01	2,864.35	1,432.18	3,806.10	1,879.69	2.66	-1.15	0.507
23.00	-20.49	-20.81	0.00	-1,623.09	0.00	1,623.09	2,855.09	1,427.54	3,775.87	1,864.76	2.90	-1.20	0.504
24.00	-20.26	-20.70	0.00	-1,602.29	0.00	1,602.29	2,845.78	1,422.89	3,745.71	1,849.87	3.16	-1.25	0.500
25.00	-20.02	-20.59	0.00	-1,581.59	0.00	1,581.59	2,835.18	1,417.59	3,713.97	1,834.19	3.43	-1.30	0.496
26.00	-19.79	-20.48	0.00	-1,561.00	0.00	1,561.00	2,821.76	1,410.88	3,678.67	1,816.76	3.70	-1.35	0.493
27.00	-19.56	-20.36	0.00	-1,540.53	0.00	1,540.53	2,808.33	1,404.17	3,643.55	1,799.41	3.99	-1.40	0.490
28.00	-19.32	-20.25	0.00	-1,520.16	0.00	1,520.16	2,794.91	1,397.45	3,608.60	1,782.15	4.29	-1.45	0.487
29.00	-19.09	-20.14	0.00	-1,499.91	0.00	1,499.91	2,781.48	1,390.74	3,573.81	1,764.97	4.60	-1.50	0.483
30.00	-18.86	-20.03	0.00	-1,479.77	0.00	1,479.77	2,768.06	1,384.03	3,539.19	1,747.87	4.92	-1.55	0.480
31.00	-18.63	-19.92	0.00	-1,459.74	0.00	1,459.74	2,754.63	1,377.32	3,504.74	1,730.86	5.25	-1.60	0.477
32.00	-18.40	-19.81	0.00	-1,439.82	0.00	1,439.82	2,741.21	1,370.60	3,470.46	1,713.93	5.60	-1.65	0.474
33.00	-18.08	-19.69	0.00	-1,420.01	0.00	1,420.01	2,727.78	1,363.89	3,436.35	1,697.08	5.95	-1.71	0.464
34.00	-17.76	-19.57	0.00	-1,400.32	0.00	1,400.32	2,714.36	1,357.18	3,402.41	1,680.32	6.31	-1.76	0.460
35.00	-17.43	-19.45	0.00	-1,380.76	0.00	1,380.76	2,700.94	1,350.47	3,368.63	1,663.64	6.68	-1.80	0.457
36.00	-17.11	-19.32	0.00	-1,361.31	0.00	1,361.31	2,178.16	1,089.08	2,770.79	1,368.39	7.07	-1.85	0.517
37.00	-16.91	-19.21	0.00	-1,341.99	0.00	1,341.99	2,171.44	1,085.72	2,748.62	1,357.44	7.46	-1.90	0.512
38.00	-16.70	-19.09	0.00	-1,322.78	0.00	1,322.78	2,164.69	1,082.35	2,726.49	1,346.51	7.87	-1.96	0.507
39.00	-16.49	-18.97	0.00	-1,303.69	0.00	1,303.69	2,157.90	1,078.95	2,704.40	1,335.60	8.28	-2.01	0.502
40.00	-16.28	-18.84	0.00	-1,284.73	0.00	1,284.73	2,151.08	1,075.54	2,682.35	1,324.71	8.71	-2.06	0.497
41.00	-16.08	-18.72	0.00	-1,265.89	0.00	1,265.89	2,144.21	1,072.10	2,660.33	1,313.84	9.14	-2.11	0.493
42.00	-15.87	-18.60	0.00	-1,247.16	0.00	1,247.16	2,137.30	1,068.65	2,638.35	1,302.98	9.59	-2.16	0.488
43.00	-15.67	-18.48	0.00	-1,228.56	0.00	1,228.56	2,130.36	1,065.18	2,616.41	1,292.15	10.05	-2.21	0.483
44.00	-15.46	-18.35	0.00	-1,210.09	0.00	1,210.09	2,123.38	1,061.69	2,594.51	1,281.33	10.52	-2.26	0.478
45.00	-15.26	-18.23	0.00	-1,191.74	0.00	1,191.74	2,116.36	1,058.18	2,572.65	1,270.54	11.00	-2.32	0.473
46.00	-15.06	-18.10	0.00	-1,173.51	0.00	1,173.51	2,109.30	1,054.65	2,550.84	1,259.76	11.49	-2.37	0.468
47.00	-14.86	-17.98	0.00	-1,155.41	0.00	1,155.41	2,102.20	1,051.10	2,529.06	1,249.01	11.99	-2.42	0.463
48.00	-14.66	-17.85	0.00	-1,137.43	0.00	1,137.43	2,095.06	1,047.53	2,507.33	1,238.28	12.50	-2.47	0.458
49.00	-14.46	-17.72	0.00	-1,119.58	0.00	1,119.58	2,087.89	1,043.95	2,485.64	1,227.56	13.03	-2.52	0.453
50.00	-14.26	-17.59	0.00	-1,101.86	0.00	1,101.86	2,080.68	1,040.34	2,464.00	1,216.88	13.56	-2.57	0.448

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:31 PM

Customer: Metro PCS

Load Case: 0.9D + 1.6W

100 mph with No Ice (Reduced DL)

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

51.00	-14.06	-17.46	0.00	-1,084.27	0.00	1,084.27	2,073.42	1,036.71	2,442.40	1,206.21	14.10	-2.62	0.443
52.00	-13.86	-17.34	0.00	-1,066.81	0.00	1,066.81	2,066.13	1,033.07	2,420.85	1,195.57	14.66	-2.67	0.438
53.00	-13.67	-17.21	0.00	-1,049.47	0.00	1,049.47	2,058.81	1,029.40	2,399.34	1,184.94	15.22	-2.72	0.433
54.00	-13.47	-17.08	0.00	-1,032.26	0.00	1,032.26	2,051.44	1,025.72	2,377.88	1,174.35	15.80	-2.77	0.428
55.00	-13.28	-16.94	0.00	-1,015.19	0.00	1,015.19	2,044.03	1,022.02	2,356.47	1,163.77	16.38	-2.81	0.423
56.00	-13.08	-16.81	0.00	-998.24	0.00	998.24	2,036.59	1,018.29	2,335.11	1,153.22	16.98	-2.86	0.419
57.00	-12.89	-16.68	0.00	-981.43	0.00	981.43	2,029.10	1,014.55	2,313.80	1,142.70	17.58	-2.91	0.414
58.00	-12.69	-16.55	0.00	-964.75	0.00	964.75	2,021.58	1,010.79	2,292.54	1,132.20	18.20	-2.96	0.409
59.00	-12.50	-16.42	0.00	-948.20	0.00	948.20	2,014.02	1,007.01	2,271.32	1,121.72	18.82	-3.01	0.404
60.00	-12.31	-16.28	0.00	-931.78	0.00	931.78	2,006.42	1,003.21	2,250.16	1,111.27	19.46	-3.06	0.399
61.00	-12.12	-16.15	0.00	-915.50	0.00	915.50	1,998.79	999.39	2,229.06	1,100.85	20.10	-3.10	0.394
62.00	-11.93	-16.02	0.00	-899.34	0.00	899.34	1,991.11	995.56	2,208.00	1,090.45	20.76	-3.15	0.389
63.00	-11.74	-15.88	0.00	-883.33	0.00	883.33	1,983.40	991.70	2,187.00	1,080.08	21.42	-3.20	0.384
64.00	-11.55	-15.75	0.00	-867.44	0.00	867.44	1,975.64	987.82	2,166.06	1,069.73	22.10	-3.25	0.379
65.00	-11.37	-15.61	0.00	-851.69	0.00	851.69	1,966.16	983.08	2,143.32	1,058.50	22.78	-3.29	0.375
66.00	-11.18	-15.48	0.00	-836.08	0.00	836.08	1,954.97	977.49	2,118.86	1,046.42	23.48	-3.34	0.370
67.00	-10.99	-15.34	0.00	-820.60	0.00	820.60	1,943.78	971.89	2,094.54	1,034.41	24.18	-3.38	0.366
68.00	-10.81	-15.21	0.00	-805.26	0.00	805.26	1,932.60	966.30	2,070.35	1,022.47	24.89	-3.43	0.362
69.00	-10.62	-15.07	0.00	-790.05	0.00	790.05	1,921.41	960.70	2,046.31	1,010.60	25.62	-3.48	0.357
70.00	-10.44	-14.94	0.00	-774.97	0.00	774.97	1,910.22	955.11	2,022.41	998.79	26.35	-3.52	0.353
71.00	-10.19	-14.79	0.00	-760.04	0.00	760.04	1,899.03	949.52	1,998.65	987.06	27.09	-3.57	0.343
72.00	-9.95	-14.65	0.00	-745.24	0.00	745.24	1,887.85	943.92	1,975.03	975.39	27.84	-3.61	0.339
73.00	-9.70	-14.53	0.00	-730.59	0.00	730.59	1,876.66	938.33	1,951.55	963.80	28.60	-3.65	0.334
73.50	-9.58	-14.46	0.00	-723.33	0.00	723.33	1,431.47	715.74	1,521.25	751.29	28.99	-3.67	0.387
74.00	-9.50	-14.37	0.00	-716.10	0.00	716.10	1,428.93	714.46	1,514.06	747.74	29.37	-3.70	0.384
75.00	-9.33	-14.23	0.00	-701.73	0.00	701.73	1,423.81	711.90	1,499.70	740.65	30.15	-3.74	0.378
76.00	-9.17	-14.09	0.00	-687.50	0.00	687.50	1,418.66	709.33	1,485.37	733.57	30.94	-3.79	0.372
77.00	-9.00	-13.98	0.00	-673.41	0.00	673.41	1,413.46	706.73	1,471.06	726.50	31.74	-3.83	0.366
77.44	-8.93	-13.91	0.00	-667.26	0.00	667.26	1,411.16	705.58	1,464.78	723.40	32.09	-3.85	0.363
77.44	-8.93	-13.91	0.00	-667.26	0.00	667.26	1,411.16	705.58	1,464.78	723.40	32.09	-3.85	0.929
78.00	-8.86	-13.82	0.00	-659.47	0.00	659.47	1,408.23	704.11	1,456.78	719.45	32.54	-3.88	0.923
79.00	-8.74	-13.70	0.00	-645.65	0.00	645.65	1,402.96	701.48	1,442.53	712.41	33.37	-3.99	0.913
80.00	-8.62	-13.57	0.00	-631.95	0.00	631.95	1,397.65	698.83	1,428.30	705.38	34.22	-4.10	0.902
81.00	-8.50	-13.45	0.00	-618.38	0.00	618.38	1,392.30	696.15	1,414.10	698.37	35.09	-4.22	0.892
82.00	-8.39	-13.32	0.00	-604.93	0.00	604.93	1,386.92	693.46	1,399.92	691.37	35.98	-4.33	0.881
83.00	-8.27	-13.21	0.00	-591.61	0.00	591.61	1,381.49	690.75	1,385.78	684.38	36.90	-4.44	0.871
84.00	-8.15	-13.14	0.00	-578.40	0.00	578.40	1,376.03	688.01	1,371.66	677.41	37.84	-4.56	0.860
85.00	-8.03	-13.06	0.00	-565.26	0.00	565.26	1,370.53	685.26	1,357.58	670.46	38.81	-4.67	0.849
86.00	-7.91	-12.98	0.00	-552.20	0.00	552.20	1,364.99	682.49	1,343.53	663.52	39.80	-4.78	0.838
87.00	-7.80	-12.91	0.00	-539.22	0.00	539.22	1,359.41	679.70	1,329.50	656.59	40.81	-4.89	0.827
88.00	-7.68	-12.83	0.00	-526.32	0.00	526.32	1,353.79	676.90	1,315.52	649.68	41.84	-5.00	0.816
89.00	-7.57	-12.75	0.00	-513.49	0.00	513.49	1,348.13	674.07	1,301.56	642.79	42.90	-5.11	0.805
90.00	-7.45	-12.67	0.00	-500.74	0.00	500.74	1,342.44	671.22	1,287.64	635.92	43.98	-5.22	0.793
91.00	-7.34	-12.60	0.00	-488.06	0.00	488.06	1,336.71	668.35	1,273.75	629.06	45.09	-5.33	0.782
92.00	-7.23	-12.52	0.00	-475.47	0.00	475.47	1,330.94	665.47	1,259.90	622.22	46.21	-5.43	0.770
93.00	-7.11	-12.44	0.00	-462.95	0.00	462.95	1,325.13	662.56	1,246.09	615.40	47.36	-5.54	0.758
94.00	-7.00	-12.36	0.00	-450.51	0.00	450.51	1,319.28	659.64	1,232.31	608.59	48.53	-5.65	0.746
95.00	-6.89	-12.28	0.00	-438.15	0.00	438.15	1,313.39	656.70	1,218.57	601.80	49.72	-5.75	0.734
96.00	-6.78	-12.20	0.00	-425.87	0.00	425.87	1,307.47	653.73	1,204.87	595.04	50.94	-5.86	0.721
97.00	-6.67	-12.12	0.00	-413.67	0.00	413.67	1,301.50	650.75	1,191.20	588.29	52.17	-5.96	0.709
98.00	-6.57	-12.05	0.00	-401.54	0.00	401.54	1,295.50	647.75	1,177.58	581.56	53.43	-6.06	0.696
99.00	-6.46	-11.97	0.00	-389.50	0.00	389.50	1,289.46	644.73	1,164.00	574.85	54.71	-6.16	0.683
100.00	-5.90	-10.81	0.00	-375.23	0.00	375.23	1,283.38	641.69	1,150.46	568.17	56.01	-6.26	0.665
101.00	-5.80	-10.73	0.00	-364.42	0.00	364.42	1,277.26	638.63	1,136.96	561.50	57.33	-6.36	0.654
102.00	-5.70	-10.66	0.00	-353.68	0.00	353.68	1,271.10	635.55	1,123.50	554.85	58.67	-6.46	0.642
103.00	-5.60	-10.58	0.00	-343.03	0.00	343.03	1,264.91	632.45	1,110.09	548.23	60.03	-6.56	0.630
104.00	-5.50	-10.50	0.00	-332.45	0.00	332.45	1,257.26	628.63	1,095.49	541.02	61.41	-6.65	0.619

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:31 PM

Customer: Metro PCS

Load Case: 0.9D + 1.6W

100 mph with No Ice (Reduced DL)

36 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

105.00	-5.40	-10.42	0.00	-321.96	0.00	321.96	1,248.31	624.16	1,079.86	533.30	62.81	-6.75	0.608
106.00	-5.31	-10.34	0.00	-311.54	0.00	311.54	1,239.36	619.68	1,064.34	525.64	64.23	-6.84	0.597
107.00	-5.21	-10.25	0.00	-301.21	0.00	301.21	1,230.41	615.21	1,048.93	518.03	65.67	-6.94	0.586
108.00	-5.12	-10.13	0.00	-290.96	0.00	290.96	1,221.46	610.73	1,033.64	510.48	67.13	-7.03	0.574
109.00	-5.03	-10.02	0.00	-280.83	0.00	280.83	1,212.51	606.26	1,018.46	502.98	68.61	-7.12	0.563
110.00	-4.94	-9.91	0.00	-270.81	0.00	270.81	1,203.56	601.78	1,003.39	495.54	70.11	-7.21	0.551
110.00	-4.94	-9.91	0.00	-270.81	0.00	270.81	829.71	414.85	695.98	343.72	70.11	-7.21	0.794
111.00	-4.86	-9.80	0.00	-260.90	0.00	260.90	826.14	413.07	687.80	339.68	71.62	-7.30	0.775
112.00	-4.78	-9.69	0.00	-251.11	0.00	251.11	822.53	411.26	679.64	335.65	73.16	-7.41	0.754
113.00	-4.70	-9.58	0.00	-241.42	0.00	241.42	818.88	409.44	671.48	331.62	74.72	-7.53	0.734
114.00	-4.62	-9.47	0.00	-231.85	0.00	231.85	815.19	407.60	663.34	327.60	76.30	-7.64	0.714
115.00	-4.54	-9.36	0.00	-222.38	0.00	222.38	811.47	405.73	655.22	323.59	77.91	-7.74	0.693
116.00	-4.46	-9.22	0.00	-212.96	0.00	212.96	807.71	403.85	647.11	319.59	79.54	-7.85	0.672
117.00	-4.38	-9.14	0.00	-203.74	0.00	203.74	803.90	401.95	639.02	315.59	81.19	-7.96	0.652
118.00	-4.30	-9.07	0.00	-194.60	0.00	194.60	800.06	400.03	630.95	311.60	82.86	-8.06	0.630
119.00	-4.23	-8.99	0.00	-185.53	0.00	185.53	796.18	398.09	622.89	307.62	84.55	-8.16	0.609
120.00	-3.59	-7.75	0.00	-176.53	0.00	176.53	792.27	396.13	614.86	303.65	86.27	-8.26	0.586
121.00	-3.52	-7.67	0.00	-168.79	0.00	168.79	788.31	394.15	606.84	299.70	88.00	-8.35	0.568
122.00	-3.45	-7.59	0.00	-161.12	0.00	161.12	784.31	392.16	598.84	295.75	89.76	-8.45	0.550
123.00	-3.38	-7.52	0.00	-153.53	0.00	153.53	780.28	390.14	590.87	291.81	91.53	-8.54	0.531
124.00	-3.31	-7.44	0.00	-146.01	0.00	146.01	776.21	388.10	582.91	287.88	93.32	-8.63	0.512
125.00	-3.24	-7.37	0.00	-138.57	0.00	138.57	772.10	386.05	574.98	283.96	95.13	-8.71	0.493
126.00	-3.17	-7.29	0.00	-131.20	0.00	131.20	767.95	383.97	567.07	280.06	96.96	-8.80	0.473
127.00	-3.11	-7.21	0.00	-123.91	0.00	123.91	763.76	381.88	559.19	276.16	98.80	-8.88	0.453
128.00	-3.04	-7.14	0.00	-116.70	0.00	116.70	759.54	379.77	551.33	272.28	100.66	-8.96	0.433
129.00	-2.97	-7.06	0.00	-109.56	0.00	109.56	755.27	377.64	543.49	268.41	102.54	-9.03	0.412
130.00	-2.95	-5.39	0.00	-99.33	0.00	99.33	750.97	375.48	535.68	264.55	104.43	-9.11	0.380
131.00	-2.89	-5.31	0.00	-93.95	0.00	93.95	746.63	373.31	527.90	260.71	106.34	-9.18	0.364
132.00	-2.84	-5.24	0.00	-88.63	0.00	88.63	742.25	371.12	520.15	256.88	108.26	-9.24	0.349
133.00	-2.79	-5.17	0.00	-83.39	0.00	83.39	737.83	368.91	512.42	253.07	110.19	-9.31	0.333
134.00	-2.74	-5.10	0.00	-78.22	0.00	78.22	733.37	366.68	504.72	249.26	112.14	-9.37	0.318
135.00	-2.69	-5.02	0.00	-73.13	0.00	73.13	728.87	364.44	497.06	245.48	114.10	-9.43	0.302
136.00	-2.64	-4.95	0.00	-68.11	0.00	68.11	724.34	362.17	489.42	241.71	116.07	-9.48	0.286
137.00	-2.59	-4.88	0.00	-63.15	0.00	63.15	719.77	359.88	481.81	237.95	118.05	-9.54	0.269
138.00	-2.54	-4.81	0.00	-58.28	0.00	58.28	715.15	357.58	474.24	234.21	120.05	-9.59	0.253
139.00	-2.49	-4.74	0.00	-53.47	0.00	53.47	710.80	355.40	466.89	230.58	122.05	-9.64	0.236
140.00	-2.44	-4.67	0.00	-48.73	0.00	48.73	704.09	352.04	458.06	226.22	124.07	-9.69	0.219
141.00	-2.40	-4.60	0.00	-44.06	0.00	44.06	697.37	348.69	449.32	221.90	126.09	-9.73	0.202
142.00	-2.35	-4.53	0.00	-39.47	0.00	39.47	690.66	345.33	440.66	217.63	128.13	-9.77	0.185
143.00	-2.30	-4.46	0.00	-34.94	0.00	34.94	683.95	341.97	432.09	213.39	130.17	-9.81	0.167
144.00	-2.26	-4.39	0.00	-30.49	0.00	30.49	677.24	338.62	423.60	209.20	132.21	-9.84	0.149
145.00	-2.21	-4.32	0.00	-26.10	0.00	26.10	670.52	335.26	415.19	205.05	134.27	-9.87	0.131
146.00	-2.17	-4.25	0.00	-21.79	0.00	21.79	663.81	331.91	406.87	200.94	136.33	-9.90	0.112
147.00	-2.12	-4.18	0.00	-17.54	0.00	17.54	657.10	328.55	398.63	196.87	138.39	-9.92	0.092
148.00	-2.08	-4.11	0.00	-13.36	0.00	13.36	650.39	325.19	390.48	192.84	140.46	-9.94	0.073
149.00	-2.04	-4.04	0.00	-9.25	0.00	9.25	643.68	321.84	382.41	188.86	142.53	-9.95	0.052
150.00	0.00	-3.63	0.00	-5.20	0.00	5.20	636.96	318.48	374.43	184.91	144.61	-9.96	0.028

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:32 PM

Customer: Metro PCS

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice	36 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance 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		9.3	0.0					0.0	0.0	9.3	0.0	0.0	0.0
1.00		18.7	238.6					7.4	203.9	26.1	442.5	0.0	0.0
2.00		18.7	245.2					7.9	213.0	26.6	458.2	0.0	0.0
3.00		18.7	248.0					8.1	217.8	26.8	465.7	0.0	0.0
4.00		18.7	249.6					8.2	221.1	26.9	470.6	0.0	0.0
5.00		18.6	250.5					8.3	223.7	27.0	474.2	0.0	0.0
6.00		18.6	251.1					8.4	225.8	27.0	476.9	0.0	0.0
7.00		18.5	251.5					8.5	227.6	27.1	479.1	0.0	0.0
8.00		18.5	251.6					8.6	229.2	27.1	480.8	0.0	0.0
9.00		18.4	251.6					8.7	230.6	27.1	482.2	0.0	0.0
10.00		18.4	251.5					8.7	231.9	27.1	483.4	0.0	0.0
11.00		18.3	251.2					8.8	233.1	27.1	484.3	0.0	0.0
12.00		18.3	250.9					8.8	234.2	27.1	485.1	0.0	0.0
13.00		18.2	250.6					8.8	235.2	27.0	485.8	0.0	0.0
14.00		18.1	250.2					8.9	236.1	27.0	486.3	0.0	0.0
15.00		18.1	249.7					8.9	237.0	27.0	486.7	0.0	0.0
16.00		18.0	249.2					9.0	237.8	27.0	487.0	0.0	0.0
17.00		18.0	248.6					9.0	238.6	26.9	487.2	0.0	0.0
18.00		17.9	248.0					9.0	239.4	26.9	487.4	0.0	0.0
19.00		17.8	247.4					9.0	240.1	26.9	487.5	0.0	0.0
20.00		17.8	246.8					9.1	240.8	26.8	487.6	0.0	0.0
21.00		17.7	246.1					9.1	241.4	26.8	487.5	0.0	0.0
22.00		17.6	245.4					9.1	242.0	26.8	487.5	0.0	0.0
23.00		17.6	244.7					9.2	242.6	26.7	487.4	0.0	0.0
24.00		17.5	244.0					9.2	243.2	26.7	487.2	0.0	0.0
25.00		17.4	243.3					9.2	243.8	26.6	487.0	0.0	0.0
26.00		17.4	242.5					9.2	244.3	26.6	486.8	0.0	0.0
27.00		17.3	241.7					9.2	244.8	26.6	486.5	0.0	0.0
28.00		17.2	240.9					9.3	245.3	26.5	486.3	0.0	0.0
29.00		17.2	240.1					9.3	245.8	26.5	485.9	0.0	0.0
30.00		17.2	239.3					9.3	246.3	26.5	485.6	0.0	0.0
31.00		17.2	238.5					9.4	246.7	26.6	485.2	0.0	0.0
32.00	Bot - Section 2	17.5	237.6					9.5	247.2	26.9	484.8	0.0	0.0
33.00		17.7	367.5					9.6	247.6	27.3	615.1	0.0	0.0
34.00		17.8	366.0					9.7	248.1	27.5	614.0	0.0	0.0
35.00		17.9	364.5					9.8	248.5	27.6	613.0	0.0	0.0
36.00	Top - Section 1	17.9	363.0					9.9	248.9	27.8	611.9	0.0	0.0
37.00		18.0	213.0					10.0	249.3	28.0	462.3	0.0	0.0
38.00		18.1	212.2					10.1	249.7	28.1	461.9	0.0	0.0
39.00		18.1	211.5					10.2	250.0	28.3	461.5	0.0	0.0
40.00		18.2	210.7					10.2	250.4	28.4	461.1	0.0	0.0
41.00		18.2	209.9					10.3	250.8	28.6	460.6	0.0	0.0
42.00		18.3	209.1					10.4	251.1	28.7	460.2	0.0	0.0
43.00		18.3	208.3					10.5	251.5	28.8	459.7	0.0	0.0
44.00		18.4	207.5					10.6	251.8	29.0	459.3	0.0	0.0
45.00		18.4	206.7					10.7	252.1	29.1	458.8	0.0	0.0
46.00		18.5	205.8					10.8	252.5	29.2	458.3	0.0	0.0
47.00		18.5	205.0					10.8	252.8	29.3	457.8	0.0	0.0

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:40 PM

Customer: Metro PCS

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice				36 Iterations			
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00				Wind Importance Factor : 1.00			
Dead Load Factor : 1.20					Ice Importance Factor : 1.00			
Wind Load Factor : 1.00								

48.00		18.5	204.2		10.9	253.1	29.5	457.3	0.0	0.0			
49.00		18.6	203.3		11.0	253.4	29.6	456.7	0.0	0.0			
50.00		18.6	202.5		11.1	253.7	29.7	456.2	0.0	0.0			
51.00		18.6	201.6		11.2	254.0	29.8	455.6	0.0	0.0			
52.00		18.6	200.8		11.2	254.3	29.9	455.1	0.0	0.0			
53.00		18.7	199.9		11.3	254.6	30.0	454.5	0.0	0.0			
54.00		18.7	199.1		11.4	254.9	30.1	453.9	0.0	0.0			
55.00		18.7	198.2		11.5	255.1	30.1	453.3	0.0	0.0			
56.00		18.7	197.3		11.5	255.4	30.2	452.7	0.0	0.0			
57.00		18.7	196.4		11.6	255.7	30.3	452.1	0.0	0.0			
58.00		18.7	195.6		11.7	256.0	30.4	451.5	0.0	0.0			
59.00		18.7	194.7		11.7	256.2	30.5	450.9	0.0	0.0			
60.00		18.7	193.8		11.8	256.5	30.5	450.3	0.0	0.0			
61.00		18.7	192.9		11.9	256.7	30.6	449.6	0.0	0.0			
62.00		18.7	192.0		11.9	257.0	30.7	449.0	0.0	0.0			
63.00		18.7	191.1		12.0	257.2	30.7	448.4	0.0	0.0			
64.00		18.7	190.2		12.1	257.5	30.8	447.7	0.0	0.0			
65.00		18.7	189.3		12.1	257.7	30.9	447.0	0.0	0.0			
66.00		18.7	188.4		12.2	258.0	30.9	446.4	0.0	0.0			
67.00		18.7	187.5		12.3	258.2	31.0	445.7	0.0	0.0			
68.00		18.7	186.6		12.3	258.4	31.0	445.0	0.0	0.0			
69.00		18.7	185.7		12.4	258.7	31.1	444.3	0.0	0.0			
70.00	Bot - Section 3	18.8	184.8		12.5	258.9	31.3	443.6	0.0	0.0			
71.00		19.0	271.5		12.5	259.1	31.5	530.6	0.0	0.0			
72.00		19.0	270.1		12.6	259.3	31.6	529.4	0.0	0.0			
73.00		14.2	268.7		12.7	259.5	26.9	528.2	0.0	0.0			
73.50	Top - Section 2	9.5	133.8		6.3	129.9	15.8	263.7	0.0	0.0			
74.00		14.2	81.7		6.4	129.9	20.6	211.7	0.0	0.0			
75.00		18.9	162.8		12.8	260.0	31.7	422.8	0.0	0.0			
76.00		18.9	162.0		12.8	260.2	31.7	422.2	0.0	0.0			
77.00		13.6	161.2		12.9	260.4	26.5	421.6	0.0	0.0			
77.44	Reinf. Top	9.4	70.7		5.7	114.6	15.1	185.3	0.0	0.0			
78.00		14.7	89.7		7.3	101.1	22.0	190.8	0.0	0.0			
79.00		18.8	159.5		13.0	180.6	31.8	340.2	0.0	0.0			
80.00		18.8	158.7		13.1	180.9	31.9	339.6	0.0	0.0			
81.00		18.8	157.9		13.1	181.1	31.9	338.9	0.0	0.0			
82.00		18.7	157.1		13.2	181.2	31.9	338.3	0.0	0.0			
83.00		18.7	156.2		10.7	168.0	29.4	324.2	0.0	0.0			
84.00		18.7	155.4		0.0	154.7	18.7	310.1	0.0	0.0			
85.00		18.6	154.6		0.0	154.9	18.6	309.5	0.0	0.0			
86.00		18.6	153.8		0.0	155.0	18.6	308.8	0.0	0.0			
87.00		18.6	152.9		0.0	155.2	18.6	308.1	0.0	0.0			
88.00		18.5	152.1		0.0	155.3	18.5	307.4	0.0	0.0			
89.00		18.5	151.3		0.0	155.5	18.5	306.7	0.0	0.0			
90.00		18.5	150.4		0.0	155.6	18.5	306.0	0.0	0.0			
91.00		18.4	149.6		0.0	155.8	18.4	305.4	0.0	0.0			
92.00		18.4	148.7		0.0	155.9	18.4	304.7	0.0	0.0			
93.00		18.4	147.9		0.0	156.1	18.4	304.0	0.0	0.0			
94.00		18.3	147.1		0.0	156.2	18.3	303.3	0.0	0.0			
95.00		18.3	146.2		0.0	156.3	18.3	302.6	0.0	0.0			
96.00		18.2	145.4		0.0	156.5	18.2	301.8	0.0	0.0			
97.00		18.2	144.5		0.0	156.6	18.2	301.1	0.0	0.0			
98.00		18.1	143.7		0.0	156.8	18.1	300.4	0.0	0.0			
99.00		18.1	142.8		0.0	156.9	18.1	299.7	0.0	0.0			
100.00	Appertunance(s)	18.0	141.9	258.0	0.0	570.4	2,013.3	0.0	157.0	276.0	2,312.2	0.0	0.0
101.00		18.0	141.1		0.0	136.7	18.0	277.8	0.0	0.0			
102.00		17.9	140.2		0.0	136.8	17.9	277.1	0.0	0.0			

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:40 PM

Customer: Metro PCS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.00 in Radial Ice

36 Iterations

Gust Response Factor : 1.10
 Dead Load Factor : 1.20
 Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
 Ice Importance Factor : 1.00

103.00	17.9	139.4					0.0	136.9	17.9	276.3	0.0	0.0	
104.00	17.8	138.5					0.0	137.0	17.8	275.6	0.0	0.0	
105.00	17.8	137.6					0.0	137.2	17.8	274.8	0.0	0.0	
106.00	17.7	136.8					0.0	137.3	17.7	274.0	0.0	0.0	
107.00	17.7	135.9					0.0	137.4	17.7	273.3	0.0	0.0	
108.00	17.6	135.1					9.0	137.5	26.6	272.5	0.0	0.0	
109.00	17.6	134.2					9.0	137.6	26.6	271.8	0.0	0.0	
110.00	Top - Section 3	17.5	133.3				9.1	137.7	26.6	271.0	0.0	0.0	
111.00		17.4	116.0				9.1	137.8	26.5	253.8	0.0	0.0	
112.00		17.4	115.2				9.1	137.9	26.5	253.1	0.0	0.0	
113.00		17.3	114.5				9.2	138.0	26.5	252.5	0.0	0.0	
114.00		17.3	113.7				9.2	138.1	26.5	251.8	0.0	0.0	
115.00		17.2	113.0				9.2	138.2	26.4	251.2	0.0	0.0	
116.00	Appertunance(s)	17.1	112.2	7.1	0.0	14.2	113.3	9.2	138.3	33.5	363.9	0.0	0.0
117.00		17.1	111.5					0.0	123.0	17.1	234.5	0.0	0.0
118.00		17.0	110.7					0.0	123.1	17.0	233.8	0.0	0.0
119.00		16.9	110.0					0.0	123.2	16.9	233.2	0.0	0.0
120.00	Appertunance(s)	16.9	109.2	265.6	0.0	-283.6	2,933.1	0.0	123.3	282.5	3,165.6	0.0	0.0
121.00		16.8	108.4					0.0	105.7	16.8	214.1	0.0	0.0
122.00		16.7	107.7					0.0	105.7	16.7	213.4	0.0	0.0
123.00		16.7	106.9					0.0	105.8	16.7	212.7	0.0	0.0
124.00		16.6	106.2					0.0	105.8	16.6	212.0	0.0	0.0
125.00		16.5	105.4					0.0	105.9	16.5	211.3	0.0	0.0
126.00		16.5	104.6					0.0	105.9	16.5	210.6	0.0	0.0
127.00		16.4	103.9					0.0	106.0	16.4	209.9	0.0	0.0
128.00		16.3	103.1					0.0	106.0	16.3	209.1	0.0	0.0
129.00		16.3	102.3					0.0	106.1	16.3	208.4	0.0	0.0
130.00	Appertunance(s)	16.2	101.6	307.9	0.0	609.0	1,932.6	0.0	106.1	324.1	2,140.3	0.0	0.0
131.00		16.1	100.8					0.0	35.2	16.1	136.0	0.0	0.0
132.00		16.0	100.0					0.0	35.2	16.0	135.2	0.0	0.0
133.00		16.0	99.3					0.0	35.2	16.0	134.4	0.0	0.0
134.00		15.9	98.5					0.0	35.2	15.9	133.7	0.0	0.0
135.00		15.8	97.7					0.0	35.2	15.8	132.9	0.0	0.0
136.00		15.7	96.9					0.0	35.2	15.7	132.1	0.0	0.0
137.00		15.7	96.2					0.0	35.2	15.7	131.3	0.0	0.0
138.00		15.6	95.4					0.0	35.2	15.6	130.6	0.0	0.0
139.00		15.5	94.6					0.0	35.2	15.5	129.8	0.0	0.0
140.00		15.4	93.8					0.0	35.2	15.4	129.0	0.0	0.0
141.00		15.3	93.0					0.0	35.2	15.3	128.2	0.0	0.0
142.00		15.3	92.3					0.0	35.2	15.3	127.4	0.0	0.0
143.00		15.2	91.5					0.0	35.2	15.2	126.7	0.0	0.0
144.00		15.1	90.7					0.0	35.2	15.1	125.9	0.0	0.0
145.00		15.0	89.9					0.0	35.2	15.0	125.1	0.0	0.0
146.00		14.9	89.1					0.0	35.2	14.9	124.3	0.0	0.0
147.00		14.8	88.3					0.0	35.2	14.8	123.5	0.0	0.0
148.00		14.8	87.6					0.0	35.2	14.8	122.7	0.0	0.0
149.00		14.7	86.8					0.0	35.2	14.7	121.9	0.0	0.0
150.00	Appertunance(s)	7.3	86.0	920.2	0.0	1,142.5	8,812.7	0.0	35.2	927.5	8,933.9	0.0	0.0
Totals:									5,370.85	69,541.8	0.00	0.00	

Site Number: 302475

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:40 PM

Customer: Metro PCS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.00 in Radial Ice

36 Iterations

Gust Response Factor : 1.10

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Ice Importance Factor : 1.00

Wind Load Factor : 1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-69.54	-5.37	0.00	-563.13	0.00	563.13	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.170
1.00	-69.10	-5.36	0.00	-557.76	0.00	557.76	3,050.02	1,525.01	4,454.72	2,200.02	0.00	-0.01	0.169
2.00	-68.64	-5.35	0.00	-552.40	0.00	552.40	3,041.56	1,520.78	4,423.28	2,184.49	0.01	-0.03	0.168
3.00	-68.17	-5.34	0.00	-547.06	0.00	547.06	3,033.07	1,516.53	4,391.90	2,168.99	0.01	-0.04	0.167
4.00	-67.70	-5.33	0.00	-541.72	0.00	541.72	3,024.53	1,512.27	4,360.56	2,153.52	0.02	-0.06	0.166
5.00	-67.22	-5.32	0.00	-536.39	0.00	536.39	3,015.96	1,507.98	4,329.28	2,138.07	0.04	-0.07	0.166
6.00	-66.75	-5.30	0.00	-531.07	0.00	531.07	3,007.35	1,503.68	4,298.05	2,122.64	0.05	-0.08	0.165
7.00	-66.26	-5.29	0.00	-525.77	0.00	525.77	2,998.70	1,499.35	4,266.87	2,107.25	0.07	-0.10	0.164
8.00	-65.78	-5.28	0.00	-520.48	0.00	520.48	2,990.02	1,495.01	4,235.75	2,091.88	0.09	-0.11	0.163
9.00	-65.30	-5.27	0.00	-515.20	0.00	515.20	2,981.29	1,490.65	4,204.68	2,076.53	0.12	-0.13	0.162
10.00	-64.81	-5.26	0.00	-509.93	0.00	509.93	2,972.53	1,486.26	4,173.67	2,061.22	0.15	-0.14	0.161
11.00	-64.33	-5.24	0.00	-504.67	0.00	504.67	2,963.72	1,481.86	4,142.71	2,045.93	0.18	-0.15	0.160
12.00	-63.84	-5.23	0.00	-499.43	0.00	499.43	2,954.88	1,477.44	4,111.81	2,030.67	0.21	-0.17	0.160
13.00	-63.36	-5.22	0.00	-494.19	0.00	494.19	2,946.00	1,473.00	4,080.97	2,015.44	0.25	-0.18	0.159
14.00	-62.87	-5.20	0.00	-488.98	0.00	488.98	2,937.08	1,468.54	4,050.18	2,000.23	0.29	-0.20	0.158
15.00	-62.38	-5.19	0.00	-483.77	0.00	483.77	2,928.13	1,464.06	4,019.46	1,985.06	0.33	-0.21	0.157
16.00	-61.89	-5.18	0.00	-478.58	0.00	478.58	2,919.13	1,459.57	3,988.79	1,969.91	0.38	-0.22	0.156
17.00	-61.40	-5.16	0.00	-473.40	0.00	473.40	2,910.10	1,455.05	3,958.19	1,954.80	0.42	-0.24	0.155
18.00	-60.92	-5.15	0.00	-468.24	0.00	468.24	2,901.03	1,450.51	3,927.64	1,939.72	0.47	-0.25	0.154
19.00	-60.43	-5.14	0.00	-463.09	0.00	463.09	2,891.92	1,445.96	3,897.16	1,924.66	0.53	-0.27	0.153
20.00	-59.94	-5.12	0.00	-457.95	0.00	457.95	2,882.77	1,441.38	3,866.74	1,909.64	0.59	-0.28	0.152
21.00	-59.45	-5.11	0.00	-452.83	0.00	452.83	2,873.58	1,436.79	3,836.39	1,894.65	0.65	-0.29	0.151
22.00	-58.96	-5.09	0.00	-447.73	0.00	447.73	2,864.35	1,432.18	3,806.10	1,879.69	0.71	-0.31	0.151
23.00	-58.47	-5.08	0.00	-442.64	0.00	442.64	2,855.09	1,427.54	3,775.87	1,864.76	0.77	-0.32	0.150
24.00	-57.98	-5.06	0.00	-437.56	0.00	437.56	2,845.78	1,422.89	3,745.71	1,849.87	0.84	-0.34	0.149
25.00	-57.50	-5.05	0.00	-432.50	0.00	432.50	2,835.18	1,417.59	3,713.97	1,834.19	0.92	-0.35	0.148
26.00	-57.01	-5.03	0.00	-427.46	0.00	427.46	2,821.76	1,410.88	3,678.67	1,816.76	0.99	-0.36	0.147
27.00	-56.52	-5.01	0.00	-422.43	0.00	422.43	2,808.33	1,404.17	3,643.55	1,799.41	1.07	-0.38	0.146
28.00	-56.03	-5.00	0.00	-417.41	0.00	417.41	2,794.91	1,397.45	3,608.60	1,782.15	1.15	-0.39	0.146
29.00	-55.55	-4.98	0.00	-412.41	0.00	412.41	2,781.48	1,390.74	3,573.81	1,764.97	1.23	-0.41	0.145
30.00	-55.06	-4.96	0.00	-407.43	0.00	407.43	2,768.06	1,384.03	3,539.19	1,747.87	1.32	-0.42	0.144
31.00	-54.57	-4.95	0.00	-402.47	0.00	402.47	2,754.63	1,377.32	3,504.74	1,730.86	1.41	-0.43	0.143
32.00	-54.09	-4.93	0.00	-397.52	0.00	397.52	2,741.21	1,370.60	3,470.46	1,713.93	1.50	-0.45	0.142
33.00	-53.47	-4.91	0.00	-392.59	0.00	392.59	2,727.78	1,363.89	3,436.35	1,697.08	1.59	-0.46	0.140
34.00	-52.86	-4.89	0.00	-387.68	0.00	387.68	2,714.36	1,357.18	3,402.41	1,680.32	1.69	-0.47	0.139
35.00	-52.24	-4.87	0.00	-382.79	0.00	382.79	2,700.94	1,350.47	3,368.63	1,663.64	1.79	-0.49	0.138
36.00	-51.63	-4.85	0.00	-377.92	0.00	377.92	2,178.16	1,089.08	2,770.79	1,368.39	1.90	-0.50	0.157
37.00	-51.17	-4.83	0.00	-373.07	0.00	373.07	2,171.44	1,085.72	2,748.62	1,357.44	2.00	-0.52	0.155
38.00	-50.70	-4.81	0.00	-368.24	0.00	368.24	2,164.69	1,082.35	2,726.49	1,346.51	2.11	-0.53	0.154
39.00	-50.24	-4.79	0.00	-363.43	0.00	363.43	2,157.90	1,078.95	2,704.40	1,335.60	2.23	-0.54	0.153
40.00	-49.78	-4.77	0.00	-358.63	0.00	358.63	2,151.08	1,075.54	2,682.35	1,324.71	2.34	-0.56	0.152
41.00	-49.32	-4.75	0.00	-353.86	0.00	353.86	2,144.21	1,072.10	2,660.33	1,313.84	2.46	-0.57	0.150
42.00	-48.86	-4.73	0.00	-349.11	0.00	349.11	2,137.30	1,068.65	2,638.35	1,302.98	2.58	-0.59	0.149
43.00	-48.40	-4.71	0.00	-344.38	0.00	344.38	2,130.36	1,065.18	2,616.41	1,292.15	2.71	-0.60	0.148
44.00	-47.94	-4.69	0.00	-339.68	0.00	339.68	2,123.38	1,061.69	2,594.51	1,281.33	2.84	-0.62	0.146
45.00	-47.48	-4.66	0.00	-334.99	0.00	334.99	2,116.36	1,058.18	2,572.65	1,270.54	2.97	-0.63	0.145
46.00	-47.02	-4.64	0.00	-330.33	0.00	330.33	2,109.30	1,054.65	2,550.84	1,259.76	3.10	-0.65	0.144
47.00	-46.56	-4.62	0.00	-325.69	0.00	325.69	2,102.20	1,051.10	2,529.06	1,249.01	3.24	-0.66	0.143
48.00	-46.10	-4.59	0.00	-321.07	0.00	321.07	2,095.06	1,047.53	2,507.33	1,238.28	3.38	-0.67	0.141
49.00	-45.64	-4.57	0.00	-316.47	0.00	316.47	2,087.89	1,043.95	2,485.64	1,227.56	3.52	-0.69	0.140
50.00	-45.19	-4.55	0.00	-311.90	0.00	311.90	2,080.68	1,040.34	2,464.00	1,216.88	3.67	-0.70	0.139

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:40 PM

Customer: Metro PCS

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice	36 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

51.00	-44.73	-4.52	0.00	-307.36	0.00	307.36	2,073.42	1,036.71	2,442.40	1,206.21	3.81	-0.72	0.137
52.00	-44.27	-4.50	0.00	-302.83	0.00	302.83	2,066.13	1,033.07	2,420.85	1,195.57	3.97	-0.73	0.136
53.00	-43.82	-4.47	0.00	-298.34	0.00	298.34	2,058.81	1,029.40	2,399.34	1,184.94	4.12	-0.74	0.135
54.00	-43.37	-4.45	0.00	-293.86	0.00	293.86	2,051.44	1,025.72	2,377.88	1,174.35	4.28	-0.76	0.133
55.00	-42.91	-4.42	0.00	-289.42	0.00	289.42	2,044.03	1,022.02	2,356.47	1,163.77	4.44	-0.77	0.132
56.00	-42.46	-4.40	0.00	-284.99	0.00	284.99	2,036.59	1,018.29	2,335.11	1,153.22	4.60	-0.79	0.131
57.00	-42.01	-4.37	0.00	-280.60	0.00	280.60	2,029.10	1,014.55	2,313.80	1,142.70	4.77	-0.80	0.129
58.00	-41.55	-4.34	0.00	-276.23	0.00	276.23	2,021.58	1,010.79	2,292.54	1,132.20	4.94	-0.81	0.128
59.00	-41.10	-4.32	0.00	-271.89	0.00	271.89	2,014.02	1,007.01	2,271.32	1,121.72	5.11	-0.83	0.127
60.00	-40.65	-4.29	0.00	-267.57	0.00	267.57	2,006.42	1,003.21	2,250.16	1,111.27	5.28	-0.84	0.125
61.00	-40.20	-4.26	0.00	-263.29	0.00	263.29	1,998.79	999.39	2,229.06	1,100.85	5.46	-0.86	0.124
62.00	-39.75	-4.23	0.00	-259.03	0.00	259.03	1,991.11	995.56	2,208.00	1,090.45	5.64	-0.87	0.123
63.00	-39.30	-4.20	0.00	-254.79	0.00	254.79	1,983.40	991.70	2,187.00	1,080.08	5.83	-0.88	0.121
64.00	-38.85	-4.18	0.00	-250.59	0.00	250.59	1,975.64	987.82	2,166.06	1,069.73	6.01	-0.90	0.120
65.00	-38.41	-4.15	0.00	-246.41	0.00	246.41	1,966.16	983.08	2,143.32	1,058.50	6.20	-0.91	0.119
66.00	-37.96	-4.12	0.00	-242.27	0.00	242.27	1,954.97	977.49	2,118.86	1,046.42	6.39	-0.92	0.117
67.00	-37.51	-4.09	0.00	-238.15	0.00	238.15	1,943.78	971.89	2,094.54	1,034.41	6.59	-0.94	0.116
68.00	-37.07	-4.06	0.00	-234.06	0.00	234.06	1,932.60	966.30	2,070.35	1,022.47	6.79	-0.95	0.115
69.00	-36.62	-4.03	0.00	-230.01	0.00	230.01	1,921.41	960.70	2,046.31	1,010.60	6.99	-0.96	0.114
70.00	-36.18	-4.00	0.00	-225.98	0.00	225.98	1,910.22	955.11	2,022.41	998.79	7.19	-0.98	0.113
71.00	-35.65	-3.96	0.00	-221.98	0.00	221.98	1,899.03	949.52	1,998.65	987.06	7.39	-0.99	0.110
72.00	-35.12	-3.93	0.00	-218.02	0.00	218.02	1,887.85	943.92	1,975.03	975.39	7.60	-1.00	0.109
73.00	-34.59	-3.90	0.00	-214.09	0.00	214.09	1,876.66	938.33	1,951.55	963.80	7.81	-1.01	0.107
73.50	-34.33	-3.88	0.00	-212.13	0.00	212.13	1,431.47	715.74	1,521.25	751.29	7.92	-1.02	0.125
74.00	-34.12	-3.87	0.00	-210.19	0.00	210.19	1,428.93	714.46	1,514.06	747.74	8.03	-1.03	0.124
75.00	-33.69	-3.84	0.00	-206.33	0.00	206.33	1,423.81	711.90	1,499.70	740.65	8.24	-1.04	0.122
76.00	-33.27	-3.80	0.00	-202.49	0.00	202.49	1,418.66	709.33	1,485.37	733.57	8.46	-1.05	0.120
77.00	-32.85	-3.77	0.00	-198.69	0.00	198.69	1,413.46	706.73	1,471.06	726.50	8.69	-1.07	0.119
77.44	-32.66	-3.76	0.00	-197.03	0.00	197.03	1,411.16	705.58	1,464.78	723.40	8.78	-1.07	0.118
77.44	-32.66	-3.76	0.00	-197.03	0.00	197.03	1,411.16	705.58	1,464.78	723.40	8.78	-1.07	0.296
78.00	-32.47	-3.75	0.00	-194.92	0.00	194.92	1,408.23	704.11	1,456.78	719.45	8.91	-1.08	0.294
79.00	-32.13	-3.73	0.00	-191.18	0.00	191.18	1,402.96	701.48	1,442.53	712.41	9.14	-1.11	0.291
80.00	-31.79	-3.71	0.00	-187.45	0.00	187.45	1,397.65	698.83	1,428.30	705.38	9.38	-1.15	0.289
81.00	-31.45	-3.69	0.00	-183.74	0.00	183.74	1,392.30	696.15	1,414.10	698.37	9.62	-1.18	0.286
82.00	-31.11	-3.67	0.00	-180.06	0.00	180.06	1,386.92	693.46	1,399.92	691.37	9.87	-1.22	0.283
83.00	-30.78	-3.65	0.00	-176.39	0.00	176.39	1,381.49	690.75	1,385.78	684.38	10.13	-1.25	0.280
84.00	-30.47	-3.64	0.00	-172.75	0.00	172.75	1,376.03	688.01	1,371.66	677.41	10.40	-1.28	0.277
85.00	-30.16	-3.63	0.00	-169.11	0.00	169.11	1,370.53	685.26	1,357.58	670.46	10.67	-1.32	0.274
86.00	-29.85	-3.62	0.00	-165.47	0.00	165.47	1,364.99	682.49	1,343.53	663.52	10.95	-1.35	0.271
87.00	-29.54	-3.61	0.00	-161.85	0.00	161.85	1,359.41	679.70	1,329.50	656.59	11.23	-1.38	0.268
88.00	-29.23	-3.60	0.00	-158.24	0.00	158.24	1,353.79	676.90	1,315.52	649.68	11.53	-1.41	0.265
89.00	-28.92	-3.60	0.00	-154.63	0.00	154.63	1,348.13	674.07	1,301.56	642.79	11.83	-1.45	0.262
90.00	-28.61	-3.59	0.00	-151.04	0.00	151.04	1,342.44	671.22	1,287.64	635.92	12.13	-1.48	0.259
91.00	-28.31	-3.58	0.00	-147.45	0.00	147.45	1,336.71	668.35	1,273.75	629.06	12.45	-1.51	0.256
92.00	-28.00	-3.56	0.00	-143.88	0.00	143.88	1,330.94	665.47	1,259.90	622.22	12.77	-1.55	0.252
93.00	-27.70	-3.55	0.00	-140.31	0.00	140.31	1,325.13	662.56	1,246.09	615.40	13.10	-1.58	0.249
94.00	-27.39	-3.54	0.00	-136.76	0.00	136.76	1,319.28	659.64	1,232.31	608.59	13.43	-1.61	0.246
95.00	-27.09	-3.53	0.00	-133.22	0.00	133.22	1,313.39	656.70	1,218.57	601.80	13.77	-1.64	0.242
96.00	-26.79	-3.52	0.00	-129.69	0.00	129.69	1,307.47	653.73	1,204.87	595.04	14.12	-1.67	0.238
97.00	-26.48	-3.51	0.00	-126.17	0.00	126.17	1,301.50	650.75	1,191.20	588.29	14.47	-1.71	0.235
98.00	-26.18	-3.49	0.00	-122.67	0.00	122.67	1,295.50	647.75	1,177.58	581.56	14.83	-1.74	0.231
99.00	-25.88	-3.48	0.00	-119.17	0.00	119.17	1,289.46	644.73	1,164.00	574.85	15.20	-1.77	0.227
100.00	-23.58	-3.14	0.00	-115.12	0.00	115.12	1,283.38	641.69	1,150.46	568.17	15.57	-1.80	0.221
101.00	-23.30	-3.13	0.00	-111.98	0.00	111.98	1,277.26	638.63	1,136.96	561.50	15.95	-1.83	0.218
102.00	-23.02	-3.12	0.00	-108.85	0.00	108.85	1,271.10	635.55	1,123.50	554.85	16.34	-1.86	0.214
103.00	-22.74	-3.10	0.00	-105.74	0.00	105.74	1,264.91	632.45	1,110.09	548.23	16.73	-1.89	0.211
104.00	-22.47	-3.08	0.00	-102.64	0.00	102.64	1,257.26	628.63	1,095.49	541.02	17.13	-1.92	0.208

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:41 PM

Customer: Metro PCS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.00 in Radial Ice

36 Iterations

Gust Response Factor : 1.10

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Ice Importance Factor : 1.00

Wind Load Factor : 1.00

105.00	-22.19	-3.07	0.00	-99.55	0.00	99.55	1,248.31	624.16	1,079.86	533.30	17.54	-1.95	0.204
106.00	-21.92	-3.05	0.00	-96.48	0.00	96.48	1,239.36	619.68	1,064.34	525.64	17.95	-1.98	0.201
107.00	-21.64	-3.04	0.00	-93.43	0.00	93.43	1,230.41	615.21	1,048.93	518.03	18.36	-2.01	0.198
108.00	-21.37	-3.01	0.00	-90.39	0.00	90.39	1,221.46	610.73	1,033.64	510.48	18.79	-2.03	0.195
109.00	-21.10	-2.99	0.00	-87.38	0.00	87.38	1,212.51	606.26	1,018.46	502.98	19.22	-2.06	0.191
110.00	-20.82	-2.96	0.00	-84.40	0.00	84.40	1,203.56	601.78	1,003.39	495.54	19.65	-2.09	0.188
110.00	-20.82	-2.96	0.00	-84.40	0.00	84.40	829.71	414.85	695.98	343.72	19.65	-2.09	0.271
111.00	-20.57	-2.93	0.00	-81.44	0.00	81.44	826.14	413.07	687.80	339.68	20.09	-2.12	0.265
112.00	-20.32	-2.91	0.00	-78.51	0.00	78.51	822.53	411.26	679.64	335.65	20.54	-2.15	0.259
113.00	-20.06	-2.89	0.00	-75.60	0.00	75.60	818.88	409.44	671.48	331.62	20.99	-2.19	0.253
114.00	-19.81	-2.86	0.00	-72.71	0.00	72.71	815.19	407.60	663.34	327.60	21.46	-2.22	0.246
115.00	-19.56	-2.84	0.00	-69.85	0.00	69.85	811.47	405.73	655.22	323.59	21.93	-2.26	0.240
116.00	-19.20	-2.80	0.00	-66.99	0.00	66.99	807.71	403.85	647.11	319.59	22.40	-2.29	0.233
117.00	-18.96	-2.79	0.00	-64.19	0.00	64.19	803.90	401.95	639.02	315.59	22.89	-2.33	0.227
118.00	-18.73	-2.77	0.00	-61.41	0.00	61.41	800.06	400.03	630.95	311.60	23.38	-2.36	0.221
119.00	-18.49	-2.75	0.00	-58.64	0.00	58.64	796.18	398.09	622.89	307.62	23.87	-2.39	0.214
120.00	-15.34	-2.35	0.00	-55.88	0.00	55.88	792.27	396.13	614.86	303.65	24.38	-2.42	0.203
121.00	-15.13	-2.33	0.00	-53.54	0.00	53.54	788.31	394.15	606.84	299.70	24.89	-2.45	0.198
122.00	-14.91	-2.31	0.00	-51.21	0.00	51.21	784.31	392.16	598.84	295.75	25.40	-2.48	0.192
123.00	-14.70	-2.29	0.00	-48.90	0.00	48.90	780.28	390.14	590.87	291.81	25.93	-2.51	0.186
124.00	-14.49	-2.27	0.00	-46.61	0.00	46.61	776.21	388.10	582.91	287.88	26.46	-2.54	0.181
125.00	-14.28	-2.25	0.00	-44.34	0.00	44.34	772.10	386.05	574.98	283.96	26.99	-2.56	0.175
126.00	-14.07	-2.23	0.00	-42.08	0.00	42.08	767.95	383.97	567.07	280.06	27.53	-2.59	0.169
127.00	-13.86	-2.21	0.00	-39.85	0.00	39.85	763.76	381.88	559.19	276.16	28.08	-2.62	0.162
128.00	-13.65	-2.19	0.00	-37.63	0.00	37.63	759.54	379.77	551.33	272.28	28.63	-2.64	0.156
129.00	-13.44	-2.17	0.00	-35.44	0.00	35.44	755.27	377.64	543.49	268.41	29.18	-2.67	0.150
130.00	-11.31	-1.76	0.00	-32.65	0.00	32.65	750.97	375.48	535.68	264.55	29.74	-2.69	0.139
131.00	-11.18	-1.74	0.00	-30.90	0.00	30.90	746.63	373.31	527.90	260.71	30.31	-2.71	0.134
132.00	-11.04	-1.72	0.00	-29.16	0.00	29.16	742.25	371.12	520.15	256.88	30.88	-2.74	0.128
133.00	-10.91	-1.70	0.00	-27.44	0.00	27.44	737.83	368.91	512.42	253.07	31.46	-2.76	0.123
134.00	-10.78	-1.68	0.00	-25.74	0.00	25.74	733.37	366.68	504.72	249.26	32.04	-2.78	0.118
135.00	-10.64	-1.66	0.00	-24.06	0.00	24.06	728.87	364.44	497.06	245.48	32.62	-2.80	0.113
136.00	-10.51	-1.64	0.00	-22.40	0.00	22.40	724.34	362.17	489.42	241.71	33.21	-2.82	0.107
137.00	-10.38	-1.63	0.00	-20.75	0.00	20.75	719.77	359.88	481.81	237.95	33.80	-2.83	0.102
138.00	-10.25	-1.61	0.00	-19.13	0.00	19.13	715.15	357.58	474.24	234.21	34.39	-2.85	0.096
139.00	-10.12	-1.59	0.00	-17.52	0.00	17.52	710.80	355.40	466.89	230.58	34.99	-2.87	0.090
140.00	-9.99	-1.57	0.00	-15.93	0.00	15.93	704.09	352.04	458.06	226.22	35.59	-2.88	0.085
141.00	-9.87	-1.55	0.00	-14.37	0.00	14.37	697.37	348.69	449.32	221.90	36.20	-2.90	0.079
142.00	-9.74	-1.53	0.00	-12.82	0.00	12.82	690.66	345.33	440.66	217.63	36.81	-2.91	0.073
143.00	-9.61	-1.51	0.00	-11.29	0.00	11.29	683.95	341.97	432.09	213.39	37.42	-2.92	0.067
144.00	-9.49	-1.49	0.00	-9.78	0.00	9.78	677.24	338.62	423.60	209.20	38.03	-2.93	0.061
145.00	-9.36	-1.47	0.00	-8.29	0.00	8.29	670.52	335.26	415.19	205.05	38.65	-2.94	0.054
146.00	-9.24	-1.45	0.00	-6.82	0.00	6.82	663.81	331.91	406.87	200.94	39.26	-2.95	0.048
147.00	-9.12	-1.43	0.00	-5.37	0.00	5.37	657.10	328.55	398.63	196.87	39.88	-2.96	0.041
148.00	-8.99	-1.41	0.00	-3.94	0.00	3.94	650.39	325.19	390.48	192.84	40.50	-2.96	0.034
149.00	-8.87	-1.39	0.00	-2.53	0.00	2.53	643.68	321.84	382.41	188.86	41.12	-2.97	0.027
150.00	0.00	-0.93	0.00	-1.14	0.00	1.14	636.96	318.48	374.43	184.91	41.74	-2.97	0.006

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:41 PM

Customer: Metro PCS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

35 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

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		12.5	0.0					0.0	0.0	12.5	0.0	0.0	0.0
1.00		25.0	146.1					5.4	112.0	30.4	258.1	0.0	0.0
2.00		24.9	145.4					5.4	112.0	30.3	257.5	0.0	0.0
3.00		24.8	144.8					5.4	112.0	30.2	256.8	0.0	0.0
4.00		24.7	144.2					5.4	112.0	30.1	256.2	0.0	0.0
5.00		24.6	143.6					5.4	112.0	30.0	255.6	0.0	0.0
6.00		24.5	143.0					5.4	112.0	29.9	255.0	0.0	0.0
7.00		24.4	142.3					5.4	112.0	29.8	254.4	0.0	0.0
8.00		24.3	141.7					5.4	112.0	29.7	253.7	0.0	0.0
9.00		24.2	141.1					5.4	112.0	29.6	253.1	0.0	0.0
10.00		24.1	140.5					5.4	112.0	29.5	252.5	0.0	0.0
11.00		24.0	139.9					5.4	112.0	29.4	251.9	0.0	0.0
12.00		23.9	139.3					5.4	112.0	29.3	251.3	0.0	0.0
13.00		23.8	138.6					5.4	112.0	29.2	250.6	0.0	0.0
14.00		23.7	138.0					5.4	112.0	29.0	250.0	0.0	0.0
15.00		23.5	137.4					5.4	112.0	28.9	249.4	0.0	0.0
16.00		23.4	136.8					5.4	112.0	28.8	248.8	0.0	0.0
17.00		23.3	136.2					5.4	112.0	28.7	248.2	0.0	0.0
18.00		23.2	135.5					5.4	112.0	28.6	247.5	0.0	0.0
19.00		23.1	134.9					5.4	112.0	28.5	246.9	0.0	0.0
20.00		23.0	134.3					5.4	112.0	28.4	246.3	0.0	0.0
21.00		22.9	133.7					5.4	112.0	28.3	245.7	0.0	0.0
22.00		22.8	133.1					5.4	112.0	28.2	245.1	0.0	0.0
23.00		22.7	132.4					5.4	112.0	28.1	244.4	0.0	0.0
24.00		22.6	131.8					5.4	112.0	28.0	243.8	0.0	0.0
25.00		22.5	131.2					5.4	112.0	27.9	243.2	0.0	0.0
26.00		22.4	130.6					5.4	112.0	27.8	242.6	0.0	0.0
27.00		22.3	130.0					5.4	112.0	27.7	242.0	0.0	0.0
28.00		22.2	129.3					5.4	112.0	27.6	241.3	0.0	0.0
29.00		22.1	128.7					5.4	112.0	27.5	240.7	0.0	0.0
30.00		22.0	128.1					5.4	112.0	27.4	240.1	0.0	0.0
31.00		22.1	127.5					5.4	112.0	27.5	239.5	0.0	0.0
32.00	Bot - Section 2	22.4	126.9					5.5	112.0	27.9	238.9	0.0	0.0
33.00		22.7	233.8					5.5	112.0	28.2	345.8	0.0	0.0
34.00		22.8	232.7					5.6	112.0	28.4	344.7	0.0	0.0
35.00		22.9	231.5					5.6	112.0	28.5	343.5	0.0	0.0
36.00	Top - Section 1	23.0	230.4					5.7	112.0	28.6	342.4	0.0	0.0
37.00		23.0	105.5					5.7	112.0	28.7	217.5	0.0	0.0
38.00		23.1	105.0					5.8	112.0	28.8	217.0	0.0	0.0
39.00		23.1	104.5					5.8	112.0	28.9	216.5	0.0	0.0
40.00		23.2	103.9					5.8	112.0	29.0	215.9	0.0	0.0
41.00		23.2	103.4					5.9	112.0	29.1	215.4	0.0	0.0
42.00		23.3	102.9					5.9	112.0	29.2	214.9	0.0	0.0
43.00		23.3	102.4					6.0	112.0	29.3	214.4	0.0	0.0
44.00		23.4	101.9					6.0	112.0	29.4	213.9	0.0	0.0
45.00		23.4	101.4					6.0	112.0	29.4	213.4	0.0	0.0
46.00		23.4	100.8					6.1	112.0	29.5	212.8	0.0	0.0
47.00		23.5	100.3					6.1	112.0	29.6	212.3	0.0	0.0

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:49 PM

Customer: Metro PCS

Load Case: 1.0D + 1.0W	Serviceability 60 mph						35 Iterations		
Gust Response Factor : 1.10							Wind Importance Factor : 1.00		
Dead Load Factor : 1.00									
Wind Load Factor : 1.00									

48.00		23.5	99.8			6.2	112.0	29.6	211.8	0.0	0.0		
49.00		23.5	99.3			6.2	112.0	29.7	211.3	0.0	0.0		
50.00		23.5	98.8			6.2	112.0	29.7	210.8	0.0	0.0		
51.00		23.5	98.3			6.3	112.0	29.8	210.3	0.0	0.0		
52.00		23.5	97.7			6.3	112.0	29.8	209.7	0.0	0.0		
53.00		23.5	97.2			6.3	112.0	29.9	209.2	0.0	0.0		
54.00		23.5	96.7			6.4	112.0	29.9	208.7	0.0	0.0		
55.00		23.5	96.2			6.4	112.0	29.9	208.2	0.0	0.0		
56.00		23.5	95.7			6.4	112.0	30.0	207.7	0.0	0.0		
57.00		23.5	95.2			6.5	112.0	30.0	207.2	0.0	0.0		
58.00		23.5	94.6			6.5	112.0	30.0	206.6	0.0	0.0		
59.00		23.5	94.1			6.5	112.0	30.0	206.1	0.0	0.0		
60.00		23.5	93.6			6.6	112.0	30.0	205.6	0.0	0.0		
61.00		23.5	93.1			6.6	112.0	30.1	205.1	0.0	0.0		
62.00		23.4	92.6			6.6	112.0	30.1	204.6	0.0	0.0		
63.00		23.4	92.1			6.7	112.0	30.1	204.1	0.0	0.0		
64.00		23.4	91.5			6.7	112.0	30.1	203.6	0.0	0.0		
65.00		23.4	91.0			6.7	112.0	30.1	203.0	0.0	0.0		
66.00		23.3	90.5			6.7	112.0	30.1	202.5	0.0	0.0		
67.00		23.3	90.0			6.8	112.0	30.1	202.0	0.0	0.0		
68.00		23.3	89.5			6.8	112.0	30.1	201.5	0.0	0.0		
69.00		23.2	89.0			6.8	112.0	30.1	201.0	0.0	0.0		
70.00	Bot - Section 3	23.4	88.4			6.9	112.0	30.3	200.5	0.0	0.0		
71.00		23.6	159.8			6.9	112.0	30.5	271.8	0.0	0.0		
72.00		23.6	158.9			6.9	112.0	30.5	270.9	0.0	0.0		
73.00		17.6	157.9			6.9	112.0	24.6	270.0	0.0	0.0		
73.50	Top - Section 2	11.7	78.6			3.5	56.0	15.2	134.6	0.0	0.0		
74.00		17.6	35.3			3.5	56.0	21.1	91.3	0.0	0.0		
75.00		23.4	70.2			7.0	112.0	30.4	182.2	0.0	0.0		
76.00		23.4	69.8			7.0	112.0	30.4	181.8	0.0	0.0		
77.00		16.8	69.4			7.1	112.0	23.9	181.4	0.0	0.0		
77.44	Reinf. Top	11.7	30.4			3.1	49.3	14.8	79.7	0.0	0.0		
78.00		18.1	38.6			4.0	25.3	22.1	63.9	0.0	0.0		
79.00		23.2	68.6			7.1	45.2	30.3	113.8	0.0	0.0		
80.00		23.2	68.2			7.1	45.2	30.3	113.4	0.0	0.0		
81.00		23.1	67.8			7.2	45.2	30.3	113.0	0.0	0.0		
82.00		23.0	67.3			7.2	45.2	30.2	112.5	0.0	0.0		
83.00		21.1	66.9			5.6	45.2	26.6	112.1	0.0	0.0		
84.00		19.1	66.5			0.0	45.2	19.1	111.7	0.0	0.0		
85.00		19.1	66.1			0.0	45.2	19.1	111.3	0.0	0.0		
86.00		19.0	65.7			0.0	45.2	19.0	110.9	0.0	0.0		
87.00		18.9	65.3			0.0	45.2	18.9	110.5	0.0	0.0		
88.00		18.9	64.9			0.0	45.2	18.9	110.1	0.0	0.0		
89.00		18.8	64.4			0.0	45.2	18.8	109.7	0.0	0.0		
90.00		18.8	64.0			0.0	45.2	18.8	109.2	0.0	0.0		
91.00		18.7	63.6			0.0	45.2	18.7	108.8	0.0	0.0		
92.00		18.6	63.2			0.0	45.2	18.6	108.4	0.0	0.0		
93.00		18.6	62.8			0.0	45.2	18.6	108.0	0.0	0.0		
94.00		18.5	62.4			0.0	45.2	18.5	107.6	0.0	0.0		
95.00		18.4	62.0			0.0	45.2	18.4	107.2	0.0	0.0		
96.00		18.4	61.6			0.0	45.2	18.4	106.8	0.0	0.0		
97.00		18.3	61.1			0.0	45.2	18.3	106.3	0.0	0.0		
98.00		18.2	60.7			0.0	45.2	18.2	105.9	0.0	0.0		
99.00		18.2	60.3			0.0	45.2	18.2	105.5	0.0	0.0		
100.00	Appertunance(s)	18.1	59.9	228.8	0.0	517.3	627.0	0.0	45.2	246.9	732.1	0.0	0.0
101.00		18.0	59.5			0.0	43.2	18.0	102.7	0.0	0.0		
102.00		18.0	59.1			0.0	43.2	18.0	102.3	0.0	0.0		

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:50 PM

Customer: Metro PCS

Load Case: 1.0D + 1.0W			Serviceability 60 mph				35 Iterations						
Gust Response Factor : 1.10			Wind Importance Factor : 1.00										
Dead Load Factor : 1.00													
Wind Load Factor : 1.00													
103.00	17.9	58.7					0.0	43.2	17.9	101.9	0.0	0.0	
104.00	17.8	58.2					0.0	43.2	17.8	101.5	0.0	0.0	
105.00	17.7	57.8					0.0	43.2	17.7	101.1	0.0	0.0	
106.00	17.6	57.4					0.0	43.2	17.6	100.7	0.0	0.0	
107.00	19.3	57.0					0.0	43.2	19.3	100.2	0.0	0.0	
108.00	21.0	56.6					4.2	43.2	25.2	99.8	0.0	0.0	
109.00	20.9	56.2					4.2	43.2	25.1	99.4	0.0	0.0	
110.00	Top - Section 3	20.8	55.8				4.3	43.2	25.0	99.0	0.0	0.0	
111.00		20.7	41.6				4.3	43.2	25.0	84.9	0.0	0.0	
112.00		20.6	41.3				4.3	43.2	24.9	84.6	0.0	0.0	
113.00		20.5	41.0				4.3	43.2	24.8	84.3	0.0	0.0	
114.00		20.4	40.7				4.3	43.2	24.7	83.9	0.0	0.0	
115.00		20.3	40.4				4.3	43.2	24.6	83.6	0.0	0.0	
116.00	Appertunance(s)	18.5	40.1	7.2	0.0	14.4	15.0	4.3	43.2	30.0	98.3	0.0	0.0
117.00		16.7	39.8					0.0	39.6	16.7	79.4	0.0	0.0
118.00		16.6	39.5					0.0	39.6	16.6	79.1	0.0	0.0
119.00		16.5	39.2					0.0	39.6	16.5	78.7	0.0	0.0
120.00	Appertunance(s)	16.5	38.9	242.7	0.0	-314.9	809.0	0.0	39.6	259.1	887.4	0.0	0.0
121.00		16.4	38.5					0.0	39.2	16.4	77.7	0.0	0.0
122.00		16.3	38.2					0.0	39.2	16.3	77.4	0.0	0.0
123.00		16.2	37.9					0.0	39.2	16.2	77.1	0.0	0.0
124.00		16.1	37.6					0.0	39.2	16.1	76.8	0.0	0.0
125.00		16.0	37.3					0.0	39.2	16.0	76.5	0.0	0.0
126.00		15.9	37.0					0.0	39.2	15.9	76.2	0.0	0.0
127.00		15.8	36.7					0.0	39.2	15.8	75.8	0.0	0.0
128.00		15.7	36.4					0.0	39.2	15.7	75.5	0.0	0.0
129.00		15.6	36.1					0.0	39.2	15.6	75.2	0.0	0.0
130.00	Appertunance(s)	15.5	35.8	357.1	0.0	711.5	243.0	0.0	39.2	372.6	317.9	0.0	0.0
131.00		15.4	35.4					0.0	29.3	15.4	64.8	0.0	0.0
132.00		15.3	35.1					0.0	29.3	15.3	64.5	0.0	0.0
133.00		15.2	34.8					0.0	29.3	15.2	64.1	0.0	0.0
134.00		15.1	34.5					0.0	29.3	15.1	63.8	0.0	0.0
135.00		15.0	34.2					0.0	29.3	15.0	63.5	0.0	0.0
136.00		14.9	33.9					0.0	29.3	14.9	63.2	0.0	0.0
137.00		14.8	33.6					0.0	29.3	14.8	62.9	0.0	0.0
138.00		14.7	33.3					0.0	29.3	14.7	62.6	0.0	0.0
139.00		14.6	33.0					0.0	29.3	14.6	62.3	0.0	0.0
140.00		14.5	32.7					0.0	29.3	14.5	62.0	0.0	0.0
141.00		14.4	32.3					0.0	29.3	14.4	61.7	0.0	0.0
142.00		14.3	32.0					0.0	29.3	14.3	61.4	0.0	0.0
143.00		14.1	31.7					0.0	29.3	14.1	61.0	0.0	0.0
144.00		14.0	31.4					0.0	29.3	14.0	60.7	0.0	0.0
145.00		13.9	31.1					0.0	29.3	13.9	60.4	0.0	0.0
146.00		13.8	30.8					0.0	29.3	13.8	60.1	0.0	0.0
147.00		13.7	30.5					0.0	29.3	13.7	59.8	0.0	0.0
148.00		13.6	30.2					0.0	29.3	13.6	59.5	0.0	0.0
149.00		13.5	29.9					0.0	29.3	13.5	59.2	0.0	0.0
150.00	Appertunance(s)	6.7	29.6	810.2	0.0	1,171.1	2,946.8	0.0	29.3	816.9	3,005.7	0.0	0.0
Totals:									5,268.23	29,037.2	0.00	0.00	

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:50 PM

Customer: Metro PCS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

35 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-29.04	-5.26	0.00	-483.44	0.00	483.44	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.139
1.00	-28.78	-5.23	0.00	-478.18	0.00	478.18	3,050.02	1,525.01	4,454.72	2,200.02	0.00	-0.01	0.138
2.00	-28.52	-5.21	0.00	-472.95	0.00	472.95	3,041.56	1,520.78	4,423.28	2,184.49	0.01	-0.02	0.137
3.00	-28.26	-5.18	0.00	-467.74	0.00	467.74	3,033.07	1,516.53	4,391.90	2,168.99	0.01	-0.04	0.136
4.00	-28.00	-5.16	0.00	-462.56	0.00	462.56	3,024.53	1,512.27	4,360.56	2,153.52	0.02	-0.05	0.135
5.00	-27.75	-5.14	0.00	-457.40	0.00	457.40	3,015.96	1,507.98	4,329.28	2,138.07	0.03	-0.06	0.135
6.00	-27.49	-5.11	0.00	-452.26	0.00	452.26	3,007.35	1,503.68	4,298.05	2,122.64	0.05	-0.07	0.134
7.00	-27.24	-5.09	0.00	-447.15	0.00	447.15	2,998.70	1,499.35	4,266.87	2,107.25	0.06	-0.08	0.133
8.00	-26.98	-5.06	0.00	-442.07	0.00	442.07	2,990.02	1,495.01	4,235.75	2,091.88	0.08	-0.10	0.132
9.00	-26.73	-5.04	0.00	-437.00	0.00	437.00	2,981.29	1,490.65	4,204.68	2,076.53	0.10	-0.11	0.131
10.00	-26.47	-5.01	0.00	-431.97	0.00	431.97	2,972.53	1,486.26	4,173.67	2,061.22	0.13	-0.12	0.130
11.00	-26.22	-4.99	0.00	-426.95	0.00	426.95	2,963.72	1,481.86	4,142.71	2,045.93	0.15	-0.13	0.129
12.00	-25.97	-4.96	0.00	-421.97	0.00	421.97	2,954.88	1,477.44	4,111.81	2,030.67	0.18	-0.14	0.128
13.00	-25.72	-4.94	0.00	-417.00	0.00	417.00	2,946.00	1,473.00	4,080.97	2,015.44	0.21	-0.15	0.128
14.00	-25.47	-4.91	0.00	-412.06	0.00	412.06	2,937.08	1,468.54	4,050.18	2,000.23	0.25	-0.17	0.127
15.00	-25.22	-4.89	0.00	-407.15	0.00	407.15	2,928.13	1,464.06	4,019.46	1,985.06	0.28	-0.18	0.126
16.00	-24.97	-4.87	0.00	-402.26	0.00	402.26	2,919.13	1,459.57	3,988.79	1,969.91	0.32	-0.19	0.125
17.00	-24.72	-4.84	0.00	-397.39	0.00	397.39	2,910.10	1,455.05	3,958.19	1,954.80	0.36	-0.20	0.124
18.00	-24.47	-4.82	0.00	-392.55	0.00	392.55	2,901.03	1,450.51	3,927.64	1,939.72	0.40	-0.21	0.123
19.00	-24.22	-4.79	0.00	-387.74	0.00	387.74	2,891.92	1,445.96	3,897.16	1,924.66	0.45	-0.22	0.122
20.00	-23.97	-4.77	0.00	-382.94	0.00	382.94	2,882.77	1,441.38	3,866.74	1,909.64	0.50	-0.24	0.121
21.00	-23.73	-4.74	0.00	-378.18	0.00	378.18	2,873.58	1,436.79	3,836.39	1,894.65	0.55	-0.25	0.120
22.00	-23.48	-4.72	0.00	-373.43	0.00	373.43	2,864.35	1,432.18	3,806.10	1,879.69	0.60	-0.26	0.120
23.00	-23.24	-4.69	0.00	-368.71	0.00	368.71	2,855.09	1,427.54	3,775.87	1,864.76	0.66	-0.27	0.119
24.00	-22.99	-4.67	0.00	-364.02	0.00	364.02	2,845.78	1,422.89	3,745.71	1,849.87	0.72	-0.28	0.118
25.00	-22.75	-4.65	0.00	-359.35	0.00	359.35	2,835.18	1,417.59	3,713.97	1,834.19	0.78	-0.29	0.117
26.00	-22.50	-4.62	0.00	-354.71	0.00	354.71	2,821.76	1,410.88	3,678.67	1,816.76	0.84	-0.31	0.116
27.00	-22.26	-4.60	0.00	-350.09	0.00	350.09	2,808.33	1,404.17	3,643.55	1,799.41	0.91	-0.32	0.115
28.00	-22.02	-4.57	0.00	-345.49	0.00	345.49	2,794.91	1,397.45	3,608.60	1,782.15	0.97	-0.33	0.115
29.00	-21.78	-4.55	0.00	-340.92	0.00	340.92	2,781.48	1,390.74	3,573.81	1,764.97	1.04	-0.34	0.114
30.00	-21.54	-4.52	0.00	-336.37	0.00	336.37	2,768.06	1,384.03	3,539.19	1,747.87	1.12	-0.35	0.113
31.00	-21.30	-4.50	0.00	-331.85	0.00	331.85	2,754.63	1,377.32	3,504.74	1,730.86	1.19	-0.36	0.112
32.00	-21.06	-4.47	0.00	-327.35	0.00	327.35	2,741.21	1,370.60	3,470.46	1,713.93	1.27	-0.38	0.112
33.00	-20.71	-4.45	0.00	-322.88	0.00	322.88	2,727.78	1,363.89	3,436.35	1,697.08	1.35	-0.39	0.109
34.00	-20.37	-4.42	0.00	-318.43	0.00	318.43	2,714.36	1,357.18	3,402.41	1,680.32	1.43	-0.40	0.109
35.00	-20.02	-4.39	0.00	-314.01	0.00	314.01	2,700.94	1,350.47	3,368.63	1,663.64	1.52	-0.41	0.108
36.00	-19.68	-4.37	0.00	-309.62	0.00	309.62	2,178.16	1,089.08	2,770.79	1,368.39	1.60	-0.42	0.122
37.00	-19.46	-4.34	0.00	-305.26	0.00	305.26	2,171.44	1,085.72	2,748.62	1,357.44	1.69	-0.43	0.121
38.00	-19.24	-4.31	0.00	-300.92	0.00	300.92	2,164.69	1,082.35	2,726.49	1,346.51	1.79	-0.44	0.120
39.00	-19.02	-4.29	0.00	-296.60	0.00	296.60	2,157.90	1,078.95	2,704.40	1,335.60	1.88	-0.46	0.119
40.00	-18.81	-4.26	0.00	-292.32	0.00	292.32	2,151.08	1,075.54	2,682.35	1,324.71	1.98	-0.47	0.117
41.00	-18.59	-4.23	0.00	-288.06	0.00	288.06	2,144.21	1,072.10	2,660.33	1,313.84	2.08	-0.48	0.116
42.00	-18.38	-4.20	0.00	-283.83	0.00	283.83	2,137.30	1,068.65	2,638.35	1,302.98	2.18	-0.49	0.115
43.00	-18.16	-4.18	0.00	-279.62	0.00	279.62	2,130.36	1,065.18	2,616.41	1,292.15	2.28	-0.50	0.114
44.00	-17.95	-4.15	0.00	-275.45	0.00	275.45	2,123.38	1,061.69	2,594.51	1,281.33	2.39	-0.51	0.113
45.00	-17.73	-4.12	0.00	-271.30	0.00	271.30	2,116.36	1,058.18	2,572.65	1,270.54	2.50	-0.53	0.112
46.00	-17.52	-4.09	0.00	-267.18	0.00	267.18	2,109.30	1,054.65	2,550.84	1,259.76	2.61	-0.54	0.110
47.00	-17.31	-4.07	0.00	-263.08	0.00	263.08	2,102.20	1,051.10	2,529.06	1,249.01	2.72	-0.55	0.109
48.00	-17.09	-4.04	0.00	-259.02	0.00	259.02	2,095.06	1,047.53	2,507.33	1,238.28	2.84	-0.56	0.108
49.00	-16.88	-4.01	0.00	-254.98	0.00	254.98	2,087.89	1,043.95	2,485.64	1,227.56	2.96	-0.57	0.107
50.00	-16.67	-3.98	0.00	-250.97	0.00	250.97	2,080.68	1,040.34	2,464.00	1,216.88	3.08	-0.58	0.106

Load Case: 1.0D + 1.0W

Serviceability 60 mph

35 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

51.00	-16.46	-3.95	0.00	-246.99	0.00	246.99	2,073.42	1,036.71	2,442.40	1,206.21	3.20	-0.59	0.105
52.00	-16.25	-3.92	0.00	-243.04	0.00	243.04	2,066.13	1,033.07	2,420.85	1,195.57	3.33	-0.61	0.104
53.00	-16.04	-3.89	0.00	-239.12	0.00	239.12	2,058.81	1,029.40	2,399.34	1,184.94	3.46	-0.62	0.102
54.00	-15.83	-3.86	0.00	-235.23	0.00	235.23	2,051.44	1,025.72	2,377.88	1,174.35	3.59	-0.63	0.101
55.00	-15.62	-3.84	0.00	-231.36	0.00	231.36	2,044.03	1,022.02	2,356.47	1,163.77	3.72	-0.64	0.100
56.00	-15.42	-3.81	0.00	-227.53	0.00	227.53	2,036.59	1,018.29	2,335.11	1,153.22	3.86	-0.65	0.099
57.00	-15.21	-3.78	0.00	-223.72	0.00	223.72	2,029.10	1,014.55	2,313.80	1,142.70	3.99	-0.66	0.098
58.00	-15.00	-3.75	0.00	-219.94	0.00	219.94	2,021.58	1,010.79	2,292.54	1,132.20	4.13	-0.67	0.097
59.00	-14.79	-3.72	0.00	-216.20	0.00	216.20	2,014.02	1,007.01	2,271.32	1,121.72	4.28	-0.68	0.095
60.00	-14.59	-3.69	0.00	-212.48	0.00	212.48	2,006.42	1,003.21	2,250.16	1,111.27	4.42	-0.69	0.094
61.00	-14.38	-3.66	0.00	-208.79	0.00	208.79	1,998.79	999.39	2,229.06	1,100.85	4.57	-0.71	0.093
62.00	-14.18	-3.63	0.00	-205.13	0.00	205.13	1,991.11	995.56	2,208.00	1,090.45	4.72	-0.72	0.092
63.00	-13.97	-3.60	0.00	-201.51	0.00	201.51	1,983.40	991.70	2,187.00	1,080.08	4.87	-0.73	0.091
64.00	-13.77	-3.57	0.00	-197.91	0.00	197.91	1,975.64	987.82	2,166.06	1,069.73	5.02	-0.74	0.090
65.00	-13.57	-3.54	0.00	-194.34	0.00	194.34	1,966.16	983.08	2,143.32	1,058.50	5.18	-0.75	0.089
66.00	-13.36	-3.51	0.00	-190.80	0.00	190.80	1,954.97	977.49	2,118.86	1,046.42	5.33	-0.76	0.088
67.00	-13.16	-3.48	0.00	-187.29	0.00	187.29	1,943.78	971.89	2,094.54	1,034.41	5.49	-0.77	0.087
68.00	-12.96	-3.45	0.00	-183.82	0.00	183.82	1,932.60	966.30	2,070.35	1,022.47	5.66	-0.78	0.086
69.00	-12.76	-3.42	0.00	-180.37	0.00	180.37	1,921.41	960.70	2,046.31	1,010.60	5.82	-0.79	0.085
70.00	-12.56	-3.39	0.00	-176.96	0.00	176.96	1,910.22	955.11	2,022.41	998.79	5.99	-0.80	0.084
71.00	-12.29	-3.35	0.00	-173.57	0.00	173.57	1,899.03	949.52	1,998.65	987.06	6.16	-0.81	0.081
72.00	-12.02	-3.32	0.00	-170.22	0.00	170.22	1,887.85	943.92	1,975.03	975.39	6.33	-0.82	0.080
73.00	-11.75	-3.29	0.00	-166.90	0.00	166.90	1,876.66	938.33	1,951.55	963.80	6.50	-0.83	0.079
73.50	-11.61	-3.28	0.00	-165.25	0.00	165.25	1,431.47	715.74	1,521.25	751.29	6.59	-0.84	0.092
74.00	-11.52	-3.26	0.00	-163.61	0.00	163.61	1,428.93	714.46	1,514.06	747.74	6.68	-0.84	0.091
75.00	-11.34	-3.23	0.00	-160.35	0.00	160.35	1,423.81	711.90	1,499.70	740.65	6.85	-0.85	0.090
76.00	-11.16	-3.19	0.00	-157.13	0.00	157.13	1,418.66	709.33	1,485.37	733.57	7.03	-0.86	0.088
77.00	-10.97	-3.17	0.00	-153.93	0.00	153.93	1,413.46	706.73	1,471.06	726.50	7.21	-0.87	0.087
77.44	-10.89	-3.15	0.00	-152.54	0.00	152.54	1,411.16	705.58	1,464.78	723.40	7.29	-0.88	0.086
77.44	-10.89	-3.15	0.00	-152.54	0.00	152.54	1,411.16	705.58	1,464.78	723.40	7.29	-0.88	0.219
78.00	-10.83	-3.13	0.00	-150.77	0.00	150.77	1,408.23	704.11	1,456.78	719.45	7.40	-0.88	0.217
79.00	-10.71	-3.11	0.00	-147.64	0.00	147.64	1,402.96	701.48	1,442.53	712.41	7.59	-0.91	0.215
80.00	-10.60	-3.08	0.00	-144.53	0.00	144.53	1,397.65	698.83	1,428.30	705.38	7.78	-0.93	0.213
81.00	-10.49	-3.05	0.00	-141.45	0.00	141.45	1,392.30	696.15	1,414.10	698.37	7.98	-0.96	0.210
82.00	-10.37	-3.03	0.00	-138.40	0.00	138.40	1,386.92	693.46	1,399.92	691.37	8.18	-0.99	0.208
83.00	-10.26	-3.00	0.00	-135.37	0.00	135.37	1,381.49	690.75	1,385.78	684.38	8.39	-1.01	0.205
84.00	-10.15	-2.98	0.00	-132.37	0.00	132.37	1,376.03	688.01	1,371.66	677.41	8.61	-1.04	0.203
85.00	-10.04	-2.97	0.00	-129.39	0.00	129.39	1,370.53	685.26	1,357.58	670.46	8.83	-1.06	0.200
86.00	-9.92	-2.95	0.00	-126.42	0.00	126.42	1,364.99	682.49	1,343.53	663.52	9.05	-1.09	0.198
87.00	-9.81	-2.93	0.00	-123.47	0.00	123.47	1,359.41	679.70	1,329.50	656.59	9.28	-1.11	0.195
88.00	-9.70	-2.92	0.00	-120.53	0.00	120.53	1,353.79	676.90	1,315.52	649.68	9.52	-1.14	0.193
89.00	-9.59	-2.90	0.00	-117.62	0.00	117.62	1,348.13	674.07	1,301.56	642.79	9.76	-1.16	0.190
90.00	-9.48	-2.88	0.00	-114.72	0.00	114.72	1,342.44	671.22	1,287.64	635.92	10.01	-1.19	0.187
91.00	-9.37	-2.87	0.00	-111.83	0.00	111.83	1,336.71	668.35	1,273.75	629.06	10.26	-1.21	0.185
92.00	-9.26	-2.85	0.00	-108.96	0.00	108.96	1,330.94	665.47	1,259.90	622.22	10.51	-1.24	0.182
93.00	-9.15	-2.83	0.00	-106.11	0.00	106.11	1,325.13	662.56	1,246.09	615.40	10.78	-1.26	0.179
94.00	-9.04	-2.82	0.00	-103.28	0.00	103.28	1,319.28	659.64	1,232.31	608.59	11.04	-1.29	0.177
95.00	-8.94	-2.80	0.00	-100.47	0.00	100.47	1,313.39	656.70	1,218.57	601.80	11.32	-1.31	0.174
96.00	-8.83	-2.78	0.00	-97.67	0.00	97.67	1,307.47	653.73	1,204.87	595.04	11.59	-1.34	0.171
97.00	-8.72	-2.76	0.00	-94.89	0.00	94.89	1,301.50	650.75	1,191.20	588.29	11.87	-1.36	0.168
98.00	-8.62	-2.75	0.00	-92.12	0.00	92.12	1,295.50	647.75	1,177.58	581.56	12.16	-1.38	0.165
99.00	-8.51	-2.73	0.00	-89.37	0.00	89.37	1,289.46	644.73	1,164.00	574.85	12.45	-1.41	0.162
100.00	-7.78	-2.47	0.00	-86.13	0.00	86.13	1,283.38	641.69	1,150.46	568.17	12.75	-1.43	0.158
101.00	-7.68	-2.45	0.00	-83.66	0.00	83.66	1,277.26	638.63	1,136.96	561.50	13.05	-1.45	0.155
102.00	-7.58	-2.43	0.00	-81.21	0.00	81.21	1,271.10	635.55	1,123.50	554.85	13.36	-1.47	0.152
103.00	-7.47	-2.42	0.00	-78.77	0.00	78.77	1,264.91	632.45	1,110.09	548.23	13.67	-1.50	0.150
104.00	-7.37	-2.40	0.00	-76.36	0.00	76.36	1,257.26	628.63	1,095.49	541.02	13.99	-1.52	0.147

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:50 PM

Customer: Metro PCS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

35 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

105.00	-7.27	-2.38	0.00	-73.96	0.00	73.96	1,248.31	624.16	1,079.86	533.30	14.31	-1.54	0.145
106.00	-7.17	-2.36	0.00	-71.58	0.00	71.58	1,239.36	619.68	1,064.34	525.64	14.63	-1.56	0.142
107.00	-7.07	-2.34	0.00	-69.22	0.00	69.22	1,230.41	615.21	1,048.93	518.03	14.96	-1.58	0.139
108.00	-6.97	-2.32	0.00	-66.88	0.00	66.88	1,221.46	610.73	1,033.64	510.48	15.30	-1.60	0.137
109.00	-6.87	-2.29	0.00	-64.56	0.00	64.56	1,212.51	606.26	1,018.46	502.98	15.63	-1.63	0.134
110.00	-6.77	-2.27	0.00	-62.27	0.00	62.27	1,203.56	601.78	1,003.39	495.54	15.98	-1.65	0.131
110.00	-6.77	-2.27	0.00	-62.27	0.00	62.27	829.71	414.85	695.98	343.72	15.98	-1.65	0.189
111.00	-6.69	-2.24	0.00	-60.00	0.00	60.00	826.14	413.07	687.80	339.68	16.32	-1.67	0.185
112.00	-6.60	-2.22	0.00	-57.76	0.00	57.76	822.53	411.26	679.64	335.65	16.67	-1.69	0.180
113.00	-6.52	-2.19	0.00	-55.54	0.00	55.54	818.88	409.44	671.48	331.62	17.03	-1.72	0.175
114.00	-6.43	-2.17	0.00	-53.34	0.00	53.34	815.19	407.60	663.34	327.60	17.40	-1.74	0.171
115.00	-6.35	-2.14	0.00	-51.18	0.00	51.18	811.47	405.73	655.22	323.59	17.76	-1.77	0.166
116.00	-6.25	-2.11	0.00	-49.02	0.00	49.02	807.71	403.85	647.11	319.59	18.14	-1.79	0.161
117.00	-6.17	-2.10	0.00	-46.90	0.00	46.90	803.90	401.95	639.02	315.59	18.51	-1.82	0.156
118.00	-6.09	-2.08	0.00	-44.80	0.00	44.80	800.06	400.03	630.95	311.60	18.90	-1.84	0.151
119.00	-6.01	-2.06	0.00	-42.72	0.00	42.72	796.18	398.09	622.89	307.62	19.29	-1.86	0.146
120.00	-5.13	-1.78	0.00	-40.66	0.00	40.66	792.27	396.13	614.86	303.65	19.68	-1.89	0.140
121.00	-5.06	-1.76	0.00	-38.88	0.00	38.88	788.31	394.15	606.84	299.70	20.08	-1.91	0.136
122.00	-4.98	-1.74	0.00	-37.12	0.00	37.12	784.31	392.16	598.84	295.75	20.48	-1.93	0.132
123.00	-4.90	-1.73	0.00	-35.37	0.00	35.37	780.28	390.14	590.87	291.81	20.89	-1.95	0.128
124.00	-4.82	-1.71	0.00	-33.65	0.00	33.65	776.21	388.10	582.91	287.88	21.30	-1.97	0.123
125.00	-4.75	-1.69	0.00	-31.94	0.00	31.94	772.10	386.05	574.98	283.96	21.71	-1.99	0.119
126.00	-4.67	-1.68	0.00	-30.24	0.00	30.24	767.95	383.97	567.07	280.06	22.13	-2.01	0.114
127.00	-4.60	-1.66	0.00	-28.57	0.00	28.57	763.76	381.88	559.19	276.16	22.55	-2.03	0.109
128.00	-4.52	-1.64	0.00	-26.91	0.00	26.91	759.54	379.77	551.33	272.28	22.98	-2.05	0.105
129.00	-4.45	-1.63	0.00	-25.26	0.00	25.26	755.27	377.64	543.49	268.41	23.41	-2.07	0.100
130.00	-4.14	-1.24	0.00	-22.93	0.00	22.93	750.97	375.48	535.68	264.55	23.85	-2.08	0.092
131.00	-4.08	-1.23	0.00	-21.68	0.00	21.68	746.63	373.31	527.90	260.71	24.28	-2.10	0.089
132.00	-4.01	-1.21	0.00	-20.46	0.00	20.46	742.25	371.12	520.15	256.88	24.73	-2.11	0.085
133.00	-3.95	-1.19	0.00	-19.25	0.00	19.25	737.83	368.91	512.42	253.07	25.17	-2.13	0.081
134.00	-3.88	-1.18	0.00	-18.05	0.00	18.05	733.37	366.68	504.72	249.26	25.62	-2.14	0.078
135.00	-3.82	-1.16	0.00	-16.88	0.00	16.88	728.87	364.44	497.06	245.48	26.07	-2.16	0.074
136.00	-3.76	-1.14	0.00	-15.72	0.00	15.72	724.34	362.17	489.42	241.71	26.52	-2.17	0.070
137.00	-3.70	-1.13	0.00	-14.57	0.00	14.57	719.77	359.88	481.81	237.95	26.98	-2.18	0.066
138.00	-3.63	-1.11	0.00	-13.45	0.00	13.45	715.15	357.58	474.24	234.21	27.44	-2.19	0.063
139.00	-3.57	-1.10	0.00	-12.34	0.00	12.34	710.80	355.40	466.89	230.58	27.90	-2.21	0.059
140.00	-3.51	-1.08	0.00	-11.24	0.00	11.24	704.09	352.04	458.06	226.22	28.36	-2.22	0.055
141.00	-3.45	-1.06	0.00	-10.16	0.00	10.16	697.37	348.69	449.32	221.90	28.82	-2.23	0.051
142.00	-3.39	-1.05	0.00	-9.10	0.00	9.10	690.66	345.33	440.66	217.63	29.29	-2.24	0.047
143.00	-3.33	-1.03	0.00	-8.05	0.00	8.05	683.95	341.97	432.09	213.39	29.76	-2.24	0.043
144.00	-3.27	-1.01	0.00	-7.02	0.00	7.02	677.24	338.62	423.60	209.20	30.23	-2.25	0.038
145.00	-3.21	-1.00	0.00	-6.01	0.00	6.01	670.52	335.26	415.19	205.05	30.70	-2.26	0.034
146.00	-3.15	-0.98	0.00	-5.01	0.00	5.01	663.81	331.91	406.87	200.94	31.18	-2.27	0.030
147.00	-3.09	-0.97	0.00	-4.03	0.00	4.03	657.10	328.55	398.63	196.87	31.65	-2.27	0.025
148.00	-3.03	-0.95	0.00	-3.06	0.00	3.06	650.39	325.19	390.48	192.84	32.13	-2.27	0.021
149.00	-2.97	-0.94	0.00	-2.11	0.00	2.11	643.68	321.84	382.41	188.86	32.61	-2.28	0.016
150.00	0.00	-0.82	0.00	-1.17	0.00	1.17	636.96	318.48	374.43	184.91	33.08	-2.28	0.006

Site Number: 302475

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

Equivalent Lateral Forces Method Analysis

(Based on ASCE7-10 Chapters 11, 12, 15)

Spectral Response Acceleration for Short Period (S_s):	0.18
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06
Long-Period Transition Period (T_L):	6
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.20
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s	0.03
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	2.76
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	2.00
Total Unfactored Dead Load:	29.04 k
Seismic Base Shear (E):	1.13 k

Load Case (1.2 + 0.2S_{ds}) * DL + E ELFM

Seismic Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
152	149.50	59	1,316	0.007	7	73
151	148.50	59	1,305	0.007	7	73
150	147.50	59	1,294	0.006	7	74
149	146.50	60	1,284	0.006	7	74
148	145.50	60	1,273	0.006	7	75
147	144.50	60	1,262	0.006	7	75
146	143.50	61	1,251	0.006	7	75
145	142.50	61	1,240	0.006	7	76
144	141.50	61	1,229	0.006	7	76
143	140.50	62	1,217	0.006	7	76
142	139.50	62	1,206	0.006	7	77
141	138.50	62	1,195	0.006	7	77
140	137.50	63	1,184	0.006	7	78
139	136.50	63	1,172	0.006	7	78
138	135.50	63	1,161	0.006	7	78
137	134.50	64	1,149	0.006	7	79
136	133.50	64	1,138	0.006	6	79
135	132.50	64	1,126	0.006	6	79
134	131.50	64	1,115	0.006	6	80
133	130.50	65	1,103	0.006	6	80
132	129.50	75	1,256	0.006	7	93
131	128.50	75	1,242	0.006	7	93
130	127.50	76	1,228	0.006	7	94

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Site Name: Sttn - Southington, CT

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Customer: Metro PCS

129	126.50	76	1,214	0.006	7	94
128	125.50	76	1,199	0.006	7	94
127	124.50	76	1,185	0.006	7	95
126	123.50	77	1,171	0.006	7	95
125	122.50	77	1,157	0.006	7	96
124	121.50	77	1,143	0.006	6	96
123	120.50	78	1,128	0.006	6	96
122	119.50	78	1,120	0.006	6	97
121	118.50	79	1,106	0.006	6	98
120	117.50	79	1,091	0.005	6	98
119	116.50	79	1,077	0.005	6	98
118	115.50	83	1,112	0.006	6	103
117	114.50	84	1,096	0.005	6	104
116	113.50	84	1,081	0.005	6	104
115	112.50	84	1,066	0.005	6	104
114	111.50	85	1,051	0.005	6	105
113	110.50	85	1,036	0.005	6	105
112	109.50	99	1,187	0.006	7	123
111	108.50	99	1,170	0.006	7	123
110	107.50	100	1,154	0.006	7	124
109	106.50	100	1,137	0.006	6	124
108	105.50	101	1,120	0.006	6	125
107	104.50	101	1,104	0.006	6	125
106	103.50	101	1,087	0.005	6	126
105	102.50	102	1,070	0.005	6	126
104	101.50	102	1,054	0.005	6	127
103	100.50	103	1,037	0.005	6	127
102	99.50	105	1,041	0.005	6	130
101	98.50	106	1,024	0.005	6	131
100	97.50	106	1,007	0.005	6	131
99	96.50	106	990	0.005	6	132
98	95.50	107	974	0.005	6	132
97	94.50	107	957	0.005	5	133
96	93.50	108	941	0.005	5	133
95	92.50	108	924	0.005	5	134
94	91.50	108	908	0.005	5	134
93	90.50	109	891	0.004	5	135
92	89.50	109	875	0.004	5	135
91	88.50	110	859	0.004	5	136
90	87.50	110	843	0.004	5	136
89	86.50	110	827	0.004	5	137
88	85.50	111	811	0.004	5	137
87	84.50	111	795	0.004	5	138
86	83.50	112	779	0.004	4	138
85	82.50	112	763	0.004	4	139
84	81.50	113	748	0.004	4	139
83	80.50	113	732	0.004	4	140
82	79.50	113	717	0.004	4	140
81	78.50	114	701	0.004	4	141
80	77.72	64	386	0.002	2	79
79	77.22	80	475	0.002	3	99
78	76.50	181	1,062	0.005	6	225
77	75.50	182	1,036	0.005	6	225
76	74.50	182	1,011	0.005	6	226
75	73.75	91	496	0.002	3	113
74	73.25	135	722	0.004	4	167
73	72.50	270	1,419	0.007	8	335
72	71.50	271	1,385	0.007	8	336
71	70.50	272	1,351	0.007	8	337
70	69.50	200	968	0.005	5	248
69	68.50	201	943	0.005	5	249
68	67.50	201	918	0.005	5	250
67	66.50	202	893	0.004	5	250
66	65.50	203	869	0.004	5	251

Site Number: 302475

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

65	64.50	203	845	0.004	5	252
64	63.50	204	821	0.004	5	252
63	62.50	204	797	0.004	5	253
62	61.50	205	774	0.004	4	254
61	60.50	205	751	0.004	4	254
60	59.50	206	728	0.004	4	255
59	58.50	206	705	0.004	4	255
58	57.50	207	683	0.003	4	256
57	56.50	207	661	0.003	4	257
56	55.50	208	640	0.003	4	257
55	54.50	208	618	0.003	4	258
54	53.50	209	597	0.003	3	259
53	52.50	209	577	0.003	3	259
52	51.50	210	556	0.003	3	260
51	50.50	210	536	0.003	3	261
50	49.50	211	516	0.003	3	261
49	48.50	211	497	0.002	3	262
48	47.50	212	478	0.002	3	262
47	46.50	212	459	0.002	3	263
46	45.50	213	441	0.002	2	264
45	44.50	213	423	0.002	2	264
44	43.50	214	405	0.002	2	265
43	42.50	214	387	0.002	2	266
42	41.50	215	370	0.002	2	266
41	40.50	215	353	0.002	2	267
40	39.50	216	337	0.002	2	268
39	38.50	216	321	0.002	2	268
38	37.50	217	305	0.002	2	269
37	36.50	217	290	0.001	2	270
36	35.50	342	431	0.002	2	424
35	34.50	344	409	0.002	2	426
34	33.50	345	387	0.002	2	427
33	32.50	346	365	0.002	2	429
32	31.50	239	237	0.001	1	296
31	30.50	239	223	0.001	1	297
30	29.50	240	209	0.001	1	298
29	28.50	241	196	0.001	1	298
28	27.50	241	183	0.001	1	299
27	26.50	242	170	0.001	1	300
26	25.50	243	158	0.001	1	301
25	24.50	243	146	0.001	1	301
24	23.50	244	135	0.001	1	302
23	22.50	244	124	0.001	1	303
22	21.50	245	113	0.001	1	304
21	20.50	246	103	0.001	1	304
20	19.50	246	94	0.000	1	305
19	18.50	247	85	0.000	0	306
18	17.50	248	76	0.000	0	307
17	16.50	248	68	0.000	0	308
16	15.50	249	60	0.000	0	308
15	14.50	249	52	0.000	0	309
14	13.50	250	46	0.000	0	310
13	12.50	251	39	0.000	0	311
12	11.50	251	33	0.000	0	311
11	10.50	252	28	0.000	0	312
10	9.50	253	23	0.000	0	313
9	8.50	253	18	0.000	0	314
8	7.50	254	14	0.000	0	314
7	6.50	254	11	0.000	0	315
6	5.50	255	8	0.000	0	316
5	4.50	256	5	0.000	0	317
4	3.50	256	3	0.000	0	318
3	2.50	257	2	0.000	0	318
2	1.50	257	1	0.000	0	319

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Site Name: Sttn - Southington, CT

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Customer: Metro PCS

1	0.50	258	0	0.000	0	320
Powerwave LGP13519	150.00	32	716	0.004	4	39
Powerwave TT08-19DB1	150.00	132	2,970	0.015	17	164
Raycap DC6-48-60-18-	150.00	20	450	0.002	3	25
Ericsson RRUS 11 (Ba	150.00	300	6,750	0.034	38	372
10' Omni	150.00	25	563	0.003	3	31
Kathrein Scala 800 1	150.00	122	2,754	0.014	16	152
KMW AM-X-CD-16-65-00	150.00	194	4,365	0.022	25	240
Andrew SBNH-1D6565C	150.00	122	2,736	0.014	16	151
Round Platform w/ Ha	150.00	2,000	45,000	0.225	255	2,479
Kathrein Smart Bias	130.00	10	168	0.001	1	12
RFS APXV18-206517S-C	130.00	79	1,338	0.007	8	98
Andrew LNX-6515DS-VT	130.00	154	2,601	0.013	15	191
DragonWave Horizon C	120.00	11	153	0.001	1	13
NextNet BTS-2500	120.00	105	1,512	0.008	9	130
Argus LLPX310R	120.00	86	1,236	0.006	7	106
Clearwire Mount	120.00	560	8,064	0.040	46	694
DragonWave A-ANT-11G	120.00	48	685	0.003	4	59
18" x 12" Junction B	116.00	15	202	0.001	1	19
DB Systems 5100A	100.00	21	210	0.001	1	26
VertexRSI 101V VPD	100.00	4	40	0.000	0	5
DB Systems 5100A-D	100.00	152	1,520	0.008	9	188
Round Side Arm	100.00	450	4,500	0.023	26	558
		29,037	199,796	1.000	1,132	35,985

Load Case (0.9 - 0.2Sds) * DL + E ELFM

Seismic (Reduced DL) Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
152	149.50	59	1,316	0.007	7	51
151	148.50	59	1,305	0.007	7	51
150	147.50	59	1,294	0.006	7	51
149	146.50	60	1,284	0.006	7	51
148	145.50	60	1,273	0.006	7	52
147	144.50	60	1,262	0.006	7	52
146	143.50	61	1,251	0.006	7	52
145	142.50	61	1,240	0.006	7	53
144	141.50	61	1,229	0.006	7	53
143	140.50	62	1,217	0.006	7	53
142	139.50	62	1,206	0.006	7	53
141	138.50	62	1,195	0.006	7	54
140	137.50	63	1,184	0.006	7	54
139	136.50	63	1,172	0.006	7	54
138	135.50	63	1,161	0.006	7	54
137	134.50	64	1,149	0.006	7	55
136	133.50	64	1,138	0.006	6	55
135	132.50	64	1,126	0.006	6	55
134	131.50	64	1,115	0.006	6	55
133	130.50	65	1,103	0.006	6	56
132	129.50	75	1,256	0.006	7	64
131	128.50	75	1,242	0.006	7	65
130	127.50	76	1,228	0.006	7	65
129	126.50	76	1,214	0.006	7	65
128	125.50	76	1,199	0.006	7	66
127	124.50	76	1,185	0.006	7	66
126	123.50	77	1,171	0.006	7	66
125	122.50	77	1,157	0.006	7	66
124	121.50	77	1,143	0.006	6	67
123	120.50	78	1,128	0.006	6	67
122	119.50	78	1,120	0.006	6	68

Site Number: 302475

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

121	118.50	79	1,106	0.006	6	68
120	117.50	79	1,091	0.005	6	68
119	116.50	79	1,077	0.005	6	68
118	115.50	83	1,112	0.006	6	72
117	114.50	84	1,096	0.005	6	72
116	113.50	84	1,081	0.005	6	72
115	112.50	84	1,066	0.005	6	73
114	111.50	85	1,051	0.005	6	73
113	110.50	85	1,036	0.005	6	73
112	109.50	99	1,187	0.006	7	85
111	108.50	99	1,170	0.006	7	86
110	107.50	100	1,154	0.006	7	86
109	106.50	100	1,137	0.006	6	86
108	105.50	101	1,120	0.006	6	87
107	104.50	101	1,104	0.006	6	87
106	103.50	101	1,087	0.005	6	87
105	102.50	102	1,070	0.005	6	88
104	101.50	102	1,054	0.005	6	88
103	100.50	103	1,037	0.005	6	88
102	99.50	105	1,041	0.005	6	90
101	98.50	106	1,024	0.005	6	91
100	97.50	106	1,007	0.005	6	91
99	96.50	106	990	0.005	6	92
98	95.50	107	974	0.005	6	92
97	94.50	107	957	0.005	5	92
96	93.50	108	941	0.005	5	93
95	92.50	108	924	0.005	5	93
94	91.50	108	908	0.005	5	93
93	90.50	109	891	0.004	5	94
92	89.50	109	875	0.004	5	94
91	88.50	110	859	0.004	5	94
90	87.50	110	843	0.004	5	95
89	86.50	110	827	0.004	5	95
88	85.50	111	811	0.004	5	95
87	84.50	111	795	0.004	5	96
86	83.50	112	779	0.004	4	96
85	82.50	112	763	0.004	4	97
84	81.50	113	748	0.004	4	97
83	80.50	113	732	0.004	4	97
82	79.50	113	717	0.004	4	98
81	78.50	114	701	0.004	4	98
80	77.72	64	386	0.002	2	55
79	77.22	80	475	0.002	3	69
78	76.50	181	1,062	0.005	6	156
77	75.50	182	1,036	0.005	6	157
76	74.50	182	1,011	0.005	6	157
75	73.75	91	496	0.002	3	79
74	73.25	135	722	0.004	4	116
73	72.50	270	1,419	0.007	8	232
72	71.50	271	1,385	0.007	8	233
71	70.50	272	1,351	0.007	8	234
70	69.50	200	968	0.005	5	173
69	68.50	201	943	0.005	5	173
68	67.50	201	918	0.005	5	173
67	66.50	202	893	0.004	5	174
66	65.50	203	869	0.004	5	174
65	64.50	203	845	0.004	5	175
64	63.50	204	821	0.004	5	175
63	62.50	204	797	0.004	5	176
62	61.50	205	774	0.004	4	176
61	60.50	205	751	0.004	4	177
60	59.50	206	728	0.004	4	177
59	58.50	206	705	0.004	4	177
58	57.50	207	683	0.003	4	178

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

57	56.50	207	661	0.003	4	178
56	55.50	208	640	0.003	4	179
55	54.50	208	618	0.003	4	179
54	53.50	209	597	0.003	3	180
53	52.50	209	577	0.003	3	180
52	51.50	210	556	0.003	3	181
51	50.50	210	536	0.003	3	181
50	49.50	211	516	0.003	3	181
49	48.50	211	497	0.002	3	182
48	47.50	212	478	0.002	3	182
47	46.50	212	459	0.002	3	183
46	45.50	213	441	0.002	2	183
45	44.50	213	423	0.002	2	184
44	43.50	214	405	0.002	2	184
43	42.50	214	387	0.002	2	185
42	41.50	215	370	0.002	2	185
41	40.50	215	353	0.002	2	185
40	39.50	216	337	0.002	2	186
39	38.50	216	321	0.002	2	186
38	37.50	217	305	0.002	2	187
37	36.50	217	290	0.001	2	187
36	35.50	342	431	0.002	2	295
35	34.50	344	409	0.002	2	296
34	33.50	345	387	0.002	2	297
33	32.50	346	365	0.002	2	298
32	31.50	239	237	0.001	1	206
31	30.50	239	223	0.001	1	206
30	29.50	240	209	0.001	1	207
29	28.50	241	196	0.001	1	207
28	27.50	241	183	0.001	1	208
27	26.50	242	170	0.001	1	208
26	25.50	243	158	0.001	1	209
25	24.50	243	146	0.001	1	209
24	23.50	244	135	0.001	1	210
23	22.50	244	124	0.001	1	210
22	21.50	245	113	0.001	1	211
21	20.50	246	103	0.001	1	211
20	19.50	246	94	0.000	1	212
19	18.50	247	85	0.000	0	213
18	17.50	248	76	0.000	0	213
17	16.50	248	68	0.000	0	214
16	15.50	249	60	0.000	0	214
15	14.50	249	52	0.000	0	215
14	13.50	250	46	0.000	0	215
13	12.50	251	39	0.000	0	216
12	11.50	251	33	0.000	0	216
11	10.50	252	28	0.000	0	217
10	9.50	253	23	0.000	0	217
9	8.50	253	18	0.000	0	218
8	7.50	254	14	0.000	0	218
7	6.50	254	11	0.000	0	219
6	5.50	255	8	0.000	0	219
5	4.50	256	5	0.000	0	220
4	3.50	256	3	0.000	0	221
3	2.50	257	2	0.000	0	221
2	1.50	257	1	0.000	0	222
1	0.50	258	0	0.000	0	222
Powerwave LGP13519	150.00	32	716	0.004	4	27
Powerwave TT08-19DB1	150.00	132	2,970	0.015	17	114
Raycap DC6-48-60-18-	150.00	20	450	0.002	3	17
Ericsson RRUS 11 (Ba	150.00	300	6,750	0.034	38	258
10' Omni	150.00	25	563	0.003	3	22
Kathrein Scala 800 1	150.00	122	2,754	0.014	16	105
KMW AM-X-CD-16-65-00	150.00	194	4,365	0.022	25	167

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

Andrew SBNH-1D6565C	150.00	122	2,736	0.014	16	105
Round Platform w/ Ha	150.00	2,000	45,000	0.225	255	1,721
Kathrein Smart Bias	130.00	10	168	0.001	1	9
RFS APXV18-206517S-C	130.00	79	1,338	0.007	8	68
Andrew LNX-6515DS-VT	130.00	154	2,601	0.013	15	132
DragonWave Horizon C	120.00	11	153	0.001	1	9
NextNet BTS-2500	120.00	105	1,512	0.008	9	90
Argus LLPX310R	120.00	86	1,236	0.006	7	74
Clearwire Mount	120.00	560	8,064	0.040	46	482
DragonWave A-ANT-11G	120.00	48	685	0.003	4	41
18" x 12" Junction B	116.00	15	202	0.001	1	13
DB Systems 5100A	100.00	21	210	0.001	1	18
VertexRSI 101V VPD	100.00	4	40	0.000	0	3
DB Systems 5100A-D	100.00	152	1,520	0.008	9	131
Round Side Arm	100.00	450	4,500	0.023	26	387
		29,037	199,796	1.000	1,132	24,994

Load Case (1.2 + 0.2Sds) * DL + E ELFM

Seismic Equivalent Lateral Forces Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-35.66	-1.13	0.00	-141.97	0.00	141.97	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.047
1.00	-35.35	-1.13	0.00	-140.84	0.00	140.84	3,050.02	1,525.01	4,454.72	2,200.02	0.00	0.00	0.047
2.00	-35.03	-1.14	0.00	-139.71	0.00	139.71	3,041.56	1,520.78	4,423.28	2,184.49	0.00	-0.01	0.046
3.00	-34.71	-1.14	0.00	-138.57	0.00	138.57	3,033.07	1,516.53	4,391.90	2,168.99	0.00	-0.01	0.046
4.00	-34.39	-1.14	0.00	-137.43	0.00	137.43	3,024.53	1,512.27	4,360.56	2,153.52	0.01	-0.01	0.046
5.00	-34.08	-1.14	0.00	-136.29	0.00	136.29	3,015.96	1,507.98	4,329.28	2,138.07	0.01	-0.02	0.046
6.00	-33.76	-1.14	0.00	-135.15	0.00	135.15	3,007.35	1,503.68	4,298.05	2,122.64	0.01	-0.02	0.046
7.00	-33.45	-1.15	0.00	-134.01	0.00	134.01	2,998.70	1,499.35	4,266.87	2,107.25	0.02	-0.02	0.046
8.00	-33.13	-1.15	0.00	-132.86	0.00	132.86	2,990.02	1,495.01	4,235.75	2,091.88	0.02	-0.03	0.045
9.00	-32.82	-1.15	0.00	-131.72	0.00	131.72	2,981.29	1,490.65	4,204.68	2,076.53	0.03	-0.03	0.045
10.00	-32.51	-1.15	0.00	-130.57	0.00	130.57	2,972.53	1,486.26	4,173.67	2,061.22	0.04	-0.04	0.045
11.00	-32.20	-1.15	0.00	-129.42	0.00	129.42	2,963.72	1,481.86	4,142.71	2,045.93	0.04	-0.04	0.045
12.00	-31.89	-1.15	0.00	-128.26	0.00	128.26	2,954.88	1,477.44	4,111.81	2,030.67	0.05	-0.04	0.045
13.00	-31.58	-1.16	0.00	-127.11	0.00	127.11	2,946.00	1,473.00	4,080.97	2,015.44	0.06	-0.05	0.044
14.00	-31.27	-1.16	0.00	-125.95	0.00	125.95	2,937.08	1,468.54	4,050.18	2,000.23	0.07	-0.05	0.044
15.00	-30.96	-1.16	0.00	-124.80	0.00	124.80	2,928.13	1,464.06	4,019.46	1,985.06	0.08	-0.05	0.044
16.00	-30.65	-1.16	0.00	-123.64	0.00	123.64	2,919.13	1,459.57	3,988.79	1,969.91	0.10	-0.06	0.044
17.00	-30.34	-1.16	0.00	-122.48	0.00	122.48	2,910.10	1,455.05	3,958.19	1,954.80	0.11	-0.06	0.043
18.00	-30.04	-1.16	0.00	-121.32	0.00	121.32	2,901.03	1,450.51	3,927.64	1,939.72	0.12	-0.06	0.043
19.00	-29.73	-1.16	0.00	-120.16	0.00	120.16	2,891.92	1,445.96	3,897.16	1,924.66	0.13	-0.07	0.043
20.00	-29.43	-1.16	0.00	-119.00	0.00	119.00	2,882.77	1,441.38	3,866.74	1,909.64	0.15	-0.07	0.043
21.00	-29.12	-1.16	0.00	-117.83	0.00	117.83	2,873.58	1,436.79	3,836.39	1,894.65	0.16	-0.08	0.043
22.00	-28.82	-1.17	0.00	-116.67	0.00	116.67	2,864.35	1,432.18	3,806.10	1,879.69	0.18	-0.08	0.042
23.00	-28.52	-1.17	0.00	-115.50	0.00	115.50	2,855.09	1,427.54	3,775.87	1,864.76	0.20	-0.08	0.042
24.00	-28.22	-1.17	0.00	-114.34	0.00	114.34	2,845.78	1,422.89	3,745.71	1,849.87	0.22	-0.09	0.042
25.00	-27.92	-1.17	0.00	-113.17	0.00	113.17	2,835.18	1,417.59	3,713.97	1,834.19	0.23	-0.09	0.042
26.00	-27.62	-1.17	0.00	-112.00	0.00	112.00	2,821.76	1,410.88	3,678.67	1,816.76	0.25	-0.09	0.041
27.00	-27.32	-1.17	0.00	-110.84	0.00	110.84	2,808.33	1,404.17	3,643.55	1,799.41	0.27	-0.10	0.041
28.00	-27.02	-1.17	0.00	-109.67	0.00	109.67	2,794.91	1,397.45	3,608.60	1,782.15	0.29	-0.10	0.041
29.00	-26.72	-1.17	0.00	-108.50	0.00	108.50	2,781.48	1,390.74	3,573.81	1,764.97	0.32	-0.10	0.041
30.00	-26.42	-1.17	0.00	-107.34	0.00	107.34	2,768.06	1,384.03	3,539.19	1,747.87	0.34	-0.11	0.041
31.00	-26.13	-1.17	0.00	-106.17	0.00	106.17	2,754.63	1,377.32	3,504.74	1,730.86	0.36	-0.11	0.041
32.00	-25.70	-1.17	0.00	-105.00	0.00	105.00	2,741.21	1,370.60	3,470.46	1,713.93	0.38	-0.12	0.040
33.00	-25.27	-1.16	0.00	-103.84	0.00	103.84	2,727.78	1,363.89	3,436.35	1,697.08	0.41	-0.12	0.040
34.00	-24.85	-1.16	0.00	-102.67	0.00	102.67	2,714.36	1,357.18	3,402.41	1,680.32	0.43	-0.12	0.039
35.00	-24.42	-1.16	0.00	-101.51	0.00	101.51	2,700.94	1,350.47	3,368.63	1,663.64	0.46	-0.13	0.039
36.00	-24.15	-1.16	0.00	-100.35	0.00	100.35	2,178.16	1,089.08	2,770.79	1,368.39	0.49	-0.13	0.045
37.00	-23.88	-1.16	0.00	-99.19	0.00	99.19	2,171.44	1,085.72	2,748.62	1,357.44	0.51	-0.13	0.044
38.00	-23.62	-1.16	0.00	-98.03	0.00	98.03	2,164.69	1,082.35	2,726.49	1,346.51	0.54	-0.14	0.044
39.00	-23.35	-1.16	0.00	-96.87	0.00	96.87	2,157.90	1,078.95	2,704.40	1,335.60	0.57	-0.14	0.044
40.00	-23.08	-1.16	0.00	-95.71	0.00	95.71	2,151.08	1,075.54	2,682.35	1,324.71	0.60	-0.15	0.043
41.00	-22.81	-1.16	0.00	-94.56	0.00	94.56	2,144.21	1,072.10	2,660.33	1,313.84	0.63	-0.15	0.043
42.00	-22.55	-1.15	0.00	-93.40	0.00	93.40	2,137.30	1,068.65	2,638.35	1,302.98	0.67	-0.15	0.043
43.00	-22.28	-1.15	0.00	-92.25	0.00	92.25	2,130.36	1,065.18	2,616.41	1,292.15	0.70	-0.16	0.042
44.00	-22.02	-1.15	0.00	-91.10	0.00	91.10	2,123.38	1,061.69	2,594.51	1,281.33	0.73	-0.16	0.042
45.00	-21.76	-1.15	0.00	-89.95	0.00	89.95	2,116.36	1,058.18	2,572.65	1,270.54	0.76	-0.16	0.042
46.00	-21.49	-1.15	0.00	-88.80	0.00	88.80	2,109.30	1,054.65	2,550.84	1,259.76	0.80	-0.17	0.041
47.00	-21.23	-1.14	0.00	-87.65	0.00	87.65	2,102.20	1,051.10	2,529.06	1,249.01	0.84	-0.17	0.041
48.00	-20.97	-1.14	0.00	-86.50	0.00	86.50	2,095.06	1,047.53	2,507.33	1,238.28	0.87	-0.18	0.040
49.00	-20.71	-1.14	0.00	-85.36	0.00	85.36	2,087.89	1,043.95	2,485.64	1,227.56	0.91	-0.18	0.040
50.00	-20.45	-1.14	0.00	-84.22	0.00	84.22	2,080.68	1,040.34	2,464.00	1,216.88	0.95	-0.18	0.040
51.00	-20.19	-1.14	0.00	-83.08	0.00	83.08	2,073.42	1,036.71	2,442.40	1,206.21	0.99	-0.19	0.039
52.00	-19.93	-1.13	0.00	-81.95	0.00	81.95	2,066.13	1,033.07	2,420.85	1,195.57	1.03	-0.19	0.039
53.00	-19.67	-1.13	0.00	-80.82	0.00	80.82	2,058.81	1,029.40	2,399.34	1,184.94	1.07	-0.20	0.039
54.00	-19.41	-1.13	0.00	-79.69	0.00	79.69	2,051.44	1,025.72	2,377.88	1,174.35	1.11	-0.20	0.038
55.00	-19.15	-1.12	0.00	-78.56	0.00	78.56	2,044.03	1,022.02	2,356.47	1,163.77	1.15	-0.20	0.038

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

116.00	-7.72	-0.77	0.00	-19.52	0.00	19.52	807.71	403.85	647.11	319.59	5.99	-0.63	0.071
117.00	-7.62	-0.77	0.00	-18.74	0.00	18.74	803.90	401.95	639.02	315.59	6.12	-0.64	0.069
118.00	-7.52	-0.76	0.00	-17.98	0.00	17.98	800.06	400.03	630.95	311.60	6.25	-0.65	0.067
119.00	-7.43	-0.75	0.00	-17.22	0.00	17.22	796.18	398.09	622.89	307.62	6.39	-0.66	0.065
120.00	-6.33	-0.67	0.00	-16.46	0.00	16.46	792.27	396.13	614.86	303.65	6.53	-0.67	0.062
121.00	-6.23	-0.66	0.00	-15.79	0.00	15.79	788.31	394.15	606.84	299.70	6.67	-0.68	0.061
122.00	-6.14	-0.66	0.00	-15.13	0.00	15.13	784.31	392.16	598.84	295.75	6.81	-0.68	0.059
123.00	-6.04	-0.65	0.00	-14.47	0.00	14.47	780.28	390.14	590.87	291.81	6.96	-0.69	0.057
124.00	-5.95	-0.64	0.00	-13.82	0.00	13.82	776.21	388.10	582.91	287.88	7.10	-0.70	0.056
125.00	-5.85	-0.64	0.00	-13.18	0.00	13.18	772.10	386.05	574.98	283.96	7.25	-0.71	0.054
126.00	-5.76	-0.63	0.00	-12.54	0.00	12.54	767.95	383.97	567.07	280.06	7.40	-0.72	0.052
127.00	-5.66	-0.62	0.00	-11.91	0.00	11.91	763.76	381.88	559.19	276.16	7.55	-0.73	0.051
128.00	-5.57	-0.61	0.00	-11.29	0.00	11.29	759.54	379.77	551.33	272.28	7.70	-0.73	0.049
129.00	-5.48	-0.61	0.00	-10.67	0.00	10.67	755.27	377.64	543.49	268.41	7.86	-0.74	0.047
130.00	-5.10	-0.57	0.00	-10.07	0.00	10.07	750.97	375.48	535.68	264.55	8.01	-0.75	0.045
131.00	-5.02	-0.57	0.00	-9.49	0.00	9.49	746.63	373.31	527.90	260.71	8.17	-0.75	0.043
132.00	-4.94	-0.56	0.00	-8.93	0.00	8.93	742.25	371.12	520.15	256.88	8.33	-0.76	0.041
133.00	-4.86	-0.55	0.00	-8.37	0.00	8.37	737.83	368.91	512.42	253.07	8.49	-0.77	0.040
134.00	-4.78	-0.55	0.00	-7.82	0.00	7.82	733.37	366.68	504.72	249.26	8.65	-0.77	0.038
135.00	-4.70	-0.54	0.00	-7.27	0.00	7.27	728.87	364.44	497.06	245.48	8.81	-0.78	0.036
136.00	-4.62	-0.53	0.00	-6.73	0.00	6.73	724.34	362.17	489.42	241.71	8.98	-0.79	0.034
137.00	-4.55	-0.52	0.00	-6.20	0.00	6.20	719.77	359.88	481.81	237.95	9.14	-0.79	0.032
138.00	-4.47	-0.52	0.00	-5.68	0.00	5.68	715.15	357.58	474.24	234.21	9.31	-0.80	0.030
139.00	-4.39	-0.51	0.00	-5.16	0.00	5.16	710.80	355.40	466.89	230.58	9.48	-0.80	0.029
140.00	-4.32	-0.50	0.00	-4.65	0.00	4.65	704.09	352.04	458.06	226.22	9.65	-0.81	0.027
141.00	-4.24	-0.49	0.00	-4.15	0.00	4.15	697.37	348.69	449.32	221.90	9.81	-0.81	0.025
142.00	-4.16	-0.49	0.00	-3.66	0.00	3.66	690.66	345.33	440.66	217.63	9.98	-0.81	0.023
143.00	-4.09	-0.48	0.00	-3.17	0.00	3.17	683.95	341.97	432.09	213.39	10.16	-0.82	0.021
144.00	-4.01	-0.47	0.00	-2.70	0.00	2.70	677.24	338.62	423.60	209.20	10.33	-0.82	0.019
145.00	-3.94	-0.46	0.00	-2.23	0.00	2.23	670.52	335.26	415.19	205.05	10.50	-0.82	0.017
146.00	-3.87	-0.45	0.00	-1.76	0.00	1.76	663.81	331.91	406.87	200.94	10.67	-0.82	0.015
147.00	-3.79	-0.45	0.00	-1.31	0.00	1.31	657.10	328.55	398.63	196.87	10.84	-0.83	0.012
148.00	-3.72	-0.44	0.00	-0.87	0.00	0.87	650.39	325.19	390.48	192.84	11.02	-0.83	0.010
149.00	-3.65	-0.43	0.00	-0.43	0.00	0.43	643.68	321.84	382.41	188.86	11.19	-0.83	0.008
150.00	0.00	-0.38	0.00	0.00	0.00	0.00	636.96	318.48	374.43	184.91	11.36	-0.83	0.000

Load Case (0.9 - 0.2Sds) * DL + E ELFM

Seismic (Reduced DL) Equivalent Lateral Forces Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-24.77	-1.13	0.00	-138.98	0.00	138.98	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.044
1.00	-24.55	-1.13	0.00	-137.85	0.00	137.85	3,050.02	1,525.01	4,454.72	2,200.02	0.00	0.00	0.043
2.00	-24.33	-1.13	0.00	-136.72	0.00	136.72	3,041.56	1,520.78	4,423.28	2,184.49	0.00	-0.01	0.043
3.00	-24.11	-1.14	0.00	-135.58	0.00	135.58	3,033.07	1,516.53	4,391.90	2,168.99	0.00	-0.01	0.043
4.00	-23.89	-1.14	0.00	-134.45	0.00	134.45	3,024.53	1,512.27	4,360.56	2,153.52	0.01	-0.01	0.043
5.00	-23.67	-1.14	0.00	-133.31	0.00	133.31	3,015.96	1,507.98	4,329.28	2,138.07	0.01	-0.02	0.043
6.00	-23.45	-1.14	0.00	-132.17	0.00	132.17	3,007.35	1,503.68	4,298.05	2,122.64	0.01	-0.02	0.043
7.00	-23.23	-1.14	0.00	-131.03	0.00	131.03	2,998.70	1,499.35	4,266.87	2,107.25	0.02	-0.02	0.042
8.00	-23.01	-1.14	0.00	-129.89	0.00	129.89	2,990.02	1,495.01	4,235.75	2,091.88	0.02	-0.03	0.042
9.00	-22.80	-1.14	0.00	-128.75	0.00	128.75	2,981.29	1,490.65	4,204.68	2,076.53	0.03	-0.03	0.042
10.00	-22.58	-1.14	0.00	-127.61	0.00	127.61	2,972.53	1,486.26	4,173.67	2,061.22	0.04	-0.03	0.042
11.00	-22.36	-1.15	0.00	-126.46	0.00	126.46	2,963.72	1,481.86	4,142.71	2,045.93	0.04	-0.04	0.042
12.00	-22.15	-1.15	0.00	-125.32	0.00	125.32	2,954.88	1,477.44	4,111.81	2,030.67	0.05	-0.04	0.041
13.00	-21.93	-1.15	0.00	-124.17	0.00	124.17	2,946.00	1,473.00	4,080.97	2,015.44	0.06	-0.05	0.041
14.00	-21.72	-1.15	0.00	-123.02	0.00	123.02	2,937.08	1,468.54	4,050.18	2,000.23	0.07	-0.05	0.041
15.00	-21.50	-1.15	0.00	-121.88	0.00	121.88	2,928.13	1,464.06	4,019.46	1,985.06	0.08	-0.05	0.041
16.00	-21.29	-1.15	0.00	-120.73	0.00	120.73	2,919.13	1,459.57	3,988.79	1,969.91	0.09	-0.06	0.041
17.00	-21.08	-1.15	0.00	-119.58	0.00	119.58	2,910.10	1,455.05	3,958.19	1,954.80	0.11	-0.06	0.040
18.00	-20.86	-1.15	0.00	-118.43	0.00	118.43	2,901.03	1,450.51	3,927.64	1,939.72	0.12	-0.06	0.040
19.00	-20.65	-1.15	0.00	-117.28	0.00	117.28	2,891.92	1,445.96	3,897.16	1,924.66	0.13	-0.07	0.040
20.00	-20.44	-1.15	0.00	-116.12	0.00	116.12	2,882.77	1,441.38	3,866.74	1,909.64	0.15	-0.07	0.040
21.00	-20.23	-1.15	0.00	-114.97	0.00	114.97	2,873.58	1,436.79	3,836.39	1,894.65	0.16	-0.07	0.040
22.00	-20.02	-1.15	0.00	-113.82	0.00	113.82	2,864.35	1,432.18	3,806.10	1,879.69	0.18	-0.08	0.039
23.00	-19.81	-1.15	0.00	-112.67	0.00	112.67	2,855.09	1,427.54	3,775.87	1,864.76	0.19	-0.08	0.039
24.00	-19.60	-1.15	0.00	-111.52	0.00	111.52	2,845.78	1,422.89	3,745.71	1,849.87	0.21	-0.08	0.039
25.00	-19.39	-1.15	0.00	-110.36	0.00	110.36	2,835.18	1,417.59	3,713.97	1,834.19	0.23	-0.09	0.039
26.00	-19.18	-1.15	0.00	-109.21	0.00	109.21	2,821.76	1,410.88	3,678.67	1,816.76	0.25	-0.09	0.039
27.00	-18.97	-1.15	0.00	-108.06	0.00	108.06	2,808.33	1,404.17	3,643.55	1,799.41	0.27	-0.09	0.038
28.00	-18.77	-1.15	0.00	-106.91	0.00	106.91	2,794.91	1,397.45	3,608.60	1,782.15	0.29	-0.10	0.038
29.00	-18.56	-1.15	0.00	-105.75	0.00	105.75	2,781.48	1,390.74	3,573.81	1,764.97	0.31	-0.10	0.038
30.00	-18.35	-1.15	0.00	-104.60	0.00	104.60	2,768.06	1,384.03	3,539.19	1,747.87	0.33	-0.11	0.038
31.00	-18.15	-1.15	0.00	-103.45	0.00	103.45	2,754.63	1,377.32	3,504.74	1,730.86	0.35	-0.11	0.038
32.00	-17.95	-1.15	0.00	-102.30	0.00	102.30	2,741.21	1,370.60	3,470.46	1,713.93	0.38	-0.11	0.038
33.00	-17.75	-1.15	0.00	-101.15	0.00	101.15	2,727.78	1,363.89	3,436.35	1,697.08	0.40	-0.12	0.037
34.00	-17.26	-1.15	0.00	-100.00	0.00	100.00	2,714.36	1,357.18	3,402.41	1,680.32	0.42	-0.12	0.037
35.00	-16.96	-1.14	0.00	-98.86	0.00	98.86	2,700.94	1,350.47	3,368.63	1,663.64	0.45	-0.12	0.036
36.00	-16.78	-1.14	0.00	-97.72	0.00	97.72	2,178.16	1,089.08	2,770.79	1,368.39	0.48	-0.13	0.041
37.00	-16.59	-1.14	0.00	-96.57	0.00	96.57	2,171.44	1,085.72	2,748.62	1,357.44	0.50	-0.13	0.041
38.00	-16.40	-1.14	0.00	-95.43	0.00	95.43	2,164.69	1,082.35	2,726.49	1,346.51	0.53	-0.13	0.041
39.00	-16.22	-1.14	0.00	-94.29	0.00	94.29	2,157.90	1,078.95	2,704.40	1,335.60	0.56	-0.14	0.041
40.00	-16.03	-1.14	0.00	-93.15	0.00	93.15	2,151.08	1,075.54	2,682.35	1,324.71	0.59	-0.14	0.040
41.00	-15.85	-1.14	0.00	-92.01	0.00	92.01	2,144.21	1,072.10	2,660.33	1,313.84	0.62	-0.15	0.040
42.00	-15.66	-1.13	0.00	-90.88	0.00	90.88	2,137.30	1,068.65	2,638.35	1,302.98	0.65	-0.15	0.040
43.00	-15.48	-1.13	0.00	-89.74	0.00	89.74	2,130.36	1,065.18	2,616.41	1,292.15	0.68	-0.15	0.039
44.00	-15.29	-1.13	0.00	-88.61	0.00	88.61	2,123.38	1,061.69	2,594.51	1,281.33	0.71	-0.16	0.039
45.00	-15.11	-1.13	0.00	-87.48	0.00	87.48	2,116.36	1,058.18	2,572.65	1,270.54	0.75	-0.16	0.039
46.00	-14.93	-1.13	0.00	-86.35	0.00	86.35	2,109.30	1,054.65	2,550.84	1,259.76	0.78	-0.16	0.038
47.00	-14.74	-1.12	0.00	-85.23	0.00	85.23	2,102.20	1,051.10	2,529.06	1,249.01	0.82	-0.17	0.038
48.00	-14.56	-1.12	0.00	-84.10	0.00	84.10	2,095.06	1,047.53	2,507.33	1,238.28	0.85	-0.17	0.038
49.00	-14.38	-1.12	0.00	-82.98	0.00	82.98	2,087.89	1,043.95	2,485.64	1,227.56	0.89	-0.18	0.037
50.00	-14.20	-1.12	0.00	-81.86	0.00	81.86	2,080.68	1,040.34	2,464.00	1,216.88	0.92	-0.18	0.037
51.00	-14.02	-1.11	0.00	-80.74	0.00	80.74	2,073.42	1,036.71	2,442.40	1,206.21	0.96	-0.18	0.037
52.00	-13.84	-1.11	0.00	-79.63	0.00	79.63	2,066.13	1,033.07	2,420.85	1,195.57	1.00	-0.19	0.036
53.00	-13.66	-1.11	0.00	-78.52	0.00	78.52	2,058.81	1,029.40	2,399.34	1,184.94	1.04	-0.19	0.036
54.00	-13.48	-1.10	0.00	-77.41	0.00	77.41	2,051.44	1,025.72	2,377.88	1,174.35	1.08	-0.19	0.036
55.00	-13.30	-1.10	0.00	-76.31	0.00	76.31	2,044.03	1,022.02	2,356.47	1,163.77	1.12	-0.20	0.035

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:51 PM

Customer: Metro PCS

116.00	-5.36	-0.75	0.00	-18.77	0.00	18.77	807.71	403.85	647.11	319.59	5.82	-0.61	0.065
117.00	-5.29	-0.74	0.00	-18.02	0.00	18.02	803.90	401.95	639.02	315.59	5.95	-0.62	0.064
118.00	-5.22	-0.73	0.00	-17.28	0.00	17.28	800.06	400.03	630.95	311.60	6.08	-0.63	0.062
119.00	-5.16	-0.73	0.00	-16.55	0.00	16.55	796.18	398.09	622.89	307.62	6.21	-0.64	0.060
120.00	-4.39	-0.65	0.00	-15.83	0.00	15.83	792.27	396.13	614.86	303.65	6.35	-0.65	0.058
121.00	-4.33	-0.64	0.00	-15.18	0.00	15.18	788.31	394.15	606.84	299.70	6.48	-0.65	0.056
122.00	-4.26	-0.63	0.00	-14.54	0.00	14.54	784.31	392.16	598.84	295.75	6.62	-0.66	0.055
123.00	-4.19	-0.63	0.00	-13.91	0.00	13.91	780.28	390.14	590.87	291.81	6.76	-0.67	0.053
124.00	-4.13	-0.62	0.00	-13.28	0.00	13.28	776.21	388.10	582.91	287.88	6.90	-0.68	0.051
125.00	-4.06	-0.61	0.00	-12.66	0.00	12.66	772.10	386.05	574.98	283.96	7.04	-0.69	0.050
126.00	-4.00	-0.61	0.00	-12.05	0.00	12.05	767.95	383.97	567.07	280.06	7.19	-0.69	0.048
127.00	-3.93	-0.60	0.00	-11.44	0.00	11.44	763.76	381.88	559.19	276.16	7.33	-0.70	0.047
128.00	-3.87	-0.59	0.00	-10.84	0.00	10.84	759.54	379.77	551.33	272.28	7.48	-0.71	0.045
129.00	-3.80	-0.58	0.00	-10.25	0.00	10.25	755.27	377.64	543.49	268.41	7.63	-0.72	0.043
130.00	-3.54	-0.55	0.00	-9.67	0.00	9.67	750.97	375.48	535.68	264.55	7.78	-0.72	0.041
131.00	-3.48	-0.54	0.00	-9.12	0.00	9.12	746.63	373.31	527.90	260.71	7.93	-0.73	0.040
132.00	-3.43	-0.54	0.00	-8.57	0.00	8.57	742.25	371.12	520.15	256.88	8.09	-0.74	0.038
133.00	-3.37	-0.53	0.00	-8.04	0.00	8.04	737.83	368.91	512.42	253.07	8.24	-0.74	0.036
134.00	-3.32	-0.52	0.00	-7.51	0.00	7.51	733.37	366.68	504.72	249.26	8.40	-0.75	0.035
135.00	-3.26	-0.52	0.00	-6.98	0.00	6.98	728.87	364.44	497.06	245.48	8.56	-0.75	0.033
136.00	-3.21	-0.51	0.00	-6.46	0.00	6.46	724.34	362.17	489.42	241.71	8.72	-0.76	0.031
137.00	-3.16	-0.50	0.00	-5.95	0.00	5.95	719.77	359.88	481.81	237.95	8.88	-0.76	0.029
138.00	-3.10	-0.50	0.00	-5.45	0.00	5.45	715.15	357.58	474.24	234.21	9.04	-0.77	0.028
139.00	-3.05	-0.49	0.00	-4.96	0.00	4.96	710.80	355.40	466.89	230.58	9.20	-0.77	0.026
140.00	-3.00	-0.48	0.00	-4.47	0.00	4.47	704.09	352.04	458.06	226.22	9.36	-0.78	0.024
141.00	-2.94	-0.47	0.00	-3.99	0.00	3.99	697.37	348.69	449.32	221.90	9.52	-0.78	0.022
142.00	-2.89	-0.47	0.00	-3.51	0.00	3.51	690.66	345.33	440.66	217.63	9.69	-0.79	0.020
143.00	-2.84	-0.46	0.00	-3.05	0.00	3.05	683.95	341.97	432.09	213.39	9.85	-0.79	0.018
144.00	-2.79	-0.45	0.00	-2.59	0.00	2.59	677.24	338.62	423.60	209.20	10.02	-0.79	0.016
145.00	-2.73	-0.44	0.00	-2.14	0.00	2.14	670.52	335.26	415.19	205.05	10.18	-0.79	0.014
146.00	-2.68	-0.44	0.00	-1.69	0.00	1.69	663.81	331.91	406.87	200.94	10.35	-0.80	0.012
147.00	-2.63	-0.43	0.00	-1.26	0.00	1.26	657.10	328.55	398.63	196.87	10.52	-0.80	0.010
148.00	-2.58	-0.42	0.00	-0.83	0.00	0.83	650.39	325.19	390.48	192.84	10.69	-0.80	0.008
149.00	-2.53	-0.41	0.00	-0.41	0.00	0.41	643.68	321.84	382.41	188.86	10.85	-0.80	0.006
150.00	0.00	-0.38	0.00	0.00	0.00	0.00	636.96	318.48	374.43	184.91	11.02	-0.80	0.000

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:51 PM

Customer: Metro PCS

Equivalent Modal Forces Analysis

(Based on ASCE7-10 Chapters 11, 12 & 15 and ANSI/TIA-G, section 2.7)

Spectral Response Acceleration for Short Period (S_s):	0.18
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.20
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Period Based on Rayleigh Method (sec):	2.76
Redundancy Factor (ρ):	1.30

Load Case (1.2 + 0.2Sds) * DL + E EMAM

Seismic Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
152	149.50	59	1.877	1.914	1.116	0.362	18	73
151	148.50	59	1.852	1.787	1.070	0.346	18	73
150	147.50	59	1.828	1.667	1.025	0.330	17	74
149	146.50	60	1.803	1.551	0.982	0.314	16	74
148	145.50	60	1.778	1.442	0.940	0.299	16	75
147	144.50	60	1.754	1.337	0.900	0.284	15	75
146	143.50	61	1.730	1.238	0.861	0.269	14	75
145	142.50	61	1.706	1.144	0.823	0.255	13	76
144	141.50	61	1.682	1.055	0.787	0.241	13	76
143	140.50	62	1.658	0.970	0.752	0.228	12	76
142	139.50	62	1.635	0.890	0.718	0.214	12	77
141	138.50	62	1.611	0.814	0.686	0.201	11	77
140	137.50	63	1.588	0.742	0.654	0.189	10	78
139	136.50	63	1.565	0.674	0.624	0.177	10	78
138	135.50	63	1.542	0.611	0.595	0.165	9	78
137	134.50	64	1.520	0.550	0.566	0.153	8	79
136	133.50	64	1.497	0.494	0.539	0.142	8	79
135	132.50	64	1.475	0.441	0.513	0.131	7	79
134	131.50	64	1.453	0.391	0.488	0.120	7	80
133	130.50	65	1.431	0.344	0.464	0.110	6	80
132	129.50	75	1.409	0.301	0.441	0.100	6	93
131	128.50	75	1.387	0.260	0.419	0.090	6	93
130	127.50	76	1.366	0.222	0.397	0.081	5	94
129	126.50	76	1.344	0.186	0.377	0.072	5	94
128	125.50	76	1.323	0.154	0.357	0.063	4	94
127	124.50	76	1.302	0.123	0.338	0.055	4	95
126	123.50	77	1.281	0.095	0.320	0.046	3	95
125	122.50	77	1.261	0.069	0.302	0.039	3	96
124	121.50	77	1.240	0.046	0.286	0.031	2	96
123	120.50	78	1.220	0.024	0.270	0.024	2	96
122	119.50	78	1.200	0.004	0.254	0.017	1	97
121	118.50	79	1.180	-0.014	0.240	0.011	1	98
120	117.50	79	1.160	-0.030	0.226	0.004	0	98
119	116.50	79	1.140	-0.045	0.213	-0.002	0	98

Site Number: 302475

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Site Name: Sttn - Southington, CT

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118	115.50	83	1.121	-0.058	0.200	-0.007	-1	103
117	114.50	84	1.101	-0.069	0.188	-0.012	-1	104
116	113.50	84	1.082	-0.079	0.176	-0.017	-1	104
115	112.50	84	1.063	-0.088	0.165	-0.022	-2	104
114	111.50	85	1.044	-0.096	0.154	-0.026	-2	105
113	110.50	85	1.026	-0.103	0.144	-0.031	-2	105
112	109.50	99	1.007	-0.108	0.135	-0.034	-3	123
111	108.50	99	0.989	-0.113	0.126	-0.038	-3	123
110	107.50	100	0.971	-0.116	0.117	-0.041	-4	124
109	106.50	100	0.953	-0.119	0.109	-0.044	-4	124
108	105.50	101	0.935	-0.120	0.101	-0.046	-4	125
107	104.50	101	0.917	-0.121	0.094	-0.048	-4	125
106	103.50	101	0.900	-0.122	0.087	-0.050	-4	126
105	102.50	102	0.883	-0.121	0.081	-0.052	-5	126
104	101.50	102	0.865	-0.120	0.075	-0.053	-5	127
103	100.50	103	0.848	-0.119	0.069	-0.054	-5	127
102	99.50	105	0.832	-0.117	0.063	-0.054	-5	130
101	98.50	106	0.815	-0.115	0.058	-0.055	-5	131
100	97.50	106	0.799	-0.112	0.053	-0.055	-5	131
99	96.50	106	0.782	-0.108	0.049	-0.054	-5	132
98	95.50	107	0.766	-0.105	0.045	-0.054	-5	132
97	94.50	107	0.750	-0.101	0.041	-0.053	-5	133
96	93.50	108	0.734	-0.097	0.037	-0.051	-5	133
95	92.50	108	0.719	-0.092	0.034	-0.050	-5	134
94	91.50	108	0.703	-0.088	0.030	-0.048	-5	134
93	90.50	109	0.688	-0.083	0.028	-0.046	-4	135
92	89.50	109	0.673	-0.078	0.025	-0.043	-4	135
91	88.50	110	0.658	-0.073	0.022	-0.041	-4	136
90	87.50	110	0.643	-0.068	0.020	-0.038	-4	136
89	86.50	110	0.629	-0.063	0.018	-0.034	-3	137
88	85.50	111	0.614	-0.058	0.016	-0.031	-3	137
87	84.50	111	0.600	-0.053	0.015	-0.028	-3	138
86	83.50	112	0.586	-0.048	0.013	-0.024	-2	138
85	82.50	112	0.572	-0.043	0.012	-0.020	-2	139
84	81.50	113	0.558	-0.037	0.010	-0.016	-2	139
83	80.50	113	0.544	-0.032	0.009	-0.012	-1	140
82	79.50	113	0.531	-0.027	0.009	-0.008	-1	140
81	78.50	114	0.518	-0.023	0.008	-0.004	0	141
80	77.72	64	0.507	-0.019	0.007	-0.001	0	79
79	77.22	80	0.501	-0.016	0.007	0.001	0	99
78	76.50	181	0.492	-0.013	0.007	0.004	1	225
77	75.50	182	0.479	-0.008	0.006	0.008	1	225
76	74.50	182	0.466	-0.004	0.006	0.012	2	226
75	73.75	91	0.457	-0.001	0.006	0.015	1	113
74	73.25	135	0.451	0.001	0.006	0.017	2	167
73	72.50	270	0.442	0.005	0.006	0.019	5	335
72	71.50	271	0.429	0.009	0.006	0.023	5	336
71	70.50	272	0.418	0.013	0.006	0.026	6	337
70	69.50	200	0.406	0.016	0.006	0.029	5	248
69	68.50	201	0.394	0.020	0.007	0.032	6	249
68	67.50	201	0.383	0.023	0.007	0.035	6	250
67	66.50	202	0.371	0.027	0.008	0.038	7	250
66	65.50	203	0.360	0.030	0.008	0.040	7	251
65	64.50	203	0.349	0.033	0.009	0.042	7	252
64	63.50	204	0.339	0.036	0.009	0.044	8	252
63	62.50	204	0.328	0.039	0.010	0.046	8	253
62	61.50	205	0.318	0.041	0.011	0.048	8	254
61	60.50	205	0.307	0.044	0.012	0.049	9	254
60	59.50	206	0.297	0.046	0.012	0.051	9	255
59	58.50	206	0.287	0.048	0.013	0.052	9	255
58	57.50	207	0.278	0.050	0.014	0.053	9	256
57	56.50	207	0.268	0.052	0.015	0.054	10	257
56	55.50	208	0.259	0.054	0.016	0.054	10	257
55	54.50	208	0.250	0.055	0.017	0.055	10	258

Site Number: 302475

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54	53.50	209	0.240	0.057	0.018	0.055	10	259
53	52.50	209	0.232	0.058	0.019	0.056	10	259
52	51.50	210	0.223	0.060	0.020	0.056	10	260
51	50.50	210	0.214	0.061	0.021	0.056	10	261
50	49.50	211	0.206	0.062	0.022	0.056	10	261
49	48.50	211	0.198	0.063	0.024	0.057	10	262
48	47.50	212	0.190	0.064	0.025	0.057	10	262
47	46.50	212	0.182	0.065	0.026	0.057	10	263
46	45.50	213	0.174	0.066	0.027	0.057	10	264
45	44.50	213	0.166	0.066	0.028	0.056	10	264
44	43.50	214	0.159	0.067	0.029	0.056	10	265
43	42.50	214	0.152	0.068	0.030	0.056	10	266
42	41.50	215	0.145	0.068	0.031	0.056	10	266
41	40.50	215	0.138	0.069	0.032	0.056	10	267
40	39.50	216	0.131	0.069	0.033	0.055	10	268
39	38.50	216	0.125	0.070	0.034	0.055	10	268
38	37.50	217	0.118	0.070	0.035	0.055	10	269
37	36.50	217	0.112	0.070	0.036	0.055	10	270
36	35.50	342	0.106	0.071	0.036	0.054	16	424
35	34.50	344	0.100	0.071	0.037	0.054	16	426
34	33.50	345	0.094	0.071	0.038	0.054	16	427
33	32.50	346	0.089	0.071	0.039	0.054	16	429
32	31.50	239	0.083	0.072	0.039	0.053	11	296
31	30.50	239	0.078	0.072	0.040	0.053	11	297
30	29.50	240	0.073	0.072	0.040	0.053	11	298
29	28.50	241	0.068	0.072	0.041	0.053	11	298
28	27.50	241	0.064	0.072	0.041	0.052	11	299
27	26.50	242	0.059	0.072	0.041	0.052	11	300
26	25.50	243	0.055	0.071	0.042	0.052	11	301
25	24.50	243	0.050	0.071	0.042	0.051	11	301
24	23.50	244	0.046	0.071	0.042	0.051	11	302
23	22.50	244	0.043	0.070	0.042	0.051	11	303
22	21.50	245	0.039	0.070	0.041	0.050	11	304
21	20.50	246	0.035	0.069	0.041	0.050	11	304
20	19.50	246	0.032	0.069	0.041	0.050	11	305
19	18.50	247	0.029	0.068	0.040	0.049	10	306
18	17.50	248	0.026	0.067	0.040	0.048	10	307
17	16.50	248	0.023	0.066	0.039	0.048	10	308
16	15.50	249	0.020	0.064	0.038	0.047	10	308
15	14.50	249	0.018	0.063	0.037	0.046	10	309
14	13.50	250	0.015	0.061	0.036	0.045	10	310
13	12.50	251	0.013	0.059	0.034	0.044	10	311
12	11.50	251	0.011	0.056	0.033	0.043	9	311
11	10.50	252	0.009	0.054	0.031	0.041	9	312
10	9.50	253	0.008	0.051	0.029	0.039	9	313
9	8.50	253	0.006	0.047	0.027	0.037	8	314
8	7.50	254	0.005	0.044	0.025	0.035	8	314
7	6.50	254	0.004	0.040	0.022	0.032	7	315
6	5.50	255	0.003	0.035	0.019	0.029	6	316
5	4.50	256	0.002	0.030	0.016	0.026	6	317
4	3.50	256	0.001	0.024	0.013	0.022	5	318
3	2.50	257	0.001	0.018	0.010	0.017	4	318
2	1.50	257	0.000	0.011	0.006	0.011	2	319
1	0.50	258	0.000	0.004	0.002	0.004	1	320
Powerwave LGP13519	150.00	32	1.890	1.980	1.140	0.371	10	39
Powerwave TT08-	150.00	132	1.890	1.980	1.140	0.371	42	164
Raycap DC6-48-60-18-	150.00	20	1.890	1.980	1.140	0.371	6	25
Ericsson RRUS 11 (Ba	150.00	300	1.890	1.980	1.140	0.371	96	372
10' Omni	150.00	25	1.890	1.980	1.140	0.371	8	31
Kathrein Scala 800 1	150.00	122	1.890	1.980	1.140	0.371	39	152
KMW AM-X-CD-16-65-00	150.00	194	1.890	1.980	1.140	0.371	62	240
Andrew SBNH-1D6565C	150.00	122	1.890	1.980	1.140	0.371	39	151
Round Platform w/ Ha	150.00	2,000	1.890	1.980	1.140	0.371	642	2,479
Kathrein Smart Bias	130.00	10	1.420	0.322	0.452	0.105	1	12

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RFS APXV18-206517S-C	130.00	79	1.420	0.322	0.452	0.105	7	98
Andrew LNX-6515DS-VT	130.00	154	1.420	0.322	0.452	0.105	14	191
DragonWave Horizon C	120.00	11	1.210	0.014	0.262	0.021	0	13
NextNet BTS-2500	120.00	105	1.210	0.014	0.262	0.021	2	130
Argus LLPX310R	120.00	86	1.210	0.014	0.262	0.021	2	106
Clearwire Mount	120.00	560	1.210	0.014	0.262	0.021	10	694
DragonWave A-ANT-11G	120.00	48	1.210	0.014	0.262	0.021	1	59
18" x 12" Junction B	116.00	15	1.130	-0.051	0.206	-0.004	0	19
DB Systems 5100A	100.00	21	0.840	-0.118	0.066	-0.054	-1	26
VertexRSI 101V VPD	100.00	4	0.840	-0.118	0.066	-0.054	0	5
DB Systems 5100A-D	100.00	152	0.840	-0.118	0.066	-0.054	-7	188
Round Side Arm	100.00	450	0.840	-0.118	0.066	-0.054	-21	558
		29,037	127.264	40.310	37.483	10.704	1,797	35,985

Load Case (0.9 - 0.2Sds) * DL + E EMAM

Seismic (Reduced DL) Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
152	149.50	59	1.877	1.914	1.116	0.362	18	51
151	148.50	59	1.852	1.787	1.070	0.346	18	51
150	147.50	59	1.828	1.667	1.025	0.330	17	51
149	146.50	60	1.803	1.551	0.982	0.314	16	51
148	145.50	60	1.778	1.442	0.940	0.299	16	52
147	144.50	60	1.754	1.337	0.900	0.284	15	52
146	143.50	61	1.730	1.238	0.861	0.269	14	52
145	142.50	61	1.706	1.144	0.823	0.255	13	53
144	141.50	61	1.682	1.055	0.787	0.241	13	53
143	140.50	62	1.658	0.970	0.752	0.228	12	53
142	139.50	62	1.635	0.890	0.718	0.214	12	53
141	138.50	62	1.611	0.814	0.686	0.201	11	54
140	137.50	63	1.588	0.742	0.654	0.189	10	54
139	136.50	63	1.565	0.674	0.624	0.177	10	54
138	135.50	63	1.542	0.611	0.595	0.165	9	54
137	134.50	64	1.520	0.550	0.566	0.153	8	55
136	133.50	64	1.497	0.494	0.539	0.142	8	55
135	132.50	64	1.475	0.441	0.513	0.131	7	55
134	131.50	64	1.453	0.391	0.488	0.120	7	55
133	130.50	65	1.431	0.344	0.464	0.110	6	56
132	129.50	75	1.409	0.301	0.441	0.100	6	64
131	128.50	75	1.387	0.260	0.419	0.090	6	65
130	127.50	76	1.366	0.222	0.397	0.081	5	65
129	126.50	76	1.344	0.186	0.377	0.072	5	65
128	125.50	76	1.323	0.154	0.357	0.063	4	66
127	124.50	76	1.302	0.123	0.338	0.055	4	66
126	123.50	77	1.281	0.095	0.320	0.046	3	66
125	122.50	77	1.261	0.069	0.302	0.039	3	66
124	121.50	77	1.240	0.046	0.286	0.031	2	67
123	120.50	78	1.220	0.024	0.270	0.024	2	67
122	119.50	78	1.200	0.004	0.254	0.017	1	68
121	118.50	79	1.180	-0.014	0.240	0.011	1	68
120	117.50	79	1.160	-0.030	0.226	0.004	0	68
119	116.50	79	1.140	-0.045	0.213	-0.002	0	68
118	115.50	83	1.121	-0.058	0.200	-0.007	-1	72
117	114.50	84	1.101	-0.069	0.188	-0.012	-1	72
116	113.50	84	1.082	-0.079	0.176	-0.017	-1	72
115	112.50	84	1.063	-0.088	0.165	-0.022	-2	73
114	111.50	85	1.044	-0.096	0.154	-0.026	-2	73
113	110.50	85	1.026	-0.103	0.144	-0.031	-2	73
112	109.50	99	1.007	-0.108	0.135	-0.034	-3	85

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111	108.50	99	0.989	-0.113	0.126	-0.038	-3	86
110	107.50	100	0.971	-0.116	0.117	-0.041	-4	86
109	106.50	100	0.953	-0.119	0.109	-0.044	-4	86
108	105.50	101	0.935	-0.120	0.101	-0.046	-4	87
107	104.50	101	0.917	-0.121	0.094	-0.048	-4	87
106	103.50	101	0.900	-0.122	0.087	-0.050	-4	87
105	102.50	102	0.883	-0.121	0.081	-0.052	-5	88
104	101.50	102	0.865	-0.120	0.075	-0.053	-5	88
103	100.50	103	0.848	-0.119	0.069	-0.054	-5	88
102	99.50	105	0.832	-0.117	0.063	-0.054	-5	90
101	98.50	106	0.815	-0.115	0.058	-0.055	-5	91
100	97.50	106	0.799	-0.112	0.053	-0.055	-5	91
99	96.50	106	0.782	-0.108	0.049	-0.054	-5	92
98	95.50	107	0.766	-0.105	0.045	-0.054	-5	92
97	94.50	107	0.750	-0.101	0.041	-0.053	-5	92
96	93.50	108	0.734	-0.097	0.037	-0.051	-5	93
95	92.50	108	0.719	-0.092	0.034	-0.050	-5	93
94	91.50	108	0.703	-0.088	0.030	-0.048	-5	93
93	90.50	109	0.688	-0.083	0.028	-0.046	-4	94
92	89.50	109	0.673	-0.078	0.025	-0.043	-4	94
91	88.50	110	0.658	-0.073	0.022	-0.041	-4	94
90	87.50	110	0.643	-0.068	0.020	-0.038	-4	95
89	86.50	110	0.629	-0.063	0.018	-0.034	-3	95
88	85.50	111	0.614	-0.058	0.016	-0.031	-3	95
87	84.50	111	0.600	-0.053	0.015	-0.028	-3	96
86	83.50	112	0.586	-0.048	0.013	-0.024	-2	96
85	82.50	112	0.572	-0.043	0.012	-0.020	-2	97
84	81.50	113	0.558	-0.037	0.010	-0.016	-2	97
83	80.50	113	0.544	-0.032	0.009	-0.012	-1	97
82	79.50	113	0.531	-0.027	0.009	-0.008	-1	98
81	78.50	114	0.518	-0.023	0.008	-0.004	0	98
80	77.72	64	0.507	-0.019	0.007	-0.001	0	55
79	77.22	80	0.501	-0.016	0.007	0.001	0	69
78	76.50	181	0.492	-0.013	0.007	0.004	1	156
77	75.50	182	0.479	-0.008	0.006	0.008	1	157
76	74.50	182	0.466	-0.004	0.006	0.012	2	157
75	73.75	91	0.457	-0.001	0.006	0.015	1	79
74	73.25	135	0.451	0.001	0.006	0.017	2	116
73	72.50	270	0.442	0.005	0.006	0.019	5	232
72	71.50	271	0.429	0.009	0.006	0.023	5	233
71	70.50	272	0.418	0.013	0.006	0.026	6	234
70	69.50	200	0.406	0.016	0.006	0.029	5	173
69	68.50	201	0.394	0.020	0.007	0.032	6	173
68	67.50	201	0.383	0.023	0.007	0.035	6	173
67	66.50	202	0.371	0.027	0.008	0.038	7	174
66	65.50	203	0.360	0.030	0.008	0.040	7	174
65	64.50	203	0.349	0.033	0.009	0.042	7	175
64	63.50	204	0.339	0.036	0.009	0.044	8	175
63	62.50	204	0.328	0.039	0.010	0.046	8	176
62	61.50	205	0.318	0.041	0.011	0.048	8	176
61	60.50	205	0.307	0.044	0.012	0.049	9	177
60	59.50	206	0.297	0.046	0.012	0.051	9	177
59	58.50	206	0.287	0.048	0.013	0.052	9	177
58	57.50	207	0.278	0.050	0.014	0.053	9	178
57	56.50	207	0.268	0.052	0.015	0.054	10	178
56	55.50	208	0.259	0.054	0.016	0.054	10	179
55	54.50	208	0.250	0.055	0.017	0.055	10	179
54	53.50	209	0.240	0.057	0.018	0.055	10	180
53	52.50	209	0.232	0.058	0.019	0.056	10	180
52	51.50	210	0.223	0.060	0.020	0.056	10	181
51	50.50	210	0.214	0.061	0.021	0.056	10	181
50	49.50	211	0.206	0.062	0.022	0.056	10	181
49	48.50	211	0.198	0.063	0.024	0.057	10	182
48	47.50	212	0.190	0.064	0.025	0.057	10	182

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Customer: Metro PCS

47	46.50	212	0.182	0.065	0.026	0.057	10	183
46	45.50	213	0.174	0.066	0.027	0.057	10	183
45	44.50	213	0.166	0.066	0.028	0.056	10	184
44	43.50	214	0.159	0.067	0.029	0.056	10	184
43	42.50	214	0.152	0.068	0.030	0.056	10	185
42	41.50	215	0.145	0.068	0.031	0.056	10	185
41	40.50	215	0.138	0.069	0.032	0.056	10	185
40	39.50	216	0.131	0.069	0.033	0.055	10	186
39	38.50	216	0.125	0.070	0.034	0.055	10	186
38	37.50	217	0.118	0.070	0.035	0.055	10	187
37	36.50	217	0.112	0.070	0.036	0.055	10	187
36	35.50	342	0.106	0.071	0.036	0.054	16	295
35	34.50	344	0.100	0.071	0.037	0.054	16	296
34	33.50	345	0.094	0.071	0.038	0.054	16	297
33	32.50	346	0.089	0.071	0.039	0.054	16	298
32	31.50	239	0.083	0.072	0.039	0.053	11	206
31	30.50	239	0.078	0.072	0.040	0.053	11	206
30	29.50	240	0.073	0.072	0.040	0.053	11	207
29	28.50	241	0.068	0.072	0.041	0.053	11	207
28	27.50	241	0.064	0.072	0.041	0.052	11	208
27	26.50	242	0.059	0.072	0.041	0.052	11	208
26	25.50	243	0.055	0.071	0.042	0.052	11	209
25	24.50	243	0.050	0.071	0.042	0.051	11	209
24	23.50	244	0.046	0.071	0.042	0.051	11	210
23	22.50	244	0.043	0.070	0.042	0.051	11	210
22	21.50	245	0.039	0.070	0.041	0.050	11	211
21	20.50	246	0.035	0.069	0.041	0.050	11	211
20	19.50	246	0.032	0.069	0.041	0.050	11	212
19	18.50	247	0.029	0.068	0.040	0.049	10	213
18	17.50	248	0.026	0.067	0.040	0.048	10	213
17	16.50	248	0.023	0.066	0.039	0.048	10	214
16	15.50	249	0.020	0.064	0.038	0.047	10	214
15	14.50	249	0.018	0.063	0.037	0.046	10	215
14	13.50	250	0.015	0.061	0.036	0.045	10	215
13	12.50	251	0.013	0.059	0.034	0.044	10	216
12	11.50	251	0.011	0.056	0.033	0.043	9	216
11	10.50	252	0.009	0.054	0.031	0.041	9	217
10	9.50	253	0.008	0.051	0.029	0.039	9	217
9	8.50	253	0.006	0.047	0.027	0.037	8	218
8	7.50	254	0.005	0.044	0.025	0.035	8	218
7	6.50	254	0.004	0.040	0.022	0.032	7	219
6	5.50	255	0.003	0.035	0.019	0.029	6	219
5	4.50	256	0.002	0.030	0.016	0.026	6	220
4	3.50	256	0.001	0.024	0.013	0.022	5	221
3	2.50	257	0.001	0.018	0.010	0.017	4	221
2	1.50	257	0.000	0.011	0.006	0.011	2	222
1	0.50	258	0.000	0.004	0.002	0.004	1	222
Powerwave LGP13519	150.00	32	1.890	1.980	1.140	0.371	10	27
Powerwave TT08-	150.00	132	1.890	1.980	1.140	0.371	42	114
Raycap DC6-48-60-18-	150.00	20	1.890	1.980	1.140	0.371	6	17
Ericsson RRUS 11 (Ba	150.00	300	1.890	1.980	1.140	0.371	96	258
10' Omni	150.00	25	1.890	1.980	1.140	0.371	8	22
Kathrein Scala 800 1	150.00	122	1.890	1.980	1.140	0.371	39	105
KMW AM-X-CD-16-65-00	150.00	194	1.890	1.980	1.140	0.371	62	167
Andrew SBNH-1D6565C	150.00	122	1.890	1.980	1.140	0.371	39	105
Round Platform w/ Ha	150.00	2,000	1.890	1.980	1.140	0.371	642	1,721
Kathrein Smart Bias	130.00	10	1.420	0.322	0.452	0.105	1	9
RFS APXV18-206517S-C	130.00	79	1.420	0.322	0.452	0.105	7	68
Andrew LNX-6515DS-VT	130.00	154	1.420	0.322	0.452	0.105	14	132
DragonWave Horizon C	120.00	11	1.210	0.014	0.262	0.021	0	9
NextNet BTS-2500	120.00	105	1.210	0.014	0.262	0.021	2	90
Argus LLPX310R	120.00	86	1.210	0.014	0.262	0.021	2	74
Clearwire Mount	120.00	560	1.210	0.014	0.262	0.021	10	482
DragonWave A-ANT-11G	120.00	48	1.210	0.014	0.262	0.021	1	41

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

18" x 12" Junction B	116.00	15	1.130	-0.051	0.206	-0.004	0	13
DB Systems 5100A	100.00	21	0.840	-0.118	0.066	-0.054	-1	18
VertexRSI 101V VPD	100.00	4	0.840	-0.118	0.066	-0.054	0	3
DB Systems 5100A-D	100.00	152	0.840	-0.118	0.066	-0.054	-7	131
Round Side Arm	100.00	450	0.840	-0.118	0.066	-0.054	-21	387
		29,037	127.264	40.310	37.483	10.704	1,797	24,994

Load Case (1.2 + 0.2Sds) * DL + E EMAM

Seismic Equivalent Modal Analysis Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-35.66	-1.80	0.00	-210.62	0.00	210.62	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.066
1.00	-35.35	-1.80	0.00	-208.82	0.00	208.82	3,050.02	1,525.01	4,454.72	2,200.02	0.00	-0.01	0.065
2.00	-35.03	-1.80	0.00	-207.02	0.00	207.02	3,041.56	1,520.78	4,423.28	2,184.49	0.00	-0.01	0.065
3.00	-34.71	-1.79	0.00	-205.23	0.00	205.23	3,033.07	1,516.53	4,391.90	2,168.99	0.01	-0.02	0.065
4.00	-34.39	-1.79	0.00	-203.43	0.00	203.43	3,024.53	1,512.27	4,360.56	2,153.52	0.01	-0.02	0.065
5.00	-34.08	-1.79	0.00	-201.64	0.00	201.64	3,015.96	1,507.98	4,329.28	2,138.07	0.01	-0.03	0.064
6.00	-33.76	-1.78	0.00	-199.85	0.00	199.85	3,007.35	1,503.68	4,298.05	2,122.64	0.02	-0.03	0.064
7.00	-33.45	-1.78	0.00	-198.07	0.00	198.07	2,998.70	1,499.35	4,266.87	2,107.25	0.03	-0.04	0.064
8.00	-33.13	-1.77	0.00	-196.29	0.00	196.29	2,990.02	1,495.01	4,235.75	2,091.88	0.04	-0.04	0.063
9.00	-32.82	-1.77	0.00	-194.51	0.00	194.51	2,981.29	1,490.65	4,204.68	2,076.53	0.04	-0.05	0.063
10.00	-32.51	-1.76	0.00	-192.75	0.00	192.75	2,972.53	1,486.26	4,173.67	2,061.22	0.06	-0.05	0.063
11.00	-32.20	-1.76	0.00	-190.98	0.00	190.98	2,963.72	1,481.86	4,142.71	2,045.93	0.07	-0.06	0.063
12.00	-31.88	-1.75	0.00	-189.23	0.00	189.23	2,954.88	1,477.44	4,111.81	2,030.67	0.08	-0.06	0.062
13.00	-31.57	-1.74	0.00	-187.48	0.00	187.48	2,946.00	1,473.00	4,080.97	2,015.44	0.09	-0.07	0.062
14.00	-31.27	-1.73	0.00	-185.74	0.00	185.74	2,937.08	1,468.54	4,050.18	2,000.23	0.11	-0.07	0.062
15.00	-30.96	-1.73	0.00	-184.00	0.00	184.00	2,928.13	1,464.06	4,019.46	1,985.06	0.12	-0.08	0.061
16.00	-30.65	-1.72	0.00	-182.28	0.00	182.28	2,919.13	1,459.57	3,988.79	1,969.91	0.14	-0.08	0.061
17.00	-30.34	-1.71	0.00	-180.56	0.00	180.56	2,910.10	1,455.05	3,958.19	1,954.80	0.16	-0.09	0.061
18.00	-30.04	-1.70	0.00	-178.85	0.00	178.85	2,901.03	1,450.51	3,927.64	1,939.72	0.18	-0.09	0.060
19.00	-29.73	-1.69	0.00	-177.15	0.00	177.15	2,891.92	1,445.96	3,897.16	1,924.66	0.20	-0.10	0.060
20.00	-29.43	-1.69	0.00	-175.45	0.00	175.45	2,882.77	1,441.38	3,866.74	1,909.64	0.22	-0.11	0.060
21.00	-29.12	-1.68	0.00	-173.77	0.00	173.77	2,873.58	1,436.79	3,836.39	1,894.65	0.24	-0.11	0.060
22.00	-28.82	-1.67	0.00	-172.09	0.00	172.09	2,864.35	1,432.18	3,806.10	1,879.69	0.27	-0.12	0.059
23.00	-28.52	-1.66	0.00	-170.42	0.00	170.42	2,855.09	1,427.54	3,775.87	1,864.76	0.29	-0.12	0.059
24.00	-28.22	-1.65	0.00	-168.76	0.00	168.76	2,845.78	1,422.89	3,745.71	1,849.87	0.32	-0.13	0.059
25.00	-27.91	-1.64	0.00	-167.11	0.00	167.11	2,835.18	1,417.59	3,713.97	1,834.19	0.35	-0.13	0.058
26.00	-27.61	-1.63	0.00	-165.47	0.00	165.47	2,821.76	1,410.88	3,678.67	1,816.76	0.37	-0.14	0.058
27.00	-27.32	-1.62	0.00	-163.84	0.00	163.84	2,808.33	1,404.17	3,643.55	1,799.41	0.40	-0.14	0.058
28.00	-27.02	-1.61	0.00	-162.21	0.00	162.21	2,794.91	1,397.45	3,608.60	1,782.15	0.43	-0.15	0.058
29.00	-26.72	-1.61	0.00	-160.60	0.00	160.60	2,781.48	1,390.74	3,573.81	1,764.97	0.47	-0.15	0.058
30.00	-26.42	-1.60	0.00	-159.00	0.00	159.00	2,768.06	1,384.03	3,539.19	1,747.87	0.50	-0.16	0.057
31.00	-26.13	-1.59	0.00	-157.40	0.00	157.40	2,754.63	1,377.32	3,504.74	1,730.86	0.53	-0.17	0.057
32.00	-25.70	-1.57	0.00	-155.81	0.00	155.81	2,741.21	1,370.60	3,470.46	1,713.93	0.57	-0.17	0.057
33.00	-25.27	-1.56	0.00	-154.24	0.00	154.24	2,727.78	1,363.89	3,436.35	1,697.08	0.60	-0.18	0.056
34.00	-24.84	-1.54	0.00	-152.68	0.00	152.68	2,714.36	1,357.18	3,402.41	1,680.32	0.64	-0.18	0.056
35.00	-24.42	-1.53	0.00	-151.14	0.00	151.14	2,700.94	1,350.47	3,368.63	1,663.64	0.68	-0.19	0.055
36.00	-24.15	-1.52	0.00	-149.62	0.00	149.62	2,178.16	1,089.08	2,770.79	1,368.39	0.72	-0.19	0.063
37.00	-23.88	-1.51	0.00	-148.10	0.00	148.10	2,171.44	1,085.72	2,748.62	1,357.44	0.76	-0.20	0.063
38.00	-23.61	-1.50	0.00	-146.59	0.00	146.59	2,164.69	1,082.35	2,726.49	1,346.51	0.80	-0.20	0.062
39.00	-23.35	-1.49	0.00	-145.09	0.00	145.09	2,157.90	1,078.95	2,704.40	1,335.60	0.85	-0.21	0.062
40.00	-23.08	-1.48	0.00	-143.60	0.00	143.60	2,151.08	1,075.54	2,682.35	1,324.71	0.89	-0.21	0.062
41.00	-22.81	-1.47	0.00	-142.12	0.00	142.12	2,144.21	1,072.10	2,660.33	1,313.84	0.94	-0.22	0.061
42.00	-22.55	-1.46	0.00	-140.65	0.00	140.65	2,137.30	1,068.65	2,638.35	1,302.98	0.98	-0.23	0.061
43.00	-22.28	-1.45	0.00	-139.18	0.00	139.18	2,130.36	1,065.18	2,616.41	1,292.15	1.03	-0.23	0.060
44.00	-22.02	-1.44	0.00	-137.73	0.00	137.73	2,123.38	1,061.69	2,594.51	1,281.33	1.08	-0.24	0.060
45.00	-21.75	-1.44	0.00	-136.29	0.00	136.29	2,116.36	1,058.18	2,572.65	1,270.54	1.13	-0.24	0.060
46.00	-21.49	-1.43	0.00	-134.85	0.00	134.85	2,109.30	1,054.65	2,550.84	1,259.76	1.18	-0.25	0.059
47.00	-21.23	-1.42	0.00	-133.43	0.00	133.43	2,102.20	1,051.10	2,529.06	1,249.01	1.24	-0.26	0.059
48.00	-20.97	-1.41	0.00	-132.01	0.00	132.01	2,095.06	1,047.53	2,507.33	1,238.28	1.29	-0.26	0.059
49.00	-20.70	-1.40	0.00	-130.60	0.00	130.60	2,087.89	1,043.95	2,485.64	1,227.56	1.35	-0.27	0.058
50.00	-20.44	-1.39	0.00	-129.20	0.00	129.20	2,080.68	1,040.34	2,464.00	1,216.88	1.40	-0.27	0.058
51.00	-20.18	-1.38	0.00	-127.82	0.00	127.82	2,073.42	1,036.71	2,442.40	1,206.21	1.46	-0.28	0.058
52.00	-19.92	-1.37	0.00	-126.44	0.00	126.44	2,066.13	1,033.07	2,420.85	1,195.57	1.52	-0.28	0.057
53.00	-19.67	-1.36	0.00	-125.07	0.00	125.07	2,058.81	1,029.40	2,399.34	1,184.94	1.58	-0.29	0.057
54.00	-19.41	-1.35	0.00	-123.71	0.00	123.71	2,051.44	1,025.72	2,377.88	1,174.35	1.64	-0.30	0.056
55.00	-19.15	-1.34	0.00	-122.36	0.00	122.36	2,044.03	1,022.02	2,356.47	1,163.77	1.70	-0.30	0.056

56.00	-18.89	-1.33	0.00	-121.01	0.00	121.01	2,036.59	1,018.29	2,335.11	1,153.22	1.77	-0.31	0.056
57.00	-18.64	-1.32	0.00	-119.68	0.00	119.68	2,029.10	1,014.55	2,313.80	1,142.70	1.83	-0.31	0.055
58.00	-18.38	-1.32	0.00	-118.36	0.00	118.36	2,021.58	1,010.79	2,292.54	1,132.20	1.90	-0.32	0.055
59.00	-18.13	-1.31	0.00	-117.04	0.00	117.04	2,014.02	1,007.01	2,271.32	1,121.72	1.97	-0.33	0.055
60.00	-17.87	-1.30	0.00	-115.74	0.00	115.74	2,006.42	1,003.21	2,250.16	1,111.27	2.04	-0.33	0.054
61.00	-17.62	-1.29	0.00	-114.44	0.00	114.44	1,998.79	999.39	2,229.06	1,100.85	2.11	-0.34	0.054
62.00	-17.37	-1.28	0.00	-113.15	0.00	113.15	1,991.11	995.56	2,208.00	1,090.45	2.18	-0.34	0.054
63.00	-17.11	-1.27	0.00	-111.86	0.00	111.86	1,983.40	991.70	2,187.00	1,080.08	2.25	-0.35	0.053
64.00	-16.86	-1.27	0.00	-110.59	0.00	110.59	1,975.64	987.82	2,166.06	1,069.73	2.32	-0.36	0.053
65.00	-16.61	-1.26	0.00	-109.32	0.00	109.32	1,966.16	983.08	2,143.32	1,058.50	2.40	-0.36	0.052
66.00	-16.36	-1.25	0.00	-108.06	0.00	108.06	1,954.97	977.49	2,118.86	1,046.42	2.48	-0.37	0.052
67.00	-16.11	-1.25	0.00	-106.81	0.00	106.81	1,943.78	971.89	2,094.54	1,034.41	2.55	-0.37	0.052
68.00	-15.86	-1.24	0.00	-105.56	0.00	105.56	1,932.60	966.30	2,070.35	1,022.47	2.63	-0.38	0.052
69.00	-15.61	-1.24	0.00	-104.32	0.00	104.32	1,921.41	960.70	2,046.31	1,010.60	2.71	-0.39	0.051
70.00	-15.28	-1.23	0.00	-103.08	0.00	103.08	1,910.22	955.11	2,022.41	998.79	2.79	-0.39	0.051
71.00	-14.94	-1.22	0.00	-101.85	0.00	101.85	1,899.03	949.52	1,998.65	987.06	2.88	-0.40	0.050
72.00	-14.61	-1.22	0.00	-100.62	0.00	100.62	1,887.85	943.92	1,975.03	975.39	2.96	-0.40	0.050
73.00	-14.44	-1.22	0.00	-99.41	0.00	99.41	1,876.66	938.33	1,951.55	963.80	3.05	-0.41	0.049
73.50	-14.32	-1.22	0.00	-98.80	0.00	98.80	1,431.47	715.74	1,521.25	751.29	3.09	-0.41	0.057
74.00	-14.10	-1.21	0.00	-98.19	0.00	98.19	1,428.93	714.46	1,514.06	747.74	3.13	-0.42	0.057
75.00	-13.87	-1.21	0.00	-96.98	0.00	96.98	1,423.81	711.90	1,499.70	740.65	3.22	-0.42	0.057
76.00	-13.65	-1.21	0.00	-95.76	0.00	95.76	1,418.66	709.33	1,485.37	733.57	3.31	-0.43	0.056
77.00	-13.55	-1.21	0.00	-94.55	0.00	94.55	1,413.46	706.73	1,471.06	726.50	3.40	-0.43	0.056
77.44	-13.47	-1.21	0.00	-94.02	0.00	94.02	1,411.16	705.58	1,464.78	723.40	3.44	-0.44	0.056
77.44	-13.47	-1.21	0.00	-94.02	0.00	94.02	1,411.16	705.58	1,464.78	723.40	3.44	-0.44	0.140
78.00	-13.33	-1.21	0.00	-93.34	0.00	93.34	1,408.23	704.11	1,456.78	719.45	3.49	-0.44	0.139
79.00	-13.19	-1.22	0.00	-92.13	0.00	92.13	1,402.96	701.48	1,442.53	712.41	3.59	-0.46	0.139
80.00	-13.05	-1.22	0.00	-90.91	0.00	90.91	1,397.65	698.83	1,428.30	705.38	3.68	-0.47	0.138
81.00	-12.91	-1.22	0.00	-89.69	0.00	89.69	1,392.30	696.15	1,414.10	698.37	3.78	-0.49	0.138
82.00	-12.77	-1.23	0.00	-88.47	0.00	88.47	1,386.92	693.46	1,399.92	691.37	3.89	-0.51	0.137
83.00	-12.63	-1.23	0.00	-87.24	0.00	87.24	1,381.49	690.75	1,385.78	684.38	4.00	-0.52	0.137
84.00	-12.49	-1.24	0.00	-86.01	0.00	86.01	1,376.03	688.01	1,371.66	677.41	4.11	-0.54	0.136
85.00	-12.35	-1.24	0.00	-84.77	0.00	84.77	1,370.53	685.26	1,357.58	670.46	4.22	-0.56	0.135
86.00	-12.22	-1.25	0.00	-83.52	0.00	83.52	1,364.99	682.49	1,343.53	663.52	4.34	-0.57	0.135
87.00	-12.08	-1.26	0.00	-82.27	0.00	82.27	1,359.41	679.70	1,329.50	656.59	4.46	-0.59	0.134
88.00	-11.94	-1.26	0.00	-81.02	0.00	81.02	1,353.79	676.90	1,315.52	649.68	4.59	-0.61	0.134
89.00	-11.81	-1.27	0.00	-79.76	0.00	79.76	1,348.13	674.07	1,301.56	642.79	4.72	-0.62	0.133
90.00	-11.67	-1.27	0.00	-78.49	0.00	78.49	1,342.44	671.22	1,287.64	635.92	4.85	-0.64	0.132
91.00	-11.54	-1.28	0.00	-77.22	0.00	77.22	1,336.71	668.35	1,273.75	629.06	4.98	-0.66	0.131
92.00	-11.40	-1.29	0.00	-75.94	0.00	75.94	1,330.94	665.47	1,259.90	622.22	5.12	-0.67	0.131
93.00	-11.27	-1.29	0.00	-74.65	0.00	74.65	1,325.13	662.56	1,246.09	615.40	5.27	-0.69	0.130
94.00	-11.14	-1.30	0.00	-73.36	0.00	73.36	1,319.28	659.64	1,232.31	608.59	5.41	-0.71	0.129
95.00	-11.00	-1.31	0.00	-72.06	0.00	72.06	1,313.39	656.70	1,218.57	601.80	5.56	-0.73	0.128
96.00	-10.87	-1.31	0.00	-70.75	0.00	70.75	1,307.47	653.73	1,204.87	595.04	5.72	-0.74	0.127
97.00	-10.74	-1.32	0.00	-69.44	0.00	69.44	1,301.50	650.75	1,191.20	588.29	5.87	-0.76	0.126
98.00	-10.61	-1.33	0.00	-68.12	0.00	68.12	1,295.50	647.75	1,177.58	581.56	6.04	-0.78	0.125
99.00	-10.48	-1.33	0.00	-66.79	0.00	66.79	1,289.46	644.73	1,164.00	574.85	6.20	-0.79	0.124
100.00	-9.57	-1.36	0.00	-65.46	0.00	65.46	1,283.38	641.69	1,150.46	568.17	6.37	-0.81	0.123
101.00	-9.45	-1.36	0.00	-64.10	0.00	64.10	1,277.26	638.63	1,136.96	561.50	6.54	-0.83	0.122
102.00	-9.32	-1.37	0.00	-62.74	0.00	62.74	1,271.10	635.55	1,123.50	554.85	6.72	-0.85	0.120
103.00	-9.19	-1.37	0.00	-61.37	0.00	61.37	1,264.91	632.45	1,110.09	548.23	6.90	-0.86	0.119
104.00	-9.07	-1.38	0.00	-60.00	0.00	60.00	1,257.26	628.63	1,095.49	541.02	7.08	-0.88	0.118
105.00	-8.94	-1.38	0.00	-58.62	0.00	58.62	1,248.31	624.16	1,079.86	533.30	7.26	-0.90	0.117
106.00	-8.82	-1.39	0.00	-57.24	0.00	57.24	1,239.36	619.68	1,064.34	525.64	7.45	-0.92	0.116
107.00	-8.69	-1.39	0.00	-55.85	0.00	55.85	1,230.41	615.21	1,048.93	518.03	7.65	-0.93	0.115
108.00	-8.57	-1.40	0.00	-54.46	0.00	54.46	1,221.46	610.73	1,033.64	510.48	7.85	-0.95	0.114
109.00	-8.45	-1.40	0.00	-53.06	0.00	53.06	1,212.51	606.26	1,018.46	502.98	8.05	-0.97	0.112
110.00	-8.34	-1.40	0.00	-51.66	0.00	51.66	1,203.56	601.78	1,003.39	495.54	8.25	-0.98	0.111
110.00	-8.34	-1.40	0.00	-51.66	0.00	51.66	829.71	414.85	695.98	343.72	8.25	-0.98	0.160
111.00	-8.24	-1.41	0.00	-50.26	0.00	50.26	826.14	413.07	687.80	339.68	8.46	-1.00	0.158
112.00	-8.13	-1.41	0.00	-48.85	0.00	48.85	822.53	411.26	679.64	335.65	8.67	-1.02	0.155
113.00	-8.03	-1.41	0.00	-47.45	0.00	47.45	818.88	409.44	671.48	331.62	8.89	-1.05	0.153
114.00	-7.92	-1.41	0.00	-46.04	0.00	46.04	815.19	407.60	663.34	327.60	9.11	-1.07	0.150
115.00	-7.82	-1.41	0.00	-44.62	0.00	44.62	811.47	405.73	655.22	323.59	9.34	-1.09	0.148

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:51 PM

Customer: Metro PCS

116.00	-7.70	-1.41	0.00	-43.21	0.00	43.21	807.71	403.85	647.11	319.59	9.57	-1.11	0.145
117.00	-7.60	-1.42	0.00	-41.79	0.00	41.79	803.90	401.95	639.02	315.59	9.80	-1.13	0.142
118.00	-7.50	-1.42	0.00	-40.38	0.00	40.38	800.06	400.03	630.95	311.60	10.04	-1.15	0.139
119.00	-7.41	-1.42	0.00	-38.96	0.00	38.96	796.18	398.09	622.89	307.62	10.28	-1.17	0.136
120.00	-6.31	-1.38	0.00	-37.55	0.00	37.55	792.27	396.13	614.86	303.65	10.53	-1.19	0.132
121.00	-6.21	-1.38	0.00	-36.17	0.00	36.17	788.31	394.15	606.84	299.70	10.78	-1.22	0.129
122.00	-6.11	-1.37	0.00	-34.79	0.00	34.79	784.31	392.16	598.84	295.75	11.04	-1.24	0.125
123.00	-6.02	-1.37	0.00	-33.42	0.00	33.42	780.28	390.14	590.87	291.81	11.30	-1.25	0.122
124.00	-5.92	-1.37	0.00	-32.05	0.00	32.05	776.21	388.10	582.91	287.88	11.57	-1.27	0.119
125.00	-5.83	-1.36	0.00	-30.68	0.00	30.68	772.10	386.05	574.98	283.96	11.84	-1.29	0.116
126.00	-5.74	-1.36	0.00	-29.32	0.00	29.32	767.95	383.97	567.07	280.06	12.11	-1.31	0.112
127.00	-5.64	-1.35	0.00	-27.96	0.00	27.96	763.76	381.88	559.19	276.16	12.39	-1.33	0.109
128.00	-5.55	-1.35	0.00	-26.61	0.00	26.61	759.54	379.77	551.33	272.28	12.67	-1.35	0.105
129.00	-5.45	-1.34	0.00	-25.26	0.00	25.26	755.27	377.64	543.49	268.41	12.95	-1.37	0.101
130.00	-5.07	-1.30	0.00	-23.92	0.00	23.92	750.97	375.48	535.68	264.55	13.24	-1.38	0.097
131.00	-4.99	-1.30	0.00	-22.62	0.00	22.62	746.63	373.31	527.90	260.71	13.53	-1.40	0.093
132.00	-4.91	-1.29	0.00	-21.32	0.00	21.32	742.25	371.12	520.15	256.88	13.83	-1.42	0.090
133.00	-4.83	-1.28	0.00	-20.03	0.00	20.03	737.83	368.91	512.42	253.07	14.12	-1.43	0.086
134.00	-4.76	-1.27	0.00	-18.75	0.00	18.75	733.37	366.68	504.72	249.26	14.42	-1.45	0.082
135.00	-4.68	-1.26	0.00	-17.48	0.00	17.48	728.87	364.44	497.06	245.48	14.73	-1.46	0.078
136.00	-4.60	-1.25	0.00	-16.22	0.00	16.22	724.34	362.17	489.42	241.71	15.04	-1.47	0.073
137.00	-4.52	-1.24	0.00	-14.97	0.00	14.97	719.77	359.88	481.81	237.95	15.35	-1.49	0.069
138.00	-4.44	-1.23	0.00	-13.73	0.00	13.73	715.15	357.58	474.24	234.21	15.66	-1.50	0.065
139.00	-4.37	-1.21	0.00	-12.50	0.00	12.50	710.80	355.40	466.89	230.58	15.97	-1.51	0.060
140.00	-4.29	-1.20	0.00	-11.29	0.00	11.29	704.09	352.04	458.06	226.22	16.29	-1.52	0.056
141.00	-4.22	-1.19	0.00	-10.09	0.00	10.09	697.37	348.69	449.32	221.90	16.61	-1.53	0.052
142.00	-4.14	-1.17	0.00	-8.90	0.00	8.90	690.66	345.33	440.66	217.63	16.93	-1.54	0.047
143.00	-4.07	-1.16	0.00	-7.73	0.00	7.73	683.95	341.97	432.09	213.39	17.26	-1.55	0.042
144.00	-3.99	-1.14	0.00	-6.57	0.00	6.57	677.24	338.62	423.60	209.20	17.58	-1.56	0.037
145.00	-3.92	-1.12	0.00	-5.43	0.00	5.43	670.52	335.26	415.19	205.05	17.91	-1.56	0.032
146.00	-3.84	-1.11	0.00	-4.31	0.00	4.31	663.81	331.91	406.87	200.94	18.24	-1.57	0.027
147.00	-3.77	-1.09	0.00	-3.20	0.00	3.20	657.10	328.55	398.63	196.87	18.57	-1.57	0.022
148.00	-3.70	-1.07	0.00	-2.11	0.00	2.11	650.39	325.19	390.48	192.84	18.89	-1.57	0.017
149.00	-3.62	-1.05	0.00	-1.05	0.00	1.05	643.68	321.84	382.41	188.86	19.22	-1.58	0.011
150.00	0.00	-0.95	0.00	0.00	0.00	0.00	636.96	318.48	374.43	184.91	19.56	-1.58	0.000

Load Case (0.9 - 0.2Sds) * DL + E EMAM

Seismic (Reduced DL) Equivalent Modal Analysis Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-24.77	-1.79	0.00	-205.50	0.00	205.50	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.062
1.00	-24.55	-1.79	0.00	-203.70	0.00	203.70	3,050.02	1,525.01	4,454.72	2,200.02	0.00	-0.01	0.062
2.00	-24.33	-1.79	0.00	-201.91	0.00	201.91	3,041.56	1,520.78	4,423.28	2,184.49	0.00	-0.01	0.061
3.00	-24.11	-1.79	0.00	-200.12	0.00	200.12	3,033.07	1,516.53	4,391.90	2,168.99	0.00	-0.02	0.061
4.00	-23.89	-1.79	0.00	-198.33	0.00	198.33	3,024.53	1,512.27	4,360.56	2,153.52	0.01	-0.02	0.061
5.00	-23.67	-1.78	0.00	-196.54	0.00	196.54	3,015.96	1,507.98	4,329.28	2,138.07	0.01	-0.03	0.060
6.00	-23.45	-1.78	0.00	-194.76	0.00	194.76	3,007.35	1,503.68	4,298.05	2,122.64	0.02	-0.03	0.060
7.00	-23.23	-1.77	0.00	-192.98	0.00	192.98	2,998.70	1,499.35	4,266.87	2,107.25	0.03	-0.04	0.060
8.00	-23.01	-1.76	0.00	-191.21	0.00	191.21	2,990.02	1,495.01	4,235.75	2,091.88	0.03	-0.04	0.060
9.00	-22.79	-1.76	0.00	-189.45	0.00	189.45	2,981.29	1,490.65	4,204.68	2,076.53	0.04	-0.05	0.059
10.00	-22.58	-1.75	0.00	-187.69	0.00	187.69	2,972.53	1,486.26	4,173.67	2,061.22	0.05	-0.05	0.059
11.00	-22.36	-1.74	0.00	-185.94	0.00	185.94	2,963.72	1,481.86	4,142.71	2,045.93	0.06	-0.06	0.059
12.00	-22.15	-1.74	0.00	-184.19	0.00	184.19	2,954.88	1,477.44	4,111.81	2,030.67	0.08	-0.06	0.059
13.00	-21.93	-1.73	0.00	-182.46	0.00	182.46	2,946.00	1,473.00	4,080.97	2,015.44	0.09	-0.07	0.058
14.00	-21.72	-1.72	0.00	-180.73	0.00	180.73	2,937.08	1,468.54	4,050.18	2,000.23	0.11	-0.07	0.058
15.00	-21.50	-1.71	0.00	-179.01	0.00	179.01	2,928.13	1,464.06	4,019.46	1,985.06	0.12	-0.08	0.058
16.00	-21.29	-1.70	0.00	-177.30	0.00	177.30	2,919.13	1,459.57	3,988.79	1,969.91	0.14	-0.08	0.057
17.00	-21.07	-1.69	0.00	-175.60	0.00	175.60	2,910.10	1,455.05	3,958.19	1,954.80	0.16	-0.09	0.057
18.00	-20.86	-1.68	0.00	-173.91	0.00	173.91	2,901.03	1,450.51	3,927.64	1,939.72	0.17	-0.09	0.057
19.00	-20.65	-1.68	0.00	-172.22	0.00	172.22	2,891.92	1,445.96	3,897.16	1,924.66	0.19	-0.10	0.057
20.00	-20.44	-1.67	0.00	-170.55	0.00	170.55	2,882.77	1,441.38	3,866.74	1,909.64	0.21	-0.10	0.056
21.00	-20.23	-1.66	0.00	-168.88	0.00	168.88	2,873.58	1,436.79	3,836.39	1,894.65	0.24	-0.11	0.056
22.00	-20.02	-1.65	0.00	-167.22	0.00	167.22	2,864.35	1,432.18	3,806.10	1,879.69	0.26	-0.11	0.056
23.00	-19.81	-1.64	0.00	-165.58	0.00	165.58	2,855.09	1,427.54	3,775.87	1,864.76	0.28	-0.12	0.055
24.00	-19.60	-1.63	0.00	-163.94	0.00	163.94	2,845.78	1,422.89	3,745.71	1,849.87	0.31	-0.12	0.055
25.00	-19.39	-1.62	0.00	-162.31	0.00	162.31	2,835.18	1,417.59	3,713.97	1,834.19	0.34	-0.13	0.055
26.00	-19.18	-1.61	0.00	-160.69	0.00	160.69	2,821.76	1,410.88	3,678.67	1,816.76	0.36	-0.13	0.055
27.00	-18.97	-1.60	0.00	-159.08	0.00	159.08	2,808.33	1,404.17	3,643.55	1,799.41	0.39	-0.14	0.055
28.00	-18.76	-1.59	0.00	-157.48	0.00	157.48	2,794.91	1,397.45	3,608.60	1,782.15	0.42	-0.14	0.054
29.00	-18.56	-1.58	0.00	-155.89	0.00	155.89	2,781.48	1,390.74	3,573.81	1,764.97	0.45	-0.15	0.054
30.00	-18.35	-1.57	0.00	-154.31	0.00	154.31	2,768.06	1,384.03	3,539.19	1,747.87	0.49	-0.16	0.054
31.00	-18.15	-1.56	0.00	-152.74	0.00	152.74	2,754.63	1,377.32	3,504.74	1,730.86	0.52	-0.16	0.054
32.00	-17.95	-1.55	0.00	-151.18	0.00	151.18	2,741.21	1,370.60	3,470.46	1,713.93	0.55	-0.17	0.054
33.00	-17.75	-1.53	0.00	-149.64	0.00	149.64	2,727.78	1,363.89	3,436.35	1,697.08	0.59	-0.17	0.053
34.00	-17.26	-1.51	0.00	-148.11	0.00	148.11	2,714.36	1,357.18	3,402.41	1,680.32	0.62	-0.18	0.052
35.00	-16.96	-1.50	0.00	-146.59	0.00	146.59	2,700.94	1,350.47	3,368.63	1,663.64	0.66	-0.18	0.052
36.00	-16.77	-1.49	0.00	-145.09	0.00	145.09	2,178.16	1,089.08	2,770.79	1,368.39	0.70	-0.19	0.059
37.00	-16.59	-1.48	0.00	-143.61	0.00	143.61	2,171.44	1,085.72	2,748.62	1,357.44	0.74	-0.19	0.059
38.00	-16.40	-1.47	0.00	-142.13	0.00	142.13	2,164.69	1,082.35	2,726.49	1,346.51	0.78	-0.20	0.059
39.00	-16.21	-1.46	0.00	-140.66	0.00	140.66	2,157.90	1,078.95	2,704.40	1,335.60	0.82	-0.20	0.058
40.00	-16.03	-1.45	0.00	-139.19	0.00	139.19	2,151.08	1,075.54	2,682.35	1,324.71	0.87	-0.21	0.058
41.00	-15.84	-1.44	0.00	-137.74	0.00	137.74	2,144.21	1,072.10	2,660.33	1,313.84	0.91	-0.21	0.058
42.00	-15.66	-1.43	0.00	-136.30	0.00	136.30	2,137.30	1,068.65	2,638.35	1,302.98	0.96	-0.22	0.057
43.00	-15.47	-1.42	0.00	-134.87	0.00	134.87	2,130.36	1,065.18	2,616.41	1,292.15	1.00	-0.23	0.057
44.00	-15.29	-1.41	0.00	-133.45	0.00	133.45	2,123.38	1,061.69	2,594.51	1,281.33	1.05	-0.23	0.057
45.00	-15.11	-1.40	0.00	-132.03	0.00	132.03	2,116.36	1,058.18	2,572.65	1,270.54	1.10	-0.24	0.056
46.00	-14.92	-1.39	0.00	-130.63	0.00	130.63	2,109.30	1,054.65	2,550.84	1,259.76	1.15	-0.24	0.056
47.00	-14.74	-1.38	0.00	-129.24	0.00	129.24	2,102.20	1,051.10	2,529.06	1,249.01	1.20	-0.25	0.055
48.00	-14.56	-1.37	0.00	-127.85	0.00	127.85	2,095.06	1,047.53	2,507.33	1,238.28	1.25	-0.25	0.055
49.00	-14.38	-1.36	0.00	-126.48	0.00	126.48	2,087.89	1,043.95	2,485.64	1,227.56	1.31	-0.26	0.055
50.00	-14.20	-1.35	0.00	-125.11	0.00	125.11	2,080.68	1,040.34	2,464.00	1,216.88	1.36	-0.27	0.054
51.00	-14.02	-1.35	0.00	-123.76	0.00	123.76	2,073.42	1,036.71	2,442.40	1,206.21	1.42	-0.27	0.054
52.00	-13.84	-1.34	0.00	-122.41	0.00	122.41	2,066.13	1,033.07	2,420.85	1,195.57	1.48	-0.28	0.054
53.00	-13.66	-1.33	0.00	-121.08	0.00	121.08	2,058.81	1,029.40	2,399.34	1,184.94	1.54	-0.28	0.053
54.00	-13.48	-1.32	0.00	-119.75	0.00	119.75	2,051.44	1,025.72	2,377.88	1,174.35	1.60	-0.29	0.053
55.00	-13.30	-1.31	0.00	-118.43	0.00	118.43	2,044.03	1,022.02	2,356.47	1,163.77	1.66	-0.29	0.053

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

11/18/2015 1:45:51 PM

Customer: Metro PCS

116.00	-5.34	-1.36	0.00	-41.81	0.00	41.81	807.71	403.85	647.11	319.59	9.27	-1.08	0.137
117.00	-5.27	-1.37	0.00	-40.45	0.00	40.45	803.90	401.95	639.02	315.59	9.50	-1.10	0.135
118.00	-5.20	-1.36	0.00	-39.08	0.00	39.08	800.06	400.03	630.95	311.60	9.73	-1.12	0.132
119.00	-5.14	-1.36	0.00	-37.72	0.00	37.72	796.18	398.09	622.89	307.62	9.97	-1.14	0.129
120.00	-4.37	-1.33	0.00	-36.35	0.00	36.35	792.27	396.13	614.86	303.65	10.21	-1.16	0.125
121.00	-4.31	-1.33	0.00	-35.02	0.00	35.02	788.31	394.15	606.84	299.70	10.45	-1.18	0.122
122.00	-4.24	-1.33	0.00	-33.68	0.00	33.68	784.31	392.16	598.84	295.75	10.70	-1.20	0.119
123.00	-4.17	-1.33	0.00	-32.35	0.00	32.35	780.28	390.14	590.87	291.81	10.96	-1.21	0.116
124.00	-4.11	-1.32	0.00	-31.03	0.00	31.03	776.21	388.10	582.91	287.88	11.21	-1.23	0.113
125.00	-4.04	-1.32	0.00	-29.70	0.00	29.70	772.10	386.05	574.98	283.96	11.47	-1.25	0.110
126.00	-3.98	-1.31	0.00	-28.39	0.00	28.39	767.95	383.97	567.07	280.06	11.74	-1.27	0.107
127.00	-3.91	-1.31	0.00	-27.07	0.00	27.07	763.76	381.88	559.19	276.16	12.00	-1.29	0.103
128.00	-3.85	-1.30	0.00	-25.76	0.00	25.76	759.54	379.77	551.33	272.28	12.28	-1.31	0.100
129.00	-3.78	-1.30	0.00	-24.46	0.00	24.46	755.27	377.64	543.49	268.41	12.55	-1.32	0.096
130.00	-3.52	-1.26	0.00	-23.16	0.00	23.16	750.97	375.48	535.68	264.55	12.83	-1.34	0.092
131.00	-3.46	-1.26	0.00	-21.90	0.00	21.90	746.63	373.31	527.90	260.71	13.11	-1.35	0.089
132.00	-3.41	-1.25	0.00	-20.65	0.00	20.65	742.25	371.12	520.15	256.88	13.40	-1.37	0.085
133.00	-3.35	-1.24	0.00	-19.40	0.00	19.40	737.83	368.91	512.42	253.07	13.69	-1.39	0.081
134.00	-3.30	-1.23	0.00	-18.16	0.00	18.16	733.37	366.68	504.72	249.26	13.98	-1.40	0.077
135.00	-3.24	-1.22	0.00	-16.93	0.00	16.93	728.87	364.44	497.06	245.48	14.27	-1.41	0.073
136.00	-3.19	-1.21	0.00	-15.71	0.00	15.71	724.34	362.17	489.42	241.71	14.57	-1.43	0.069
137.00	-3.13	-1.20	0.00	-14.50	0.00	14.50	719.77	359.88	481.81	237.95	14.87	-1.44	0.065
138.00	-3.08	-1.19	0.00	-13.30	0.00	13.30	715.15	357.58	474.24	234.21	15.17	-1.45	0.061
139.00	-3.03	-1.18	0.00	-12.11	0.00	12.11	710.80	355.40	466.89	230.58	15.48	-1.46	0.057
140.00	-2.97	-1.16	0.00	-10.93	0.00	10.93	704.09	352.04	458.06	226.22	15.79	-1.47	0.053
141.00	-2.92	-1.15	0.00	-9.77	0.00	9.77	697.37	348.69	449.32	221.90	16.10	-1.48	0.048
142.00	-2.87	-1.14	0.00	-8.62	0.00	8.62	690.66	345.33	440.66	217.63	16.41	-1.49	0.044
143.00	-2.82	-1.12	0.00	-7.48	0.00	7.48	683.95	341.97	432.09	213.39	16.72	-1.50	0.039
144.00	-2.76	-1.10	0.00	-6.36	0.00	6.36	677.24	338.62	423.60	209.20	17.04	-1.51	0.035
145.00	-2.71	-1.09	0.00	-5.26	0.00	5.26	670.52	335.26	415.19	205.05	17.35	-1.51	0.030
146.00	-2.66	-1.07	0.00	-4.17	0.00	4.17	663.81	331.91	406.87	200.94	17.67	-1.52	0.025
147.00	-2.61	-1.05	0.00	-3.10	0.00	3.10	657.10	328.55	398.63	196.87	17.99	-1.52	0.020
148.00	-2.56	-1.03	0.00	-2.05	0.00	2.05	650.39	325.19	390.48	192.84	18.31	-1.52	0.015
149.00	-2.51	-1.01	0.00	-1.01	0.00	1.01	643.68	321.84	382.41	188.86	18.63	-1.53	0.009
150.00	0.00	-0.95	0.00	0.00	0.00	0.00	636.96	318.48	374.43	184.91	18.95	-1.53	0.000

Site Number: 302475

Code: ANSI/TIA-222-G

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Site Name: Sttn - Southington, CT

Engineering Number: 64022822

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Customer: Metro PCS

Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	23.88	0.00	34.83	0.00	0.00	2216.03	77.44	0.97
0.9D + 1.6W	23.37	0.00	26.12	0.00	0.00	2132.37	77.44	0.93
1.2D + 1.0Di + 1.0Wi	5.37	0.00	69.54	0.00	0.00	563.13	77.44	0.30
(1.2 + 0.2Sds) * DL + E ELFM	1.13	0.00	35.66	0.00	0.00	141.97	77.44	0.08
(1.2 + 0.2Sds) * DL + E EMAM	1.80	0.00	35.66	0.00	0.00	210.62	110.00	0.16
(0.9 - 0.2Sds) * DL + E ELFM	1.13	0.00	24.77	0.00	0.00	138.98	77.44	0.08
(0.9 - 0.2Sds) * DL + E EMAM	1.79	0.00	24.77	0.00	0.00	205.50	110.00	0.15
1.0D + 1.0W	5.26	0.00	29.04	0.00	0.00	483.44	77.44	0.22

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Upper Termination Connectors				Lower Termination Connectors				Max Member		
			VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Pu (kip)	phiPn (kip)	Ratio
0.00	77.4	(4) SOL-#20 All Thre	277.2	8.3	16.8	157.2	12.0	14	12	0.0	12.0	0	0	246.4	330.5	0.745

Base/Flange Plate	Plate Type	Baseplate
	Pole Diameter	36 in
	Pole Thickness	0.375 in
	Plate Length	44 in
	Plate Thickness	2.5 in
	Plate Fy	60 ksi
	Weld Length	0.3125 in
	ϕ_s Resistance	1584.05 k-in
	Applied	890.01 k-in
Stiffeners	#	0

Code Rev. **G**

Date 11/18/2015
 Engineer BMS
 Site # 302475
 Carrier Metro PCS

Moment 2216.0 k-ft
 Axial 34.8 k

Bolts	#	8
	Bolt Circle	44 in
	(R)adial / (S)quare	S
	Bolt Gap	6 in
	Diameter	2.25 in
	Hole Diameter	2.375 in
	Type	A615
	Fy	75 ksi
	Fu	100 ksi
	ϕ_s Resistance	259.82 k
Applied	178.00 k	
Reinforcement	#	4
	DYW. Circle	43 in
	Offset Angle	15°
	Type	#20
	Diameter	2.5 in
Fu	100 ksi	
Extra Bolts O	#	0

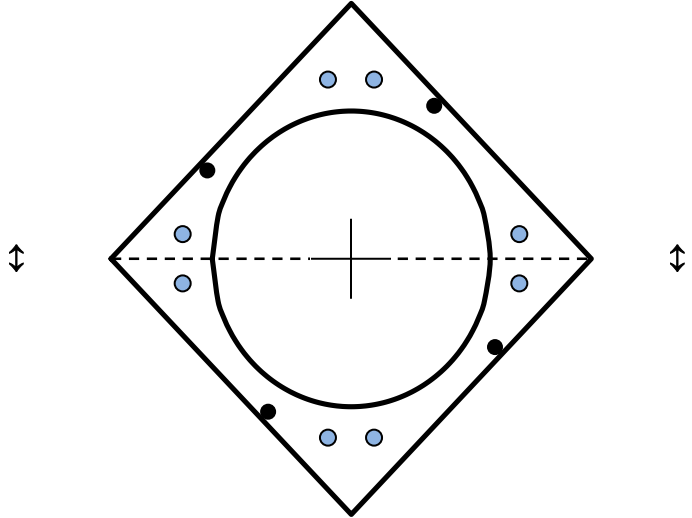


Plate Stress Ratio:
0.56 (Pass)

Bolt Stress Ratio:
0.69 (Pass)

Base/Flange Plate	Plate Type	Flange @ 110.0 ft
	Pole Diameter	20.53 in
	Pole Thickness	0.1875 in
	Plate Diameter	28.5 in
	Plate Thickness	1 in
	Plate Fy	60 ksi
	Weld Length	0.3125 in
	ϕ_s Resistance	376.31 k-in
	Applied	74.55 k-in
	Stiffeners	#
Thickness	0.75 in	
Length	3 in	
Height	6 in	
Chamfer	0.75 in	
Offset Angle	0°	
Fy	50 ksi	

Code Rev. **G**

Date **11/18/2015**
 Engineer **BMS**
 Site # **302475**
 Carrier **Metro PCS**

Moment **280.5 k-ft**
 Axial **6.9 k**

Bolts	#	12
	Bolt Circle	25.75 in
	(R)adial / (S)quare	R
	Diameter	1 in
	Hole Diameter	1.125 in
	Type	A325
	Fy	92 ksi
	Fu	120 ksi
	ϕ_s Resistance	54.52 k
	Applied	42.97 k
Reinforcement	#	0
Extra Bolts	#	0

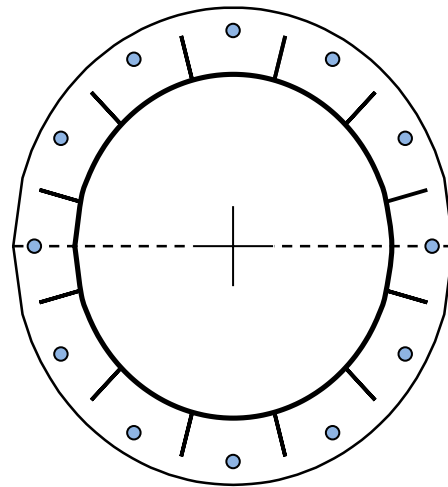
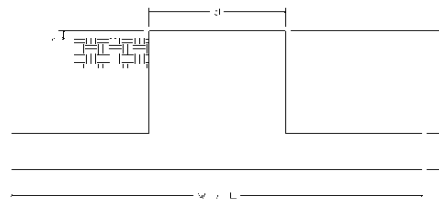


Plate Stress Ratio:
0.20 (Pass)

Bolt Stress Ratio:
0.79 (Pass)

Site Name: STTN - Southington, CT
 Site Number: 302475
 Engineering Number: 64022822
 Engineer: Brendan M Smith
 Date: 11/18/15
 Tower Type: MP

Program Last Updated: 5/13/2014



Design Loads (Factored) - Analysis per TIA-222-G Standards

Design / Analysis / Mapping:

	Analysis
Compression/Leg:	34.8 k
Uplift/Leg:	0.0 k
Total Shear:	23.9 k
Moment:	2216.0 k-ft
Tower + Appurtenance Weight:	32.5 k
Depth to Base of Foundation (l + t - h):	8.00 ft
Diameter of Pier (d):	4.33 ft
Height of Pier above Ground (h):	0.50
Width of Pad (W):	18.00 ft
Length of Pad (L):	18.00 ft
Thickness of Pad (t):	3.00 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:	9.00 ft
Unit Weight of Concrete:	150.0 pcf
Unit Weight of Soil Above Water Table:	115.0 pcf
Unit Weight of Water:	62.4 pcf
Unit Weight of Soil Below Water Table:	53.0 pcf
Friction Angle of Uplift:	0.0 Degrees
Ultimate Coefficient of Shear Friction:	0.35
Ultimate Compressive Bearing Pressure:	12000.0 psf
Ultimate Passive Pressure on Pad Face:	0.0 psf
$\phi_{\text{Soil and Concrete Weight}}$:	0.9
ϕ_{Soil} :	0.75

Concrete Strength (f'_c):	3000 psi
Pad Tension Steel Depth:	32.00 in
ϕ_{Shear} :	0.75
$\phi_{\text{Flexure / Tension}}$:	0.90
$\phi_{\text{Compression}}$:	0.65
β :	0.85
Bottom Pad Rebar Size #:	10
# of Bottom Pad Rebar:	36
Pad Bottom Steel Area:	45.72 in ²
Pad Steel F_y :	60000 psi
Top Pad Rebar Size #:	5
# of Top Pad Rebar:	36
Pad Top Steel Area:	11.16 in ²
Pier Rebar Size #:	11
Pier Steel Area (Single Bar):	1.56 in ²
# of Pier Rebar:	36
Pier Steel F_y :	60000 psi
Pier Cage Diameter:	44.0 in
Rebar Strain Limit:	0.008
Steel Elastic Modulus:	29000 ksi
Tie Rebar Size #:	4
Tie Steel Area (Single Bar):	0.20 in ²
Tie Spacing:	12 in
Tie Steel F_y :	60000 psi

Overturing Moment Usage

Design OTM:	2419.0 k-ft
OTM Resistance:	2939.2 k-ft
Design OTM / OTM Resistance:	0.82 Result: OK

Soil Bearing Pressure Usage

Net Bearing Pressure:	4190 psf
Factored Nominal Bearing Pressure:	9000 psf
Net Bearing Pressure/Factored Nominal Bearing Pressure:	0.47 Result: OK
Load Direction Controlling Design Bearing Pressure:	Diagonal to Pad Edge

Sliding Factor of Safety

Total Factored Sliding Resistance:	95.3 k
Sliding Design / Sliding Resistance:	0.25 Result: OK

One Way Shear, Flexural Capacity, and Punching Shear

Factored One Way Shear (V_u):	158.0 k
One Way Shear Capacity (ϕV_c):	498.2 k - ACI11.3.1.1
$V_u / \phi V_c$:	0.32 Result: OK
Load Direction Controlling Shear Capacity:	Diagonal to Pad Edge
Lower Steel Pad Factored Moment (M_u):	952.5 k-ft
Lower Steel Pad Moment Capacity (ϕM_n):	6148.2 k-ft - ACI10.3
$M_u / \phi M_n$:	0.15 Result: OK
Load Direction Controlling Flexural Capacity:	Parallel to Pad Edge
Upper Steel Pad Factored Moment (M_u):	653.8 k-ft
Upper Steel Pad Moment Capacity (ϕM_n):	1581.1 k-ft
$M_u / \phi M_n$:	0.41 Result: OK
Lower Pad Flexural Reinforcement Ratio:	0.0066 OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Upper Pad Flexural Reinforcement Ratio:	0.0016 OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Lower Pad Reinforcement Spacing:	6 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Upper Pad Reinforcement Spacing:	6 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Factored Punching Shear (V_u):	0.0 k
Nominal Punching Shear Capacity ($\phi_c V_n$):	1386.9 k - ACI11.12.2.1
$V_u / \phi V_c$:	0.00 Result: OK
Factored Moment in Pier (M_u):	2347.4 k-ft
Pier Moment Capacity (ϕM_n):	5432.9 k-ft
$M_u / \phi M_n$:	0.43 Result: OK
Factored Shear in Pier (V_u):	23.9 k
Pier Shear Capacity (ϕV_n):	175.6 k
$V_u / \phi V_c$:	0.14 Result: OK
Pier Shear Reinforcement Ratio:	0.0009 No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0 k
Pier Tension Capacity (ϕT_n):	3032.6 k
$T_u / \phi T_n$:	0.00 Result: OK
Factored Compression in Pier (P_u):	34.8 k
Pier Compression Capacity (ϕP_n):	2737.2 k - ACI10.3.6.2
$P_u / \phi P_n$:	0.01 Result: OK
Pier Compression Reinforcement Ratio:	0.026 OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
$M_u / \phi_B M_n + T_u / \phi_T T_n$:	0.43 Result: OK

Nominal and Design Moment Capacity and Factored Design Loads

