February 22, 2017

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Street
New Britain, CT 06051

Regarding:	Notice of Exempt Modification – Swap of Antennas & Remote Radio Heads
Property Address:	4 Hoffman Road, Canton CT 06022
AT&T Site:	CT1020

Dear Ms. Bachman:

AT&T currently maintains a wireless telecommunications facility on an existing 15 foot monopole at the above-referenced address, latitude 41.85527, longitude -72.8925. Said monopole is owned by American Tower Corporation. The existing equipment shelter is 25.10' by 21.70', totaling 544.67 square feet.

AT&T desires to modify its existing telecommunications facility by swapping three antennas and three remote radio heads. The centerline height of said antennas is and will remain at 150 feet. Antennas are mounted utilizing a platform with handrails.

Please accept this application as notification pursuant to R.C.S.A. §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16-50j-72 (b)(2). In accordance with R.C.S.A. §16-50j-73, a copy of this letter is being sent to Leslie Hill, First Selectman of the Town of Canton. A copy of this letter is also being sent to the property owners Brian and Kelley Biskupiak, and to the tower owner American Tower Corporation. It is also being sent to Director of Planning and Community Development Neil S. Pade, AICP.

The planned modifications to AT&T's facility fall squarely within those activities explicitly provided for in R.C.S.A. §16-50j-72 (b)(2). Specifically:

1. The planned modification will not result in an increase in the height of the existing structure. The antennas to be swapped will be installed at the existing height of 152 feet on the 150-foot monopole.

2. The proposed modifications will not involve any changes to ground-mounted equipment, and therefore will not require an extension of the site boundary.

3. The proposed modification will not increase the noise level at the facility by six decibel or more, or to levels that exceed state and local criteria.

4. The operation of the modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above Federal Communications Commission (FCC) safety standard. An RF emissions calculation (attached) for AT&T's modified facility is herein provided.

5. The proposed modifications will not case a change or alteration in the physical or environmental characteristics of the site.

6. The monopole and its foundation can support AT&T's proposed modifications (please see attached structural analysis completed by American Tower dated February 7, 2017).

For the foregoing reasons, AT&T respectfully requests that the proposed antenna and remote radio head swap be exempt modifications under R.C.S.A. §16-50j-72 (b)(2).

Sincerely,

Sarah Snell

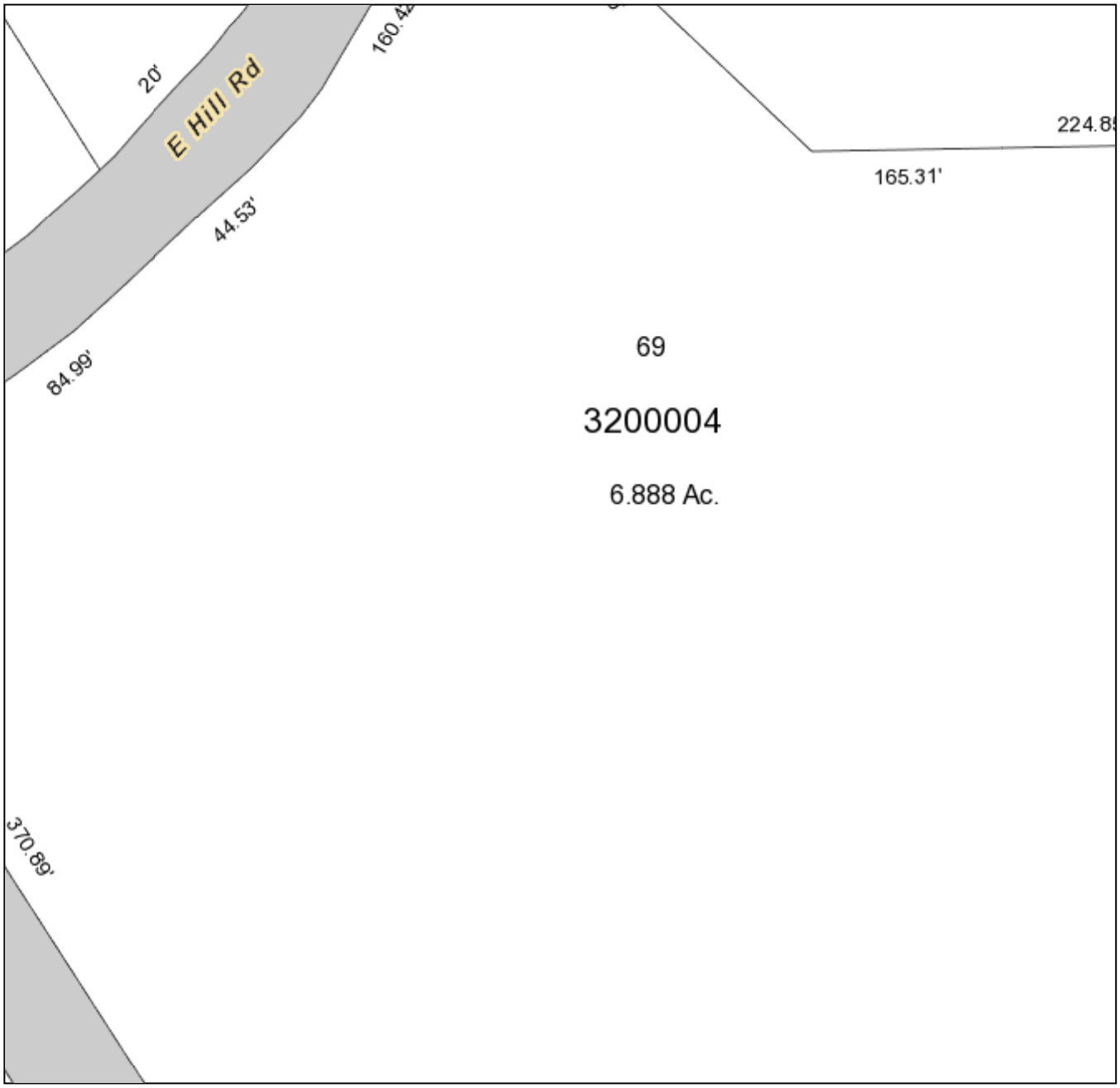
Sarah Snell
Site Acquisition Specialist

cc: Leslie Hill, First Selectman of the Town of Canton (municipality)
Brian and Kelley Biskupiak (landowners)
American Tower Corporation (tower owner)
Neil S. Pade, AICP, Director of Planning and Community Development Town of Canton

Town of Canton

Geographic Information System (GIS)

Date Printed: 2/22/2017



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Canton and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 75 feet

0 75 Feet

N W E S

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2013.

TOWN OF CANTON CT

Information on the Property Records for the Municipality of Canton was last updated on 2/21/2017.

Property Summary Information

Parcel Data And Values | Outbuildings | Sales | Google Map

Parcel Information

Location:	4 HOFFMANN ROAD	Property Use:	Residential	Primary Use:	Residential
Unique ID:	3200004	Map Block Lot:	23/320/0004	Acres:	6.65
490 Acres:	0.00	Zone:	AR-3	Volume / Page:	0421/1046
Developers Map / Lot:	A	Census:			

Value Information

	Appraised Value	70% Assessed Value
Land	263,950	184,770
Buildings	0	0

	Appraised Value	70% Assessed Value
Detached Outbuildings	5,560	3,890
Total	269,510	188,660

Owner's Information

Owner's Data
BISKUPIAK BRIAN & BISKUPIAK KELLEY 14 CROWN POINT CANTON CT 09019

Back To Search (JavaScript:window.history.back(1);)
Print View (PrintPage.aspx?towncode=023&uniqueid=3200004)

WIRELESS COMMUNICATIONS FACILITY
CT1020 - LTE 2C
CANTON-HOFFMANN RD
AMERICAN TOWER CO. SITE NO.: CT-302488
4 HOFFMANN RD
CANTON, CT 06019

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2016 CONNECTICUT STATE BUILDING CODE, INCLUDING THE TIA-222 REVISION "G" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2016 CONNECTICUT FIRE SAFETY CODE AND, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
2. THE COMPOUND, TOWER, PRIMARY GROUND RING, ELECTRICAL SERVICE TO THE METER BANK AND TELEPHONE SERVICE TO THE DEMARCATION POINT ARE PROVIDED BY SITE OWNER. AS BUILT FIELD CONDITIONS REGARDING THESE ITEMS SHALL BE CONFIRMED BY THE CONTRACTOR. SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
3. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
4. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
5. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
7. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
8. LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
10. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
11. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
12. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
13. ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE AT&T CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
15. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
16. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
17. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
19. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
20. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
21. CONTRACTOR SHALL COMPLY WITH OWNERS ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.

SITE DIRECTIONS

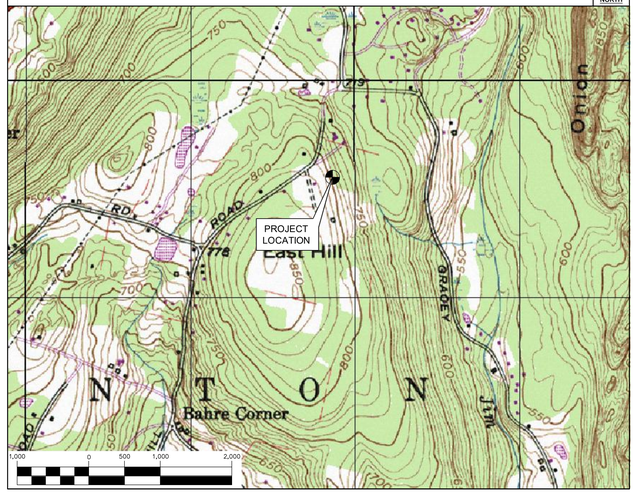
FROM: 500 ENTERPRISE DRIVE, ROCKY HILL, CONNECTICUT

TO: 4 HOFFMANN RD, CANTON, CONNECTICUT

1.	HEAD NORTHEAST ON ENTERPRISE DR TOWARD CAPITAL BLVD	0.37 MI
2.	TURN LEFT ONTO CAPITAL BLVD	0.27 MI
3.	TURN LEFT ONTO WEST ST	0.30 MI
4.	TURN LEFT TO MERGE ONTO I-91 S TOWARD NEW HAVEN	1.40 MI
5.	TAKE EXIT 22N FOR CT-9 N TOWARD NEW BRITAIN	11.1 MI
6.	TAKE THE LEFT EXIT 32 FOR I-84 W TOWARD WATERBURY	0.70 MI
7.	TAKE EXIT 39 TOWARD FARMINGTON/CT-4	0.90 MI
8.	CONTINUE ONTO STATE HWY 508	0.80 MI
9.	STATE HWY 508 TURNS SLIGHTLY RIGHT AND BECOMES CT-4 W	4.60 MI
10.	TURN RIGHT ONTO CT-177 N/LOVELY ST	4.70 MI
11.	TURN LEFT ONTO ALBANY TURNPIKE	1.30 MI
12.	TURN RIGHT ONTO E HILL RD	1.90 MI
13.	THE ENTRANCE TO THE SITE IS APPROX. 1000' PAST THE INTERSECTION OF HOFFMANN RD	0.20 MI

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

1. THE PROPOSED SCOPE OF WORK CONSISTS OF A MODIFICATION TO THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING THE FOLLOWING:
   - A. REMOVE, REPLACE AND RELOCATE EXISTING POSITION 3 ANTENNA FOR NEW HEXPORT ANTENNA, (3) TOTAL.
   - B. INSTALL (3) NEW ERICSSON RRUS-32 B2 BEHIND EXISTING ANTENNAS, (1) PER SECTOR.
   - C. REMOVE AND REPLACE EXISTING DUL WITHIN EXISTING EQUIPMENT SHELTER FOR NEW DUS41. INSTALL NEW XMU.

PROJECT INFORMATION

AT&T SITE NUMBER:	CT1020
AT&T SITE NAME:	CANTON-HOFFMANN RD
SITE ADDRESS:	AMERICAN TOWER CO. SITE NO.: CT-302488 4 HOFFMANN RD CANTON, CT 06019
LESSEE/APPLICANT:	AT&T MOBILITY 500 ENTERPRISE DRIVE, SUITE 3A ROCKY HILL, CT 06067
ENGINEER:	CENTEK ENGINEERING, INC. 63-2 NORTH BRANFORD RD. BRANFORD, CT 06405
PROJECT COORDINATES:	LATITUDE: 41°-51'-18.972" N LONGITUDE: 72°-53'-32.996" W GROUND ELEVATION: ±786' AMSL GROUND ELEVATION REFERENCED FROM GOOGLE EARTH. COORDINATES REFERENCED FROM RFDS DOCUMENTS.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	NOTES, SPECIFICATIONS AND DETAILS	0
C-1	PLANS AND ELEVATION	0
C-2	LTE 2C EQUIPMENT DETAILS	0
E-1	LTE SCHEMATIC DIAGRAM & NOTES	0
E-2	LTE WIRING DIAGRAM	0
E-3	TYPICAL ELECTRICAL DETAILS	0

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	02/20/17	LGL	CAG	CONSTRUCTION DOCUMENTS - ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER SEAL

CENTEK engineering
Centered on Solutions℠
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

AT&T MOBILITY
WIRELESS COMMUNICATIONS FACILITY

CANTON-HOFFMANN RD
CT1020 - LTE 2C
4 HOFFMANN RD
CANTON, CT 06019

DATE: 01/16/17
SCALE: AS NOTED
JOB NO. 17004.03

TITLE SHEET

T-1

NOTES AND SPECIFICATIONS

DESIGN BASIS:

GOVERNING CODE: 2012 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2016 CT STATE BUILDING CODE AND AMENDMENTS.

1. DESIGN CRITERIA:

- WIND LOAD: PER TIA 222 G (ANTENNA MOUNTS): 90–105 MPH (3 SECOND GUST)
- RISK CATEGORY: II (BASED ON IBC TABLE 1604.5)
- NOMINAL DESIGN SPEED (OTHER STRUCTURE): 93 MPH (Vasd) (EXPOSURE B/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7–10) PER 2012 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2016 CONNECTICUT STATE BUILDING CODE.
- SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7–10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
2. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
3. BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATIONS CONCERNING PHYSICAL CONDITIONS (SURFACE AND SUBSURFACE) AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
4. DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST EXISTING FIELD CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
6. ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
7. AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONDITIONS WHICH ARE IN CONFLICT OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.
8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE SHORING, BRACING, AND BARRICADES AS MAY BE REQUIRED FOR THE PROTECTION OF EXISTING PROPERTY, CONSTRUCTION WORKERS, AND FOR PUBLIC SAFETY.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING SITE OPERATIONS, COORDINATE WORK WITH NORTHEAST UTILITIES
10. THE STRUCTURE IS DESIGNED TO BE SELF–SUPPORTING AND STABLE AFTER FOUNDATION REMEDIATION WORK IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, TEMPORARY BRACING, GUYS OR TIEDOWNS, WHICH MIGHT BE NECESSARY.
11. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
12. SHOP DRAWINGS, CONCRETE MIX DESIGNS, TEST REPORTS, AND OTHER SUBMITTALS PERTAINING TO STRUCTURAL WORK SHALL BE FORWARDED TO THE OWNER FOR REVIEW BEFORE FABRICATION AND/OR INSTALLATION IS MADE. SHOP DRAWINGS SHALL INCLUDE ERECTION DRAWINGS AND COMPLETE DETAILS OF CONNECTIONS AS WELL AS MANUFACTURER'S SPECIFICATION DATA WHERE APPROPRIATE. SHOP DRAWINGS SHALL BE CHECKED BY THE CONTRACTOR AND BEAR THE CHECKER'S INITIALS BEFORE BEING SUBMITTED FOR REVIEW.
13. NO DRILLING WELDING OR TAPING ON CL&P OWNED EQUIPMENT.
14. REFER TO DRAWING T1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL IS DESIGNED BY ALLOWABLE STRESS DESIGN (ASD)

   A. STRUCTURAL STEEL (W SHAPES)–––ASTM A992 (FY = 50 KSI)
   B. STRUCTURAL STEEL (OTHER SHAPES)–––ASTM A36 (FY = 36 KSI)
   C. STRUCTURAL HSS (RECTANGULAR SHAPES)–––ASTM A500 GRADE B, (FY = 46 KSI)
   D. STRUCTURAL HSS (ROUND SHAPES)–––ASTM A500 GRADE B, (FY = 42 KSI)
   E. PIPE–––ASTM A53 (FY = 35 KSI)
   F. CONNECTION BOLTS–––ASTM A325–N
   G. U–BOLTS–––ASTM A36
   H. ANCHOR RODS–––ASTM F 1554
   I. WELDING ELECTRODE–––ASTM E 70XX

2. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING: SECTION PROFILES, SIZES, CONNECTION ATTACHMENTS, REINFORCING, ANCHORAGE, SIZE AND TYPE OF FASTENERS AND ACCESSORIES. INCLUDE ERECTION DRAWINGS, ELEVATIONS AND DETAILS.
3. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST PROVISIONS OF AISC MANUAL OF STEEL CONSTRUCTION.
4. PROVIDE ALL PLATES, CLIP ANGLES, CLOSURE PIECES, STRAP ANCHORS, MISCELLANEOUS PIECES AND HOLES REQUIRED TO COMPLETE THE STRUCTURE.
5. FIT AND SHOP ASSEMBLE FABRICATIONS IN THE LARGEST PRACTICAL SECTIONS FOR DELIVERY TO SITE.
6. INSTALL FABRICATIONS PLUMB AND LEVEL, ACCURATELY FITTED, AND FREE FROM DISTORTIONS OR DEFECTS.
7. AFTER ERECTION OF STRUCTURES, TOUCHUP ALL WELDS, ABRASIONS AND NON–GALVANIZED SURFACES WITH A 95% ORGANIC ZINC RICH PAINT IN ACCORDANCE WITH ASTM 780.
8. ALL STEEL MATERIAL (EXPOSED TO WEATHER) SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT DIPPED GALVANIZED) COATINGS" ON IRONS AND STEEL PRODUCTS.
9. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC COATING (HOT–DIP) ON IRON AND STEEL HARDWARE".
10. THE ENGINEER SHALL BE NOTIFIED OF ANY INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON CONFORMING MATERIALS OR CONDITIONS TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE ENGINEER REVIEW.
11. CONNECTION ANGLES SHALL HAVE A MINIMUM THICKNESS OF 1/4 INCHES.
12. STRUCTURAL CONNECTION BOLTS SHALL CONFORM TO ASTM A325. ALL BOLTS SHALL BE 3/4" DIAMETER MINIMUM AND SHALL HAVE A MINIMUM OF TWO BOLTS, UNLESS OTHERWISE ON THE DRAWINGS.
13. LOCK WASHER ARE NOT PERMITTED FOR A325 STEEL ASSEMBLIES.
14. SHOP CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED.
15. MILL BEARING ENDS OF COLUMNS, STIFFENERS, AND OTHER BEARING SURFACES TO TRANSFER LOAD OVER ENTIRE CROSS SECTION.
16. FABRICATE BEAMS WITH MILL CAMBER UP.
17. LEVEL AND PLUMB INDIVIDUAL MEMBERS OF THE STRUCTURE TO AN ACCURACY OF 1:500, BUT NOT TO EXCEED 1/4" IN THE FULL HEIGHT OF THE COLUMN.
18. COMMENCEMENT OF STRUCTURAL STEEL WORK WITHOUT NOTIFYING THE ENGINEER OF ANY DISCREPANCIES WILL BE CONSIDERED ACCEPTANCE OF PRECEDING WORK.
19. INSPECTION AND TESTING OF ALL WELDING AND HIGH STRENGTH BOLTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY.
20. FOUR COPIES OF ALL INSPECTION TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN TEN (10) WORKING DAYS OF THE DATE OF INSPECTION.

PAINT NOTES

PAINTING SCHEDULE:

1. ANTENNA PANELS:

   A. SHERWIN WILLIAMS POLANE–B
   B. COLOR TO BE MATCHED WITH EXISTING TOWER STRUCTURE.

2. COAXIAL CABLES:

   A. ONE COAT OF DTM BONDING PRIMER (2–5 MILS. DRY FINISH)
   B. TWO COATS OF DTM ACRYLIC PRIMER/FINISH (2.5–5 MILS. DRY FINISH)
   C. COLOR TO BE FIELD MATCHED WITH EXISTING STRUCTURE.

EXAMINATION AND PREPARATION:

1. DO NOT APPLY PAINT IN SNOW, RAIN, FOG OR MIST OR WHEN RELATIVE HUMIDITY EXCEEDS 85%. DO NOT APPLY PAINT TO DAMP OR WET SURFACES.
2. VERIFY THAT SUBSTRATE CONDITIONS ARE READY TO RECEIVE WORK. EXAMINE SURFACE SCHEDULED TO BE FINISHED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY CONDITION THAT MAY POTENTIALLY AFFECT PROPER APPLICATION.
3. TEST SHOP APPLIED PRIMER FOR COMPATIBILITY WITH SUBSEQUENT COVER MATERIALS.
4. PERFORM PREPARATION AND CLEANING PROCEDURE IN STRICT ACCORDANCE WITH COATING MANUFACTURER'S INSTRUCTIONS FOR EACH SUBSTRATE CONDITION.
5. CORRECT DEFECTS AND CLEAN SURFACES WHICH AFFECT WORK OF THIS SECTION. REMOVE EXISTING COATINGS THAT EXHIBIT LOOSE SURFACE DEFECTS.
6. IMPERVIOUS SURFACE: REMOVE MILDEW BY SCRUBBING WITH SOLUTION OF TRI–SODIUM PHOSPHATE AND BLEACH. RINSE WITH CLEAN WATER AND ALLOW SURFACE TO DRY.
7. ALUMINUM SURFACE SCHEDULED FOR PAINT FINISH: REMOVE SURFACE CONTAMINATION BY STEAM OR HIGH–PRESSURE WATER. REMOVE OXIDATION WITH ACID ETCH AND SOLVENT WASHING. APPLY ETCHING PRIMER IMMEDIATELY FOLLOWING CLEANING.
8. FERROUS METALS: CLEAN UNGALVANIZED FERROUS METAL SURFACES THAT HAVE NOT BEEN SHOP COATED; REMOVE OIL, GREASE, DIRT, LOOSE MILL SCALE, AND OTHER FOREIGN SUBSTANCES. USE SOLVENT OR MECHANICAL CLEANING METHODS THAT COMPLY WITH THE STEEL STRUCTURES PAINTING COUNCIL'S (SSPC) RECOMMENDATIONS. TOUCH UP BARE AREAS AND SHOP APPLIED PRIME COATS THAT HAVE BEEN DAMAGED. WIRE BRUSH, CLEAN WITH SOLVENTS RECOMMENDED BY PAINT MANUFACTURER, AND TOUCH UP WITH THE SAME PRIMER AS THE SHOP COAT.
9. GALVANIZED SURFACES: CLEAN GALVANIZED SURFACES WITH NON–PETROLEUM–BASED SOLVENTS SO SURFACE IS FREE OF OIL AND SURFACE CONTAMINANTS. REMOVE PRETREATMENT FROM GALVANIZED SHEET METAL FABRICATED FROM COIL STOCK BY MECHANICAL METHODS.
10. ANTENNA PANELS: REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION. PANELS MUST BE WIPED WITH METHYL ETHYL KETONE (MEK).
11. COAXIAL CABLES: REMOVE ALL OIL, DUST, GREASE. DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION.

CLEANING:

1. COLLECT WASTE MATERIAL, WHICH MAY CONSTITUTE A FIRE HAZARD, PLACE IN CLOSED METAL CONTAINERS AND REMOVE DAILY FROM SITE.

APPLICATION:

1. APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. DO NOT APPLY FINISHES TO SURFACES THAT ARE NOT DRY.
3. APPLY EACH COAT TO UNIFORM FINISH.
4. APPLY EACH COAT OF PAINT SLIGHTLY DARKER THAN PRECEDING COAT UNLESS OTHERWISE APPROVED.
5. SAND METAL LIGHTLY BETWEEN COATS TO ACHIEVE REQUIRED FINISH.
6. VACUUM CLEAN SURFACES FREE OF LOOSE PARTICLES. USE TACK CLOTH JUST PRIOR TO APPLYING NEXT COAT.
7. ALLOW APPLIED COAT TO DRY BEFORE NEXT COAT IS APPLIED.

COMPLETED WORK:

1. SAMPLES: PREPARE 24" X 24" SAMPLE AREA FOR REVIEW.
2. MATCH APPROVED SAMPLES FOR COLOR, TEXTURE AND COVERAGE. REMOVE REFINISH OR REPAINT WORK NOT IN COMPLIANCE WITH SPECIFIED REQUIREMENTS.

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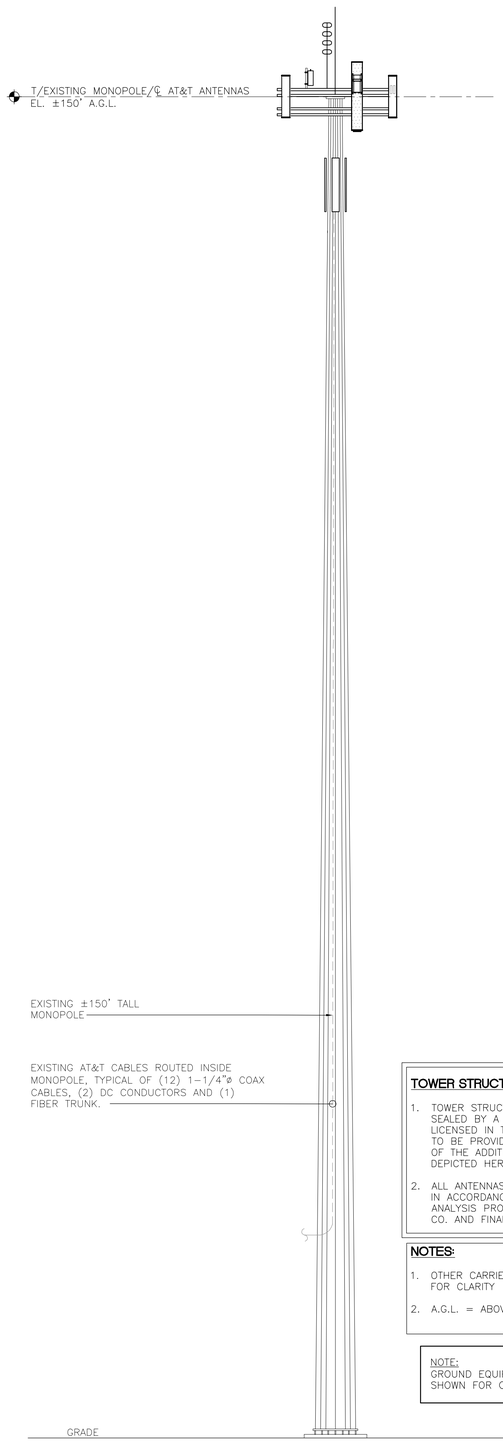
NOTES, SPECIFICATIONS AND DETAILS

N–1

Sheet No. 2 of 5



3 C-1 **TOWER ELEVATION**
SCALE: 1/8" = 1'-0"

TOWER STRUCTURAL NOTES:

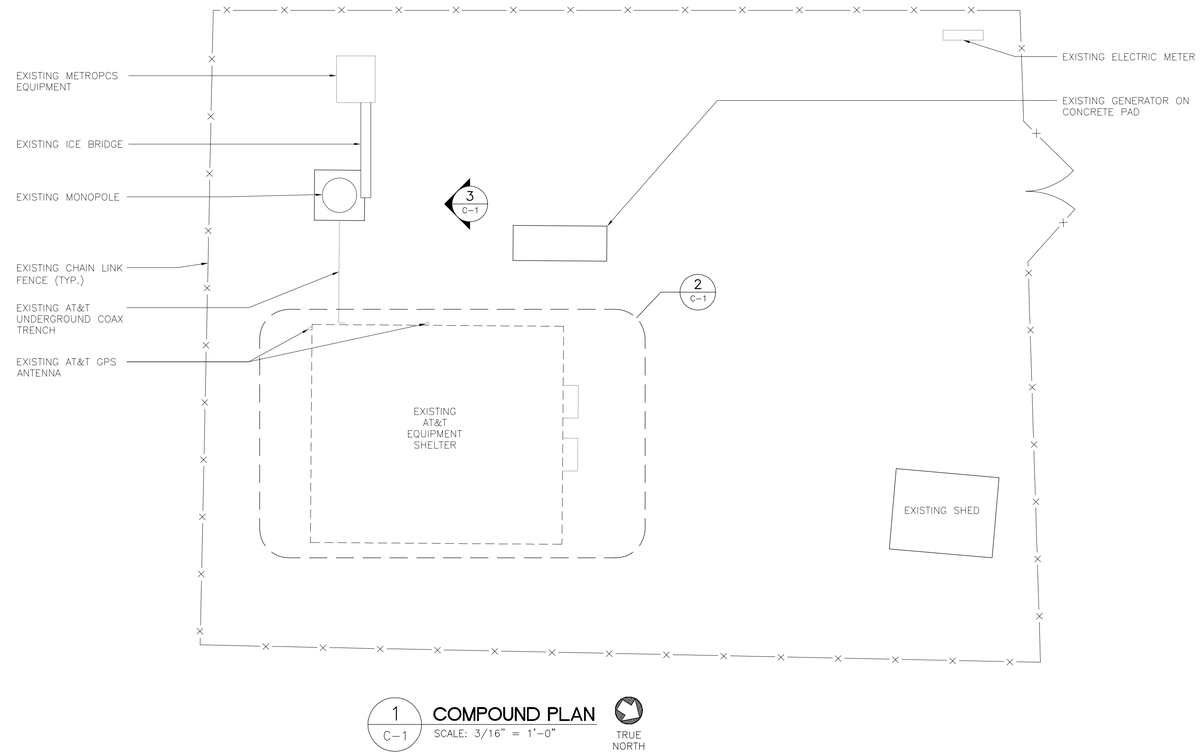
1. TOWER STRUCTURAL ANALYSIS SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT TO BE PROVIDED PRIOR TO INSTALLATION OF THE ADDITIONAL TOWER LOADING DEPICTED HEREIN.
2. ALL ANTENNAS AND COAX TO BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ANALYSIS PROVIDED BY AMERICAN TOWER CO. AND FINAL AT&T RF DATA SHEET.

NOTES:

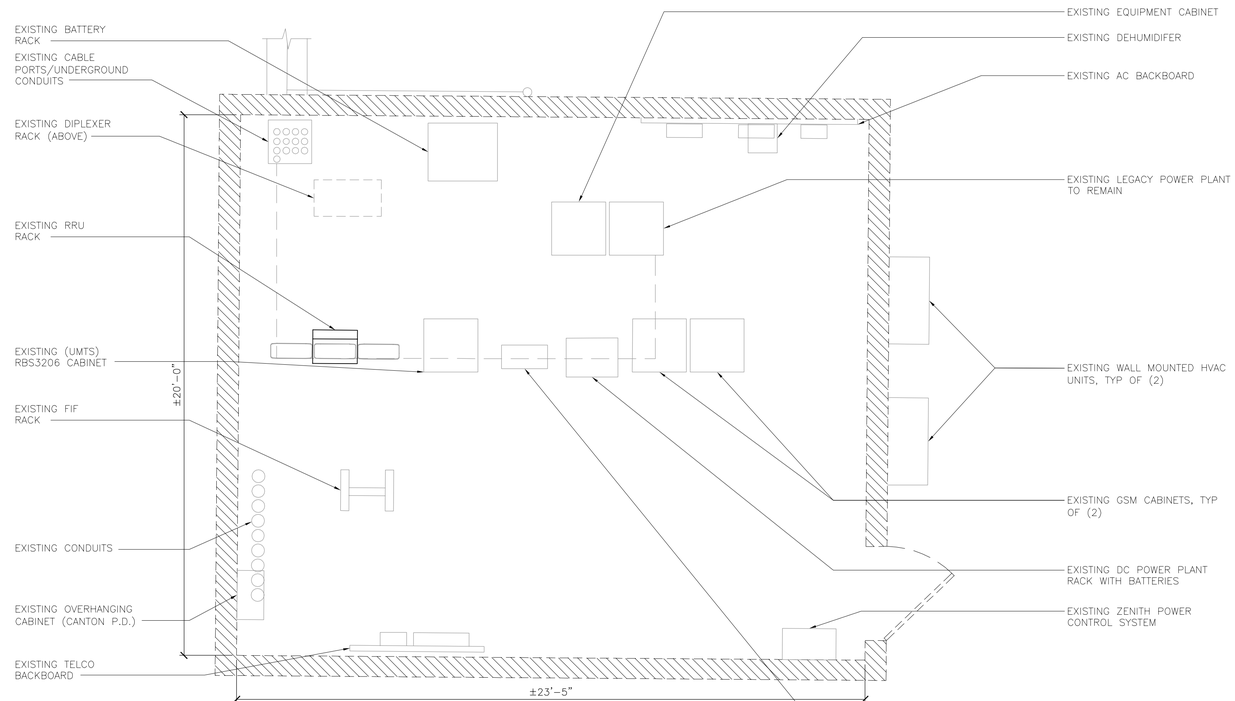
1. OTHER CARRIER EQUIPMENT NOT SHOWN FOR CLARITY
2. A.G.L. = ABOVE GRADE LEVEL

NOTE:
GROUND EQUIPMENT NOT SHOWN FOR CLARITY.

GRAPHIC SCALE
8 0 4 8 16 32
(IN FEET)
1 inch = 8 ft.



1 C-1 **COMPOUND PLAN**
SCALE: 3/16" = 1'-0"
TRUE NORTH



2 C-1 **EQUIPMENT LAYOUT PLAN**
SCALE: 1/2" = 1'-0"
TRUE NORTH

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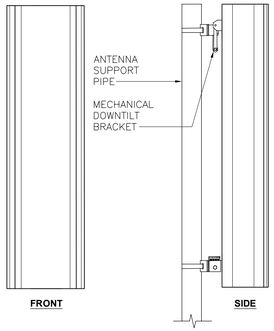
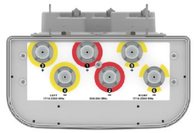
PLANS AND ELEVATION

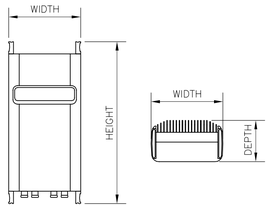
C-1
Sheet No. 3 of 5





ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: CCI MODEL: HPA-65R-BUU-H6-H8	92.4"L x 14.8"W x 7.4"D	68 LBS.

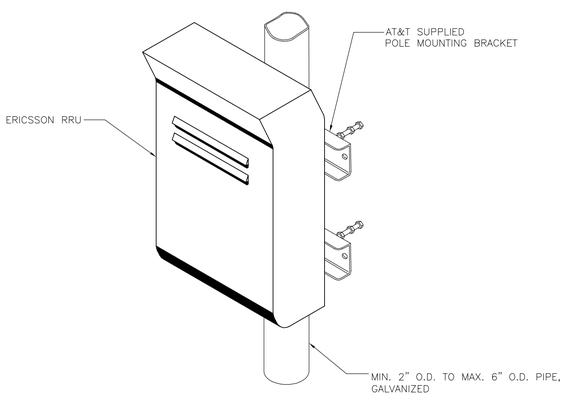
5 / C-2 PROPOSED ANTENNA DETAIL
SCALE: 1/2" = 1'-0"



RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	CLEARANCES
MAKE: ERICSSON MODEL: RRUS-32 B2	27.17"H x 12.05"W x 7.01"D	52.91 LBS.	ABOVE: 16" MIN. BELOW: 12" MIN. FRONT: 36" MIN.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH AT&T CONSTRUCTION MANAGER PRIOR TO ORDERING.

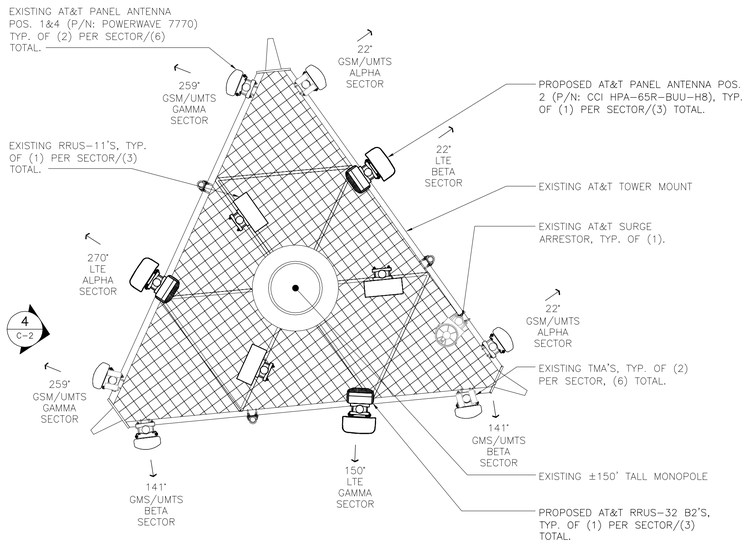
6 / C-2 ERICSSON RRUS 32 B2 DETAIL
SCALE: 1" = 1'-0"



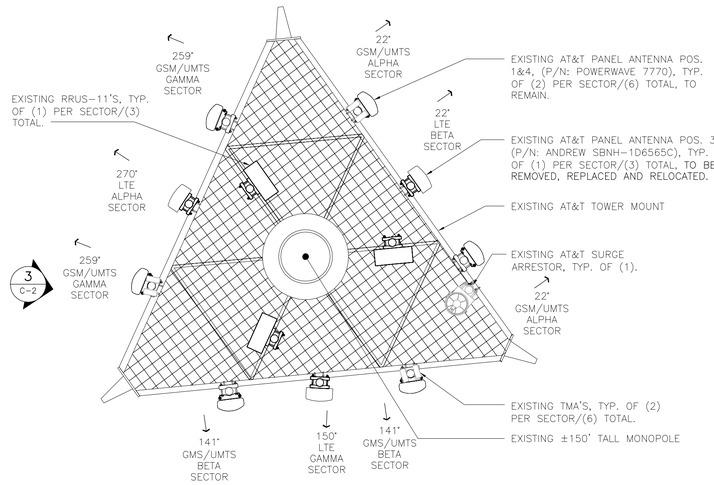
NOTES:

1. AT&T SHALL SUPPLY RRU, AND RRU POLE-MOUNTING BRACKET. CONTRACTOR SHALL SUPPLY POLE/PIPE AND INSTALL ALL MOUNTING HARDWARE INCLUDING ERICSSON RRU POLE-MOUNTING BRACKET. CONTRACTOR SHALL INSTALLS RRU AND MAKES CABLE TERMINATIONS.
2. NO PAINTING OF THE RRU OR SOLAR SHIELD IS ALLOWED.

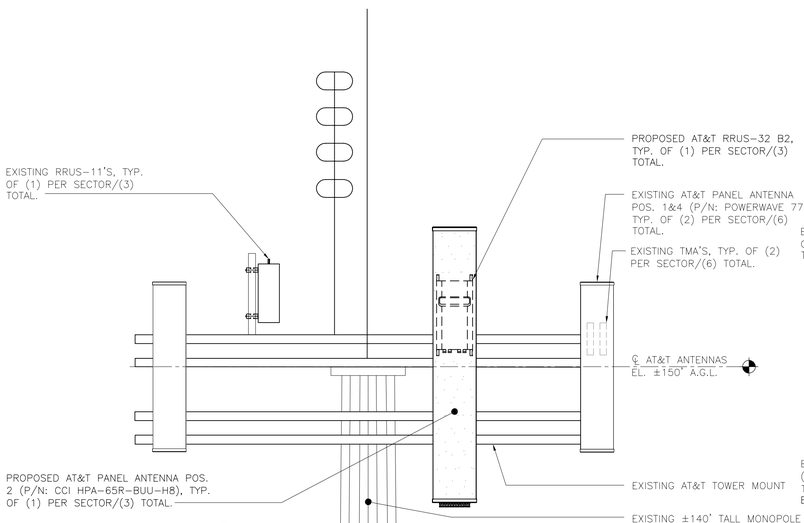
7 / C-2 TYPICAL RRUS MOUNTING DETAILS
SCALE: NTS



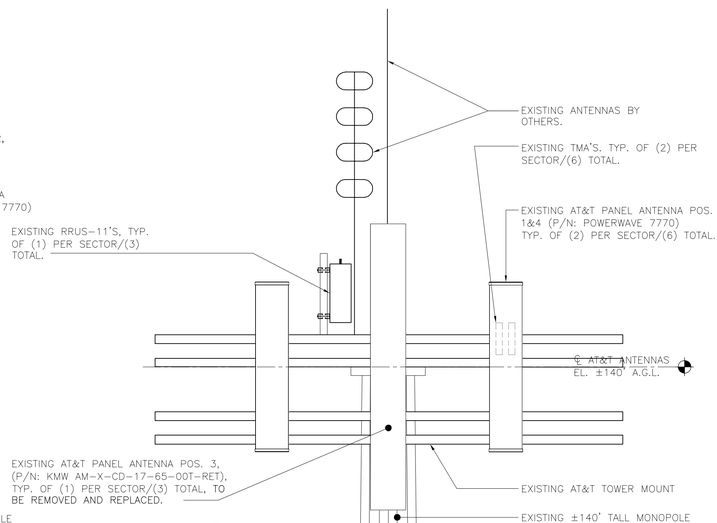
2 / C-2 PROPOSED ANTENNA PLAN
SCALE: 3/8" = 1'-0" NORTH



1 / C-2 EXISTING ANTENNA PLAN
SCALE: 3/8" = 1'-0" NORTH



4 / C-2 PROPOSED ANTENNA ELEVATION
SCALE: 1/2" = 1'-0"



3 / C-2 EXISTING ANTENNA ELEVATION
SCALE: 1/2" = 1'-0"

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LTE 2C EQUIPMENT DETAILS

C-2

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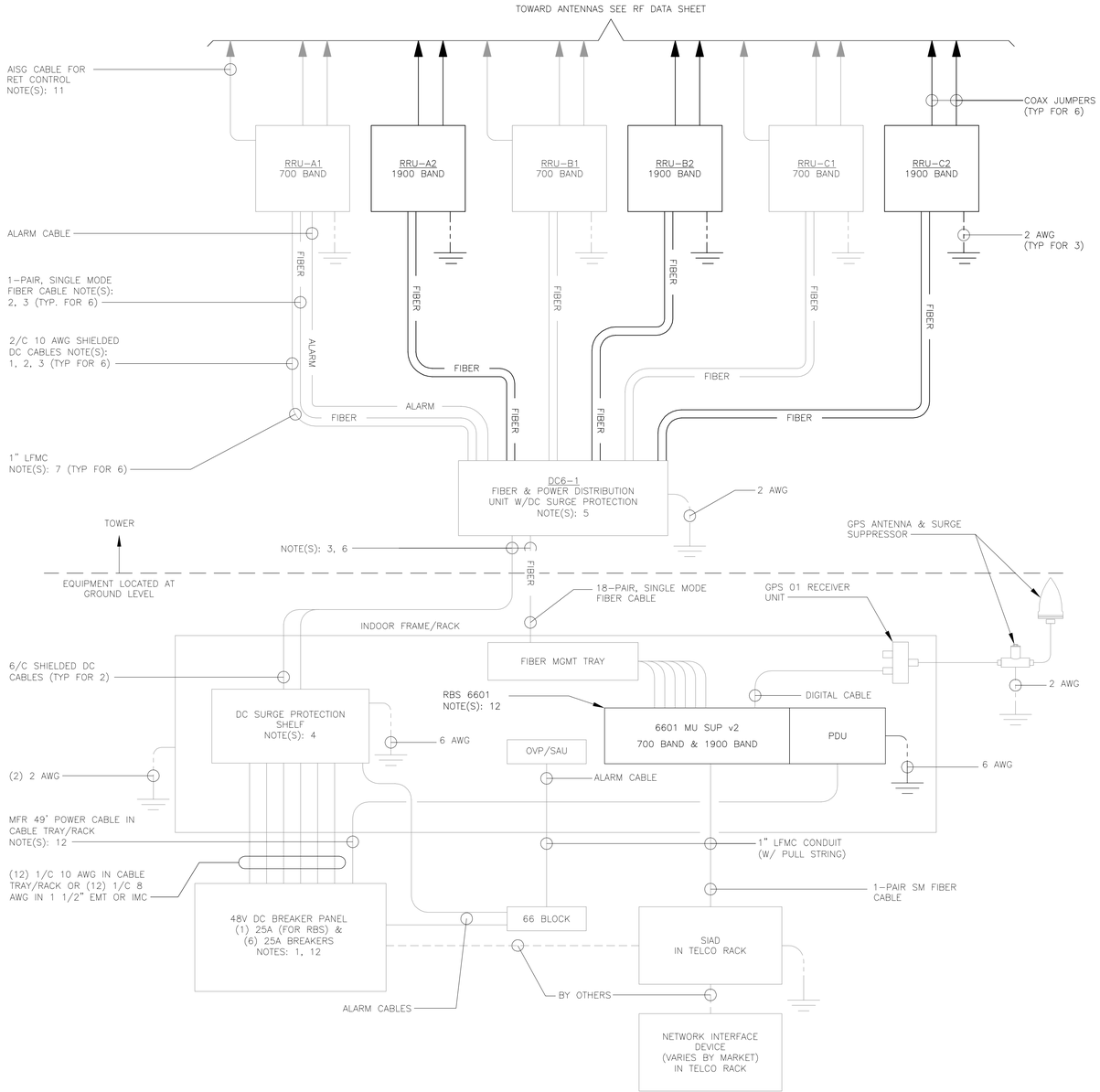

1 / E-1 LTE SCHEMATIC DIAGRAM

NOT TO SCALE

LTE SCHEMATIC DIAGRAM NOTES:

1. BREAKERS TO BE TAGGED AND LOCKED OUT. A 20A (MIN.) OR 30A (MAX.) BREAKER FOR RRUs MAY BE SUBSTITUTED FOR THE RECOMMENDED 25A BREAKER. SIZE 12 CONDUCTORS MAY BE USED ONLY WITH 20A BREAKERS.
2. LEAVE COILED AND PROTECTED UNTIL TERMINATED.
3. DC AND FIBER CABLE SHALL BE ROUTED WITH THE EXISTING COAX CABLE.
4. DC SURGE PROTECTION SHELF SHALL BE RAYCAP DCx-48-60-RM.
5. FIBER & DC DISTRIBUTION BOX W/DC SURGE PROTECTION SHALL BE RAYCAP DC6-48-60-18-8F.
6. SUPPORT FIBER & DC POWER CABLES WITH SNAP-IN HANGERS SPACED NO GREATER THAN 3 FEET APART ON TOWER. SUPPORT FIBER AND DC POWER CABLES INSIDE MONOPOLE WITH CABLE HOISTING GRIPS AT 250 FT MAXIMUM INTERVALS. DRESS CABLES TO PREVENT CONTACT WITH ENTRANCE AND EXIT OPENINGS.
7. CONDUIT TO BE USED ON A TOWER IF THE RRU IS MORE THAN 10' FROM THE DISTRIBUTION UNITS. MAX CABLE LENGTH IS 16 FEET.
8. SINGLE-CONDUCTOR DC POWER CABLES SHALL BE TELCOFLEX® OR KS24194™, COPPER, UL LISTED RHH NON-HALOGEN, LOW SMOKE WITH BRAIDED COVER, TYPE TC (1/0 AND LARGER). UNLESS OTHERWISE NOTED, STRANDING SHALL BE CLASS B (TYPE III) FOR CABLES SIZES 14, 12 & 10 AWG AND CLASS I (TYPE IV) FOR SIZES 8 AWG AND LARGER. CABLES SHALL BE COLOR CODED RED FOR +24V, BLUE FOR -48V AND GRAY FOR 24V AND 48V RETURN CONDUCTORS. MULTI-CONDUCTOR DC POWER CABLES SHALL BE COPPER, CLASS B STRANDING WITH FLAME RETARDANT PVC JACKET, TYPE TC, UL LISTED FOR 90°C DRY/ 75°C WET INSTALLATION.
9. GROUNDING WIRES SHALL BE COPPER, GREEN THHN/THWN UL LISTED FOR 90°C DRY/75°C WET INSTALLATION. MINIMUM SIZE IS 6 AWG UNLESS NOTED OTHERWISE.
10. FIBER OPTIC CABLES SHALL BE INSTALLED IN FLEXIBLE CONDUIT AS SCOPED BY MARKET.
11. RET CONTROL FROM THE RRU IS AN OPTIONAL METHOD OF CONNECTION. REFER TO RF DATA SHEET FOR APPLICABILITY.
12. RBS 6601 VARIANT 2 REQUIRES A 25A BREAKER AND 10 AWG (MIN.) CONDUCTORS. REPLACE EXISTING 15A OR 20A BREAKERS AND 12 AWG CONDUCTORS WHEN UPGRADING AN EXISTING RBS 6601 VARIANT 1.

ELECTRICAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR SHALL COORDINATE WITH OWNER FOR ALL CONSTRUCTION STANDARDS AND SPECIFICATIONS, AND ALL MANUFACTURER DOCUMENTATION FOR ALL EQUIPMENT TO BE INSTALLED.
2. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH LOCAL BUILDING CODE, NATIONAL ELECTRIC CODE, OWNER AND MANUFACTURER'S SPECIFICATIONS.
3. CONNECT ALL NEW EQUIPMENT TO EXISTING TELCO AS REQUIRED BY MANUFACTURER.
4. MAINTAIN ALL CLEARANCES REQUIRED BY NEC AND EQUIPMENT MANUFACTURER.
5. PRIOR TO INSTALLATION CONTRACTOR SHALL MEASURE EXISTING ELECTRICAL LOAD AND VERIFY EXISTING AVAILABLE CAPACITY FOR PROPOSED INSTALLATION. IF INADEQUATE CAPACITY IS AVAILABLE, CONTRACTOR SHALL COORDINATE WITH LOCAL ELECTRIC UTILITY COMPANY TO UPGRADE EXISTING ELECTRIC SERVICE.
6. CONTRACTOR SHALL INSPECT EXISTING GROUNDING AND LIGHTNING PROTECTION SYSTEM AND ENSURE THAT IT IS IN COMPLIANCE WITH NEC, AND SITE OWNER'S SPECIFICATIONS. THE RESULTS OF THIS INSPECTION SHALL BE PRESENTED TO OWNERS REPRESENTATIVE, AND ANY DEFICIENCIES SHALL BE CORRECTED.
7. ALL TRANSMISSION TOWER SITES CONTAIN AN EXTENSIVE BURIED GROUNDING SYSTEM. ALL GROUNDING WORK MUST BE COORDINATED WITH, AND APPROVED BY, THE TOWER OWNER'S SITE REPRESENTATIVE. ALL OF THE TOWER OWNER'S SPECIFICATIONS MUST BE STRICTLY FOLLOWED.
8. PROVIDE AND INSTALL GROUND KITS FOR ALL NEW COAXIAL CABLES AND BOND TO EXISTING OWNERS GROUNDING SYSTEM PER OWNERS SPECIFICATIONS AND NEC.
9. ALL CONDUCTORS SHALL BE TYPE THWN (INT. APPLICATION) AND XHHW (EXT. APPLICATION), 75 DEGREE C, 600 VOLT INSULATION, SOFT ANNEALED STRANDED COPPER. #10 AWG AND SMALLER SHALL BE SPLICED USING ACCEPTABLE SOLDERLESS PRESSURE CONNECTORS. #8 AWG AND LARGER SHALL BE SPLICED USING COMPRESSION SPLIT-BOLT TYPE CONNECTORS, #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR FOR LINE VOLTAGE BRANCH CIRCUITS. REFER TO PANEL SCHEDULE FOR BRANCH CIRCUIT CONDUCTOR SIZE(S). CONDUCTORS SHALL BE COLOR CODED FOR CONSISTENT PHASE IDENTIFICATION:
10. MINIMUM BENDING RADIUS FOR CONDUCTORS SHALL BE 12 TIMES THE LARGEST DIAMETER OF BRANCH CIRCUIT CONDUCTOR.
11. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WHICH MAY APPLY AND NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS AN INFRINGEMENT OF SUCH CODES OR REGULATIONS.
12. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE COMPLETE INSTALLATION AND COORDINATION OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH OWNER'S REPRESENTATIVE, DESIGN ENGINEER AND OTHER AUTHORITIES HAVING JURISDICTION OF TRADES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES AS MAY BE REQUIRED FOR THE ELECTRICAL WORK AND FOR SCHEDULING OF ALL INSPECTIONS AS MAY BE REQUIRED BY THE LOCAL AUTHORITY.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE SITE AND/OR BUILDING OWNER FOR NEW AND/OR DEMOLITION WORK INVOLVED.
15. THE CONTRACTOR SHALL GUARANTEE ALL NEW WORK FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE DATE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WARRANTIES FROM ALL EQUIPMENT MANUFACTURERS FOR SUBMISSION TO THE OWNER.
16. DRAWINGS INDICATE GENERAL ARRANGEMENT OF WORK INCLUDED IN CONTRACT. CONTRACTOR SHALL WITHOUT EXTRA CHARGE, MAKE MODIFICATIONS TO THE LAYOUT OF THE WORK TO PREVENT CONFLICT WITH WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF WORK. CHECK ALL DRAWINGS AND VISIT JOB SITE TO VERIFY SPACE AND TYPE OF EXISTING CONDITIONS IN WHICH WORK WILL BE DONE, PRIOR TO SUBMITTAL OF BID.
17. ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDEPENDENT RETURN PATH TO THE EQUIPMENT GROUNDING SOURCES.
18. GROUNDING SYSTEM WILL BE IN ACCORDANCE WITH THE LATEST ACCEPTABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS PER LOCAL INSPECTOR HAVING JURISDICTION.
19. EACH EQUIPMENT GROUND CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. ARTICLE 250-122. (MIN. #12 AWG).
20. CONTRACTOR SHALL PROVIDE A CELLULAR GROUNDING SYNSTEM WITH THE MAXIMUM AC RESISTANCE TO GROUND OF 5 OHM BETWEEN ANY POINT ON THE GROUNDING SYSTEM AS MEASURED BY 3-POINT GROUNDING TEST. (REFER TO SECTION 16960).

TESTS BY INDEPENDENT ELECTRICAL TESTING FIRM

A. CONTRACTOR SHALL RETAIN THE SERVICES OF A LOCAL INDEPENDENT ELECTRICAL TESTING FIRM (WITH MINIMUM 5 YEARS COMMERCIAL EXPERIENCE IN THE ELECTRICAL TESTING INDUSTRY) AS SPECIFIED BY OWNER TO PERFORM:

   TEST 1: RESISTANCE TO GROUND TEST ON THE CELLULAR GROUNDING SYSTEM.

   THE TESTING FIRM SHALL INCLUDE THE FOLLOWING INFORMATION WITH THE REPORT:

   1. TESTING PROCEDURE INCLUDING THE MAKE AND MODEL OF TEST EQUIPMENT.
   2. CERTIFICATION OF TESTING EQUIPMENT CALIBRATION WITHIN SIX (6) MONTHS OF DATE OF TESTING. INCLUDE CERTIFICATION LAB ADDRESS AND TELEPHONE NUMBER.
   3. GRAPHICAL DESCRIPTION OF TESTING METHOD ACTUALLY IMPLEMENTED.

B. TESTING SHALL BE PERFORMED IN THE PRESENCE AND TO THE SATISFACTION OF OWNERS CONSTRUCTION REPRESENTATIVE. TESTING DATA SHALL BE INITIALED AND DATED BY THE CONSTRUCTION AND INCLUDED WITH THE WRITTEN REPORT/ANALYSIS.

C. THE CONTRACTOR SHALL FORWARD SIX (6) COPIES OF THE INDEPENDENT ELECTRICAL TESTING FIRM REPORT/ANALYSIS TO ENGINEER A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO THE JOB TURNOVER.

D. CONTRACTOR TO PROVIDE A MINIMUM OF ONE (1) WEEK NOTICE TO OWNER AND ENGINEER FOR ALL TESTS REQUIRING WITNESSING.

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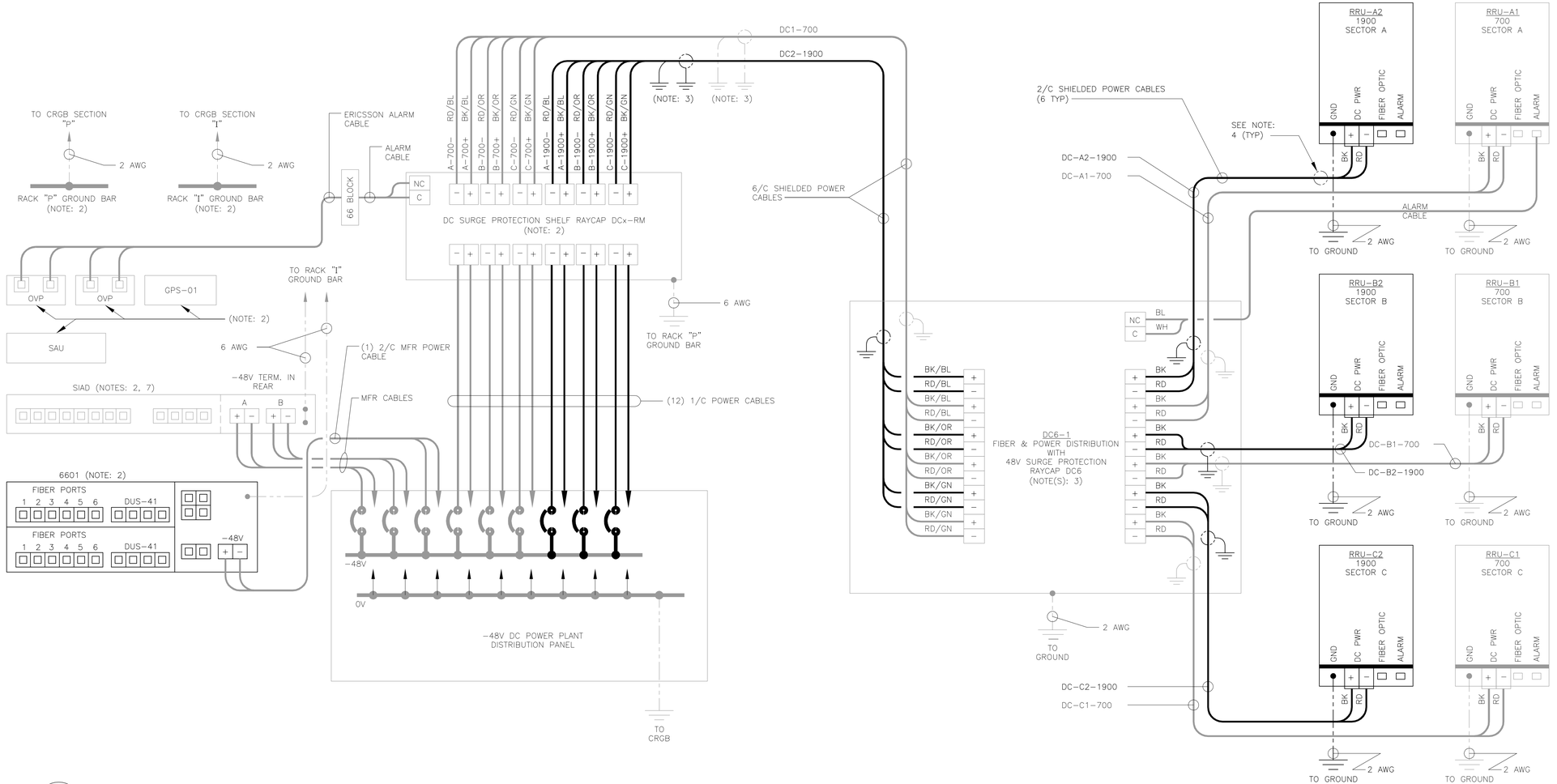
LTE SCHEMATIC DIAGRAM AND NOTES

E-1

Sheet No. 5 of 5



1 / E-2 LTE WIRING DIAGRAM

NOT TO SCALE

LTE WIRING DIAGRAM NOTES:

1. LABEL THE DC POWER CABLES AT BOTH ENDS OF EVERY WIRE AND IN ANY PULL BOX IF USED. LABEL SHALL BE DURABLE, SELF ADHESIVE, WRAPPED LONGITUDINALLY ALONG THE CABLE AND STATE THE SECTOR, FREQUENCY BAND AND POLARITY; I.E. "A-1900+". CABLE AND WIRE LABELS SHOWN ARE REPRESENTATIVE AND MAY BE MODIFIED AS DIRECTED BY AT&T.
2. INSTALL ON BASEBAND EQUIPMENT RACK.
3. THE BARE GROUND WIRE OF EACH MULTI-CONDUCTOR CABLE SHALL BE CONNECTED TO THE "P" GROUND BAR ON THE RACK. WHEN A SHIELDED CABLE IS USED, THE DRAIN WIRE ALSO SHALL BE CONNECTED TO THE "P" GROUND BAR.
4. CABLE GROUND WIRE AND SHIELD DRAIN WIRE TO BE LEFT UN-TERMINATED AT RRU AND DC POWER PLANT.
5. SEE LTE SCHEMATIC DIAGRAM DETAIL 1/E-1 FOR BREAKER RATING.

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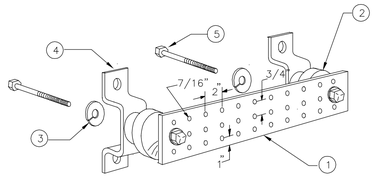
LTE WIRING DIAGRAM

E-2

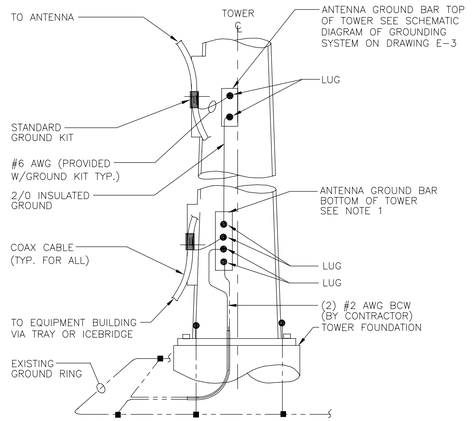
Sheet No. 6 of 5



LEGEND

1. TINNED COPPER GROUND BAR, 1/4"x 4"x 20", NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG .
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 2. 3061–4.
3. 3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015–8.
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. 4. CAT NO. A–6056.
5. STAINLESS STEEL SECURITY SCREWS.

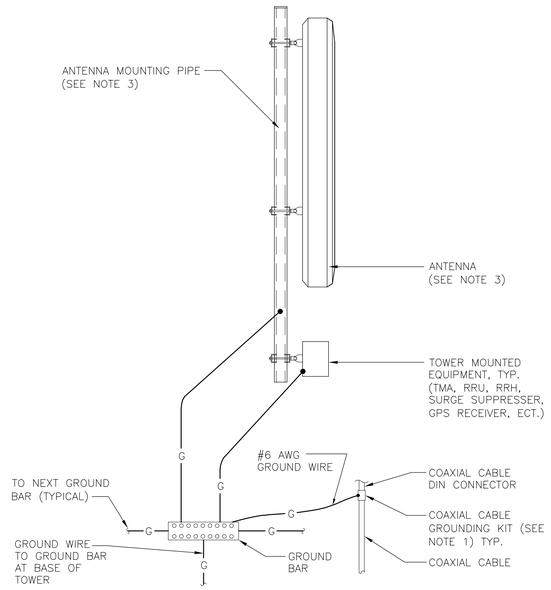
3 E-3 **GROUND BAR DETAIL**
NOT TO SCALE



NOTES:

1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
2. A SEPARATE GROUND BAR TO BE USED FOR GPS ANTENNA IF REQUIRED.

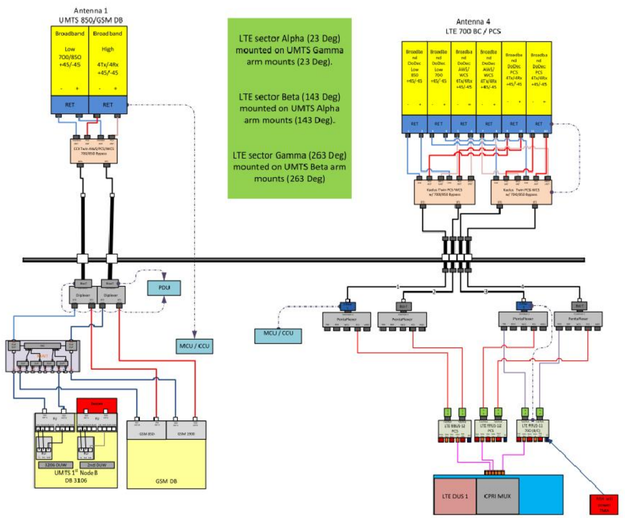
2 E-3 **ANTENNA CABLE GROUNDING - TOWER**
NOT TO SCALE



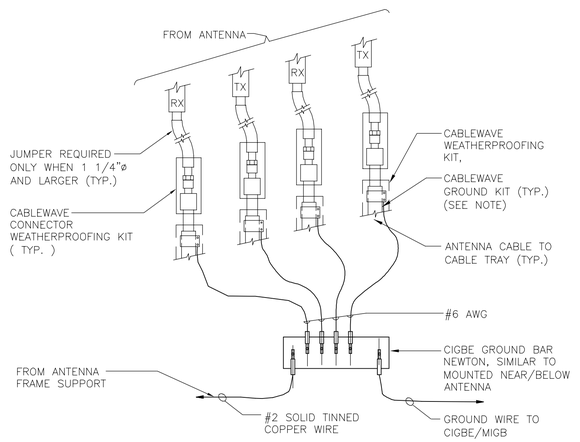
NOTES:

1. BOND COAXIAL CABLE GROUND KITS TO EACH OWNER'S GROUND BAR ALONG ENTIRE COAX RUN FROM ANTENNA TO SHELTER.
2. BOND ALL EQUIPMENT TO GROUND PER NEC AND MANUFACTURERS SPECIFICATIONS.
3. DETAIL IS TYPICAL FOR ALL ANTENNA SECTORS, INCLUDING GPS ANTENNA.

1 E-3 **TYPICAL ANTENNA GROUNDING DETAIL**
NOT TO SCALE



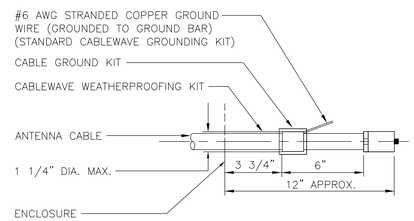
6 E-3 **RF PLUMBING DIAGRAM**



NOTE:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

5 E-3 **CONNECTION OF GROUND WIRES TO GROUND BAR**
NOT TO SCALE



NOTE:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

4 E-3 **ANTENNA CABLE GROUNDING DETAIL**
NOT TO SCALE

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	02/20/17	LGL	CAG	CONSTRUCTION DOCUMENTS – ISSUED FOR CONSTRUCTION

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WIRELESS COMMUNICATIONS FACILITY

CANTON-HOFFMANN RD

CT1020 - LTE 2C
4 HOFFMANN RD
CANTON, CT 06019

DATE: 01/16/17
SCALE: AS NOTED
JOB NO. 17004.03

TYPICAL ELECTRICAL DETAILS

E-3

Sheet No. 7 of 5

AMERICAN TOWER®
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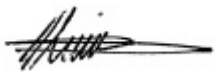
Structural Analysis Report

Structure	:	**150 ft Monopole**
ATC Site Name	:	**Cntn - Canton, CT**
ATC Site Number	:	**302488**
Engineering Number	:	**OAA694241_C3_01**
Proposed Carrier	:	**AT&T Mobility**
Carrier Site Name	:	**Canton CT**
Carrier Site Number	:	**CT1020**
Site Location	:	**4 Hoffmann Road** **Canton, CT 06019-2122** **41.85527,-72.8925**
County	:	**Hartford**
Date	:	**February 7, 2017**
Max Usage	:	**97%**
Result	:	**Pass**

Prepared By:
Amir H. Tabarestani, E.I.
Structural Engineer II



Reviewed By:

COA: PEC.0001553

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Table of Contents

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 AT&T Mobility.

Supporting Documents

Tower Drawings	ITT Meyer, AT&T Spec. AT-8935 B, dated April 13, 1984
Foundation Drawing	Girard & Co. Drawing dated April 2, 1986
Geotechnical Report	GEOServices Project #21-07254, dated September 12, 2008
Modifications	ATC Project #51822034, dated March 12, 2013

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:	93 mph (3-Second Gust, V_{ASD}), 120 mph (3-Second Gust, V_{ULT})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	Ss = 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	150.0	3	Andrew ABT-DMDF-ADBH	Platform w/ Handrails	(12) 1 1/4" Coax (1) 0.39" Fiber Trunk (2) 0.78" 8 AWG 6 (1) 3" Conduit (1) 1 5/8 Coax (1) 1/2" Coax (1) 7/8" Coax	AT&T Mobility
		6	Powerwave TT19-08BP111-001			
		1	Raycap DC6-48-60-18-8F			
		3	Ericsson RRUS 11 (Band 12)			
		6	Powerwave 7770.00A			
	158.0	1	12' Omni			Spok Holdings
	155.5	1	6' Yagi			
	160.0	1	12' Dipole			Town Of Canton
141.0	141.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8 Coax	Metro PCS
134.0	134.0	3	RFS ATMAA1412D-1A20	Low Profile Platform	(12) 1 5/8" Coax	T-Mobile
		3	RFS ATMPP1412D-1CWA			
		3	RFS APX16DWV-16DWV-S-E-ACU			
123.0	123.0	1	75" x 16.8" Panel	Stand-Off	(1) 7/8" Coax	Town Of Canton
10.0	10.0	1	Channel Master Type 120	Leg	(1) 0.28" RG-6	Spok Holdings

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
152.0	152.0	3	Powerwave P65-17-XLH-RR	-	-	AT&T Mobility
150.0	150.0	3	Ericsson RRUS 11 (Band 12)	-	-	

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
150.0	150.0	12	Powerwave 7020.00 Dual Band RET	Platform w/ Handrails	(1) 0.39" Fiber Trunk (1) 3" Conduit (2) 0.78" 8 AWG 6	AT&T Mobility
		3	Ericsson RRUS 32 B2			
		3	CCI HPA-65R-BUU-H8			

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

Install proposed coax inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	62%	Pass
Shaft	97%	Pass
Base Plate	40%	Pass
Flanges	96%	Pass
Reinforcement	68%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	1,928.5	86%
Shear (Kips)	18.5	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.

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
150.0	Powerwave Allgon 7020.00 Dual Band RET	AT&T Mobility	4.241	3.296
	Ericsson RRUS 32 B2			
	CCI HPA-65R-BUU-H8			
10.0	Channel Master Type 120	Spok Holdings	0.010	0.118

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

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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:

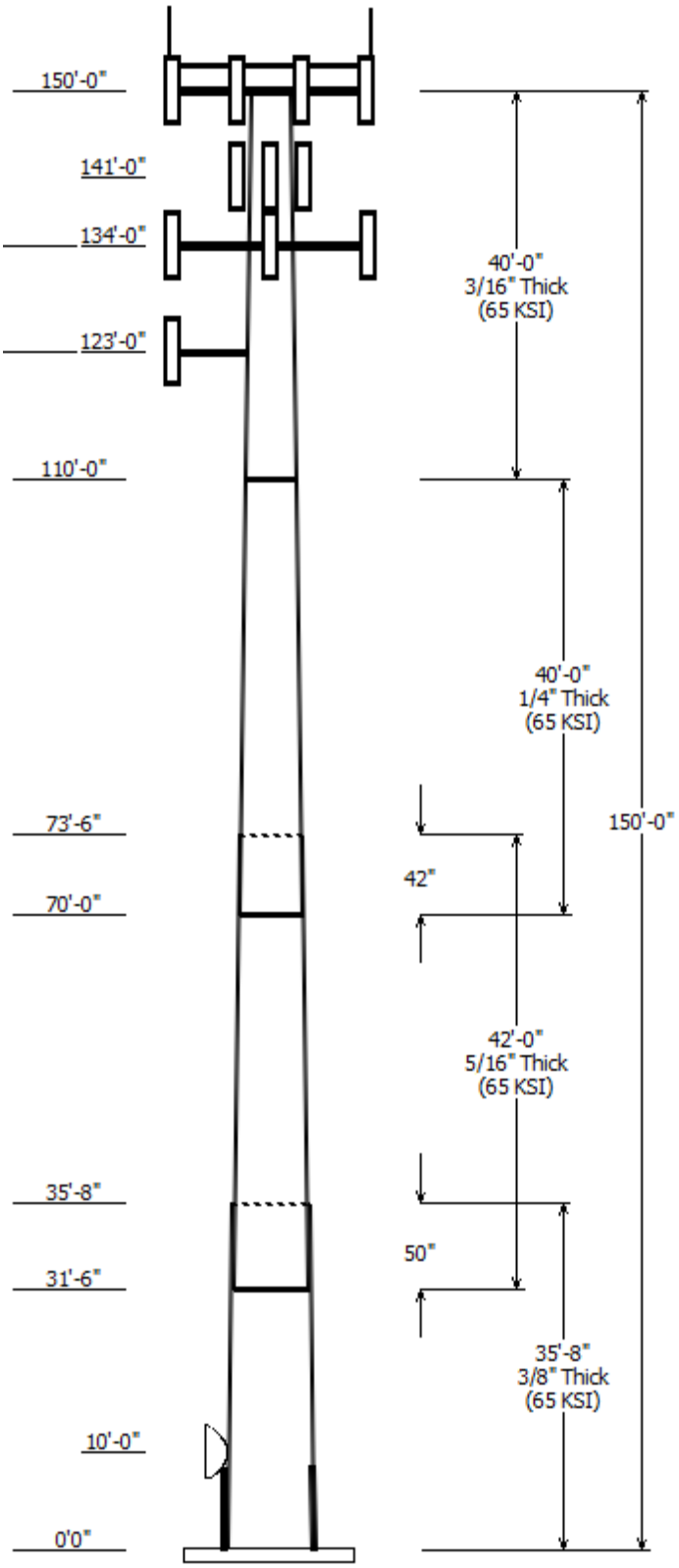
-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

-- 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.



Job Information

Pole :	302488	Code:	ANSI/TIA-222-G
Description :	150 ft ITT Meyer Type "B" Monopole		
Client :	AT&T Mobility	Struct Class :	II
Location :	Cntn - Canton, CT		
Shape :	12 Sides	Exposure :	B
Height :	150.00 (ft)	Topo :	1
Base Elev (ft):	0.00		
Taper:	0.156707 (in/ft)		

Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	35.667	31.79	37.38	0.375		0.000	0.156700	65
2	42.000	26.48	33.06	0.313	Slip Joint	50.000	0.156700	65
3	40.000	21.26	27.53	0.250	Slip Joint	42.000	0.156700	65
4	40.000	14.99	21.26	0.188	Butt Joint	0.000	0.156700	65

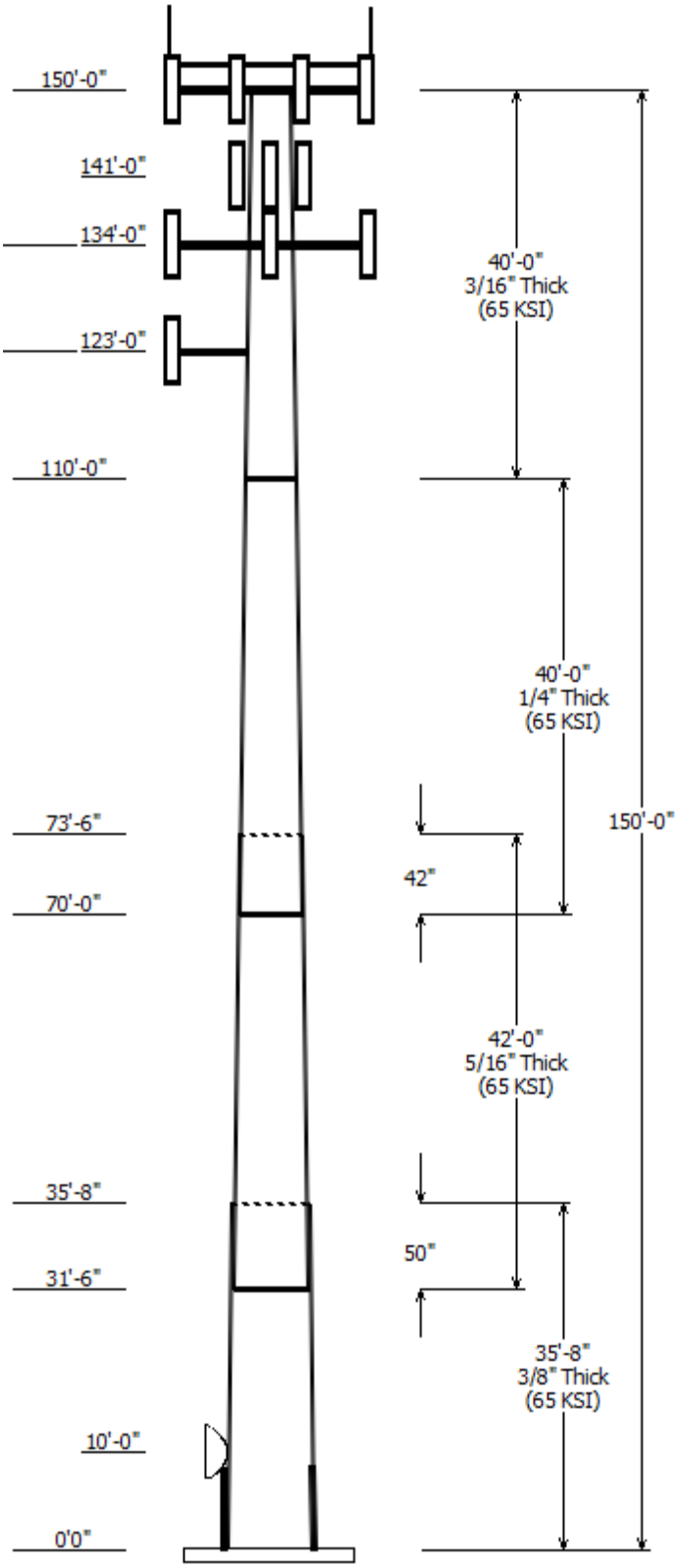
Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.000	160.000	1	12' Dipole
150.000	150.000	1	Raycap DC6-48-60-18-8F
150.000	150.000	12	Powerwave Allgon 7020.00
150.000	150.000	3	Andrew ABT-DMDF-ADBH
150.000	150.000	3	Ericsson RRUS 11 (Band 12)
150.000	150.000	6	Powerwave TT19-08BP111-001
150.000	150.000	3	Ericsson RRUS 32 B2
150.000	150.000	3	CCI HPA-65R-BUU-H8
150.000	155.500	1	6' Yagi
150.000	150.000	6	Powerwave 7770.00A
150.000	158.000	1	12' Omni
150.000	150.000	1	Flat Platform w/ Handrails
141.000	141.000	3	RFS APXV18-206517S-C
134.000	134.000	1	Low Profile Platform
134.000	134.000	3	RFS APX16DWV-16DWV-S-E-
134.000	134.000	3	RFS ATMAA1412D-1A20
134.000	134.000	3	RFS ATMPP1412D-1CWA
123.000	123.000	1	75" x 16.8" Panel
123.000	123.000	1	Stand-Off
10.000	10.000	1	Channel Master Type 120

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	10.000	0.28" RG-6	Yes
0.000	15.500	reinforcement	Yes
0.000	123.0	7/8" Coax	No
0.000	134.0	1 5/8" Coax	No
0.000	141.0	1 5/8 Coax	No
0.000	150.0	0.39" Fiber Trunk	No
0.000	150.0	0.78" 8 AWG 6	No
0.000	150.0	1 1/4" Coax	No
0.000	150.0	1 5/8 Coax	No
0.000	150.0	1/2" Coax	No
0.000	150.0	3" Conduit	No
0.000	150.0	3" Conduit	No
0.000	150.0	7/8" Coax	No

Load Cases



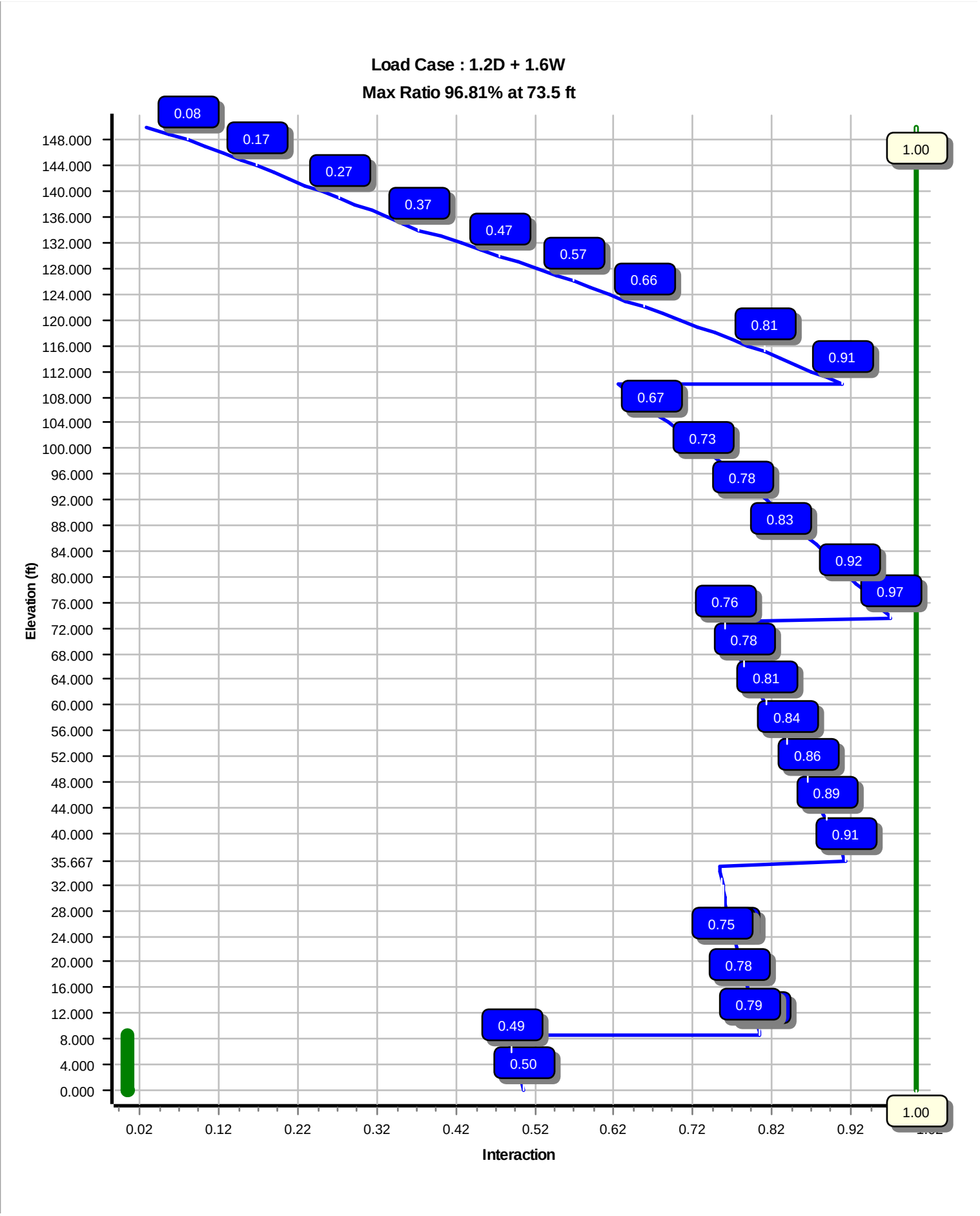
1.2D + 1.6W	93 mph with No Ice
0.9D + 1.6W	93 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) 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	1928.51	18.48	29.92
0.9D + 1.6W	1882.12	18.47	22.44
1.2D + 1.0Di + 1.0Wi	642.84	5.08	50.42
(1.2 + 0.2Sds) * DL + E ELFM	132.55	0.97	30.56
(1.2 + 0.2Sds) * DL + E EMAM	233.33	1.79	30.56
(0.9 - 0.2Sds) * DL + E ELFM	128.32	0.97	21.27
(0.9 - 0.2Sds) * DL + E EMAM	225.32	1.79	21.27
1.0D + 1.0W	496.34	4.80	24.94

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	10.00	0.117	0.118


Load Case : 1.2D + 1.6W
Max Ratio 96.81% at 73.5 ft
0.08
0.17
0.27
0.37
0.47
0.57
0.66
0.81
0.91
0.67
0.73
0.78
0.83
0.92
0.97
0.76
0.78
0.81
0.84
0.86
0.89
0.91
0.75
0.78
0.79
0.49
0.50
1.00
1.00
148.000
144.000
140.000
136.000
132.000
128.000
124.000
120.000
116.000
112.000
108.000
104.000
100.000
96.000
92.000
88.000
84.000
80.000
76.000
72.000
68.000
64.000
60.000
56.000
52.000
48.000
44.000
40.000
35.667
32.000
28.000
24.000
20.000
16.000
12.000
8.000
4.000
0.000
Elevation (ft)
0.02
0.12
0.22
0.32
0.42
0.52
0.62
0.72
0.82
0.92
Interaction

Site Number:	302488	Code: ANSI/TIA-222-G	
Site Name:	Cntn - Canton, CT	Engineering Number:OAA694241_C3_01	2/7/2017 4:27:57 PM
Customer:	AT&T Mobility		

Analysis Parameters

Location:	Hartford County, CT	Height (ft):	150
Code:	ANSI/TIA-222-G	Base Diameter (in):	37.38
Shape:	12 Sides	Top Diameter (in):	15.00
Pole Type:	Taper	Taper (in/ft) :	0.157
Pole Manfacturer:	ITT Meyer	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	93 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):	3.41				
T_L (sec):	8	p:	1.3	C_s:	0.030
S_s:	0.179	S_1:	0.065	C_s Max:	0.030
F_a:	1.600	F_v:	2.400	C_s Min:	0.030
S_{ds}:	0.191	S_{d1}:	0.104		

Load Cases

1.2D + 1.6W	93 mph with No Ice
0.9D + 1.6W	93 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

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (in²)	Bottom Ix (in⁴)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (in²)	Top Ix (in⁴)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-12	35.667	0.3750	65		0.00	5,014	37.38	0.00	44.68	7810.1	24.03	99.68	31.79	35.67	37.93	4778.8	20.04	84.78	0.156707
2-12	42.000	0.3125	65	Slip	50.00	4,237	33.06	31.50	32.96	4514.1	25.67	105.82	26.48	73.50	26.34	2303.2	20.03	84.76	0.156707
3-12	40.000	0.2500	65	Slip	42.00	2,646	27.53	70.00	21.96	2087.3	26.83	110.14	21.26	110.00	16.92	953.9	20.11	85.07	0.156707
4-12	40.000	0.1875	65	Butt	0.00	1,475	21.26	110.00	12.73	721.8	27.71	113.42	14.99	150.00	8.94	250.4	18.75	79.99	0.156707
				Shaft Weight		13,372													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor	Distance From Face (ft)	Vert Ecc (ft)
150.00	12' Dipole	1	40.00	4.510	1.00	218.09	14.069	1.00	0.000	10.000
150.00	12' Omni	1	40.00	3.600	1.00	280.10	8.501	1.00	0.000	8.000
150.00	6' Yagi	1	25.00	8.950	1.00	364.85	40.812	1.00	0.000	5.500
150.00	Andrew ABT-DMDF-ADBH	3	1.10	0.050	0.50	10.90	0.202	0.50	0.000	0.000
150.00	CCI HPA-65R-BUU-H8	3	68.00	12.980	0.68	477.43	15.176	0.68	0.000	0.000
150.00	Ericsson RRUS 11 (Band 12)	3	50.00	2.570	0.50	167.46	3.465	0.50	0.000	0.000
150.00	Ericsson RRUS 32 B2	3	53.00	2.740	0.50	179.98	3.742	0.50	0.000	0.000
150.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	3,898.14	70.411	1.00	0.000	0.000
150.00	Powerwave 7770.00A	6	27.00	5.560	0.65	221.74	7.018	0.65	0.000	0.000
150.00	Powerwave Allgon 7020.00	12	2.20	0.400	0.50	27.36	0.744	0.50	0.000	0.000
150.00	Powerwave TT19-08BP111-	6	16.00	0.640	0.50	58.36	1.038	0.50	0.000	0.000
150.00	Raycap DC6-48-60-18-8F	1	32.80	1.280	1.00	166.18	3.097	1.00	0.000	0.000
141.00	RFS APXV18-206517S-C	3	26.40	5.170	0.68	197.55	6.841	0.68	0.000	0.000
134.00	Low Profile Platform	1	1500.00	26.100	1.00	2,355.60	51.313	1.00	0.000	0.000
134.00	RFS APX16DWV-16DWV-S-E-	3	39.60	6.080	0.60	223.47	7.529	0.60	0.000	0.000
134.00	RFS ATMAA1412D-1A20	3	13.00	1.000	0.50	64.99	1.595	0.50	0.000	0.000
134.00	RFS ATMPP1412D-1CWA	3	12.50	1.000	0.50	61.50	1.607	0.50	0.000	0.000
123.00	75" x 16.8" Panel	1	31.20	12.250	1.00	439.26	12.941	1.00	0.000	0.000
123.00	Stand-Off	1	100.00	3.000	1.00	163.85	5.052	1.00	0.000	0.000
10.00	Channel Master Type 120	1	126.00	20.190	1.00	334.52	23.242	1.00	0.000	0.000
	Totals	57	4970.20		14,379.41			Number of Loadings :		20

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	2	0.39" Fiber Trunk	0.39	0.07	N	0.00	N	AT&T Mobility
0.00	150.00	4	0.78" 8 AWG 6	0.78	0.59	N	0.00	N	AT&T Mobility
0.00	150.00	12	1 1/4" Coax	1.55	0.63	N	0.00	N	AT&T Mobility
0.00	150.00	1	1 5/8 Coax	1.98	0.82	N	0.00	N	Spok Holdings
0.00	150.00	1	1/2" Coax	0.63	0.15	N	0.00	N	Spok Holdings
0.00	150.00	1	3" Conduit	3.50	7.58	N	0.00	N	AT&T Mobility
0.00	150.00	1	3" Conduit	3.50	7.58	N	0.00	N	AT&T Mobility
0.00	150.00	1	7/8" Coax	1.09	0.33	N	0.00	N	Town of Canton
0.00	141.00	6	1 5/8 Coax	1.98	0.82	N	0.00	N	Metro PCS
0.00	134.00	12	1 5/8" Coax	1.98	0.82	N	0.00	N	T-Mobile
0.00	123.00	1	7/8" Coax	1.09	0.33	N	0.00	N	Town of Canton
0.00	15.50	4	reinforcement	4.00	0.00	N	4.00	Y	--
0.00	10.00	1	0.28" RG-6	0.28	0.03	N	0.00	Y	Spok Holdings

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connections				Continuation?
						Description	Spacing (in)	Len (in)	Connectors	
0.00	8.50	4	SOL #20 All Thread	75	2.19	5/8" Hollo Bolt	40.0	3.31	5/8" A36 U-Bolt	No

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	F'y (ksi)	S (in^3)	Z (in^3)	Weight (lb)	Additional Reinforcing Area (in^2)	Additional Reinforcing Ix (in^4)	Additional Reinforcing Weight (lb)
0.00		0.3750	37.380	44.684	7,810.1	24.03	99.68	78.5	403.6	0.0	0.0	19.64	4,958	0.0
1.00		0.3750	37.223	44.494	7,711.3	23.92	99.26	78.6	400.2	0.0	151.7	19.64	4,923	66.8
2.00		0.3750	37.067	44.305	7,613.3	23.81	98.84	78.8	396.8	0.0	151.1	19.64	4,887	66.8
3.00		0.3750	36.910	44.116	7,516.2	23.69	98.43	78.9	393.4	0.0	150.4	19.64	4,852	66.8
4.00		0.3750	36.753	43.927	7,419.9	23.58	98.01	79.0	390.0	0.0	149.8	19.64	4,816	66.8
5.00		0.3750	36.596	43.737	7,324.4	23.47	97.59	79.1	386.6	0.0	149.2	19.64	4,781	66.8
6.00		0.3750	36.440	43.548	7,229.7	23.36	97.17	79.2	383.3	0.0	148.5	19.64	4,746	66.8
7.00		0.3750	36.283	43.359	7,135.9	23.25	96.75	79.4	379.9	0.0	147.9	19.64	4,711	66.8
8.00		0.3750	36.126	43.170	7,042.9	23.13	96.34	79.5	376.6	0.0	147.2	19.64	4,676	66.8
8.50	Reinf. Top	0.3750	36.048	43.075	6,996.7	23.08	96.13	79.5	375.0	0.0	73.4	19.64	4,659	33.4
9.00		0.3750	35.970	42.981	6,950.7	23.02	95.92	79.6	373.3	0.0	73.2			
10.00		0.3750	35.813	42.791	6,859.3	22.91	95.50	79.7	370.0	0.0	145.9			
11.00		0.3750	35.656	42.602	6,768.7	22.80	95.08	79.9	366.7	0.0	145.3			
12.00		0.3750	35.500	42.413	6,678.9	22.69	94.67	80.0	363.5	0.0	144.6			
13.00		0.3750	35.343	42.224	6,589.9	22.57	94.25	80.1	360.2	0.0	144.0			
14.00		0.3750	35.186	42.034	6,501.7	22.46	93.83	80.2	357.0	0.0	143.4			
15.00		0.3750	35.029	41.845	6,414.3	22.35	93.41	80.3	353.7	0.0	142.7			
16.00		0.3750	34.873	41.656	6,327.7	22.24	92.99	80.5	350.5	0.0	142.1			
17.00		0.3750	34.716	41.467	6,241.8	22.13	92.58	80.6	347.3	0.0	141.4			
18.00		0.3750	34.559	41.278	6,156.8	22.01	92.16	80.7	344.2	0.0	140.8			
19.00		0.3750	34.403	41.088	6,072.5	21.90	91.74	80.8	341.0	0.0	140.1			
20.00		0.3750	34.246	40.899	5,989.0	21.79	91.32	80.9	337.8	0.0	139.5			
21.00		0.3750	34.089	40.710	5,906.2	21.68	90.90	81.1	334.7	0.0	138.8			
22.00		0.3750	33.932	40.521	5,824.2	21.57	90.49	81.2	331.6	0.0	138.2			
23.00		0.3750	33.776	40.331	5,743.0	21.45	90.07	81.3	328.5	0.0	137.6			
24.00		0.3750	33.619	40.142	5,662.6	21.34	89.65	81.4	325.4	0.0	136.9			
25.00		0.3750	33.462	39.953	5,582.9	21.23	89.23	81.6	322.3	0.0	136.3			
26.00		0.3750	33.306	39.764	5,503.9	21.12	88.81	81.7	319.2	0.0	135.6			
27.00		0.3750	33.149	39.574	5,425.7	21.01	88.40	81.8	316.2	0.0	135.0			
28.00		0.3750	32.992	39.385	5,348.3	20.89	87.98	81.9	313.2	0.0	134.3			
29.00		0.3750	32.835	39.196	5,271.6	20.78	87.56	81.9	310.1	0.0	133.7			
30.00		0.3750	32.679	39.007	5,195.6	20.67	87.14	81.9	307.1	0.0	133.1			
31.00		0.3750	32.522	38.818	5,120.3	20.56	86.73	81.9	304.2	0.0	132.4			
31.50	Bot - Section 2	0.3750	32.444	38.723	5,083.0	20.50	86.52	81.9	302.7	0.0	66.0			
32.00		0.3750	32.365	38.628	5,045.8	20.45	86.31	81.9	301.2	0.0	121.7			
33.00		0.3750	32.209	38.439	4,972.0	20.33	85.89	81.9	298.2	0.0	242.7			
34.00		0.3750	32.052	38.250	4,899.0	20.22	85.47	81.9	295.3	0.0	241.6			
35.00		0.3750	31.895	38.061	4,826.6	20.11	85.05	81.9	292.3	0.0	240.4			
35.67	Top - Section 1	0.3125	32.416	32.304	4,249.5	25.11	103.73	77.3	253.3	0.0	159.7			
36.00		0.3125	32.364	32.251	4,228.8	25.07	103.56	77.4	252.4	0.0	36.6			
37.00		0.3125	32.207	32.094	4,167.1	24.94	103.06	77.5	250.0	0.0	109.5			
38.00		0.3125	32.050	31.936	4,106.0	24.80	102.56	77.7	247.5	0.0	108.9			
39.00		0.3125	31.893	31.778	4,045.4	24.67	102.06	77.8	245.0	0.0	108.4			
40.00		0.3125	31.737	31.621	3,985.5	24.53	101.56	78.0	242.6	0.0	107.9			
41.00		0.3125	31.580	31.463	3,926.2	24.40	101.06	78.1	240.2	0.0	107.3			
42.00		0.3125	31.423	31.305	3,867.5	24.26	100.55	78.3	237.8	0.0	106.8			
43.00		0.3125	31.267	31.148	3,809.3	24.13	100.05	78.4	235.4	0.0	106.3			
44.00		0.3125	31.110	30.990	3,751.7	24.00	99.55	78.5	233.0	0.0	105.7			
45.00		0.3125	30.953	30.832	3,694.8	23.86	99.05	78.7	230.6	0.0	105.2			
46.00		0.3125	30.796	30.674	3,638.4	23.73	98.55	78.8	228.2	0.0	104.6			
47.00		0.3125	30.640	30.517	3,582.5	23.59	98.05	79.0	225.9	0.0	104.1			
48.00		0.3125	30.483	30.359	3,527.3	23.46	97.55	79.1	223.5	0.0	103.6			
49.00		0.3125	30.326	30.201	3,472.6	23.32	97.04	79.3	221.2	0.0	103.0			
50.00		0.3125	30.170	30.044	3,418.5	23.19	96.54	79.4	218.9	0.0	102.5			
51.00		0.3125	30.013	29.886	3,365.0	23.05	96.04	79.6	216.6	0.0	102.0			
52.00		0.3125	29.856	29.728	3,312.0	22.92	95.54	79.7	214.3	0.0	101.4			
53.00		0.3125	29.700	29.571	3,259.6	22.79	95.04	79.9	212.0	0.0	100.9			
54.00		0.3125	29.543	29.413	3,207.7	22.65	94.54	80.0	209.8	0.0	100.4			

55.00		0.3125	29.386	29.255	3,156.4	22.52	94.04	80.2	207.5	0.0	99.8
56.00		0.3125	29.229	29.098	3,105.6	22.38	93.53	80.3	205.3	0.0	99.3
57.00		0.3125	29.073	28.940	3,055.4	22.25	93.03	80.4	203.0	0.0	98.7
58.00		0.3125	28.916	28.782	3,005.7	22.11	92.53	80.6	200.8	0.0	98.2
59.00		0.3125	28.759	28.625	2,956.6	21.98	92.03	80.7	198.6	0.0	97.7
60.00		0.3125	28.603	28.467	2,908.0	21.85	91.53	80.9	196.4	0.0	97.1
61.00		0.3125	28.446	28.309	2,859.9	21.71	91.03	81.0	194.2	0.0	96.6
62.00		0.3125	28.289	28.152	2,812.4	21.58	90.53	81.2	192.1	0.0	96.1
63.00		0.3125	28.132	27.994	2,765.4	21.44	90.02	81.3	189.9	0.0	95.5
64.00		0.3125	27.976	27.836	2,718.9	21.31	89.52	81.5	187.8	0.0	95.0
65.00		0.3125	27.819	27.678	2,673.0	21.17	89.02	81.6	185.6	0.0	94.5
66.00		0.3125	27.662	27.521	2,627.6	21.04	88.52	81.8	183.5	0.0	93.9
67.00		0.3125	27.506	27.363	2,582.7	20.90	88.02	81.9	181.4	0.0	93.4
68.00		0.3125	27.349	27.205	2,538.3	20.77	87.52	81.9	179.3	0.0	92.8
69.00		0.3125	27.192	27.048	2,494.4	20.64	87.02	81.9	177.2	0.0	92.3
70.00		0.3125	27.035	26.890	2,451.0	20.50	86.51	81.9	175.1	0.0	91.8
70.00	Bot - Section 3	0.3125	27.035	26.890	2,451.0	20.50	86.51	81.9	175.1	0.0	0.0
71.00		0.3125	26.879	26.732	2,408.2	20.37	86.01	81.9	173.1	0.0	165.7
72.00		0.3125	26.722	26.575	2,365.8	20.23	85.51	81.9	171.0	0.0	164.8
73.00		0.3125	26.565	26.417	2,323.9	20.10	85.01	81.9	169.0	0.0	163.8
73.50	Top - Section 2	0.2500	26.987	21.523	1,963.9	26.25	107.95	76.1	140.6	0.0	81.6
74.00		0.2500	26.909	21.460	1,946.7	26.16	107.63	76.2	139.8	0.0	36.5
75.00		0.2500	26.752	21.334	1,912.6	25.99	107.01	76.4	138.1	0.0	72.8
76.00		0.2500	26.595	21.208	1,878.8	25.83	106.38	76.5	136.5	0.0	72.4
77.00		0.2500	26.439	21.082	1,845.5	25.66	105.75	76.7	134.9	0.0	72.0
78.00		0.2500	26.282	20.956	1,812.6	25.49	105.13	76.9	133.2	0.0	71.5
79.00		0.2500	26.125	20.829	1,780.0	25.32	104.50	77.1	131.6	0.0	71.1
80.00		0.2500	25.968	20.703	1,747.9	25.15	103.87	77.3	130.0	0.0	70.7
81.00		0.2500	25.812	20.577	1,716.1	24.99	103.25	77.5	128.4	0.0	70.2
82.00		0.2500	25.655	20.451	1,684.8	24.82	102.62	77.6	126.9	0.0	69.8
83.00		0.2500	25.498	20.325	1,653.8	24.65	101.99	77.8	125.3	0.0	69.4
84.00		0.2500	25.342	20.199	1,623.2	24.48	101.37	78.0	123.7	0.0	68.9
85.00		0.2500	25.185	20.073	1,593.0	24.31	100.74	78.2	122.2	0.0	68.5
86.00		0.2500	25.028	19.946	1,563.1	24.15	100.11	78.4	120.7	0.0	68.1
87.00		0.2500	24.871	19.820	1,533.6	23.98	99.49	78.6	119.1	0.0	67.7
88.00		0.2500	24.715	19.694	1,504.5	23.81	98.86	78.7	117.6	0.0	67.2
89.00		0.2500	24.558	19.568	1,475.8	23.64	98.23	78.9	116.1	0.0	66.8
90.00		0.2500	24.401	19.442	1,447.5	23.47	97.61	79.1	114.6	0.0	66.4
91.00		0.2500	24.245	19.316	1,419.5	23.31	96.98	79.3	113.1	0.0	65.9
92.00		0.2500	24.088	19.190	1,391.8	23.14	96.35	79.5	111.6	0.0	65.5
93.00		0.2500	23.931	19.063	1,364.6	22.97	95.72	79.7	110.2	0.0	65.1
94.00		0.2500	23.775	18.937	1,337.7	22.80	95.10	79.8	108.7	0.0	64.7
95.00		0.2500	23.618	18.811	1,311.1	22.63	94.47	80.0	107.2	0.0	64.2
96.00		0.2500	23.461	18.685	1,284.9	22.47	93.84	80.2	105.8	0.0	63.8
97.00		0.2500	23.304	18.559	1,259.1	22.30	93.22	80.4	104.4	0.0	63.4
98.00		0.2500	23.148	18.433	1,233.6	22.13	92.59	80.6	102.9	0.0	62.9
99.00		0.2500	22.991	18.306	1,208.4	21.96	91.96	80.8	101.5	0.0	62.5
100.0		0.2500	22.834	18.180	1,183.6	21.79	91.34	80.9	100.1	0.0	62.1
101.0		0.2500	22.678	18.054	1,159.1	21.63	90.71	81.1	98.7	0.0	61.6
102.0		0.2500	22.521	17.928	1,135.0	21.46	90.08	81.3	97.4	0.0	61.2
103.0		0.2500	22.364	17.802	1,111.2	21.29	89.46	81.5	96.0	0.0	60.8
104.0		0.2500	22.207	17.676	1,087.7	21.12	88.83	81.7	94.6	0.0	60.4
105.0		0.2500	22.051	17.550	1,064.6	20.95	88.20	81.9	93.3	0.0	59.9
106.0		0.2500	21.894	17.423	1,041.8	20.79	87.58	81.9	91.9	0.0	59.5
107.0		0.2500	21.737	17.297	1,019.4	20.62	86.95	81.9	90.6	0.0	59.1
108.0		0.2500	21.581	17.171	997.2	20.45	86.32	81.9	89.3	0.0	58.6
109.0		0.2500	21.424	17.045	975.4	20.28	85.70	81.9	88.0	0.0	58.2
110.0		0.2500	21.267	16.919	953.9	20.11	85.07	81.9	86.7	0.0	57.8
110.0	Top - Section 3	0.2500	21.267	16.919	953.9	20.11	85.07	81.9	86.6	0.0	0.0
110.0	Bot - Section 4	0.1875	21.267	12.727	721.8	27.71	113.42	74.5	65.6	0.0	
111.0		0.1875	21.111	12.632	705.9	27.49	112.59	74.7	64.6	0.0	43.1
112.0		0.1875	20.954	12.538	690.1	27.26	111.75	75.0	63.6	0.0	42.8
113.0		0.1875	20.797	12.443	674.6	27.04	110.92	75.2	62.7	0.0	42.5
114.0		0.1875	20.640	12.348	659.3	26.82	110.08	75.5	61.7	0.0	42.2

115.0	0.1875	20.484	12.254	644.3	26.59	109.25	75.7	60.8	0.0	41.9	
116.0	0.1875	20.327	12.159	629.5	26.37	108.41	76.0	59.8	0.0	41.5	
117.0	0.1875	20.170	12.065	614.9	26.15	107.57	76.2	58.9	0.0	41.2	
118.0	0.1875	20.014	11.970	600.6	25.92	106.74	76.4	58.0	0.0	40.9	
119.0	0.1875	19.857	11.875	586.4	25.70	105.90	76.7	57.1	0.0	40.6	
120.0	0.1875	19.700	11.781	572.5	25.47	105.07	76.9	56.1	0.0	40.2	
121.0	0.1875	19.543	11.686	558.8	25.25	104.23	77.2	55.2	0.0	39.9	
122.0	0.1875	19.387	11.592	545.4	25.03	103.40	77.4	54.3	0.0	39.6	
123.0	0.1875	19.230	11.497	532.1	24.80	102.56	77.7	53.5	0.0	39.3	
124.0	0.1875	19.073	11.402	519.1	24.58	101.72	77.9	52.6	0.0	39.0	
125.0	0.1875	18.917	11.308	506.3	24.35	100.89	78.2	51.7	0.0	38.6	
126.0	0.1875	18.760	11.213	493.7	24.13	100.05	78.4	50.8	0.0	38.3	
127.0	0.1875	18.603	11.118	481.3	23.91	99.22	78.6	50.0	0.0	38.0	
128.0	0.1875	18.446	11.024	469.1	23.68	98.38	78.9	49.1	0.0	37.7	
129.0	0.1875	18.290	10.929	457.1	23.46	97.55	79.1	48.3	0.0	37.4	
130.0	0.1875	18.133	10.835	445.4	23.23	96.71	79.4	47.4	0.0	37.0	
131.0	0.1875	17.976	10.740	433.8	23.01	95.87	79.6	46.6	0.0	36.7	
132.0	0.1875	17.820	10.645	422.4	22.79	95.04	79.9	45.8	0.0	36.4	
133.0	0.1875	17.663	10.551	411.3	22.56	94.20	80.1	45.0	0.0	36.1	
134.0	0.1875	17.506	10.456	400.3	22.34	93.37	80.4	44.2	0.0	35.7	
135.0	0.1875	17.350	10.362	389.5	22.11	92.53	80.6	43.4	0.0	35.4	
136.0	0.1875	17.193	10.267	379.0	21.89	91.70	80.8	42.6	0.0	35.1	
137.0	0.1875	17.036	10.172	368.6	21.67	90.86	81.1	41.8	0.0	34.8	
138.0	0.1875	16.879	10.078	358.4	21.44	90.02	81.3	41.0	0.0	34.5	
139.0	0.1875	16.723	9.983	348.4	21.22	89.19	81.6	40.2	0.0	34.1	
140.0	0.1875	16.566	9.889	338.6	20.99	88.35	81.8	39.5	0.0	33.8	
141.0	0.1875	16.409	9.794	329.0	20.77	87.52	81.9	38.7	0.0	33.5	
142.0	0.1875	16.253	9.699	319.5	20.55	86.68	81.9	38.0	0.0	33.2	
143.0	0.1875	16.096	9.605	310.3	20.32	85.84	81.9	37.2	0.0	32.8	
144.0	0.1875	15.939	9.510	301.2	20.10	85.01	81.9	36.5	0.0	32.5	
145.0	0.1875	15.782	9.415	292.3	19.87	84.17	81.9	35.8	0.0	32.2	
146.0	0.1875	15.626	9.321	283.6	19.65	83.34	81.9	35.1	0.0	31.9	
147.0	0.1875	15.469	9.226	275.0	19.43	82.50	81.9	34.3	0.0	31.6	
148.0	0.1875	15.312	9.132	266.6	19.20	81.67	81.9	33.6	0.0	31.2	
149.0	0.1875	15.156	9.037	258.4	18.98	80.83	81.9	32.9	0.0	30.9	
150.0	0.1875	14.999	8.942	250.4	18.75	79.99	81.9	32.3	0.0	30.6	
										13,371.9	567.8

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:27:58 PM

Customer: AT&T Mobility

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.19	250.92	1.000	0.000	0.00	0.000	0.00	41.7	0.0	0.0
1.00		1.00	0.70	14.724	16.19	250.40	1.000	0.000	1.00	3.218	3.22	83.2	0.0	182.1
2.00		1.00	0.70	14.724	16.19	249.34	1.000	0.000	1.00	3.205	3.20	82.9	0.0	181.3
3.00		1.00	0.70	14.724	16.19	248.29	1.000	0.000	1.00	3.191	3.19	82.5	0.0	180.5
4.00		1.00	0.70	14.724	16.19	247.24	1.000	0.000	1.00	3.178	3.18	82.2	0.0	179.8
5.00		1.00	0.70	14.724	16.19	246.19	1.000	0.000	1.00	3.164	3.16	81.8	0.0	179.0
6.00		1.00	0.70	14.724	16.19	245.14	1.000	0.000	1.00	3.151	3.15	81.5	0.0	178.2
7.00		1.00	0.70	14.724	16.19	244.08	1.000	0.000	1.00	3.137	3.14	81.1	0.0	177.4
8.00		1.00	0.70	14.724	16.19	243.03	1.000	0.000	1.00	3.123	3.12	60.6	0.0	176.7
8.50	Reinf. Top	1.00	0.70	14.724	16.19	242.24	1.000	0.000	0.50	1.557	1.56	40.3	0.0	88.0
9.00		1.00	0.70	14.724	16.19	241.72	1.000	0.000	0.50	1.553	1.55	60.2	0.0	87.8
10.00	Appertunance(s)	1.00	0.70	14.724	16.19	240.93	1.000	0.000	1.00	3.096	3.10	80.1	0.0	175.1
11.00		1.00	0.70	14.724	16.19	239.88	1.000	0.000	1.00	3.083	3.08	79.7	0.0	174.3
12.00		1.00	0.70	14.724	16.19	238.82	1.000	0.000	1.00	3.069	3.07	79.4	0.0	173.6
13.00		1.00	0.70	14.724	16.19	237.77	1.000	0.000	1.00	3.056	3.06	79.0	0.0	172.8
14.00		1.00	0.70	14.724	16.19	236.72	1.000	0.000	1.00	3.042	3.04	78.7	0.0	172.0
15.00		1.00	0.70	14.724	16.19	235.67	1.000	0.000	1.00	3.029	3.03	78.3	0.0	171.3
16.00		1.00	0.70	14.724	16.19	234.62	1.000	0.000	1.00	3.015	3.02	78.0	0.0	170.5
17.00		1.00	0.70	14.724	16.19	233.56	1.000	0.000	1.00	3.002	3.00	77.6	0.0	169.7
18.00		1.00	0.70	14.724	16.19	232.51	1.000	0.000	1.00	2.988	2.99	77.3	0.0	168.9
19.00		1.00	0.70	14.724	16.19	231.46	1.000	0.000	1.00	2.975	2.97	76.9	0.0	168.2
20.00		1.00	0.70	14.724	16.19	230.41	1.000	0.000	1.00	2.961	2.96	76.6	0.0	167.4
21.00		1.00	0.70	14.724	16.19	229.36	1.000	0.000	1.00	2.948	2.95	76.2	0.0	166.6
22.00		1.00	0.70	14.724	16.19	228.30	1.000	0.000	1.00	2.934	2.93	75.9	0.0	165.8
23.00		1.00	0.70	14.724	16.19	227.25	1.000	0.000	1.00	2.921	2.92	75.5	0.0	165.1
24.00		1.00	0.70	14.724	16.19	226.20	1.000	0.000	1.00	2.907	2.91	75.2	0.0	164.3
25.00		1.00	0.70	14.724	16.19	225.15	1.000	0.000	1.00	2.894	2.89	74.8	0.0	163.5
26.00		1.00	0.70	14.724	16.19	224.10	1.000	0.000	1.00	2.880	2.88	74.5	0.0	162.8
27.00		1.00	0.70	14.724	16.19	223.05	1.000	0.000	1.00	2.867	2.87	74.1	0.0	162.0
28.00		1.00	0.70	14.724	16.19	221.99	1.000	0.000	1.00	2.853	2.85	73.8	0.0	161.2
29.00		1.00	0.70	14.724	16.19	220.94	1.000	0.000	1.00	2.840	2.84	73.4	0.0	160.4
30.00		1.00	0.70	14.724	16.19	219.89	1.000	0.000	1.00	2.826	2.83	73.3	0.0	159.7
31.00		1.00	0.70	14.806	16.28	219.45	1.000	0.000	1.00	2.813	2.81	55.0	0.0	158.9
31.50	Bot - Section 2	1.00	0.70	14.909	16.40	219.42	1.000	0.000	0.50	1.402	1.40	37.2	0.0	79.2
32.00		1.00	0.71	14.977	16.47	219.38	1.000	0.000	0.50	1.424	1.42	56.4	0.0	146.1
33.00		1.00	0.71	15.077	16.58	219.32	1.000	0.000	1.00	2.839	2.84	75.5	0.0	291.3
34.00		1.00	0.72	15.209	16.72	219.20	1.000	0.000	1.00	2.826	2.83	75.8	0.0	289.9
35.00		1.00	0.72	15.337	16.87	219.05	1.000	0.000	1.00	2.812	2.81	63.3	0.0	288.5
35.67	Top - Section 1	1.00	0.73	15.442	16.98	218.90	1.000	0.000	0.67	1.868	1.87	38.1	0.0	191.6
36.00		1.00	0.73	15.504	17.05	223.11	1.000	0.000	0.33	0.931	0.93	50.9	0.0	43.9
37.00		1.00	0.74	15.586	17.14	222.97	1.000	0.000	1.00	2.785	2.79	76.5	0.0	131.4
38.00		1.00	0.74	15.707	17.27	222.75	1.000	0.000	1.00	2.772	2.77	76.7	0.0	130.7
39.00		1.00	0.75	15.825	17.40	222.50	1.000	0.000	1.00	2.758	2.76	76.9	0.0	130.1
40.00		1.00	0.75	15.942	17.53	222.22	1.000	0.000	1.00	2.745	2.74	77.1	0.0	129.4
41.00		1.00	0.76	16.056	17.66	221.92	1.000	0.000	1.00	2.731	2.73	77.3	0.0	128.8
42.00		1.00	0.76	16.168	17.78	221.59	1.000	0.000	1.00	2.718	2.72	77.4	0.0	128.2
43.00		1.00	0.77	16.278	17.90	221.24	1.000	0.000	1.00	2.704	2.70	77.5	0.0	127.5
44.00		1.00	0.77	16.387	18.02	220.86	1.000	0.000	1.00	2.691	2.69	77.7	0.0	126.9
45.00		1.00	0.78	16.494	18.14	220.47	1.000	0.000	1.00	2.677	2.68	77.8	0.0	126.2
46.00		1.00	0.78	16.599	18.25	220.05	1.000	0.000	1.00	2.664	2.66	77.9	0.0	125.6
47.00		1.00	0.79	16.702	18.37	219.62	1.000	0.000	1.00	2.650	2.65	77.9	0.0	124.9

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

48.00		1.00	0.79	16.804	18.48	219.16	1.000	0.000	1.00	2.637	2.64	78.0	0.0	124.3
49.00		1.00	0.80	16.904	18.59	218.69	1.000	0.000	1.00	2.623	2.62	78.1	0.0	123.6
50.00		1.00	0.80	17.003	18.70	218.20	1.000	0.000	1.00	2.610	2.61	78.1	0.0	123.0
51.00		1.00	0.81	17.101	18.81	217.69	1.000	0.000	1.00	2.596	2.60	78.1	0.0	122.4
52.00		1.00	0.81	17.197	18.91	217.16	1.000	0.000	1.00	2.583	2.58	78.2	0.0	121.7
53.00		1.00	0.82	17.292	19.02	216.62	1.000	0.000	1.00	2.569	2.57	78.2	0.0	121.1
54.00		1.00	0.82	17.385	19.12	216.06	1.000	0.000	1.00	2.556	2.56	78.2	0.0	120.4
55.00		1.00	0.83	17.477	19.22	215.49	1.000	0.000	1.00	2.542	2.54	78.2	0.0	119.8
56.00		1.00	0.83	17.568	19.32	214.90	1.000	0.000	1.00	2.528	2.53	78.2	0.0	119.1
57.00		1.00	0.83	17.658	19.42	214.29	1.000	0.000	1.00	2.515	2.51	78.1	0.0	118.5
58.00		1.00	0.84	17.747	19.52	213.68	1.000	0.000	1.00	2.501	2.50	78.1	0.0	117.8
59.00		1.00	0.84	17.835	19.61	213.05	1.000	0.000	1.00	2.488	2.49	78.1	0.0	117.2
60.00		1.00	0.85	17.921	19.71	212.40	1.000	0.000	1.00	2.474	2.47	78.0	0.0	116.6
61.00		1.00	0.85	18.007	19.80	211.75	1.000	0.000	1.00	2.461	2.46	78.0	0.0	115.9
62.00		1.00	0.86	18.091	19.90	211.08	1.000	0.000	1.00	2.447	2.45	77.9	0.0	115.3
63.00		1.00	0.86	18.175	19.99	210.39	1.000	0.000	1.00	2.434	2.43	77.8	0.0	114.6
64.00		1.00	0.86	18.257	20.08	209.70	1.000	0.000	1.00	2.420	2.42	77.7	0.0	114.0
65.00		1.00	0.87	18.339	20.17	208.99	1.000	0.000	1.00	2.407	2.41	77.6	0.0	113.3
66.00		1.00	0.87	18.420	20.26	208.28	1.000	0.000	1.00	2.393	2.39	77.5	0.0	112.7
67.00		1.00	0.88	18.500	20.35	207.55	1.000	0.000	1.00	2.380	2.38	77.4	0.0	112.1
68.00		1.00	0.88	18.579	20.43	206.81	1.000	0.000	1.00	2.366	2.37	77.3	0.0	111.4
69.00		1.00	0.88	18.657	20.52	206.06	1.000	0.000	1.00	2.353	2.35	77.2	0.0	110.8
70.00		1.00	0.89	18.734	20.60	205.30	1.000	0.000	1.00	2.339	2.34	38.6	0.0	110.1
70.00	Bot - Section 3	1.00	0.89	18.773	20.65	204.92	1.000	0.000	0.00	0.001	0.00	39.2	0.0	0.0
71.00		1.00	0.89	18.811	20.69	204.53	1.000	0.000	1.00	2.368	2.37	78.3	0.0	198.8
72.00		1.00	0.89	18.887	20.77	203.75	1.000	0.000	1.00	2.355	2.36	78.2	0.0	197.8
73.00		1.00	0.90	18.962	20.85	202.96	1.000	0.000	1.00	2.342	2.34	58.6	0.0	196.6
73.50	Top - Section 2	1.00	0.90	19.018	20.92	202.37	1.000	0.000	0.50	1.167	1.17	39.0	0.0	97.9
74.00		1.00	0.90	19.055	20.96	205.78	1.000	0.000	0.50	1.162	1.16	58.4	0.0	43.8
75.00		1.00	0.90	19.110	21.02	205.18	1.000	0.000	1.00	2.315	2.31	77.8	0.0	87.4
76.00		1.00	0.91	19.183	21.10	204.37	1.000	0.000	1.00	2.301	2.30	77.6	0.0	86.9
77.00		1.00	0.91	19.255	21.18	203.55	1.000	0.000	1.00	2.288	2.29	77.4	0.0	86.3
78.00		1.00	0.91	19.327	21.25	202.73	1.000	0.000	1.00	2.274	2.27	77.3	0.0	85.8
79.00		1.00	0.92	19.398	21.33	201.89	1.000	0.000	1.00	2.261	2.26	77.1	0.0	85.3
80.00		1.00	0.92	19.468	21.41	201.05	1.000	0.000	1.00	2.247	2.25	76.9	0.0	84.8
81.00		1.00	0.92	19.538	21.49	200.19	1.000	0.000	1.00	2.234	2.23	76.7	0.0	84.3
82.00		1.00	0.93	19.607	21.56	199.33	1.000	0.000	1.00	2.220	2.22	76.5	0.0	83.8
83.00		1.00	0.93	19.675	21.64	198.47	1.000	0.000	1.00	2.207	2.21	76.3	0.0	83.3
84.00		1.00	0.93	19.743	21.71	197.59	1.000	0.000	1.00	2.193	2.19	76.1	0.0	82.7
85.00		1.00	0.94	19.810	21.79	196.71	1.000	0.000	1.00	2.180	2.18	75.9	0.0	82.2
86.00		1.00	0.94	19.877	21.86	195.81	1.000	0.000	1.00	2.166	2.17	75.7	0.0	81.7
87.00		1.00	0.94	19.943	21.93	194.92	1.000	0.000	1.00	2.152	2.15	75.4	0.0	81.2
88.00		1.00	0.95	20.009	22.01	194.01	1.000	0.000	1.00	2.139	2.14	75.2	0.0	80.7
89.00		1.00	0.95	20.074	22.08	193.10	1.000	0.000	1.00	2.125	2.13	75.0	0.0	80.2
90.00		1.00	0.95	20.138	22.15	192.18	1.000	0.000	1.00	2.112	2.11	74.7	0.0	79.6
91.00		1.00	0.96	20.202	22.22	191.25	1.000	0.000	1.00	2.098	2.10	74.5	0.0	79.1
92.00		1.00	0.96	20.266	22.29	190.32	1.000	0.000	1.00	2.085	2.08	74.2	0.0	78.6
93.00		1.00	0.96	20.329	22.36	189.38	1.000	0.000	1.00	2.071	2.07	74.0	0.0	78.1
94.00		1.00	0.96	20.391	22.43	188.43	1.000	0.000	1.00	2.058	2.06	73.7	0.0	77.6
95.00		1.00	0.97	20.454	22.49	187.48	1.000	0.000	1.00	2.044	2.04	73.5	0.0	77.1
96.00		1.00	0.97	20.515	22.56	186.52	1.000	0.000	1.00	2.031	2.03	73.2	0.0	76.6
97.00		1.00	0.97	20.576	22.63	185.55	1.000	0.000	1.00	2.017	2.02	72.9	0.0	76.0
98.00		1.00	0.98	20.637	22.70	184.58	1.000	0.000	1.00	2.004	2.00	72.6	0.0	75.5
99.00		1.00	0.98	20.697	22.76	183.60	1.000	0.000	1.00	1.990	1.99	72.4	0.0	75.0
100.0		1.00	0.98	20.757	22.83	182.62	1.000	0.000	1.00	1.977	1.98	72.1	0.0	74.5
101.0		1.00	0.99	20.816	22.89	181.63	1.000	0.000	1.00	1.963	1.96	71.8	0.0	74.0
102.0		1.00	0.99	20.875	22.96	180.63	1.000	0.000	1.00	1.950	1.95	71.5	0.0	73.5

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

103.0		1.00	0.99	20.934	23.02	179.63	1.000	0.000	1.00	1.936	1.94	71.2	0.0	72.9
104.0		1.00	0.99	20.992	23.09	178.62	1.000	0.000	1.00	1.923	1.92	70.9	0.0	72.4
105.0		1.00	1.00	21.050	23.15	177.61	1.000	0.000	1.00	1.909	1.91	70.6	0.0	71.9
106.0		1.00	1.00	21.107	23.21	176.59	1.000	0.000	1.00	1.896	1.90	70.3	0.0	71.4
107.0		1.00	1.00	21.164	23.28	175.57	1.000	0.000	1.00	1.882	1.88	69.9	0.0	70.9
108.0		1.00	1.00	21.221	23.34	174.54	1.000	0.000	1.00	1.869	1.87	69.6	0.0	70.4
109.0		1.00	1.01	21.277	23.40	173.51	1.000	0.000	1.00	1.855	1.86	69.3	0.0	69.9
110.0		1.00	1.01	21.333	23.46	172.47	1.000	0.000	1.00	1.842	1.84	34.6	0.0	69.3
110.0	Top - Section 3	1.00	1.01	21.361	23.49	171.95	1.000	0.000	0.00	0.001	0.00	34.4	0.0	0.0
111.0		1.00	1.01	21.388	23.52	171.43	1.000	0.000	1.00	1.827	1.83	68.6	0.0	51.8
112.0		1.00	1.01	21.443	23.58	170.38	1.000	0.000	1.00	1.815	1.81	68.3	0.0	51.4
113.0		1.00	1.02	21.498	23.64	169.32	1.000	0.000	1.00	1.801	1.80	68.0	0.0	51.0
114.0		1.00	1.02	21.553	23.70	168.27	1.000	0.000	1.00	1.787	1.79	67.6	0.0	50.6
115.0		1.00	1.02	21.607	23.76	167.20	1.000	0.000	1.00	1.774	1.77	67.3	0.0	50.2
116.0		1.00	1.03	21.661	23.82	166.13	1.000	0.000	1.00	1.760	1.76	66.9	0.0	49.8
117.0		1.00	1.03	21.714	23.88	165.06	1.000	0.000	1.00	1.747	1.75	66.6	0.0	49.5
118.0		1.00	1.03	21.767	23.94	163.98	1.000	0.000	1.00	1.733	1.73	66.2	0.0	49.1
119.0		1.00	1.03	21.820	24.00	162.90	1.000	0.000	1.00	1.720	1.72	65.9	0.0	48.7
120.0		1.00	1.04	21.872	24.05	161.82	1.000	0.000	1.00	1.706	1.71	65.5	0.0	48.3
121.0		1.00	1.04	21.924	24.11	160.72	1.000	0.000	1.00	1.693	1.69	65.1	0.0	47.9
122.0		1.00	1.04	21.976	24.17	159.63	1.000	0.000	1.00	1.679	1.68	64.8	0.0	47.5
123.0	Appertunance(s)	1.00	1.04	22.028	24.23	158.53	1.000	0.000	1.00	1.666	1.67	64.4	0.0	47.1
124.0		1.00	1.05	22.079	24.28	157.43	1.000	0.000	1.00	1.652	1.65	64.0	0.0	46.8
125.0		1.00	1.05	22.130	24.34	156.32	1.000	0.000	1.00	1.639	1.64	63.6	0.0	46.4
126.0		1.00	1.05	22.181	24.39	155.21	1.000	0.000	1.00	1.625	1.63	63.3	0.0	46.0
127.0		1.00	1.05	22.231	24.45	154.09	1.000	0.000	1.00	1.612	1.61	62.9	0.0	45.6
128.0		1.00	1.05	22.281	24.50	152.97	1.000	0.000	1.00	1.598	1.60	62.5	0.0	45.2
129.0		1.00	1.06	22.331	24.56	151.84	1.000	0.000	1.00	1.585	1.58	62.1	0.0	44.8
130.0		1.00	1.06	22.380	24.61	150.72	1.000	0.000	1.00	1.571	1.57	61.7	0.0	44.4
131.0		1.00	1.06	22.430	24.67	149.58	1.000	0.000	1.00	1.558	1.56	61.3	0.0	44.0
132.0		1.00	1.06	22.478	24.72	148.45	1.000	0.000	1.00	1.544	1.54	60.9	0.0	43.7
133.0		1.00	1.07	22.527	24.78	147.31	1.000	0.000	1.00	1.531	1.53	60.5	0.0	43.3
134.0	Appertunance(s)	1.00	1.07	22.576	24.83	146.16	1.000	0.000	1.00	1.517	1.52	60.1	0.0	42.9
135.0		1.00	1.07	22.624	24.88	145.01	1.000	0.000	1.00	1.504	1.50	59.7	0.0	42.5
136.0		1.00	1.07	22.672	24.93	143.86	1.000	0.000	1.00	1.490	1.49	59.2	0.0	42.1
137.0		1.00	1.08	22.719	24.99	142.71	1.000	0.000	1.00	1.477	1.48	58.8	0.0	41.7
138.0		1.00	1.08	22.767	25.04	141.55	1.000	0.000	1.00	1.463	1.46	58.4	0.0	41.3
139.0		1.00	1.08	22.814	25.09	140.38	1.000	0.000	1.00	1.449	1.45	58.0	0.0	41.0
140.0		1.00	1.08	22.861	25.14	139.22	1.000	0.000	1.00	1.436	1.44	57.6	0.0	40.6
141.0	Appertunance(s)	1.00	1.08	22.908	25.19	138.05	1.000	0.000	1.00	1.422	1.42	57.1	0.0	40.2
142.0		1.00	1.09	22.954	25.25	136.87	1.000	0.000	1.00	1.409	1.41	56.7	0.0	39.8
143.0		1.00	1.09	23.000	25.30	135.70	1.000	0.000	1.00	1.395	1.40	56.3	0.0	39.4
144.0		1.00	1.09	23.046	25.35	134.52	1.000	0.000	1.00	1.382	1.38	55.8	0.0	39.0
145.0		1.00	1.09	23.092	25.40	133.33	1.000	0.000	1.00	1.368	1.37	55.4	0.0	38.6
146.0		1.00	1.10	23.138	25.45	132.15	1.000	0.000	1.00	1.355	1.35	55.0	0.0	38.3
147.0		1.00	1.10	23.183	25.50	130.95	1.000	0.000	1.00	1.341	1.34	54.5	0.0	37.9
148.0		1.00	1.10	23.228	25.55	129.76	1.000	0.000	1.00	1.328	1.33	54.1	0.0	37.5
149.0		1.00	1.10	23.273	25.60	128.56	1.000	0.000	1.00	1.314	1.31	53.6	0.0	37.1
150.0	Appertunance(s)	1.00	1.10	23.318	25.64	127.36	1.000	0.000	1.00	1.301	1.30	26.7	0.0	36.7
							Totals:		150.00			10,877.0	0.0	16,046.3

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:07 PM

Customer: AT&T Mobility

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 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

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	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		41.7	0.0					0.0	0.0	41.7	0.0	0.0	0.0
1.00		83.2	182.1					17.3	130.1	100.5	312.2	0.0	0.0
2.00		82.9	181.3					17.3	130.1	100.1	311.4	0.0	0.0
3.00		82.5	180.5					17.3	130.1	99.8	310.7	0.0	0.0
4.00		82.2	179.8					17.3	130.1	99.4	309.9	0.0	0.0
5.00		81.8	179.0					17.3	130.1	99.1	309.1	0.0	0.0
6.00		81.5	178.2					17.3	130.1	98.7	308.3	0.0	0.0
7.00		81.1	177.4					17.3	130.1	98.4	307.6	0.0	0.0
8.00		60.6	176.7					17.3	130.1	77.9	306.8	0.0	0.0
8.50	Reinf. Top	40.3	88.0					8.6	65.1	48.9	153.1	0.0	0.0
9.00		60.2	87.8					8.6	25.0	68.9	112.8	0.0	0.0
10.00	Appertunance(s)	80.1	175.1	523.2	0.0	0.0	151.2	17.3	50.0	620.6	376.3	0.0	0.0
11.00		79.7	174.3					17.3	49.9	97.0	224.3	0.0	0.0
12.00		79.4	173.6					17.3	49.9	96.6	223.5	0.0	0.0
13.00		79.0	172.8					17.3	49.9	96.3	222.7	0.0	0.0
14.00		78.7	172.0					17.3	49.9	95.9	222.0	0.0	0.0
15.00		78.3	171.3					17.3	49.9	95.6	221.2	0.0	0.0
16.00		78.0	170.5					8.6	49.9	86.6	220.4	0.0	0.0
17.00		77.6	169.7					0.0	49.9	77.6	219.6	0.0	0.0
18.00		77.3	168.9					0.0	49.9	77.3	218.9	0.0	0.0
19.00		76.9	168.2					0.0	49.9	76.9	218.1	0.0	0.0
20.00		76.6	167.4					0.0	49.9	76.6	217.3	0.0	0.0
21.00		76.2	166.6					0.0	49.9	76.2	216.5	0.0	0.0
22.00		75.9	165.8					0.0	49.9	75.9	215.8	0.0	0.0
23.00		75.5	165.1					0.0	49.9	75.5	215.0	0.0	0.0
24.00		75.2	164.3					0.0	49.9	75.2	214.2	0.0	0.0
25.00		74.8	163.5					0.0	49.9	74.8	213.5	0.0	0.0
26.00		74.5	162.8					0.0	49.9	74.5	212.7	0.0	0.0
27.00		74.1	162.0					0.0	49.9	74.1	211.9	0.0	0.0
28.00		73.8	161.2					0.0	49.9	73.8	211.1	0.0	0.0
29.00		73.4	160.4					0.0	49.9	73.4	210.4	0.0	0.0
30.00		73.3	159.7					0.0	49.9	73.3	209.6	0.0	0.0
31.00		55.0	158.9					0.0	49.9	55.0	208.8	0.0	0.0
31.50	Bot - Section 2	37.2	79.2					0.0	25.0	37.2	104.2	0.0	0.0
32.00		56.4	146.1					0.0	24.9	56.4	171.0	0.0	0.0
33.00		75.5	291.3					0.0	49.9	75.5	341.2	0.0	0.0
34.00		75.8	289.9					0.0	49.9	75.8	339.8	0.0	0.0
35.00		63.3	288.5					0.0	49.9	63.3	338.4	0.0	0.0
35.67	Top - Section 1	38.1	191.6					0.0	33.3	38.1	224.9	0.0	0.0
36.00		50.9	43.9					0.0	16.6	50.9	60.5	0.0	0.0
37.00		76.5	131.4					0.0	49.9	76.5	181.3	0.0	0.0
38.00		76.7	130.7					0.0	49.9	76.7	180.7	0.0	0.0
39.00		76.9	130.1					0.0	49.9	76.9	180.0	0.0	0.0
40.00		77.1	129.4					0.0	49.9	77.1	179.4	0.0	0.0
41.00		77.3	128.8					0.0	49.9	77.3	178.7	0.0	0.0
42.00		77.4	128.2					0.0	49.9	77.4	178.1	0.0	0.0
43.00		77.5	127.5					0.0	49.9	77.5	177.4	0.0	0.0
44.00		77.7	126.9					0.0	49.9	77.7	176.8	0.0	0.0
45.00		77.8	126.2					0.0	49.9	77.8	176.1	0.0	0.0

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

46.00		77.9	125.6	0.0	49.9	77.9	175.5	0.0	0.0
47.00		77.9	124.9	0.0	49.9	77.9	174.9	0.0	0.0
48.00		78.0	124.3	0.0	49.9	78.0	174.2	0.0	0.0
49.00		78.1	123.6	0.0	49.9	78.1	173.6	0.0	0.0
50.00		78.1	123.0	0.0	49.9	78.1	172.9	0.0	0.0
51.00		78.1	122.4	0.0	49.9	78.1	172.3	0.0	0.0
52.00		78.2	121.7	0.0	49.9	78.2	171.6	0.0	0.0
53.00		78.2	121.1	0.0	49.9	78.2	171.0	0.0	0.0
54.00		78.2	120.4	0.0	49.9	78.2	170.4	0.0	0.0
55.00		78.2	119.8	0.0	49.9	78.2	169.7	0.0	0.0
56.00		78.2	119.1	0.0	49.9	78.2	169.1	0.0	0.0
57.00		78.1	118.5	0.0	49.9	78.1	168.4	0.0	0.0
58.00		78.1	117.8	0.0	49.9	78.1	167.8	0.0	0.0
59.00		78.1	117.2	0.0	49.9	78.1	167.1	0.0	0.0
60.00		78.0	116.6	0.0	49.9	78.0	166.5	0.0	0.0
61.00		78.0	115.9	0.0	49.9	78.0	165.8	0.0	0.0
62.00		77.9	115.3	0.0	49.9	77.9	165.2	0.0	0.0
63.00		77.8	114.6	0.0	49.9	77.8	164.6	0.0	0.0
64.00		77.7	114.0	0.0	49.9	77.7	163.9	0.0	0.0
65.00		77.6	113.3	0.0	49.9	77.6	163.3	0.0	0.0
66.00		77.5	112.7	0.0	49.9	77.5	162.6	0.0	0.0
67.00		77.4	112.1	0.0	49.9	77.4	162.0	0.0	0.0
68.00		77.3	111.4	0.0	49.9	77.3	161.3	0.0	0.0
69.00		77.2	110.8	0.0	49.9	77.2	160.7	0.0	0.0
70.00		38.6	110.1	0.0	49.9	38.6	160.1	0.0	0.0
70.00	Bot - Section 3	39.2	0.0	0.0	0.0	39.2	0.1	0.0	0.0
71.00		78.3	198.8	0.0	49.9	78.3	248.8	0.0	0.0
72.00		78.2	197.8	0.0	49.9	78.2	247.7	0.0	0.0
73.00		58.6	196.6	0.0	49.9	58.6	246.5	0.0	0.0
73.50	Top - Section 2	39.0	97.9	0.0	25.0	39.0	122.9	0.0	0.0
74.00		58.4	43.8	0.0	24.9	58.4	68.8	0.0	0.0
75.00		77.8	87.4	0.0	49.9	77.8	137.3	0.0	0.0
76.00		77.6	86.9	0.0	49.9	77.6	136.8	0.0	0.0
77.00		77.4	86.3	0.0	49.9	77.4	136.3	0.0	0.0
78.00		77.3	85.8	0.0	49.9	77.3	135.8	0.0	0.0
79.00		77.1	85.3	0.0	49.9	77.1	135.2	0.0	0.0
80.00		76.9	84.8	0.0	49.9	76.9	134.7	0.0	0.0
81.00		76.7	84.3	0.0	49.9	76.7	134.2	0.0	0.0
82.00		76.5	83.8	0.0	49.9	76.5	133.7	0.0	0.0
83.00		76.3	83.3	0.0	49.9	76.3	133.2	0.0	0.0
84.00		76.1	82.7	0.0	49.9	76.1	132.7	0.0	0.0
85.00		75.9	82.2	0.0	49.9	75.9	132.1	0.0	0.0
86.00		75.7	81.7	0.0	49.9	75.7	131.6	0.0	0.0
87.00		75.4	81.2	0.0	49.9	75.4	131.1	0.0	0.0
88.00		75.2	80.7	0.0	49.9	75.2	130.6	0.0	0.0
89.00		75.0	80.2	0.0	49.9	75.0	130.1	0.0	0.0
90.00		74.7	79.6	0.0	49.9	74.7	129.6	0.0	0.0
91.00		74.5	79.1	0.0	49.9	74.5	129.1	0.0	0.0
92.00		74.2	78.6	0.0	49.9	74.2	128.5	0.0	0.0
93.00		74.0	78.1	0.0	49.9	74.0	128.0	0.0	0.0
94.00		73.7	77.6	0.0	49.9	73.7	127.5	0.0	0.0
95.00		73.5	77.1	0.0	49.9	73.5	127.0	0.0	0.0
96.00		73.2	76.6	0.0	49.9	73.2	126.5	0.0	0.0
97.00		72.9	76.0	0.0	49.9	72.9	126.0	0.0	0.0
98.00		72.6	75.5	0.0	49.9	72.6	125.5	0.0	0.0
99.00		72.4	75.0	0.0	49.9	72.4	124.9	0.0	0.0
100.00		72.1	74.5	0.0	49.9	72.1	124.4	0.0	0.0

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

101.00		71.8	74.0					0.0	49.9	71.8	123.9	0.0	0.0
102.00		71.5	73.5					0.0	49.9	71.5	123.4	0.0	0.0
103.00		71.2	72.9					0.0	49.9	71.2	122.9	0.0	0.0
104.00		70.9	72.4					0.0	49.9	70.9	122.4	0.0	0.0
105.00		70.6	71.9					0.0	49.9	70.6	121.8	0.0	0.0
106.00		70.3	71.4					0.0	49.9	70.3	121.3	0.0	0.0
107.00		69.9	70.9					0.0	49.9	69.9	120.8	0.0	0.0
108.00		69.6	70.4					0.0	49.9	69.6	120.3	0.0	0.0
109.00		69.3	69.9					0.0	49.9	69.3	119.8	0.0	0.0
110.00		34.6	69.3					0.0	49.9	34.6	119.3	0.0	0.0
110.00	Top - Section 3	34.4	0.0					0.0	0.0	34.4	0.0	0.0	0.0
111.00		68.6	51.8					0.0	49.9	68.6	101.7	0.0	0.0
112.00		68.3	51.4					0.0	49.9	68.3	101.3	0.0	0.0
113.00		68.0	51.0					0.0	49.9	68.0	100.9	0.0	0.0
114.00		67.6	50.6					0.0	49.9	67.6	100.5	0.0	0.0
115.00		67.3	50.2					0.0	49.9	67.3	100.2	0.0	0.0
116.00		66.9	49.8					0.0	49.9	66.9	99.8	0.0	0.0
117.00		66.6	49.5					0.0	49.9	66.6	99.4	0.0	0.0
118.00		66.2	49.1					0.0	49.9	66.2	99.0	0.0	0.0
119.00		65.9	48.7					0.0	49.9	65.9	98.6	0.0	0.0
120.00		65.5	48.3					0.0	49.9	65.5	98.2	0.0	0.0
121.00		65.1	47.9					0.0	49.9	65.1	97.8	0.0	0.0
122.00		64.8	47.5					0.0	49.9	64.8	97.5	0.0	0.0
123.00	Appertunance(s)	64.4	47.1	591.9	0.0	0.0	157.4	0.0	49.9	656.3	254.5	0.0	0.0
124.00		64.0	46.8					0.0	49.5	64.0	96.3	0.0	0.0
125.00		63.6	46.4					0.0	49.5	63.6	95.9	0.0	0.0
126.00		63.3	46.0					0.0	49.5	63.3	95.5	0.0	0.0
127.00		62.9	45.6					0.0	49.5	62.9	95.1	0.0	0.0
128.00		62.5	45.2					0.0	49.5	62.5	94.7	0.0	0.0
129.00		62.1	44.8					0.0	49.5	62.1	94.4	0.0	0.0
130.00		61.7	44.4					0.0	49.5	61.7	94.0	0.0	0.0
131.00		61.3	44.0					0.0	49.5	61.3	93.6	0.0	0.0
132.00		60.9	43.7					0.0	49.5	60.9	93.2	0.0	0.0
133.00		60.5	43.3					0.0	49.5	60.5	92.8	0.0	0.0
134.00	Appertunance(s)	60.1	42.9	1,481.8	0.0	0.0	2,034.4	0.0	49.5	1,541.9	2,126.8	0.0	0.0
135.00		59.7	42.5					0.0	37.7	59.7	80.2	0.0	0.0
136.00		59.2	42.1					0.0	37.7	59.2	79.8	0.0	0.0
137.00		58.8	41.7					0.0	37.7	58.8	79.5	0.0	0.0
138.00		58.4	41.3					0.0	37.7	58.4	79.1	0.0	0.0
139.00		58.0	41.0					0.0	37.7	58.0	78.7	0.0	0.0
140.00		57.6	40.6					0.0	37.7	57.6	78.3	0.0	0.0
141.00	Appertunance(s)	57.1	40.2	425.7	0.0	0.0	95.0	0.0	37.7	482.8	173.0	0.0	0.0
142.00		56.7	39.8					0.0	31.8	56.7	71.6	0.0	0.0
143.00		56.3	39.4					0.0	31.8	56.3	71.2	0.0	0.0
144.00		55.8	39.0					0.0	31.8	55.8	70.8	0.0	0.0
145.00		55.4	38.6					0.0	31.8	55.4	70.5	0.0	0.0
146.00		55.0	38.3					0.0	31.8	55.0	70.1	0.0	0.0
147.00		54.5	37.9					0.0	31.8	54.5	69.7	0.0	0.0
148.00		54.1	37.5					0.0	31.8	54.1	69.3	0.0	0.0
149.00		53.6	37.1					0.0	31.8	53.6	68.9	0.0	0.0
150.00	Appertunance(s)	26.7	36.7	4,341.0	0.0	5,010.8	3,526.2	0.0	31.8	4,367.7	3,594.7	0.0	0.0
								Totals:		18,508.5	29,928.8	0.00	0.00

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:07 PM

Customer: AT&T Mobility

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 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	-29.92	-18.48	0.00	-1,928.51	0.00	1,928.51	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.503
1.00	-29.60	-18.40	0.00	-1,910.03	0.00	1,910.03	3,148.69	1,574.34	4,778.83	2,360.09	0.00	-0.04	0.501
2.00	-29.27	-18.32	0.00	-1,891.63	0.00	1,891.63	3,140.16	1,570.08	4,745.43	2,343.59	0.02	-0.09	0.498
3.00	-28.95	-18.24	0.00	-1,873.32	0.00	1,873.32	3,131.60	1,565.80	4,712.07	2,327.11	0.04	-0.13	0.496
4.00	-28.62	-18.16	0.00	-1,855.08	0.00	1,855.08	3,123.00	1,561.50	4,678.76	2,310.67	0.07	-0.17	0.493
5.00	-28.30	-18.08	0.00	-1,836.91	0.00	1,836.91	3,114.35	1,557.18	4,645.51	2,294.24	0.11	-0.21	0.491
6.00	-27.98	-18.00	0.00	-1,818.83	0.00	1,818.83	3,105.66	1,552.83	4,612.30	2,277.84	0.16	-0.26	0.488
7.00	-27.66	-17.92	0.00	-1,800.83	0.00	1,800.83	3,096.94	1,548.47	4,579.15	2,261.47	0.22	-0.30	0.486
8.00	-27.34	-17.86	0.00	-1,782.90	0.00	1,782.90	3,088.17	1,544.08	4,546.04	2,245.12	0.29	-0.34	0.483
8.50	-27.18	-17.82	0.00	-1,773.97	0.00	1,773.97	3,083.76	1,541.88	4,529.51	2,236.96	0.33	-0.36	0.482
8.50	-27.18	-17.82	0.00	-1,773.97	0.00	1,773.97	3,083.76	1,541.88	4,529.51	2,236.96	0.33	-0.36	0.802
9.00	-27.06	-17.77	0.00	-1,765.06	0.00	1,765.06	3,079.35	1,539.68	4,513.00	2,228.80	0.37	-0.39	0.801
10.00	-26.66	-17.18	0.00	-1,747.29	0.00	1,747.29	3,070.50	1,535.25	4,480.00	2,212.50	0.46	-0.46	0.799
11.00	-26.42	-17.12	0.00	-1,730.11	0.00	1,730.11	3,061.60	1,530.80	4,447.06	2,196.24	0.56	-0.53	0.797
12.00	-26.17	-17.05	0.00	-1,712.99	0.00	1,712.99	3,052.67	1,526.33	4,414.18	2,180.00	0.68	-0.60	0.794
13.00	-25.93	-16.99	0.00	-1,695.94	0.00	1,695.94	3,043.69	1,521.84	4,381.36	2,163.79	0.81	-0.68	0.792
14.00	-25.69	-16.92	0.00	-1,678.95	0.00	1,678.95	3,034.67	1,517.33	4,348.59	2,147.60	0.96	-0.75	0.790
15.00	-25.45	-16.85	0.00	-1,662.03	0.00	1,662.03	3,025.61	1,512.80	4,315.88	2,131.45	1.13	-0.82	0.788
16.00	-25.21	-16.80	0.00	-1,645.18	0.00	1,645.18	3,016.50	1,508.25	4,283.22	2,115.32	1.31	-0.89	0.786
17.00	-24.97	-16.75	0.00	-1,628.38	0.00	1,628.38	3,007.36	1,503.68	4,250.63	2,099.23	1.50	-0.97	0.784
18.00	-24.73	-16.70	0.00	-1,611.63	0.00	1,611.63	2,998.17	1,499.09	4,218.10	2,083.16	1.71	-1.04	0.782
19.00	-24.49	-16.65	0.00	-1,594.93	0.00	1,594.93	2,988.94	1,494.47	4,185.63	2,067.13	1.94	-1.12	0.780
20.00	-24.25	-16.60	0.00	-1,578.28	0.00	1,578.28	2,979.67	1,489.84	4,153.23	2,051.12	2.18	-1.19	0.778
21.00	-24.02	-16.55	0.00	-1,561.68	0.00	1,561.68	2,970.36	1,485.18	4,120.88	2,035.15	2.44	-1.27	0.776
22.00	-23.78	-16.50	0.00	-1,545.13	0.00	1,545.13	2,961.01	1,480.50	4,088.60	2,019.21	2.71	-1.34	0.773
23.00	-23.55	-16.45	0.00	-1,528.63	0.00	1,528.63	2,951.61	1,475.81	4,056.39	2,003.30	3.00	-1.41	0.771
24.00	-23.31	-16.40	0.00	-1,512.18	0.00	1,512.18	2,942.18	1,471.09	4,024.24	1,987.42	3.31	-1.49	0.769
25.00	-23.08	-16.35	0.00	-1,495.78	0.00	1,495.78	2,932.70	1,466.35	3,992.16	1,971.58	3.63	-1.57	0.767
26.00	-22.85	-16.30	0.00	-1,479.43	0.00	1,479.43	2,923.18	1,461.59	3,960.14	1,955.76	3.96	-1.64	0.764
27.00	-22.62	-16.25	0.00	-1,463.13	0.00	1,463.13	2,913.62	1,456.81	3,928.19	1,939.99	4.31	-1.72	0.762
28.00	-22.38	-16.20	0.00	-1,446.88	0.00	1,446.88	2,903.09	1,451.54	3,895.07	1,923.63	4.68	-1.79	0.760
29.00	-22.16	-16.15	0.00	-1,430.68	0.00	1,430.68	2,889.14	1,444.57	3,857.52	1,905.08	5.07	-1.87	0.759
30.00	-21.93	-16.10	0.00	-1,414.53	0.00	1,414.53	2,875.19	1,437.60	3,820.15	1,886.63	5.47	-1.95	0.758
31.00	-21.70	-16.06	0.00	-1,398.43	0.00	1,398.43	2,861.24	1,430.62	3,782.96	1,868.26	5.88	-2.02	0.756
31.50	-21.59	-16.03	0.00	-1,390.40	0.00	1,390.40	2,854.27	1,427.13	3,764.43	1,859.11	6.10	-2.06	0.756
32.00	-21.40	-15.99	0.00	-1,382.38	0.00	1,382.38	2,847.30	1,423.65	3,745.96	1,849.99	6.31	-2.10	0.755
33.00	-21.05	-15.93	0.00	-1,366.39	0.00	1,366.39	2,833.35	1,416.67	3,709.14	1,831.80	6.76	-2.18	0.753
34.00	-20.69	-15.87	0.00	-1,350.46	0.00	1,350.46	2,819.40	1,409.70	3,672.50	1,813.71	7.23	-2.26	0.752
35.00	-20.33	-15.82	0.00	-1,334.59	0.00	1,334.59	2,805.45	1,402.73	3,636.04	1,795.70	7.71	-2.34	0.751
35.67	-20.10	-15.78	0.00	-1,324.04	0.00	1,324.04	2,248.05	1,124.03	2,973.86	1,468.68	8.04	-2.39	0.911
36.00	-20.03	-15.75	0.00	-1,318.78	0.00	1,318.78	2,245.81	1,122.91	2,966.02	1,464.81	8.21	-2.41	0.909
37.00	-19.82	-15.70	0.00	-1,303.03	0.00	1,303.03	2,239.07	1,119.53	2,942.52	1,453.20	8.72	-2.50	0.906
38.00	-19.62	-15.64	0.00	-1,287.34	0.00	1,287.34	2,232.28	1,116.14	2,919.04	1,441.60	9.25	-2.59	0.902
39.00	-19.42	-15.59	0.00	-1,271.69	0.00	1,271.69	2,225.45	1,112.72	2,895.60	1,430.03	9.81	-2.68	0.898
40.00	-19.22	-15.53	0.00	-1,256.11	0.00	1,256.11	2,218.58	1,109.29	2,872.19	1,418.47	10.38	-2.77	0.894
41.00	-19.02	-15.48	0.00	-1,240.57	0.00	1,240.57	2,211.66	1,105.83	2,848.82	1,406.93	10.97	-2.86	0.891
42.00	-18.83	-15.42	0.00	-1,225.10	0.00	1,225.10	2,204.71	1,102.35	2,825.49	1,395.40	11.57	-2.95	0.887
43.00	-18.63	-15.36	0.00	-1,209.68	0.00	1,209.68	2,197.71	1,098.85	2,802.19	1,383.90	12.20	-3.04	0.883
44.00	-18.43	-15.30	0.00	-1,194.32	0.00	1,194.32	2,190.67	1,095.33	2,778.94	1,372.41	12.85	-3.13	0.879
45.00	-18.24	-15.24	0.00	-1,179.01	0.00	1,179.01	2,183.59	1,091.79	2,755.72	1,360.95	13.51	-3.22	0.875
46.00	-18.04	-15.19	0.00	-1,163.77	0.00	1,163.77	2,176.47	1,088.23	2,732.54	1,349.50	14.19	-3.31	0.871

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00
Dead Load Factor : 1.20
Wind Load Factor : 1.60

47.00	-17.85	-15.13	0.00	-1,148.58	0.00	1,148.58	2,169.30	1,084.65	2,709.41	1,338.07	14.90	-3.40	0.867
48.00	-17.65	-15.07	0.00	-1,133.46	0.00	1,133.46	2,162.10	1,081.05	2,686.31	1,326.67	15.62	-3.49	0.863
49.00	-17.46	-15.00	0.00	-1,118.39	0.00	1,118.39	2,154.85	1,077.43	2,663.26	1,315.28	16.36	-3.58	0.859
50.00	-17.27	-14.94	0.00	-1,103.39	0.00	1,103.39	2,147.56	1,073.78	2,640.25	1,303.92	17.11	-3.67	0.854
51.00	-17.08	-14.88	0.00	-1,088.45	0.00	1,088.45	2,140.23	1,070.12	2,617.28	1,292.58	17.89	-3.76	0.850
52.00	-16.89	-14.82	0.00	-1,073.57	0.00	1,073.57	2,132.86	1,066.43	2,594.37	1,281.26	18.69	-3.85	0.846
53.00	-16.70	-14.76	0.00	-1,058.75	0.00	1,058.75	2,125.45	1,062.72	2,571.49	1,269.96	19.50	-3.94	0.842
54.00	-16.51	-14.69	0.00	-1,043.99	0.00	1,043.99	2,118.00	1,059.00	2,548.66	1,258.69	20.34	-4.03	0.837
55.00	-16.33	-14.63	0.00	-1,029.30	0.00	1,029.30	2,110.50	1,055.25	2,525.88	1,247.44	21.19	-4.13	0.833
56.00	-16.14	-14.56	0.00	-1,014.67	0.00	1,014.67	2,102.96	1,051.48	2,503.15	1,236.21	22.07	-4.22	0.829
57.00	-15.95	-14.50	0.00	-1,000.11	0.00	1,000.11	2,095.38	1,047.69	2,480.47	1,225.01	22.96	-4.31	0.824
58.00	-15.77	-14.43	0.00	-985.61	0.00	985.61	2,087.76	1,043.88	2,457.84	1,213.83	23.87	-4.40	0.820
59.00	-15.59	-14.37	0.00	-971.17	0.00	971.17	2,080.10	1,040.05	2,435.26	1,202.68	24.80	-4.50	0.815
60.00	-15.40	-14.30	0.00	-956.81	0.00	956.81	2,072.39	1,036.20	2,412.72	1,191.55	25.75	-4.59	0.811
61.00	-15.22	-14.24	0.00	-942.50	0.00	942.50	2,064.65	1,032.32	2,390.25	1,180.45	26.72	-4.68	0.806
62.00	-15.04	-14.17	0.00	-928.27	0.00	928.27	2,056.86	1,028.43	2,367.82	1,169.38	27.71	-4.77	0.801
63.00	-14.86	-14.10	0.00	-914.10	0.00	914.10	2,049.03	1,024.52	2,345.45	1,158.33	28.72	-4.87	0.797
64.00	-14.68	-14.04	0.00	-899.99	0.00	899.99	2,041.16	1,020.58	2,323.13	1,147.31	29.75	-4.96	0.792
65.00	-14.50	-13.97	0.00	-885.96	0.00	885.96	2,033.25	1,016.62	2,300.87	1,136.31	30.80	-5.05	0.787
66.00	-14.32	-13.90	0.00	-871.99	0.00	871.99	2,025.30	1,012.65	2,278.67	1,125.35	31.87	-5.15	0.782
67.00	-14.15	-13.83	0.00	-858.09	0.00	858.09	2,016.93	1,008.47	2,256.11	1,114.21	32.95	-5.24	0.777
68.00	-13.97	-13.76	0.00	-844.26	0.00	844.26	2,005.31	1,002.65	2,230.04	1,101.33	34.06	-5.34	0.774
69.00	-13.80	-13.69	0.00	-830.50	0.00	830.50	1,993.69	996.84	2,204.11	1,088.53	35.19	-5.43	0.770
70.00	-13.63	-13.65	0.00	-816.81	0.00	816.81	1,982.06	991.03	2,178.34	1,075.80	36.33	-5.52	0.766
70.00	-13.62	-13.62	0.00	-816.81	0.00	816.81	1,982.06	991.03	2,178.33	1,075.80	36.33	-5.52	0.766
71.00	-13.36	-13.54	0.00	-803.19	0.00	803.19	1,970.44	985.22	2,152.72	1,063.15	37.50	-5.62	0.762
72.00	-13.10	-13.46	0.00	-789.65	0.00	789.65	1,958.82	979.41	2,127.25	1,050.57	38.68	-5.71	0.759
73.00	-12.84	-13.39	0.00	-776.19	0.00	776.19	1,947.19	973.60	2,101.94	1,038.07	39.89	-5.81	0.755
73.50	-12.71	-13.35	0.00	-769.49	0.00	769.49	1,473.95	736.97	1,624.52	802.29	40.50	-5.85	0.968
74.00	-12.63	-13.31	0.00	-762.81	0.00	762.81	1,471.40	735.70	1,616.91	798.53	41.11	-5.90	0.964
75.00	-12.48	-13.24	0.00	-749.51	0.00	749.51	1,466.26	733.13	1,601.72	791.03	42.36	-6.01	0.956
76.00	-12.33	-13.17	0.00	-736.27	0.00	736.27	1,461.09	730.55	1,586.54	783.53	43.63	-6.12	0.948
77.00	-12.17	-13.10	0.00	-723.10	0.00	723.10	1,455.88	727.94	1,571.38	776.05	44.92	-6.23	0.940
78.00	-12.02	-13.03	0.00	-710.00	0.00	710.00	1,450.62	725.31	1,556.25	768.57	46.23	-6.34	0.932
79.00	-11.87	-12.96	0.00	-696.97	0.00	696.97	1,445.32	722.66	1,541.14	761.11	47.57	-6.45	0.924
80.00	-11.72	-12.90	0.00	-684.00	0.00	684.00	1,439.98	719.99	1,526.06	753.66	48.93	-6.56	0.916
81.00	-11.57	-12.83	0.00	-671.11	0.00	671.11	1,434.60	717.30	1,511.01	746.23	50.31	-6.67	0.908
82.00	-11.42	-12.76	0.00	-658.28	0.00	658.28	1,429.18	714.59	1,495.98	738.81	51.72	-6.78	0.899
83.00	-11.28	-12.69	0.00	-645.53	0.00	645.53	1,423.71	711.86	1,480.97	731.40	53.15	-6.89	0.891
84.00	-11.13	-12.62	0.00	-632.84	0.00	632.84	1,418.21	709.10	1,466.00	724.00	54.60	-7.00	0.882
85.00	-10.98	-12.55	0.00	-620.22	0.00	620.22	1,412.66	706.33	1,451.06	716.62	56.08	-7.11	0.874
86.00	-10.84	-12.48	0.00	-607.68	0.00	607.68	1,407.07	703.53	1,436.14	709.26	57.57	-7.22	0.865
87.00	-10.69	-12.40	0.00	-595.20	0.00	595.20	1,401.44	700.72	1,421.26	701.91	59.09	-7.33	0.856
88.00	-10.55	-12.33	0.00	-582.80	0.00	582.80	1,395.76	697.88	1,406.40	694.57	60.64	-7.44	0.847
89.00	-10.41	-12.26	0.00	-570.47	0.00	570.47	1,390.05	695.02	1,391.58	687.25	62.20	-7.55	0.838
90.00	-10.27	-12.19	0.00	-558.21	0.00	558.21	1,384.29	692.15	1,376.80	679.95	63.79	-7.66	0.829
91.00	-10.13	-12.12	0.00	-546.02	0.00	546.02	1,378.50	689.25	1,362.04	672.66	65.40	-7.77	0.819
92.00	-9.99	-12.05	0.00	-533.90	0.00	533.90	1,372.66	686.33	1,347.32	665.39	67.04	-7.88	0.810
93.00	-9.85	-11.97	0.00	-521.85	0.00	521.85	1,366.78	683.39	1,332.64	658.14	68.69	-7.98	0.800
94.00	-9.71	-11.90	0.00	-509.88	0.00	509.88	1,360.85	680.43	1,317.99	650.91	70.37	-8.09	0.791
95.00	-9.57	-11.83	0.00	-497.98	0.00	497.98	1,354.89	677.44	1,303.39	643.69	72.07	-8.20	0.781
96.00	-9.43	-11.75	0.00	-486.15	0.00	486.15	1,348.88	674.44	1,288.81	636.50	73.80	-8.31	0.771
97.00	-9.30	-11.68	0.00	-474.40	0.00	474.40	1,342.84	671.42	1,274.28	629.32	75.54	-8.41	0.761
98.00	-9.16	-11.61	0.00	-462.72	0.00	462.72	1,336.75	668.37	1,259.79	622.16	77.31	-8.52	0.751
99.00	-9.03	-11.53	0.00	-451.11	0.00	451.11	1,330.62	665.31	1,245.34	615.03	79.10	-8.62	0.741
100.00	-8.90	-11.46	0.00	-439.58	0.00	439.58	1,324.45	662.22	1,230.93	607.91	80.91	-8.73	0.730
101.00	-8.77	-11.39	0.00	-428.12	0.00	428.12	1,318.23	659.12	1,216.56	600.81	82.74	-8.83	0.720

Load Case: 1.2D + 1.6W 93 mph with No Ice 40 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

102.00	-8.63	-11.31	0.00	-416.73	0.00	416.73	1,311.98	655.99	1,202.23	593.74	84.59	-8.94	0.709
103.00	-8.50	-11.24	0.00	-405.42	0.00	405.42	1,305.68	652.84	1,187.95	586.68	86.47	-9.04	0.698
104.00	-8.37	-11.16	0.00	-394.18	0.00	394.18	1,299.34	649.67	1,173.71	579.65	88.37	-9.14	0.687
105.00	-8.25	-11.09	0.00	-383.01	0.00	383.01	1,292.96	646.48	1,159.52	572.64	90.28	-9.24	0.676
106.00	-8.12	-11.02	0.00	-371.93	0.00	371.93	1,284.28	642.14	1,143.36	564.66	92.22	-9.34	0.665
107.00	-7.99	-10.94	0.00	-360.91	0.00	360.91	1,274.98	637.49	1,126.77	556.47	94.18	-9.44	0.655
108.00	-7.87	-10.87	0.00	-349.97	0.00	349.97	1,265.69	632.84	1,110.30	548.34	96.16	-9.54	0.645
109.00	-7.74	-10.79	0.00	-339.11	0.00	339.11	1,256.39	628.19	1,093.96	540.26	98.16	-9.64	0.634
110.00	-7.62	-10.74	0.00	-328.32	0.00	328.32	1,247.09	623.54	1,077.73	532.25	100.18	-9.74	0.623
110.00	-7.62	-10.72	0.00	-328.31	0.00	328.31	1,247.09	623.54	1,077.72	532.25	100.18	-9.74	0.623
110.00	-7.62	-10.72	0.00	-328.31	0.00	328.31	853.22	426.61	741.74	366.32	100.18	-9.74	0.906
111.00	-7.51	-10.64	0.00	-317.60	0.00	317.60	849.66	424.83	733.10	362.05	102.22	-9.84	0.887
112.00	-7.40	-10.58	0.00	-306.96	0.00	306.96	846.05	423.02	724.47	357.79	104.28	-9.96	0.867
113.00	-7.29	-10.51	0.00	-296.38	0.00	296.38	842.40	421.20	715.86	353.53	106.37	-10.09	0.848
114.00	-7.18	-10.44	0.00	-285.87	0.00	285.87	838.71	419.35	707.25	349.29	108.49	-10.21	0.828
115.00	-7.07	-10.37	0.00	-275.43	0.00	275.43	834.98	417.49	698.66	345.04	110.63	-10.33	0.807
116.00	-6.96	-10.30	0.00	-265.06	0.00	265.06	831.20	415.60	690.08	340.81	112.79	-10.45	0.787
117.00	-6.85	-10.23	0.00	-254.77	0.00	254.77	827.39	413.69	681.52	336.58	114.98	-10.57	0.766
118.00	-6.75	-10.16	0.00	-244.54	0.00	244.54	823.53	411.76	672.98	332.36	117.20	-10.68	0.745
119.00	-6.64	-10.09	0.00	-234.37	0.00	234.37	819.63	409.81	664.45	328.14	119.43	-10.80	0.723
120.00	-6.54	-10.02	0.00	-224.28	0.00	224.28	815.69	407.84	655.93	323.94	121.69	-10.91	0.701
121.00	-6.44	-9.95	0.00	-214.26	0.00	214.26	811.71	405.85	647.44	319.75	123.97	-11.02	0.679
122.00	-6.34	-9.88	0.00	-204.31	0.00	204.31	807.68	403.84	638.96	315.56	126.28	-11.12	0.656
123.00	-6.20	-9.20	0.00	-194.44	0.00	194.44	803.62	401.81	630.51	311.38	128.60	-11.23	0.633
124.00	-6.10	-9.13	0.00	-185.24	0.00	185.24	799.51	399.76	622.07	307.22	130.95	-11.33	0.611
125.00	-6.00	-9.06	0.00	-176.11	0.00	176.11	795.36	397.68	613.66	303.06	133.32	-11.43	0.589
126.00	-5.91	-8.98	0.00	-167.06	0.00	167.06	791.17	395.59	605.27	298.92	135.71	-11.52	0.567
127.00	-5.81	-8.91	0.00	-158.07	0.00	158.07	786.94	393.47	596.90	294.79	138.12	-11.62	0.544
128.00	-5.72	-8.84	0.00	-149.16	0.00	149.16	782.67	391.33	588.56	290.67	140.54	-11.71	0.521
129.00	-5.63	-8.77	0.00	-140.32	0.00	140.32	778.35	389.18	580.24	286.56	142.99	-11.80	0.497
130.00	-5.53	-8.70	0.00	-131.55	0.00	131.55	774.00	387.00	571.95	282.46	145.45	-11.88	0.473
131.00	-5.44	-8.63	0.00	-122.85	0.00	122.85	769.60	384.80	563.68	278.38	147.93	-11.96	0.449
132.00	-5.35	-8.55	0.00	-114.22	0.00	114.22	765.16	382.58	555.44	274.31	150.42	-12.04	0.424
133.00	-5.26	-8.48	0.00	-105.67	0.00	105.67	760.68	380.34	547.23	270.25	152.93	-12.11	0.398
134.00	-3.50	-6.53	0.00	-97.19	0.00	97.19	756.16	378.08	539.04	266.21	155.46	-12.18	0.370
135.00	-3.43	-6.46	0.00	-90.65	0.00	90.65	751.59	375.80	530.89	262.19	158.00	-12.25	0.351
136.00	-3.36	-6.39	0.00	-84.19	0.00	84.19	746.99	373.49	522.77	258.17	160.55	-12.31	0.331
137.00	-3.29	-6.32	0.00	-77.80	0.00	77.80	742.34	371.17	514.67	254.18	163.12	-12.37	0.311
138.00	-3.21	-6.25	0.00	-71.49	0.00	71.49	737.65	368.82	506.61	250.20	165.70	-12.43	0.290
139.00	-3.14	-6.18	0.00	-65.24	0.00	65.24	732.92	366.46	498.59	246.23	168.29	-12.49	0.270
140.00	-3.08	-6.11	0.00	-59.06	0.00	59.06	728.15	364.07	490.59	242.29	170.89	-12.54	0.248
141.00	-3.01	-5.60	0.00	-52.95	0.00	52.95	721.91	360.95	481.68	237.89	173.50	-12.58	0.227
142.00	-2.95	-5.53	0.00	-47.35	0.00	47.35	714.93	357.47	472.37	233.29	176.12	-12.63	0.207
143.00	-2.88	-5.46	0.00	-41.82	0.00	41.82	707.96	353.98	463.15	228.73	178.74	-12.67	0.187
144.00	-2.82	-5.39	0.00	-36.36	0.00	36.36	700.99	350.49	454.01	224.22	181.38	-12.70	0.166
145.00	-2.77	-5.33	0.00	-30.97	0.00	30.97	694.01	347.01	444.97	219.76	184.02	-12.73	0.145
146.00	-2.71	-5.26	0.00	-25.64	0.00	25.64	687.04	343.52	436.02	215.34	186.67	-12.76	0.123
147.00	-2.65	-5.19	0.00	-20.38	0.00	20.38	680.07	340.03	427.16	210.96	189.33	-12.79	0.101
148.00	-2.59	-5.12	0.00	-15.19	0.00	15.19	673.09	336.55	418.40	206.63	191.98	-12.80	0.078
149.00	-2.54	-5.06	0.00	-10.07	0.00	10.07	666.12	333.06	409.72	202.34	194.64	-12.82	0.054
150.00	0.00	-4.37	0.00	-5.01	0.00	5.01	659.14	329.57	401.13	198.10	197.31	-12.83	0.025

Load Case: 0.9D + 1.6W 93 mph with No Ice (Reduced DL) 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.19	250.92	1.000	0.000	0.00	0.000	0.00	41.7	0.0	0.0
1.00		1.00	0.70	14.724	16.19	250.40	1.000	0.000	1.00	3.218	3.22	83.2	0.0	136.6
2.00		1.00	0.70	14.724	16.19	249.34	1.000	0.000	1.00	3.205	3.20	82.9	0.0	136.0
3.00		1.00	0.70	14.724	16.19	248.29	1.000	0.000	1.00	3.191	3.19	82.5	0.0	135.4
4.00		1.00	0.70	14.724	16.19	247.24	1.000	0.000	1.00	3.178	3.18	82.2	0.0	134.8
5.00		1.00	0.70	14.724	16.19	246.19	1.000	0.000	1.00	3.164	3.16	81.8	0.0	134.2
6.00		1.00	0.70	14.724	16.19	245.14	1.000	0.000	1.00	3.151	3.15	81.5	0.0	133.7
7.00		1.00	0.70	14.724	16.19	244.08	1.000	0.000	1.00	3.137	3.14	81.1	0.0	133.1
8.00		1.00	0.70	14.724	16.19	243.03	1.000	0.000	1.00	3.123	3.12	60.6	0.0	132.5
8.50	Reinf. Top	1.00	0.70	14.724	16.19	242.24	1.000	0.000	0.50	1.557	1.56	40.3	0.0	66.0
9.00		1.00	0.70	14.724	16.19	241.72	1.000	0.000	0.50	1.553	1.55	60.2	0.0	65.9
10.00	Appertunance(s)	1.00	0.70	14.724	16.19	240.93	1.000	0.000	1.00	3.096	3.10	80.1	0.0	131.3
11.00		1.00	0.70	14.724	16.19	239.88	1.000	0.000	1.00	3.083	3.08	79.7	0.0	130.8
12.00		1.00	0.70	14.724	16.19	238.82	1.000	0.000	1.00	3.069	3.07	79.4	0.0	130.2
13.00		1.00	0.70	14.724	16.19	237.77	1.000	0.000	1.00	3.056	3.06	79.0	0.0	129.6
14.00		1.00	0.70	14.724	16.19	236.72	1.000	0.000	1.00	3.042	3.04	78.7	0.0	129.0
15.00		1.00	0.70	14.724	16.19	235.67	1.000	0.000	1.00	3.029	3.03	78.3	0.0	128.4
16.00		1.00	0.70	14.724	16.19	234.62	1.000	0.000	1.00	3.015	3.02	78.0	0.0	127.9
17.00		1.00	0.70	14.724	16.19	233.56	1.000	0.000	1.00	3.002	3.00	77.6	0.0	127.3
18.00		1.00	0.70	14.724	16.19	232.51	1.000	0.000	1.00	2.988	2.99	77.3	0.0	126.7
19.00		1.00	0.70	14.724	16.19	231.46	1.000	0.000	1.00	2.975	2.97	76.9	0.0	126.1
20.00		1.00	0.70	14.724	16.19	230.41	1.000	0.000	1.00	2.961	2.96	76.6	0.0	125.5
21.00		1.00	0.70	14.724	16.19	229.36	1.000	0.000	1.00	2.948	2.95	76.2	0.0	125.0
22.00		1.00	0.70	14.724	16.19	228.30	1.000	0.000	1.00	2.934	2.93	75.9	0.0	124.4
23.00		1.00	0.70	14.724	16.19	227.25	1.000	0.000	1.00	2.921	2.92	75.5	0.0	123.8
24.00		1.00	0.70	14.724	16.19	226.20	1.000	0.000	1.00	2.907	2.91	75.2	0.0	123.2
25.00		1.00	0.70	14.724	16.19	225.15	1.000	0.000	1.00	2.894	2.89	74.8	0.0	122.6
26.00		1.00	0.70	14.724	16.19	224.10	1.000	0.000	1.00	2.880	2.88	74.5	0.0	122.1
27.00		1.00	0.70	14.724	16.19	223.05	1.000	0.000	1.00	2.867	2.87	74.1	0.0	121.5
28.00		1.00	0.70	14.724	16.19	221.99	1.000	0.000	1.00	2.853	2.85	73.8	0.0	120.9
29.00		1.00	0.70	14.724	16.19	220.94	1.000	0.000	1.00	2.840	2.84	73.4	0.0	120.3
30.00		1.00	0.70	14.724	16.19	219.89	1.000	0.000	1.00	2.826	2.83	73.3	0.0	119.7
31.00		1.00	0.70	14.806	16.28	219.45	1.000	0.000	1.00	2.813	2.81	55.0	0.0	119.2
31.50	Bot - Section 2	1.00	0.70	14.909	16.40	219.42	1.000	0.000	0.50	1.402	1.40	37.2	0.0	59.4
32.00		1.00	0.71	14.977	16.47	219.38	1.000	0.000	0.50	1.424	1.42	56.4	0.0	109.6
33.00		1.00	0.71	15.077	16.58	219.32	1.000	0.000	1.00	2.839	2.84	75.5	0.0	218.5
34.00		1.00	0.72	15.209	16.72	219.20	1.000	0.000	1.00	2.826	2.83	75.8	0.0	217.4
35.00		1.00	0.72	15.337	16.87	219.05	1.000	0.000	1.00	2.812	2.81	63.3	0.0	216.3
35.67	Top - Section 1	1.00	0.73	15.442	16.98	218.90	1.000	0.000	0.67	1.868	1.87	38.1	0.0	143.7
36.00		1.00	0.73	15.504	17.05	223.11	1.000	0.000	0.33	0.931	0.93	50.9	0.0	32.9
37.00		1.00	0.74	15.586	17.14	222.97	1.000	0.000	1.00	2.785	2.79	76.5	0.0	98.5
38.00		1.00	0.74	15.707	17.27	222.75	1.000	0.000	1.00	2.772	2.77	76.7	0.0	98.0
39.00		1.00	0.75	15.825	17.40	222.50	1.000	0.000	1.00	2.758	2.76	76.9	0.0	97.6
40.00		1.00	0.75	15.942	17.53	222.22	1.000	0.000	1.00	2.745	2.74	77.1	0.0	97.1
41.00		1.00	0.76	16.056	17.66	221.92	1.000	0.000	1.00	2.731	2.73	77.3	0.0	96.6
42.00		1.00	0.76	16.168	17.78	221.59	1.000	0.000	1.00	2.718	2.72	77.4	0.0	96.1
43.00		1.00	0.77	16.278	17.90	221.24	1.000	0.000	1.00	2.704	2.70	77.5	0.0	95.6
44.00		1.00	0.77	16.387	18.02	220.86	1.000	0.000	1.00	2.691	2.69	77.7	0.0	95.1
45.00		1.00	0.78	16.494	18.14	220.47	1.000	0.000	1.00	2.677	2.68	77.8	0.0	94.7
46.00		1.00	0.78	16.599	18.25	220.05	1.000	0.000	1.00	2.664	2.66	77.9	0.0	94.2
47.00		1.00	0.79	16.702	18.37	219.62	1.000	0.000	1.00	2.650	2.65	77.9	0.0	93.7

Load Case: 0.9D + 1.6W — 93 mph with No Ice (Reduced DL) — 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

48.00		1.00	0.79	16.804	18.48	219.16	1.000	0.000	1.00	2.637	2.64	78.0	0.0	93.2
49.00		1.00	0.80	16.904	18.59	218.69	1.000	0.000	1.00	2.623	2.62	78.1	0.0	92.7
50.00		1.00	0.80	17.003	18.70	218.20	1.000	0.000	1.00	2.610	2.61	78.1	0.0	92.3
51.00		1.00	0.81	17.101	18.81	217.69	1.000	0.000	1.00	2.596	2.60	78.1	0.0	91.8
52.00		1.00	0.81	17.197	18.91	217.16	1.000	0.000	1.00	2.583	2.58	78.2	0.0	91.3
53.00		1.00	0.82	17.292	19.02	216.62	1.000	0.000	1.00	2.569	2.57	78.2	0.0	90.8
54.00		1.00	0.82	17.385	19.12	216.06	1.000	0.000	1.00	2.556	2.56	78.2	0.0	90.3
55.00		1.00	0.83	17.477	19.22	215.49	1.000	0.000	1.00	2.542	2.54	78.2	0.0	89.8
56.00		1.00	0.83	17.568	19.32	214.90	1.000	0.000	1.00	2.528	2.53	78.2	0.0	89.4
57.00		1.00	0.83	17.658	19.42	214.29	1.000	0.000	1.00	2.515	2.51	78.1	0.0	88.9
58.00		1.00	0.84	17.747	19.52	213.68	1.000	0.000	1.00	2.501	2.50	78.1	0.0	88.4
59.00		1.00	0.84	17.835	19.61	213.05	1.000	0.000	1.00	2.488	2.49	78.1	0.0	87.9
60.00		1.00	0.85	17.921	19.71	212.40	1.000	0.000	1.00	2.474	2.47	78.0	0.0	87.4
61.00		1.00	0.85	18.007	19.80	211.75	1.000	0.000	1.00	2.461	2.46	78.0	0.0	86.9
62.00		1.00	0.86	18.091	19.90	211.08	1.000	0.000	1.00	2.447	2.45	77.9	0.0	86.5
63.00		1.00	0.86	18.175	19.99	210.39	1.000	0.000	1.00	2.434	2.43	77.8	0.0	86.0
64.00		1.00	0.86	18.257	20.08	209.70	1.000	0.000	1.00	2.420	2.42	77.7	0.0	85.5
65.00		1.00	0.87	18.339	20.17	208.99	1.000	0.000	1.00	2.407	2.41	77.6	0.0	85.0
66.00		1.00	0.87	18.420	20.26	208.28	1.000	0.000	1.00	2.393	2.39	77.5	0.0	84.5
67.00		1.00	0.88	18.500	20.35	207.55	1.000	0.000	1.00	2.380	2.38	77.4	0.0	84.0
68.00		1.00	0.88	18.579	20.43	206.81	1.000	0.000	1.00	2.366	2.37	77.3	0.0	83.6
69.00		1.00	0.88	18.657	20.52	206.06	1.000	0.000	1.00	2.353	2.35	77.2	0.0	83.1
70.00		1.00	0.89	18.734	20.60	205.30	1.000	0.000	1.00	2.339	2.34	38.6	0.0	82.6
70.00	Bot - Section 3	1.00	0.89	18.773	20.65	204.92	1.000	0.000	0.00	0.001	0.00	39.2	0.0	0.0
71.00		1.00	0.89	18.811	20.69	204.53	1.000	0.000	1.00	2.368	2.37	78.3	0.0	149.1
72.00		1.00	0.89	18.887	20.77	203.75	1.000	0.000	1.00	2.355	2.36	78.2	0.0	148.3
73.00		1.00	0.90	18.962	20.85	202.96	1.000	0.000	1.00	2.342	2.34	58.6	0.0	147.4
73.50	Top - Section 2	1.00	0.90	19.018	20.92	202.37	1.000	0.000	0.50	1.167	1.17	39.0	0.0	73.4
74.00		1.00	0.90	19.055	20.96	205.78	1.000	0.000	0.50	1.162	1.16	58.4	0.0	32.9
75.00		1.00	0.90	19.110	21.02	205.18	1.000	0.000	1.00	2.315	2.31	77.8	0.0	65.5
76.00		1.00	0.91	19.183	21.10	204.37	1.000	0.000	1.00	2.301	2.30	77.6	0.0	65.1
77.00		1.00	0.91	19.255	21.18	203.55	1.000	0.000	1.00	2.288	2.29	77.4	0.0	64.8
78.00		1.00	0.91	19.327	21.25	202.73	1.000	0.000	1.00	2.274	2.27	77.3	0.0	64.4
79.00		1.00	0.92	19.398	21.33	201.89	1.000	0.000	1.00	2.261	2.26	77.1	0.0	64.0
80.00		1.00	0.92	19.468	21.41	201.05	1.000	0.000	1.00	2.247	2.25	76.9	0.0	63.6
81.00		1.00	0.92	19.538	21.49	200.19	1.000	0.000	1.00	2.234	2.23	76.7	0.0	63.2
82.00		1.00	0.93	19.607	21.56	199.33	1.000	0.000	1.00	2.220	2.22	76.5	0.0	62.8
83.00		1.00	0.93	19.675	21.64	198.47	1.000	0.000	1.00	2.207	2.21	76.3	0.0	62.4
84.00		1.00	0.93	19.743	21.71	197.59	1.000	0.000	1.00	2.193	2.19	76.1	0.0	62.1
85.00		1.00	0.94	19.810	21.79	196.71	1.000	0.000	1.00	2.180	2.18	75.9	0.0	61.7
86.00		1.00	0.94	19.877	21.86	195.81	1.000	0.000	1.00	2.166	2.17	75.7	0.0	61.3
87.00		1.00	0.94	19.943	21.93	194.92	1.000	0.000	1.00	2.152	2.15	75.4	0.0	60.9
88.00		1.00	0.95	20.009	22.01	194.01	1.000	0.000	1.00	2.139	2.14	75.2	0.0	60.5
89.00		1.00	0.95	20.074	22.08	193.10	1.000	0.000	1.00	2.125	2.13	75.0	0.0	60.1
90.00		1.00	0.95	20.138	22.15	192.18	1.000	0.000	1.00	2.112	2.11	74.7	0.0	59.7
91.00		1.00	0.96	20.202	22.22	191.25	1.000	0.000	1.00	2.098	2.10	74.5	0.0	59.3
92.00		1.00	0.96	20.266	22.29	190.32	1.000	0.000	1.00	2.085	2.08	74.2	0.0	59.0
93.00		1.00	0.96	20.329	22.36	189.38	1.000	0.000	1.00	2.071	2.07	74.0	0.0	58.6
94.00		1.00	0.96	20.391	22.43	188.43	1.000	0.000	1.00	2.058	2.06	73.7	0.0	58.2
95.00		1.00	0.97	20.454	22.49	187.48	1.000	0.000	1.00	2.044	2.04	73.5	0.0	57.8
96.00		1.00	0.97	20.515	22.56	186.52	1.000	0.000	1.00	2.031	2.03	73.2	0.0	57.4
97.00		1.00	0.97	20.576	22.63	185.55	1.000	0.000	1.00	2.017	2.02	72.9	0.0	57.0
98.00		1.00	0.98	20.637	22.70	184.58	1.000	0.000	1.00	2.004	2.00	72.6	0.0	56.6
99.00		1.00	0.98	20.697	22.76	183.60	1.000	0.000	1.00	1.990	1.99	72.4	0.0	56.3
100.0		1.00	0.98	20.757	22.83	182.62	1.000	0.000	1.00	1.977	1.98	72.1	0.0	55.9
101.0		1.00	0.99	20.816	22.89	181.63	1.000	0.000	1.00	1.963	1.96	71.8	0.0	55.5
102.0		1.00	0.99	20.875	22.96	180.63	1.000	0.000	1.00	1.950	1.95	71.5	0.0	55.1

Load Case: 0.9D + 1.6W — 93 mph with No Ice (Reduced DL) — 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.00

103.0		1.00	0.99	20.934	23.02	179.63	1.000	0.000	1.00	1.936	1.94	71.2	0.0	54.7
104.0		1.00	0.99	20.992	23.09	178.62	1.000	0.000	1.00	1.923	1.92	70.9	0.0	54.3
105.0		1.00	1.00	21.050	23.15	177.61	1.000	0.000	1.00	1.909	1.91	70.6	0.0	53.9
106.0		1.00	1.00	21.107	23.21	176.59	1.000	0.000	1.00	1.896	1.90	70.3	0.0	53.6
107.0		1.00	1.00	21.164	23.28	175.57	1.000	0.000	1.00	1.882	1.88	69.9	0.0	53.2
108.0		1.00	1.00	21.221	23.34	174.54	1.000	0.000	1.00	1.869	1.87	69.6	0.0	52.8
109.0		1.00	1.01	21.277	23.40	173.51	1.000	0.000	1.00	1.855	1.86	69.3	0.0	52.4
110.0		1.00	1.01	21.333	23.46	172.47	1.000	0.000	1.00	1.842	1.84	34.6	0.0	52.0
110.0	Top - Section 3	1.00	1.01	21.361	23.49	171.95	1.000	0.000	0.00	0.001	0.00	34.4	0.0	0.0
111.0		1.00	1.01	21.388	23.52	171.43	1.000	0.000	1.00	1.827	1.83	68.6	0.0	38.8
112.0		1.00	1.01	21.443	23.58	170.38	1.000	0.000	1.00	1.815	1.81	68.3	0.0	38.5
113.0		1.00	1.02	21.498	23.64	169.32	1.000	0.000	1.00	1.801	1.80	68.0	0.0	38.3
114.0		1.00	1.02	21.553	23.70	168.27	1.000	0.000	1.00	1.787	1.79	67.6	0.0	38.0
115.0		1.00	1.02	21.607	23.76	167.20	1.000	0.000	1.00	1.774	1.77	67.3	0.0	37.7
116.0		1.00	1.03	21.661	23.82	166.13	1.000	0.000	1.00	1.760	1.76	66.9	0.0	37.4
117.0		1.00	1.03	21.714	23.88	165.06	1.000	0.000	1.00	1.747	1.75	66.6	0.0	37.1
118.0		1.00	1.03	21.767	23.94	163.98	1.000	0.000	1.00	1.733	1.73	66.2	0.0	36.8
119.0		1.00	1.03	21.820	24.00	162.90	1.000	0.000	1.00	1.720	1.72	65.9	0.0	36.5
120.0		1.00	1.04	21.872	24.05	161.82	1.000	0.000	1.00	1.706	1.71	65.5	0.0	36.2
121.0		1.00	1.04	21.924	24.11	160.72	1.000	0.000	1.00	1.693	1.69	65.1	0.0	35.9
122.0		1.00	1.04	21.976	24.17	159.63	1.000	0.000	1.00	1.679	1.68	64.8	0.0	35.6
123.0	Appertunance(s)	1.00	1.04	22.028	24.23	158.53	1.000	0.000	1.00	1.666	1.67	64.4	0.0	35.4
124.0		1.00	1.05	22.079	24.28	157.43	1.000	0.000	1.00	1.652	1.65	64.0	0.0	35.1
125.0		1.00	1.05	22.130	24.34	156.32	1.000	0.000	1.00	1.639	1.64	63.6	0.0	34.8
126.0		1.00	1.05	22.181	24.39	155.21	1.000	0.000	1.00	1.625	1.63	63.3	0.0	34.5
127.0		1.00	1.05	22.231	24.45	154.09	1.000	0.000	1.00	1.612	1.61	62.9	0.0	34.2
128.0		1.00	1.05	22.281	24.50	152.97	1.000	0.000	1.00	1.598	1.60	62.5	0.0	33.9
129.0		1.00	1.06	22.331	24.56	151.84	1.000	0.000	1.00	1.585	1.58	62.1	0.0	33.6
130.0		1.00	1.06	22.380	24.61	150.72	1.000	0.000	1.00	1.571	1.57	61.7	0.0	33.3
131.0		1.00	1.06	22.430	24.67	149.58	1.000	0.000	1.00	1.558	1.56	61.3	0.0	33.0
132.0		1.00	1.06	22.478	24.72	148.45	1.000	0.000	1.00	1.544	1.54	60.9	0.0	32.7
133.0		1.00	1.07	22.527	24.78	147.31	1.000	0.000	1.00	1.531	1.53	60.5	0.0	32.5
134.0	Appertunance(s)	1.00	1.07	22.576	24.83	146.16	1.000	0.000	1.00	1.517	1.52	60.1	0.0	32.2
135.0		1.00	1.07	22.624	24.88	145.01	1.000	0.000	1.00	1.504	1.50	59.7	0.0	31.9
136.0		1.00	1.07	22.672	24.93	143.86	1.000	0.000	1.00	1.490	1.49	59.2	0.0	31.6
137.0		1.00	1.08	22.719	24.99	142.71	1.000	0.000	1.00	1.477	1.48	58.8	0.0	31.3
138.0		1.00	1.08	22.767	25.04	141.55	1.000	0.000	1.00	1.463	1.46	58.4	0.0	31.0
139.0		1.00	1.08	22.814	25.09	140.38	1.000	0.000	1.00	1.449	1.45	58.0	0.0	30.7
140.0		1.00	1.08	22.861	25.14	139.22	1.000	0.000	1.00	1.436	1.44	57.6	0.0	30.4
141.0	Appertunance(s)	1.00	1.08	22.908	25.19	138.05	1.000	0.000	1.00	1.422	1.42	57.1	0.0	30.1
142.0		1.00	1.09	22.954	25.25	136.87	1.000	0.000	1.00	1.409	1.41	56.7	0.0	29.8
143.0		1.00	1.09	23.000	25.30	135.70	1.000	0.000	1.00	1.395	1.40	56.3	0.0	29.6
144.0		1.00	1.09	23.046	25.35	134.52	1.000	0.000	1.00	1.382	1.38	55.8	0.0	29.3
145.0		1.00	1.09	23.092	25.40	133.33	1.000	0.000	1.00	1.368	1.37	55.4	0.0	29.0
146.0		1.00	1.10	23.138	25.45	132.15	1.000	0.000	1.00	1.355	1.35	55.0	0.0	28.7
147.0		1.00	1.10	23.183	25.50	130.95	1.000	0.000	1.00	1.341	1.34	54.5	0.0	28.4
148.0		1.00	1.10	23.228	25.55	129.76	1.000	0.000	1.00	1.328	1.33	54.1	0.0	28.1
149.0		1.00	1.10	23.273	25.60	128.56	1.000	0.000	1.00	1.314	1.31	53.6	0.0	27.8
150.0	Appertunance(s)	1.00	1.10	23.318	25.64	127.36	1.000	0.000	1.00	1.301	1.30	26.7	0.0	27.5
							Totals:		150.00			10,877.0	0.0	12,034.7

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:17 PM

Customer: AT&T Mobility

Load Case: 0.9D + 1.6W 93 mph with No Ice (Reduced DL) 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	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		41.7	0.0					0.0	0.0	41.7	0.0	0.0	0.0
1.00		83.2	136.6					17.3	97.6	100.5	234.1	0.0	0.0
2.00		82.9	136.0					17.3	97.6	100.1	233.6	0.0	0.0
3.00		82.5	135.4					17.3	97.6	99.8	233.0	0.0	0.0
4.00		82.2	134.8					17.3	97.6	99.4	232.4	0.0	0.0
5.00		81.8	134.2					17.3	97.6	99.1	231.8	0.0	0.0
6.00		81.5	133.7					17.3	97.6	98.7	231.2	0.0	0.0
7.00		81.1	133.1					17.3	97.6	98.4	230.7	0.0	0.0
8.00		60.6	132.5					17.3	97.6	77.9	230.1	0.0	0.0
8.50	Reinf. Top	40.3	66.0					8.6	48.8	48.9	114.8	0.0	0.0
9.00		60.2	65.9					8.6	18.7	68.9	84.6	0.0	0.0
10.00	Appertunance(s)	80.1	131.3	523.2	0.0	0.0	113.4	17.3	37.5	620.6	282.2	0.0	0.0
11.00		79.7	130.8					17.3	37.4	97.0	168.2	0.0	0.0
12.00		79.4	130.2					17.3	37.4	96.6	167.6	0.0	0.0
13.00		79.0	129.6					17.3	37.4	96.3	167.0	0.0	0.0
14.00		78.7	129.0					17.3	37.4	95.9	166.5	0.0	0.0
15.00		78.3	128.4					17.3	37.4	95.6	165.9	0.0	0.0
16.00		78.0	127.9					8.6	37.4	86.6	165.3	0.0	0.0
17.00		77.6	127.3					0.0	37.4	77.6	164.7	0.0	0.0
18.00		77.3	126.7					0.0	37.4	77.3	164.1	0.0	0.0
19.00		76.9	126.1					0.0	37.4	76.9	163.6	0.0	0.0
20.00		76.6	125.5					0.0	37.4	76.6	163.0	0.0	0.0
21.00		76.2	125.0					0.0	37.4	76.2	162.4	0.0	0.0
22.00		75.9	124.4					0.0	37.4	75.9	161.8	0.0	0.0
23.00		75.5	123.8					0.0	37.4	75.5	161.3	0.0	0.0
24.00		75.2	123.2					0.0	37.4	75.2	160.7	0.0	0.0
25.00		74.8	122.6					0.0	37.4	74.8	160.1	0.0	0.0
26.00		74.5	122.1					0.0	37.4	74.5	159.5	0.0	0.0
27.00		74.1	121.5					0.0	37.4	74.1	158.9	0.0	0.0
28.00		73.8	120.9					0.0	37.4	73.8	158.4	0.0	0.0
29.00		73.4	120.3					0.0	37.4	73.4	157.8	0.0	0.0
30.00		73.3	119.7					0.0	37.4	73.3	157.2	0.0	0.0
31.00		55.0	119.2					0.0	37.4	55.0	156.6	0.0	0.0
31.50	Bot - Section 2	37.2	59.4					0.0	18.7	37.2	78.1	0.0	0.0
32.00		56.4	109.6					0.0	18.7	56.4	128.3	0.0	0.0
33.00		75.5	218.5					0.0	37.4	75.5	255.9	0.0	0.0
34.00		75.8	217.4					0.0	37.4	75.8	254.9	0.0	0.0
35.00		63.3	216.3					0.0	37.4	63.3	253.8	0.0	0.0
35.67	Top - Section 1	38.1	143.7					0.0	25.0	38.1	168.7	0.0	0.0
36.00		50.9	32.9					0.0	12.5	50.9	45.4	0.0	0.0
37.00		76.5	98.5					0.0	37.4	76.5	136.0	0.0	0.0
38.00		76.7	98.0					0.0	37.4	76.7	135.5	0.0	0.0
39.00		76.9	97.6					0.0	37.4	76.9	135.0	0.0	0.0
40.00		77.1	97.1					0.0	37.4	77.1	134.5	0.0	0.0
41.00		77.3	96.6					0.0	37.4	77.3	134.0	0.0	0.0
42.00		77.4	96.1					0.0	37.4	77.4	133.6	0.0	0.0
43.00		77.5	95.6					0.0	37.4	77.5	133.1	0.0	0.0
44.00		77.7	95.1					0.0	37.4	77.7	132.6	0.0	0.0
45.00		77.8	94.7					0.0	37.4	77.8	132.1	0.0	0.0

Load Case: 0.9D + 1.6W 93 mph with No Ice (Reduced DL) 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

46.00		77.9	94.2	0.0	37.4	77.9	131.6	0.0	0.0
47.00		77.9	93.7	0.0	37.4	77.9	131.1	0.0	0.0
48.00		78.0	93.2	0.0	37.4	78.0	130.7	0.0	0.0
49.00		78.1	92.7	0.0	37.4	78.1	130.2	0.0	0.0
50.00		78.1	92.3	0.0	37.4	78.1	129.7	0.0	0.0
51.00		78.1	91.8	0.0	37.4	78.1	129.2	0.0	0.0
52.00		78.2	91.3	0.0	37.4	78.2	128.7	0.0	0.0
53.00		78.2	90.8	0.0	37.4	78.2	128.2	0.0	0.0
54.00		78.2	90.3	0.0	37.4	78.2	127.8	0.0	0.0
55.00		78.2	89.8	0.0	37.4	78.2	127.3	0.0	0.0
56.00		78.2	89.4	0.0	37.4	78.2	126.8	0.0	0.0
57.00		78.1	88.9	0.0	37.4	78.1	126.3	0.0	0.0
58.00		78.1	88.4	0.0	37.4	78.1	125.8	0.0	0.0
59.00		78.1	87.9	0.0	37.4	78.1	125.4	0.0	0.0
60.00		78.0	87.4	0.0	37.4	78.0	124.9	0.0	0.0
61.00		78.0	86.9	0.0	37.4	78.0	124.4	0.0	0.0
62.00		77.9	86.5	0.0	37.4	77.9	123.9	0.0	0.0
63.00		77.8	86.0	0.0	37.4	77.8	123.4	0.0	0.0
64.00		77.7	85.5	0.0	37.4	77.7	122.9	0.0	0.0
65.00		77.6	85.0	0.0	37.4	77.6	122.5	0.0	0.0
66.00		77.5	84.5	0.0	37.4	77.5	122.0	0.0	0.0
67.00		77.4	84.0	0.0	37.4	77.4	121.5	0.0	0.0
68.00		77.3	83.6	0.0	37.4	77.3	121.0	0.0	0.0
69.00		77.2	83.1	0.0	37.4	77.2	120.5	0.0	0.0
70.00		38.6	82.6	0.0	37.4	38.6	120.0	0.0	0.0
70.00	Bot - Section 3	39.2	0.0	0.0	0.0	39.2	0.0	0.0	0.0
71.00		78.3	149.1	0.0	37.4	78.3	186.6	0.0	0.0
72.00		78.2	148.3	0.0	37.4	78.2	185.8	0.0	0.0
73.00		58.6	147.4	0.0	37.4	58.6	184.9	0.0	0.0
73.50	Top - Section 2	39.0	73.4	0.0	18.7	39.0	92.2	0.0	0.0
74.00		58.4	32.9	0.0	18.7	58.4	51.6	0.0	0.0
75.00		77.8	65.5	0.0	37.4	77.8	103.0	0.0	0.0
76.00		77.6	65.1	0.0	37.4	77.6	102.6	0.0	0.0
77.00		77.4	64.8	0.0	37.4	77.4	102.2	0.0	0.0
78.00		77.3	64.4	0.0	37.4	77.3	101.8	0.0	0.0
79.00		77.1	64.0	0.0	37.4	77.1	101.4	0.0	0.0
80.00		76.9	63.6	0.0	37.4	76.9	101.0	0.0	0.0
81.00		76.7	63.2	0.0	37.4	76.7	100.7	0.0	0.0
82.00		76.5	62.8	0.0	37.4	76.5	100.3	0.0	0.0
83.00		76.3	62.4	0.0	37.4	76.3	99.9	0.0	0.0
84.00		76.1	62.1	0.0	37.4	76.1	99.5	0.0	0.0
85.00		75.9	61.7	0.0	37.4	75.9	99.1	0.0	0.0
86.00		75.7	61.3	0.0	37.4	75.7	98.7	0.0	0.0
87.00		75.4	60.9	0.0	37.4	75.4	98.3	0.0	0.0
88.00		75.2	60.5	0.0	37.4	75.2	98.0	0.0	0.0
89.00		75.0	60.1	0.0	37.4	75.0	97.6	0.0	0.0
90.00		74.7	59.7	0.0	37.4	74.7	97.2	0.0	0.0
91.00		74.5	59.3	0.0	37.4	74.5	96.8	0.0	0.0
92.00		74.2	59.0	0.0	37.4	74.2	96.4	0.0	0.0
93.00		74.0	58.6	0.0	37.4	74.0	96.0	0.0	0.0
94.00		73.7	58.2	0.0	37.4	73.7	95.6	0.0	0.0
95.00		73.5	57.8	0.0	37.4	73.5	95.2	0.0	0.0
96.00		73.2	57.4	0.0	37.4	73.2	94.9	0.0	0.0
97.00		72.9	57.0	0.0	37.4	72.9	94.5	0.0	0.0
98.00		72.6	56.6	0.0	37.4	72.6	94.1	0.0	0.0
99.00		72.4	56.3	0.0	37.4	72.4	93.7	0.0	0.0
100.00		72.1	55.9	0.0	37.4	72.1	93.3	0.0	0.0

Load Case: 0.9D + 1.6W 93 mph with No Ice (Reduced DL) 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

101.00		71.8	55.5					0.0	37.4	71.8	92.9	0.0	0.0
102.00		71.5	55.1					0.0	37.4	71.5	92.5	0.0	0.0
103.00		71.2	54.7					0.0	37.4	71.2	92.2	0.0	0.0
104.00		70.9	54.3					0.0	37.4	70.9	91.8	0.0	0.0
105.00		70.6	53.9					0.0	37.4	70.6	91.4	0.0	0.0
106.00		70.3	53.6					0.0	37.4	70.3	91.0	0.0	0.0
107.00		69.9	53.2					0.0	37.4	69.9	90.6	0.0	0.0
108.00		69.6	52.8					0.0	37.4	69.6	90.2	0.0	0.0
109.00		69.3	52.4					0.0	37.4	69.3	89.8	0.0	0.0
110.00		34.6	52.0					0.0	37.4	34.6	89.5	0.0	0.0
110.00	Top - Section 3	34.4	0.0					0.0	0.0	34.4	0.0	0.0	0.0
111.00		68.6	38.8					0.0	37.4	68.6	76.3	0.0	0.0
112.00		68.3	38.5					0.0	37.4	68.3	76.0	0.0	0.0
113.00		68.0	38.3					0.0	37.4	68.0	75.7	0.0	0.0
114.00		67.6	38.0					0.0	37.4	67.6	75.4	0.0	0.0
115.00		67.3	37.7					0.0	37.4	67.3	75.1	0.0	0.0
116.00		66.9	37.4					0.0	37.4	66.9	74.8	0.0	0.0
117.00		66.6	37.1					0.0	37.4	66.6	74.5	0.0	0.0
118.00		66.2	36.8					0.0	37.4	66.2	74.2	0.0	0.0
119.00		65.9	36.5					0.0	37.4	65.9	74.0	0.0	0.0
120.00		65.5	36.2					0.0	37.4	65.5	73.7	0.0	0.0
121.00		65.1	35.9					0.0	37.4	65.1	73.4	0.0	0.0
122.00		64.8	35.6					0.0	37.4	64.8	73.1	0.0	0.0
123.00	Appertunance(s)	64.4	35.4	591.9	0.0	0.0	118.1	0.0	37.4	656.3	190.9	0.0	0.0
124.00		64.0	35.1					0.0	37.1	64.0	72.2	0.0	0.0
125.00		63.6	34.8					0.0	37.1	63.6	71.9	0.0	0.0
126.00		63.3	34.5					0.0	37.1	63.3	71.6	0.0	0.0
127.00		62.9	34.2					0.0	37.1	62.9	71.3	0.0	0.0
128.00		62.5	33.9					0.0	37.1	62.5	71.1	0.0	0.0
129.00		62.1	33.6					0.0	37.1	62.1	70.8	0.0	0.0
130.00		61.7	33.3					0.0	37.1	61.7	70.5	0.0	0.0
131.00		61.3	33.0					0.0	37.1	61.3	70.2	0.0	0.0
132.00		60.9	32.7					0.0	37.1	60.9	69.9	0.0	0.0
133.00		60.5	32.5					0.0	37.1	60.5	69.6	0.0	0.0
134.00	Appertunance(s)	60.1	32.2	1,481.8	0.0	0.0	1,525.8	0.0	37.1	1,541.9	1,595.1	0.0	0.0
135.00		59.7	31.9					0.0	28.3	59.7	60.2	0.0	0.0
136.00		59.2	31.6					0.0	28.3	59.2	59.9	0.0	0.0
137.00		58.8	31.3					0.0	28.3	58.8	59.6	0.0	0.0
138.00		58.4	31.0					0.0	28.3	58.4	59.3	0.0	0.0
139.00		58.0	30.7					0.0	28.3	58.0	59.0	0.0	0.0
140.00		57.6	30.4					0.0	28.3	57.6	58.7	0.0	0.0
141.00	Appertunance(s)	57.1	30.1	425.7	0.0	0.0	71.3	0.0	28.3	482.8	129.7	0.0	0.0
142.00		56.7	29.8					0.0	23.9	56.7	53.7	0.0	0.0
143.00		56.3	29.6					0.0	23.9	56.3	53.4	0.0	0.0
144.00		55.8	29.3					0.0	23.9	55.8	53.1	0.0	0.0
145.00		55.4	29.0					0.0	23.9	55.4	52.8	0.0	0.0
146.00		55.0	28.7					0.0	23.9	55.0	52.6	0.0	0.0
147.00		54.5	28.4					0.0	23.9	54.5	52.3	0.0	0.0
148.00		54.1	28.1					0.0	23.9	54.1	52.0	0.0	0.0
149.00		53.6	27.8					0.0	23.9	53.6	51.7	0.0	0.0
150.00	Appertunance(s)	26.7	27.5	4,341.0	0.0	5,010.8	2,644.6	0.0	23.9	4,367.7	2,696.0	0.0	0.0
								Totals:		18,508.5	22,446.6	0.00	0.00

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:17 PM

Customer: AT&T Mobility

Load Case: 0.9D + 1.6W 93 mph with No Ice (Reduced DL) 39 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	-22.44	-18.47	0.00	-1,882.12	0.00	1,882.12	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.489
1.00	-22.19	-18.39	0.00	-1,863.64	0.00	1,863.64	3,148.69	1,574.34	4,778.83	2,360.09	0.00	-0.04	0.487
2.00	-21.94	-18.30	0.00	-1,845.26	0.00	1,845.26	3,140.16	1,570.08	4,745.43	2,343.59	0.02	-0.08	0.484
3.00	-21.70	-18.22	0.00	-1,826.95	0.00	1,826.95	3,131.60	1,565.80	4,712.07	2,327.11	0.04	-0.13	0.482
4.00	-21.45	-18.13	0.00	-1,808.74	0.00	1,808.74	3,123.00	1,561.50	4,678.76	2,310.67	0.07	-0.17	0.480
5.00	-21.21	-18.05	0.00	-1,790.60	0.00	1,790.60	3,114.35	1,557.18	4,645.51	2,294.24	0.11	-0.21	0.477
6.00	-20.96	-17.97	0.00	-1,772.55	0.00	1,772.55	3,105.66	1,552.83	4,612.30	2,277.84	0.16	-0.25	0.475
7.00	-20.72	-17.88	0.00	-1,754.59	0.00	1,754.59	3,096.94	1,548.47	4,579.15	2,261.47	0.22	-0.29	0.472
8.00	-20.48	-17.81	0.00	-1,736.71	0.00	1,736.71	3,088.17	1,544.08	4,546.04	2,245.12	0.28	-0.33	0.470
8.50	-20.36	-17.77	0.00	-1,727.80	0.00	1,727.80	3,083.76	1,541.88	4,529.51	2,236.96	0.32	-0.36	0.468
8.50	-20.36	-17.77	0.00	-1,727.80	0.00	1,727.80	3,083.76	1,541.88	4,529.51	2,236.96	0.32	-0.36	0.779
9.00	-20.26	-17.72	0.00	-1,718.91	0.00	1,718.91	3,079.35	1,539.68	4,513.00	2,228.80	0.36	-0.38	0.778
10.00	-19.96	-17.12	0.00	-1,701.20	0.00	1,701.20	3,070.50	1,535.25	4,480.00	2,212.50	0.44	-0.45	0.776
11.00	-19.78	-17.05	0.00	-1,684.08	0.00	1,684.08	3,061.60	1,530.80	4,447.06	2,196.24	0.55	-0.52	0.773
12.00	-19.59	-16.97	0.00	-1,667.03	0.00	1,667.03	3,052.67	1,526.33	4,414.18	2,180.00	0.66	-0.59	0.771
13.00	-19.40	-16.90	0.00	-1,650.06	0.00	1,650.06	3,043.69	1,521.84	4,381.36	2,163.79	0.79	-0.66	0.769
14.00	-19.22	-16.82	0.00	-1,633.16	0.00	1,633.16	3,034.67	1,517.33	4,348.59	2,147.60	0.94	-0.73	0.767
15.00	-19.03	-16.75	0.00	-1,616.34	0.00	1,616.34	3,025.61	1,512.80	4,315.88	2,131.45	1.10	-0.80	0.765
16.00	-18.84	-16.68	0.00	-1,599.59	0.00	1,599.59	3,016.50	1,508.25	4,283.22	2,115.32	1.27	-0.87	0.763
17.00	-18.66	-16.63	0.00	-1,582.91	0.00	1,582.91	3,007.36	1,503.68	4,250.63	2,099.23	1.46	-0.94	0.760
18.00	-18.48	-16.57	0.00	-1,566.28	0.00	1,566.28	2,998.17	1,499.09	4,218.10	2,083.16	1.67	-1.01	0.758
19.00	-18.29	-16.51	0.00	-1,549.71	0.00	1,549.71	2,988.94	1,494.47	4,185.63	2,067.13	1.89	-1.09	0.756
20.00	-18.11	-16.46	0.00	-1,533.20	0.00	1,533.20	2,979.67	1,489.84	4,153.23	2,051.12	2.12	-1.16	0.754
21.00	-17.93	-16.40	0.00	-1,516.74	0.00	1,516.74	2,970.36	1,485.18	4,120.88	2,035.15	2.38	-1.23	0.751
22.00	-17.75	-16.34	0.00	-1,500.34	0.00	1,500.34	2,961.01	1,480.50	4,088.60	2,019.21	2.64	-1.30	0.749
23.00	-17.57	-16.29	0.00	-1,484.00	0.00	1,484.00	2,951.61	1,475.81	4,056.39	2,003.30	2.92	-1.38	0.747
24.00	-17.39	-16.23	0.00	-1,467.72	0.00	1,467.72	2,942.18	1,471.09	4,024.24	1,987.42	3.22	-1.45	0.745
25.00	-17.21	-16.17	0.00	-1,451.49	0.00	1,451.49	2,932.70	1,466.35	3,992.16	1,971.58	3.53	-1.52	0.742
26.00	-17.03	-16.12	0.00	-1,435.32	0.00	1,435.32	2,923.18	1,461.59	3,960.14	1,955.76	3.86	-1.60	0.740
27.00	-16.86	-16.06	0.00	-1,419.20	0.00	1,419.20	2,913.62	1,456.81	3,928.19	1,939.99	4.20	-1.67	0.737
28.00	-16.68	-16.00	0.00	-1,403.14	0.00	1,403.14	2,903.09	1,451.54	3,895.07	1,923.63	4.56	-1.74	0.735
29.00	-16.50	-15.94	0.00	-1,387.14	0.00	1,387.14	2,889.14	1,444.57	3,857.52	1,905.08	4.93	-1.82	0.734
30.00	-16.33	-15.89	0.00	-1,371.20	0.00	1,371.20	2,875.19	1,437.60	3,820.15	1,886.63	5.32	-1.89	0.733
31.00	-16.16	-15.84	0.00	-1,355.31	0.00	1,355.31	2,861.24	1,430.62	3,782.96	1,868.26	5.72	-1.97	0.731
31.50	-16.07	-15.81	0.00	-1,347.38	0.00	1,347.38	2,854.27	1,427.13	3,764.43	1,859.11	5.93	-2.01	0.730
32.00	-15.93	-15.77	0.00	-1,339.48	0.00	1,339.48	2,847.30	1,423.65	3,745.96	1,849.99	6.15	-2.04	0.730
33.00	-15.65	-15.70	0.00	-1,323.71	0.00	1,323.71	2,833.35	1,416.67	3,709.14	1,831.80	6.58	-2.12	0.728
34.00	-15.38	-15.64	0.00	-1,308.01	0.00	1,308.01	2,819.40	1,409.70	3,672.50	1,813.71	7.03	-2.19	0.727
35.00	-15.11	-15.58	0.00	-1,292.37	0.00	1,292.37	2,805.45	1,402.73	3,636.04	1,795.70	7.50	-2.27	0.725
35.67	-14.94	-15.55	0.00	-1,281.98	0.00	1,281.98	2,248.05	1,124.03	2,973.86	1,468.68	7.82	-2.32	0.880
36.00	-14.88	-15.51	0.00	-1,276.80	0.00	1,276.80	2,245.81	1,122.91	2,966.02	1,464.81	7.98	-2.34	0.878
37.00	-14.72	-15.45	0.00	-1,261.29	0.00	1,261.29	2,239.07	1,119.53	2,942.52	1,453.20	8.48	-2.43	0.875
38.00	-14.57	-15.39	0.00	-1,245.84	0.00	1,245.84	2,232.28	1,116.14	2,919.04	1,441.60	9.00	-2.52	0.871
39.00	-14.41	-15.33	0.00	-1,230.45	0.00	1,230.45	2,225.45	1,112.72	2,895.60	1,430.03	9.54	-2.60	0.867
40.00	-14.26	-15.27	0.00	-1,215.13	0.00	1,215.13	2,218.58	1,109.29	2,872.19	1,418.47	10.09	-2.69	0.863
41.00	-14.11	-15.20	0.00	-1,199.86	0.00	1,199.86	2,211.66	1,105.83	2,848.82	1,406.93	10.66	-2.77	0.859
42.00	-13.95	-15.14	0.00	-1,184.66	0.00	1,184.66	2,204.71	1,102.35	2,825.49	1,395.40	11.25	-2.86	0.855
43.00	-13.80	-15.08	0.00	-1,169.52	0.00	1,169.52	2,197.71	1,098.85	2,802.19	1,383.90	11.86	-2.95	0.852
44.00	-13.65	-15.01	0.00	-1,154.44	0.00	1,154.44	2,190.67	1,095.33	2,778.94	1,372.41	12.49	-3.03	0.848
45.00	-13.50	-14.95	0.00	-1,139.43	0.00	1,139.43	2,183.59	1,091.79	2,755.72	1,360.95	13.13	-3.12	0.844
46.00	-13.35	-14.88	0.00	-1,124.48	0.00	1,124.48	2,176.47	1,088.23	2,732.54	1,349.50	13.80	-3.21	0.840

Load Case: 0.9D + 1.6W — 93 mph with No Ice (Reduced DL) — 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

47.00	-13.20	-14.82	0.00	-1,109.59	0.00	1,109.59	2,169.30	1,084.65	2,709.41	1,338.07	14.48	-3.30	0.836
48.00	-13.05	-14.75	0.00	-1,094.78	0.00	1,094.78	2,162.10	1,081.05	2,686.31	1,326.67	15.18	-3.38	0.831
49.00	-12.91	-14.69	0.00	-1,080.02	0.00	1,080.02	2,154.85	1,077.43	2,663.26	1,315.28	15.89	-3.47	0.827
50.00	-12.76	-14.62	0.00	-1,065.33	0.00	1,065.33	2,147.56	1,073.78	2,640.25	1,303.92	16.63	-3.56	0.823
51.00	-12.61	-14.56	0.00	-1,050.71	0.00	1,050.71	2,140.23	1,070.12	2,617.28	1,292.58	17.38	-3.65	0.819
52.00	-12.47	-14.49	0.00	-1,036.16	0.00	1,036.16	2,132.86	1,066.43	2,594.37	1,281.26	18.16	-3.73	0.815
53.00	-12.32	-14.42	0.00	-1,021.67	0.00	1,021.67	2,125.45	1,062.72	2,571.49	1,269.96	18.95	-3.82	0.810
54.00	-12.18	-14.35	0.00	-1,007.25	0.00	1,007.25	2,118.00	1,059.00	2,548.66	1,258.69	19.76	-3.91	0.806
55.00	-12.03	-14.28	0.00	-992.90	0.00	992.90	2,110.50	1,055.25	2,525.88	1,247.44	20.59	-4.00	0.802
56.00	-11.89	-14.22	0.00	-978.61	0.00	978.61	2,102.96	1,051.48	2,503.15	1,236.21	21.43	-4.09	0.797
57.00	-11.75	-14.15	0.00	-964.40	0.00	964.40	2,095.38	1,047.69	2,480.47	1,225.01	22.30	-4.18	0.793
58.00	-11.61	-14.08	0.00	-950.25	0.00	950.25	2,087.76	1,043.88	2,457.84	1,213.83	23.18	-4.27	0.789
59.00	-11.47	-14.01	0.00	-936.17	0.00	936.17	2,080.10	1,040.05	2,435.26	1,202.68	24.09	-4.36	0.784
60.00	-11.32	-13.94	0.00	-922.16	0.00	922.16	2,072.39	1,036.20	2,412.72	1,191.55	25.01	-4.45	0.780
61.00	-11.19	-13.87	0.00	-908.22	0.00	908.22	2,064.65	1,032.32	2,390.25	1,180.45	25.95	-4.54	0.775
62.00	-11.05	-13.80	0.00	-894.35	0.00	894.35	2,056.86	1,028.43	2,367.82	1,169.38	26.91	-4.62	0.770
63.00	-10.91	-13.73	0.00	-880.55	0.00	880.55	2,049.03	1,024.52	2,345.45	1,158.33	27.88	-4.71	0.766
64.00	-10.77	-13.66	0.00	-866.83	0.00	866.83	2,041.16	1,020.58	2,323.13	1,147.31	28.88	-4.80	0.761
65.00	-10.63	-13.59	0.00	-853.17	0.00	853.17	2,033.25	1,016.62	2,300.87	1,136.31	29.89	-4.89	0.756
66.00	-10.50	-13.52	0.00	-839.58	0.00	839.58	2,025.30	1,012.65	2,278.67	1,125.35	30.93	-4.98	0.751
67.00	-10.36	-13.44	0.00	-826.06	0.00	826.06	2,016.93	1,008.47	2,256.11	1,114.21	31.98	-5.07	0.747
68.00	-10.23	-13.37	0.00	-812.62	0.00	812.62	2,005.31	1,002.65	2,230.04	1,101.33	33.05	-5.17	0.743
69.00	-10.09	-13.30	0.00	-799.25	0.00	799.25	1,993.69	996.84	2,204.11	1,088.53	34.14	-5.26	0.739
70.00	-9.97	-13.26	0.00	-785.95	0.00	785.95	1,982.06	991.03	2,178.34	1,075.80	35.25	-5.35	0.736
70.00	-9.96	-13.23	0.00	-785.94	0.00	785.94	1,982.06	991.03	2,178.33	1,075.80	35.25	-5.35	0.736
71.00	-9.76	-13.15	0.00	-772.72	0.00	772.72	1,970.44	985.22	2,152.72	1,063.15	36.38	-5.44	0.732
72.00	-9.56	-13.07	0.00	-759.57	0.00	759.57	1,958.82	979.41	2,127.25	1,050.57	37.52	-5.53	0.728
73.00	-9.37	-13.00	0.00	-746.50	0.00	746.50	1,947.19	973.60	2,101.94	1,038.07	38.69	-5.62	0.724
73.50	-9.27	-12.96	0.00	-740.00	0.00	740.00	1,473.95	736.97	1,624.52	802.29	39.28	-5.66	0.929
74.00	-9.21	-12.91	0.00	-733.52	0.00	733.52	1,471.40	735.70	1,616.91	798.53	39.88	-5.71	0.925
75.00	-9.09	-12.84	0.00	-720.61	0.00	720.61	1,466.26	733.13	1,601.72	791.03	41.08	-5.81	0.917
76.00	-8.97	-12.77	0.00	-707.77	0.00	707.77	1,461.09	730.55	1,586.54	783.53	42.31	-5.92	0.910
77.00	-8.86	-12.70	0.00	-695.00	0.00	695.00	1,455.88	727.94	1,571.38	776.05	43.56	-6.03	0.902
78.00	-8.74	-12.63	0.00	-682.31	0.00	682.31	1,450.62	725.31	1,556.25	768.57	44.83	-6.13	0.894
79.00	-8.62	-12.56	0.00	-669.68	0.00	669.68	1,445.32	722.66	1,541.14	761.11	46.12	-6.24	0.886
80.00	-8.51	-12.48	0.00	-657.12	0.00	657.12	1,439.98	719.99	1,526.06	753.66	47.44	-6.35	0.878
81.00	-8.39	-12.41	0.00	-644.64	0.00	644.64	1,434.60	717.30	1,511.01	746.23	48.78	-6.45	0.870
82.00	-8.28	-12.34	0.00	-632.23	0.00	632.23	1,429.18	714.59	1,495.98	738.81	50.14	-6.56	0.862
83.00	-8.17	-12.27	0.00	-619.89	0.00	619.89	1,423.71	711.86	1,480.97	731.40	51.52	-6.66	0.854
84.00	-8.05	-12.19	0.00	-607.62	0.00	607.62	1,418.21	709.10	1,466.00	724.00	52.92	-6.77	0.845
85.00	-7.94	-12.12	0.00	-595.43	0.00	595.43	1,412.66	706.33	1,451.06	716.62	54.35	-6.87	0.837
86.00	-7.83	-12.05	0.00	-583.31	0.00	583.31	1,407.07	703.53	1,436.14	709.26	55.79	-6.98	0.828
87.00	-7.72	-11.98	0.00	-571.26	0.00	571.26	1,401.44	700.72	1,421.26	701.91	57.26	-7.08	0.820
88.00	-7.61	-11.90	0.00	-559.28	0.00	559.28	1,395.76	697.88	1,406.40	694.57	58.76	-7.19	0.811
89.00	-7.50	-11.83	0.00	-547.38	0.00	547.38	1,390.05	695.02	1,391.58	687.25	60.27	-7.29	0.802
90.00	-7.39	-11.76	0.00	-535.55	0.00	535.55	1,384.29	692.15	1,376.80	679.95	61.80	-7.40	0.793
91.00	-7.29	-11.69	0.00	-523.79	0.00	523.79	1,378.50	689.25	1,362.04	672.66	63.36	-7.50	0.784
92.00	-7.18	-11.61	0.00	-512.10	0.00	512.10	1,372.66	686.33	1,347.32	665.39	64.94	-7.61	0.775
93.00	-7.07	-11.54	0.00	-500.49	0.00	500.49	1,366.78	683.39	1,332.64	658.14	66.54	-7.71	0.766
94.00	-6.97	-11.47	0.00	-488.95	0.00	488.95	1,360.85	680.43	1,317.99	650.91	68.16	-7.81	0.757
95.00	-6.86	-11.39	0.00	-477.49	0.00	477.49	1,354.89	677.44	1,303.39	643.69	69.80	-7.92	0.747
96.00	-6.76	-11.32	0.00	-466.10	0.00	466.10	1,348.88	674.44	1,288.81	636.50	71.46	-8.02	0.738
97.00	-6.66	-11.24	0.00	-454.78	0.00	454.78	1,342.84	671.42	1,274.28	629.32	73.15	-8.12	0.728
98.00	-6.55	-11.17	0.00	-443.54	0.00	443.54	1,336.75	668.37	1,259.79	622.16	74.86	-8.22	0.718
99.00	-6.45	-11.10	0.00	-432.37	0.00	432.37	1,330.62	665.31	1,245.34	615.03	76.58	-8.32	0.708
100.00	-6.35	-11.02	0.00	-421.27	0.00	421.27	1,324.45	662.22	1,230.93	607.91	78.33	-8.42	0.698
101.00	-6.25	-10.95	0.00	-410.25	0.00	410.25	1,318.23	659.12	1,216.56	600.81	80.10	-8.52	0.688

Load Case: 0.9D + 1.6W — 93 mph with No Ice (Reduced DL) — 39 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.00

102.00	-6.15	-10.88	0.00	-399.30	0.00	399.30	1,311.98	655.99	1,202.23	593.74	81.89	-8.62	0.677
103.00	-6.05	-10.80	0.00	-388.42	0.00	388.42	1,305.68	652.84	1,187.95	586.68	83.70	-8.72	0.667
104.00	-5.95	-10.73	0.00	-377.62	0.00	377.62	1,299.34	649.67	1,173.71	579.65	85.53	-8.82	0.656
105.00	-5.86	-10.65	0.00	-366.89	0.00	366.89	1,292.96	646.48	1,159.52	572.64	87.38	-8.92	0.645
106.00	-5.76	-10.58	0.00	-356.24	0.00	356.24	1,284.28	642.14	1,143.36	564.66	89.25	-9.01	0.636
107.00	-5.66	-10.51	0.00	-345.66	0.00	345.66	1,274.98	637.49	1,126.77	556.47	91.14	-9.11	0.626
108.00	-5.57	-10.43	0.00	-335.15	0.00	335.15	1,265.69	632.84	1,110.30	548.34	93.05	-9.20	0.616
109.00	-5.47	-10.36	0.00	-324.72	0.00	324.72	1,256.39	628.19	1,093.96	540.26	94.98	-9.30	0.606
110.00	-5.38	-10.31	0.00	-314.36	0.00	314.36	1,247.09	623.54	1,077.73	532.25	96.93	-9.39	0.595
110.00	-5.38	-10.29	0.00	-314.36	0.00	314.36	1,247.09	623.54	1,077.72	532.25	96.93	-9.39	0.595
110.00	-5.38	-10.29	0.00	-314.36	0.00	314.36	853.22	426.61	741.74	366.32	96.93	-9.39	0.865
111.00	-5.30	-10.21	0.00	-304.07	0.00	304.07	849.66	424.83	733.10	362.05	98.90	-9.48	0.847
112.00	-5.21	-10.15	0.00	-293.86	0.00	293.86	846.05	423.02	724.47	357.79	100.89	-9.60	0.828
113.00	-5.13	-10.08	0.00	-283.71	0.00	283.71	842.40	421.20	715.86	353.53	102.90	-9.72	0.809
114.00	-5.05	-10.01	0.00	-273.64	0.00	273.64	838.71	419.35	707.25	349.29	104.94	-9.84	0.790
115.00	-4.96	-9.94	0.00	-263.63	0.00	263.63	834.98	417.49	698.66	345.04	107.00	-9.96	0.771
116.00	-4.88	-9.87	0.00	-253.69	0.00	253.69	831.20	415.60	690.08	340.81	109.09	-10.07	0.751
117.00	-4.80	-9.80	0.00	-243.82	0.00	243.82	827.39	413.69	681.52	336.58	111.20	-10.18	0.731
118.00	-4.72	-9.73	0.00	-234.02	0.00	234.02	823.53	411.76	672.98	332.36	113.34	-10.29	0.710
119.00	-4.64	-9.66	0.00	-224.29	0.00	224.29	819.63	409.81	664.45	328.14	115.49	-10.40	0.690
120.00	-4.56	-9.59	0.00	-214.63	0.00	214.63	815.69	407.84	655.93	323.94	117.67	-10.51	0.669
121.00	-4.49	-9.52	0.00	-205.04	0.00	205.04	811.71	405.85	647.44	319.75	119.87	-10.61	0.647
122.00	-4.41	-9.45	0.00	-195.52	0.00	195.52	807.68	403.84	638.96	315.56	122.09	-10.71	0.626
123.00	-4.33	-8.78	0.00	-186.06	0.00	186.06	803.62	401.81	630.51	311.38	124.33	-10.81	0.603
124.00	-4.26	-8.71	0.00	-177.28	0.00	177.28	799.51	399.76	622.07	307.22	126.60	-10.91	0.583
125.00	-4.18	-8.64	0.00	-168.57	0.00	168.57	795.36	397.68	613.66	303.06	128.88	-11.01	0.562
126.00	-4.11	-8.57	0.00	-159.93	0.00	159.93	791.17	395.59	605.27	298.92	131.18	-11.10	0.541
127.00	-4.04	-8.50	0.00	-151.36	0.00	151.36	786.94	393.47	596.90	294.79	133.50	-11.19	0.519
128.00	-3.97	-8.43	0.00	-142.86	0.00	142.86	782.67	391.33	588.56	290.67	135.84	-11.28	0.497
129.00	-3.90	-8.37	0.00	-134.42	0.00	134.42	778.35	389.18	580.24	286.56	138.19	-11.36	0.475
130.00	-3.83	-8.30	0.00	-126.06	0.00	126.06	774.00	387.00	571.95	282.46	140.56	-11.44	0.452
131.00	-3.77	-8.23	0.00	-117.76	0.00	117.76	769.60	384.80	563.68	278.38	142.95	-11.52	0.428
132.00	-3.70	-8.16	0.00	-109.53	0.00	109.53	765.16	382.58	555.44	274.31	145.36	-11.59	0.405
133.00	-3.63	-8.09	0.00	-101.38	0.00	101.38	760.68	380.34	547.23	270.25	147.78	-11.66	0.380
134.00	-2.38	-6.26	0.00	-93.29	0.00	93.29	756.16	378.08	539.04	266.21	150.21	-11.73	0.354
135.00	-2.32	-6.19	0.00	-87.03	0.00	87.03	751.59	375.80	530.89	262.19	152.66	-11.80	0.335
136.00	-2.27	-6.12	0.00	-80.84	0.00	80.84	746.99	373.49	522.77	258.17	155.12	-11.86	0.316
137.00	-2.22	-6.06	0.00	-74.71	0.00	74.71	742.34	371.17	514.67	254.18	157.59	-11.91	0.297
138.00	-2.17	-5.99	0.00	-68.66	0.00	68.66	737.65	368.82	506.61	250.20	160.07	-11.97	0.278
139.00	-2.12	-5.92	0.00	-62.67	0.00	62.67	732.92	366.46	498.59	246.23	162.57	-12.02	0.258
140.00	-2.07	-5.85	0.00	-56.75	0.00	56.75	728.15	364.07	490.59	242.29	165.07	-12.07	0.237
141.00	-2.04	-5.36	0.00	-50.90	0.00	50.90	721.91	360.95	481.68	237.89	167.59	-12.12	0.217
142.00	-1.99	-5.29	0.00	-45.54	0.00	45.54	714.93	357.47	472.37	233.29	170.11	-12.16	0.198
143.00	-1.95	-5.23	0.00	-40.25	0.00	40.25	707.96	353.98	463.15	228.73	172.64	-12.20	0.179
144.00	-1.91	-5.16	0.00	-35.02	0.00	35.02	700.99	350.49	454.01	224.22	175.18	-12.23	0.159
145.00	-1.86	-5.10	0.00	-29.86	0.00	29.86	694.01	347.01	444.97	219.76	177.73	-12.26	0.139
146.00	-1.82	-5.03	0.00	-24.76	0.00	24.76	687.04	343.52	436.02	215.34	180.28	-12.29	0.118
147.00	-1.78	-4.97	0.00	-19.73	0.00	19.73	680.07	340.03	427.16	210.96	182.84	-12.31	0.096
148.00	-1.74	-4.91	0.00	-14.76	0.00	14.76	673.09	336.55	418.40	206.63	185.40	-12.33	0.074
149.00	-1.70	-4.84	0.00	-9.85	0.00	9.85	666.12	333.06	409.72	202.34	187.96	-12.34	0.051
150.00	0.00	-4.37	0.00	-5.01	0.00	5.01	659.14	329.57	401.13	198.10	190.53	-12.35	0.025

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:18 PM

Customer: AT&T Mobility

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.682	0.000	1.200	0.000	0.00	0.000	0.00	9.7	0.0	0.0
1.00		1.00	0.70	4.256	4.682	0.000	1.200	1.315	1.00	3.437	4.12	19.3	65.6	247.7
2.00		1.00	0.70	4.256	4.682	0.000	1.200	1.468	1.00	3.449	4.14	19.4	73.3	254.5
3.00		1.00	0.70	4.256	4.682	0.000	1.200	1.545	1.00	3.449	4.14	19.4	76.9	257.5
4.00		1.00	0.70	4.256	4.682	0.000	1.200	1.598	1.00	3.444	4.13	19.3	79.3	259.1
5.00		1.00	0.70	4.256	4.682	0.000	1.200	1.639	1.00	3.437	4.12	19.3	81.1	260.1
6.00		1.00	0.70	4.256	4.682	0.000	1.200	1.672	1.00	3.429	4.12	19.2	82.5	260.7
7.00		1.00	0.70	4.256	4.682	0.000	1.200	1.700	1.00	3.420	4.10	19.2	83.6	261.0
8.00		1.00	0.70	4.256	4.682	0.000	1.200	1.725	1.00	3.411	4.09	14.4	84.5	261.2
8.50	Reinf. Top	1.00	0.70	4.256	4.682	0.000	1.200	1.741	0.50	1.702	2.04	9.6	42.6	130.6
9.00		1.00	0.70	4.256	4.682	0.000	1.200	1.751	0.50	1.699	2.04	14.3	42.8	130.6
10.00	Appertunance(s)	1.00	0.70	4.256	4.682	0.000	1.200	1.766	1.00	3.391	4.07	19.0	85.9	261.0
11.00		1.00	0.70	4.256	4.682	0.000	1.200	1.784	1.00	3.380	4.06	19.0	86.4	260.8
12.00		1.00	0.70	4.256	4.682	0.000	1.200	1.800	1.00	3.369	4.04	18.9	86.9	260.5
13.00		1.00	0.70	4.256	4.682	0.000	1.200	1.815	1.00	3.358	4.03	18.8	87.3	260.1
14.00		1.00	0.70	4.256	4.682	0.000	1.200	1.829	1.00	3.347	4.02	18.8	87.6	259.6
15.00		1.00	0.70	4.256	4.682	0.000	1.200	1.842	1.00	3.336	4.00	18.7	87.9	259.2
16.00		1.00	0.70	4.256	4.682	0.000	1.200	1.854	1.00	3.324	3.99	18.6	88.1	258.6
17.00		1.00	0.70	4.256	4.682	0.000	1.200	1.866	1.00	3.313	3.98	18.6	88.3	258.1
18.00		1.00	0.70	4.256	4.682	0.000	1.200	1.877	1.00	3.301	3.96	18.5	88.5	257.4
19.00		1.00	0.70	4.256	4.682	0.000	1.200	1.888	1.00	3.289	3.95	18.4	88.6	256.8
20.00		1.00	0.70	4.256	4.682	0.000	1.200	1.898	1.00	3.278	3.93	18.4	88.8	256.1
21.00		1.00	0.70	4.256	4.682	0.000	1.200	1.907	1.00	3.266	3.92	18.3	88.8	255.4
22.00		1.00	0.70	4.256	4.682	0.000	1.200	1.916	1.00	3.254	3.90	18.2	88.9	254.7
23.00		1.00	0.70	4.256	4.682	0.000	1.200	1.925	1.00	3.242	3.89	18.2	88.9	254.0
24.00		1.00	0.70	4.256	4.682	0.000	1.200	1.933	1.00	3.229	3.88	18.1	88.9	253.2
25.00		1.00	0.70	4.256	4.682	0.000	1.200	1.941	1.00	3.217	3.86	18.0	88.9	252.5
26.00		1.00	0.70	4.256	4.682	0.000	1.200	1.949	1.00	3.205	3.85	18.0	88.9	251.7
27.00		1.00	0.70	4.256	4.682	0.000	1.200	1.957	1.00	3.193	3.83	17.9	88.9	250.9
28.00		1.00	0.70	4.256	4.682	0.000	1.200	1.964	1.00	3.180	3.82	17.8	88.8	250.0
29.00		1.00	0.70	4.256	4.682	0.000	1.200	1.971	1.00	3.168	3.80	17.8	88.8	249.2
30.00		1.00	0.70	4.256	4.682	0.000	1.200	1.978	1.00	3.156	3.79	17.7	88.7	248.3
31.00		1.00	0.70	4.280	4.708	0.000	1.200	1.984	1.00	3.143	3.77	13.3	88.6	247.5
31.50	Bot - Section 2	1.00	0.70	4.310	4.741	0.000	1.200	1.989	0.50	1.568	1.88	9.0	44.3	123.5
32.00		1.00	0.71	4.329	4.762	0.000	1.200	1.992	0.50	1.590	1.91	13.7	45.1	191.1
33.00		1.00	0.71	4.358	4.794	0.000	1.200	1.997	1.00	3.172	3.81	18.3	90.0	381.3
34.00		1.00	0.72	4.396	4.836	0.000	1.200	2.003	1.00	3.160	3.79	18.4	89.9	379.8
35.00		1.00	0.72	4.433	4.876	0.000	1.200	2.009	1.00	3.147	3.78	15.4	89.7	378.2
35.67	Top - Section 1	1.00	0.73	4.463	4.910	0.000	1.200	2.014	0.67	2.092	2.51	9.2	59.8	251.4
36.00		1.00	0.73	4.481	4.930	0.000	1.200	2.017	0.33	1.042	1.25	12.4	29.9	73.8
37.00		1.00	0.74	4.505	4.956	0.000	1.200	2.020	1.00	3.122	3.75	18.6	89.5	220.8
38.00		1.00	0.74	4.540	4.994	0.000	1.200	2.026	1.00	3.109	3.73	18.7	89.3	220.0
39.00		1.00	0.75	4.574	5.032	0.000	1.200	2.031	1.00	3.097	3.72	18.7	89.1	219.2
40.00		1.00	0.75	4.608	5.069	0.000	1.200	2.036	1.00	3.084	3.70	18.8	89.0	218.4
41.00		1.00	0.76	4.641	5.105	0.000	1.200	2.041	1.00	3.071	3.69	18.8	88.8	217.6
42.00		1.00	0.76	4.673	5.141	0.000	1.200	2.046	1.00	3.059	3.67	18.9	88.6	216.8
43.00		1.00	0.77	4.705	5.176	0.000	1.200	2.051	1.00	3.046	3.66	18.9	88.4	215.9
44.00		1.00	0.77	4.737	5.210	0.000	1.200	2.056	1.00	3.033	3.64	19.0	88.2	215.1
45.00		1.00	0.78	4.768	5.244	0.000	1.200	2.061	1.00	3.021	3.62	19.0	88.0	214.2
46.00		1.00	0.78	4.798	5.278	0.000	1.200	2.065	1.00	3.008	3.61	19.1	87.8	213.4
47.00		1.00	0.79	4.828	5.311	0.000	1.200	2.070	1.00	2.995	3.59	19.1	87.6	212.5

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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		1.00	0.79	4.857	5.343	0.000	1.200	2.074	1.00	2.982	3.58	19.1	87.4	211.6
49.00		1.00	0.80	4.886	5.375	0.000	1.200	2.079	1.00	2.970	3.56	19.2	87.1	210.8
50.00		1.00	0.80	4.915	5.406	0.000	1.200	2.083	1.00	2.957	3.55	19.2	86.9	209.9
51.00		1.00	0.81	4.943	5.437	0.000	1.200	2.087	1.00	2.944	3.53	19.2	86.7	209.0
52.00		1.00	0.81	4.971	5.468	0.000	1.200	2.091	1.00	2.931	3.52	19.2	86.4	208.1
53.00		1.00	0.82	4.998	5.498	0.000	1.200	2.095	1.00	2.918	3.50	19.3	86.2	207.2
54.00		1.00	0.82	5.025	5.528	0.000	1.200	2.099	1.00	2.905	3.49	19.3	85.9	206.3
55.00		1.00	0.83	5.052	5.557	0.000	1.200	2.103	1.00	2.892	3.47	19.3	85.6	205.4
56.00		1.00	0.83	5.078	5.586	0.000	1.200	2.107	1.00	2.880	3.46	19.3	85.4	204.5
57.00		1.00	0.83	5.104	5.615	0.000	1.200	2.110	1.00	2.867	3.44	19.3	85.1	203.6
58.00		1.00	0.84	5.130	5.643	0.000	1.200	2.114	1.00	2.854	3.42	19.3	84.9	202.7
59.00		1.00	0.84	5.155	5.671	0.000	1.200	2.118	1.00	2.841	3.41	19.3	84.6	201.8
60.00		1.00	0.85	5.180	5.698	0.000	1.200	2.121	1.00	2.828	3.39	19.3	84.3	200.9
61.00		1.00	0.85	5.205	5.725	0.000	1.200	2.125	1.00	2.815	3.38	19.3	84.0	199.9
62.00		1.00	0.86	5.229	5.752	0.000	1.200	2.128	1.00	2.802	3.36	19.3	83.7	199.0
63.00		1.00	0.86	5.253	5.779	0.000	1.200	2.132	1.00	2.789	3.35	19.3	83.4	198.1
64.00		1.00	0.86	5.277	5.805	0.000	1.200	2.135	1.00	2.776	3.33	19.3	83.2	197.1
65.00		1.00	0.87	5.301	5.831	0.000	1.200	2.139	1.00	2.763	3.32	19.3	82.9	196.2
66.00		1.00	0.87	5.324	5.857	0.000	1.200	2.142	1.00	2.750	3.30	19.3	82.6	195.3
67.00		1.00	0.88	5.347	5.882	0.000	1.200	2.145	1.00	2.737	3.28	19.3	82.3	194.3
68.00		1.00	0.88	5.370	5.907	0.000	1.200	2.148	1.00	2.724	3.27	19.3	82.0	193.4
69.00		1.00	0.88	5.393	5.932	0.000	1.200	2.152	1.00	2.711	3.25	19.3	81.6	192.4
70.00		1.00	0.89	5.415	5.957	0.000	1.200	2.155	1.00	2.698	3.24	9.6	81.3	191.5
70.00	Bot - Section 3	1.00	0.89	5.426	5.969	0.000	1.200	2.156	0.00	0.001	0.00	9.8	0.0	0.1
71.00		1.00	0.89	5.437	5.981	0.000	1.200	2.158	1.00	2.728	3.27	19.6	82.4	281.2
72.00		1.00	0.89	5.459	6.005	0.000	1.200	2.161	1.00	2.715	3.26	19.6	82.1	279.9
73.00		1.00	0.90	5.481	6.029	0.000	1.200	2.164	1.00	2.702	3.24	14.7	81.8	278.4
73.50	Top - Section 2	1.00	0.90	5.497	6.047	0.000	1.200	2.166	0.50	1.347	1.62	9.8	40.9	138.8
74.00		1.00	0.90	5.508	6.059	0.000	1.200	2.167	0.50	1.342	1.61	14.6	40.7	84.6
75.00		1.00	0.90	5.524	6.076	0.000	1.200	2.170	1.00	2.676	3.21	19.5	81.1	168.5
76.00		1.00	0.91	5.545	6.099	0.000	1.200	2.173	1.00	2.663	3.20	19.5	80.8	167.7
77.00		1.00	0.91	5.566	6.122	0.000	1.200	2.175	1.00	2.650	3.18	19.5	80.5	166.8
78.00		1.00	0.91	5.586	6.145	0.000	1.200	2.178	1.00	2.637	3.16	19.4	80.2	166.0
79.00		1.00	0.92	5.607	6.168	0.000	1.200	2.181	1.00	2.624	3.15	19.4	79.8	165.1
80.00		1.00	0.92	5.627	6.190	0.000	1.200	2.184	1.00	2.611	3.13	19.4	79.5	164.3
81.00		1.00	0.92	5.647	6.212	0.000	1.200	2.187	1.00	2.598	3.12	19.4	79.2	163.4
82.00		1.00	0.93	5.667	6.234	0.000	1.200	2.189	1.00	2.585	3.10	19.3	78.8	162.6
83.00		1.00	0.93	5.687	6.256	0.000	1.200	2.192	1.00	2.572	3.09	19.3	78.5	161.7
84.00		1.00	0.93	5.707	6.277	0.000	1.200	2.195	1.00	2.559	3.07	19.3	78.1	160.9
85.00		1.00	0.94	5.726	6.299	0.000	1.200	2.197	1.00	2.546	3.05	19.2	77.8	160.0
86.00		1.00	0.94	5.745	6.320	0.000	1.200	2.200	1.00	2.533	3.04	19.2	77.4	159.1
87.00		1.00	0.94	5.765	6.341	0.000	1.200	2.202	1.00	2.520	3.02	19.2	77.1	158.3
88.00		1.00	0.95	5.784	6.362	0.000	1.200	2.205	1.00	2.506	3.01	19.1	76.7	157.4
89.00		1.00	0.95	5.802	6.383	0.000	1.200	2.207	1.00	2.493	2.99	19.1	76.4	156.5
90.00		1.00	0.95	5.821	6.403	0.000	1.200	2.210	1.00	2.480	2.98	19.0	76.0	155.7
91.00		1.00	0.96	5.840	6.423	0.000	1.200	2.212	1.00	2.467	2.96	19.0	75.7	154.8
92.00		1.00	0.96	5.858	6.444	0.000	1.200	2.215	1.00	2.454	2.94	19.0	75.3	153.9
93.00		1.00	0.96	5.876	6.464	0.000	1.200	2.217	1.00	2.441	2.93	18.9	74.9	153.0
94.00		1.00	0.96	5.894	6.484	0.000	1.200	2.220	1.00	2.428	2.91	18.9	74.6	152.2
95.00		1.00	0.97	5.912	6.503	0.000	1.200	2.222	1.00	2.415	2.90	18.8	74.2	151.3
96.00		1.00	0.97	5.930	6.523	0.000	1.200	2.224	1.00	2.402	2.88	18.8	73.8	150.4
97.00		1.00	0.97	5.948	6.542	0.000	1.200	2.227	1.00	2.388	2.87	18.7	73.5	149.5
98.00		1.00	0.98	5.965	6.562	0.000	1.200	2.229	1.00	2.375	2.85	18.7	73.1	148.6
99.00		1.00	0.98	5.983	6.581	0.000	1.200	2.231	1.00	2.362	2.83	18.6	72.7	147.7
100.0		1.00	0.98	6.000	6.600	0.000	1.200	2.233	1.00	2.349	2.82	18.6	72.4	146.9
101.0		1.00	0.99	6.017	6.619	0.000	1.200	2.236	1.00	2.336	2.80	18.5	72.0	146.0
102.0		1.00	0.99	6.034	6.637	0.000	1.200	2.238	1.00	2.323	2.79	18.5	71.6	145.1

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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

103.0		1.00	0.99	6.051	6.656	0.000	1.200	2.240	1.00	2.310	2.77	18.4	71.2	144.2
104.0		1.00	0.99	6.068	6.675	0.000	1.200	2.242	1.00	2.296	2.76	18.4	70.8	143.3
105.0		1.00	1.00	6.084	6.693	0.000	1.200	2.244	1.00	2.283	2.74	18.3	70.5	142.4
106.0		1.00	1.00	6.101	6.711	0.000	1.200	2.246	1.00	2.270	2.72	18.3	70.1	141.5
107.0		1.00	1.00	6.118	6.729	0.000	1.200	2.249	1.00	2.257	2.71	18.2	69.7	140.6
108.0		1.00	1.00	6.134	6.747	0.000	1.200	2.251	1.00	2.244	2.69	18.1	69.3	139.7
109.0		1.00	1.01	6.150	6.765	0.000	1.200	2.253	1.00	2.231	2.68	18.1	68.9	138.8
110.0		1.00	1.01	6.166	6.783	0.000	1.200	2.255	1.00	2.217	2.66	9.0	68.5	137.9
110.0	Top - Section 3	1.00	1.01	6.174	6.792	0.000	1.200	2.256	0.00	0.001	0.00	9.0	0.0	0.0
111.0		1.00	1.01	6.182	6.801	0.000	1.200	2.257	1.00	2.203	2.64	18.0	68.1	119.9
112.0		1.00	1.01	6.198	6.818	0.000	1.200	2.259	1.00	2.191	2.63	17.9	67.8	119.1
113.0		1.00	1.02	6.214	6.835	0.000	1.200	2.261	1.00	2.178	2.61	17.8	67.4	118.4
114.0		1.00	1.02	6.230	6.853	0.000	1.200	2.263	1.00	2.165	2.60	17.8	67.0	117.6
115.0		1.00	1.02	6.245	6.870	0.000	1.200	2.265	1.00	2.151	2.58	17.7	66.6	116.8
116.0		1.00	1.03	6.261	6.887	0.000	1.200	2.267	1.00	2.138	2.57	17.6	66.2	116.0
117.0		1.00	1.03	6.276	6.904	0.000	1.200	2.269	1.00	2.125	2.55	17.6	65.8	115.2
118.0		1.00	1.03	6.292	6.921	0.000	1.200	2.271	1.00	2.112	2.53	17.5	65.4	114.4
119.0		1.00	1.03	6.307	6.938	0.000	1.200	2.273	1.00	2.099	2.52	17.4	65.0	113.7
120.0		1.00	1.04	6.322	6.954	0.000	1.200	2.275	1.00	2.085	2.50	17.4	64.6	112.9
121.0		1.00	1.04	6.337	6.971	0.000	1.200	2.277	1.00	2.072	2.49	17.3	64.2	112.1
122.0		1.00	1.04	6.352	6.987	0.000	1.200	2.278	1.00	2.059	2.47	17.2	63.8	111.3
123.0	Appertunance(s)	1.00	1.04	6.367	7.004	0.000	1.200	2.280	1.00	2.046	2.46	17.2	63.4	110.5
124.0		1.00	1.05	6.382	7.020	0.000	1.200	2.282	1.00	2.033	2.44	17.1	63.0	109.7
125.0		1.00	1.05	6.397	7.036	0.000	1.200	2.284	1.00	2.019	2.42	17.0	62.5	108.9
126.0		1.00	1.05	6.411	7.052	0.000	1.200	2.286	1.00	2.006	2.41	16.9	62.1	108.1
127.0		1.00	1.05	6.426	7.068	0.000	1.200	2.288	1.00	1.993	2.39	16.9	61.7	107.3
128.0		1.00	1.05	6.440	7.084	0.000	1.200	2.289	1.00	1.980	2.38	16.8	61.3	106.5
129.0		1.00	1.06	6.455	7.100	0.000	1.200	2.291	1.00	1.967	2.36	16.7	60.9	105.7
130.0		1.00	1.06	6.469	7.116	0.000	1.200	2.293	1.00	1.953	2.34	16.6	60.5	104.9
131.0		1.00	1.06	6.483	7.132	0.000	1.200	2.295	1.00	1.940	2.33	16.6	60.1	104.1
132.0		1.00	1.06	6.497	7.147	0.000	1.200	2.297	1.00	1.927	2.31	16.5	59.7	103.3
133.0		1.00	1.07	6.511	7.163	0.000	1.200	2.298	1.00	1.914	2.30	16.4	59.2	102.5
134.0	Appertunance(s)	1.00	1.07	6.526	7.178	0.000	1.200	2.300	1.00	1.900	2.28	16.3	58.8	101.7
135.0		1.00	1.07	6.539	7.193	0.000	1.200	2.302	1.00	1.887	2.26	16.3	58.4	100.9
136.0		1.00	1.07	6.553	7.209	0.000	1.200	2.303	1.00	1.874	2.25	16.2	58.0	100.1
137.0		1.00	1.08	6.567	7.224	0.000	1.200	2.305	1.00	1.861	2.23	16.1	57.6	99.3
138.0		1.00	1.08	6.581	7.239	0.000	1.200	2.307	1.00	1.847	2.22	16.0	57.1	98.5
139.0		1.00	1.08	6.594	7.254	0.000	1.200	2.308	1.00	1.834	2.20	15.9	56.7	97.7
140.0		1.00	1.08	6.608	7.269	0.000	1.200	2.310	1.00	1.821	2.19	15.8	56.3	96.9
141.0	Appertunance(s)	1.00	1.08	6.621	7.284	0.000	1.200	2.312	1.00	1.808	2.17	15.8	55.9	96.1
142.0		1.00	1.09	6.635	7.298	0.000	1.200	2.313	1.00	1.794	2.15	15.7	55.4	95.2
143.0		1.00	1.09	6.648	7.313	0.000	1.200	2.315	1.00	1.781	2.14	15.6	55.0	94.4
144.0		1.00	1.09	6.662	7.328	0.000	1.200	2.317	1.00	1.768	2.12	15.5	54.6	93.6
145.0		1.00	1.09	6.675	7.342	0.000	1.200	2.318	1.00	1.755	2.11	15.4	54.2	92.8
146.0		1.00	1.10	6.688	7.357	0.000	1.200	2.320	1.00	1.741	2.09	15.3	53.7	92.0
147.0		1.00	1.10	6.701	7.371	0.000	1.200	2.321	1.00	1.728	2.07	15.2	53.3	91.2
148.0		1.00	1.10	6.714	7.386	0.000	1.200	2.323	1.00	1.715	2.06	15.2	52.9	90.4
149.0		1.00	1.10	6.727	7.400	0.000	1.200	2.325	1.00	1.702	2.04	15.1	52.4	89.5
150.0	Appertunance(s)	1.00	1.10	6.740	7.414	0.000	1.200	2.326	1.00	1.688	2.03	7.5	52.0	88.7
							Totals:		150.00			2,742.3	11,457.1	27,503.4

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	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		9.7	0.0					0.0	0.0	9.7	0.0	0.0	0.0
1.00		19.3	247.7					5.2	156.4	24.5	404.1	0.0	0.0
2.00		19.4	254.5					5.4	159.3	24.8	413.9	0.0	0.0
3.00		19.4	257.5					5.5	160.9	24.9	418.3	0.0	0.0
4.00		19.3	259.1					5.6	161.9	24.9	421.0	0.0	0.0
5.00		19.3	260.1					5.7	162.8	25.0	422.9	0.0	0.0
6.00		19.2	260.7					5.7	163.5	25.0	424.2	0.0	0.0
7.00		19.2	261.0					5.8	164.1	25.0	425.1	0.0	0.0
8.00		14.4	261.2					5.8	164.6	20.2	425.7	0.0	0.0
8.50	Reinf. Top	9.6	130.6					2.9	82.5	12.5	213.1	0.0	0.0
9.00		14.3	130.6					2.9	42.5	17.2	173.1	0.0	0.0
10.00	Appertunance(s)	19.0	261.0	108.8	0.0	0.0	300.7	5.9	85.3	133.7	647.0	0.0	0.0
11.00		19.0	260.8					5.9	81.4	24.9	342.1	0.0	0.0
12.00		18.9	260.5					5.9	81.6	24.8	342.1	0.0	0.0
13.00		18.8	260.1					6.0	81.9	24.8	342.0	0.0	0.0
14.00		18.8	259.6					6.0	82.1	24.7	341.8	0.0	0.0
15.00		18.7	259.2					6.0	82.3	24.7	341.5	0.0	0.0
16.00		18.6	258.6					3.0	66.2	21.7	324.9	0.0	0.0
17.00		18.6	258.1					0.0	49.9	18.6	308.0	0.0	0.0
18.00		18.5	257.4					0.0	49.9	18.5	307.4	0.0	0.0
19.00		18.4	256.8					0.0	49.9	18.4	306.7	0.0	0.0
20.00		18.4	256.1					0.0	49.9	18.4	306.1	0.0	0.0
21.00		18.3	255.4					0.0	49.9	18.3	305.4	0.0	0.0
22.00		18.2	254.7					0.0	49.9	18.2	304.7	0.0	0.0
23.00		18.2	254.0					0.0	49.9	18.2	303.9	0.0	0.0
24.00		18.1	253.2					0.0	49.9	18.1	303.2	0.0	0.0
25.00		18.0	252.5					0.0	49.9	18.0	302.4	0.0	0.0
26.00		18.0	251.7					0.0	49.9	18.0	301.6	0.0	0.0
27.00		17.9	250.9					0.0	49.9	17.9	300.8	0.0	0.0
28.00		17.8	250.0					0.0	49.9	17.8	300.0	0.0	0.0
29.00		17.8	249.2					0.0	49.9	17.8	299.1	0.0	0.0
30.00		17.7	248.3					0.0	49.9	17.7	298.3	0.0	0.0
31.00		13.3	247.5					0.0	49.9	13.3	297.4	0.0	0.0
31.50	Bot - Section 2	9.0	123.5					0.0	25.0	9.0	148.5	0.0	0.0
32.00		13.7	191.1					0.0	24.9	13.7	216.1	0.0	0.0
33.00		18.3	381.3					0.0	49.9	18.3	431.2	0.0	0.0
34.00		18.4	379.8					0.0	49.9	18.4	429.7	0.0	0.0
35.00		15.4	378.2					0.0	49.9	15.4	428.1	0.0	0.0
35.67	Top - Section 1	9.2	251.4					0.0	33.3	9.2	284.7	0.0	0.0
36.00		12.4	73.8					0.0	16.6	12.4	90.4	0.0	0.0
37.00		18.6	220.8					0.0	49.9	18.6	270.8	0.0	0.0
38.00		18.7	220.0					0.0	49.9	18.7	270.0	0.0	0.0
39.00		18.7	219.2					0.0	49.9	18.7	269.2	0.0	0.0
40.00		18.8	218.4					0.0	49.9	18.8	268.3	0.0	0.0
41.00		18.8	217.6					0.0	49.9	18.8	267.5	0.0	0.0
42.00		18.9	216.8					0.0	49.9	18.9	266.7	0.0	0.0
43.00		18.9	215.9					0.0	49.9	18.9	265.9	0.0	0.0
44.00		19.0	215.1					0.0	49.9	19.0	265.0	0.0	0.0
45.00		19.0	214.2					0.0	49.9	19.0	264.2	0.0	0.0

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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

46.00		19.1	213.4	0.0	49.9	19.1	263.3	0.0	0.0
47.00		19.1	212.5	0.0	49.9	19.1	262.4	0.0	0.0
48.00		19.1	211.6	0.0	49.9	19.1	261.6	0.0	0.0
49.00		19.2	210.8	0.0	49.9	19.2	260.7	0.0	0.0
50.00		19.2	209.9	0.0	49.9	19.2	259.8	0.0	0.0
51.00		19.2	209.0	0.0	49.9	19.2	258.9	0.0	0.0
52.00		19.2	208.1	0.0	49.9	19.2	258.1	0.0	0.0
53.00		19.3	207.2	0.0	49.9	19.3	257.2	0.0	0.0
54.00		19.3	206.3	0.0	49.9	19.3	256.3	0.0	0.0
55.00		19.3	205.4	0.0	49.9	19.3	255.4	0.0	0.0
56.00		19.3	204.5	0.0	49.9	19.3	254.5	0.0	0.0
57.00		19.3	203.6	0.0	49.9	19.3	253.5	0.0	0.0
58.00		19.3	202.7	0.0	49.9	19.3	252.6	0.0	0.0
59.00		19.3	201.8	0.0	49.9	19.3	251.7	0.0	0.0
60.00		19.3	200.9	0.0	49.9	19.3	250.8	0.0	0.0
61.00		19.3	199.9	0.0	49.9	19.3	249.9	0.0	0.0
62.00		19.3	199.0	0.0	49.9	19.3	248.9	0.0	0.0
63.00		19.3	198.1	0.0	49.9	19.3	248.0	0.0	0.0
64.00		19.3	197.1	0.0	49.9	19.3	247.1	0.0	0.0
65.00		19.3	196.2	0.0	49.9	19.3	246.1	0.0	0.0
66.00		19.3	195.3	0.0	49.9	19.3	245.2	0.0	0.0
67.00		19.3	194.3	0.0	49.9	19.3	244.2	0.0	0.0
68.00		19.3	193.4	0.0	49.9	19.3	243.3	0.0	0.0
69.00		19.3	192.4	0.0	49.9	19.3	242.3	0.0	0.0
70.00		9.6	191.5	0.0	49.9	9.6	241.4	0.0	0.0
70.00	Bot - Section 3	9.8	0.1	0.0	0.0	9.8	0.1	0.0	0.0
71.00		19.6	281.2	0.0	49.9	19.6	331.1	0.0	0.0
72.00		19.6	279.9	0.0	49.9	19.6	329.8	0.0	0.0
73.00		14.7	278.4	0.0	49.9	14.7	328.3	0.0	0.0
73.50	Top - Section 2	9.8	138.8	0.0	25.0	9.8	163.8	0.0	0.0
74.00		14.6	84.6	0.0	24.9	14.6	109.5	0.0	0.0
75.00		19.5	168.5	0.0	49.9	19.5	218.4	0.0	0.0
76.00		19.5	167.7	0.0	49.9	19.5	217.6	0.0	0.0
77.00		19.5	166.8	0.0	49.9	19.5	216.8	0.0	0.0
78.00		19.4	166.0	0.0	49.9	19.4	215.9	0.0	0.0
79.00		19.4	165.1	0.0	49.9	19.4	215.1	0.0	0.0
80.00		19.4	164.3	0.0	49.9	19.4	214.2	0.0	0.0
81.00		19.4	163.4	0.0	49.9	19.4	213.4	0.0	0.0
82.00		19.3	162.6	0.0	49.9	19.3	212.5	0.0	0.0
83.00		19.3	161.7	0.0	49.9	19.3	211.7	0.0	0.0
84.00		19.3	160.9	0.0	49.9	19.3	210.8	0.0	0.0
85.00		19.2	160.0	0.0	49.9	19.2	209.9	0.0	0.0
86.00		19.2	159.1	0.0	49.9	19.2	209.1	0.0	0.0
87.00		19.2	158.3	0.0	49.9	19.2	208.2	0.0	0.0
88.00		19.1	157.4	0.0	49.9	19.1	207.3	0.0	0.0
89.00		19.1	156.5	0.0	49.9	19.1	206.5	0.0	0.0
90.00		19.0	155.7	0.0	49.9	19.0	205.6	0.0	0.0
91.00		19.0	154.8	0.0	49.9	19.0	204.7	0.0	0.0
92.00		19.0	153.9	0.0	49.9	19.0	203.8	0.0	0.0
93.00		18.9	153.0	0.0	49.9	18.9	203.0	0.0	0.0
94.00		18.9	152.2	0.0	49.9	18.9	202.1	0.0	0.0
95.00		18.8	151.3	0.0	49.9	18.8	201.2	0.0	0.0
96.00		18.8	150.4	0.0	49.9	18.8	200.3	0.0	0.0
97.00		18.7	149.5	0.0	49.9	18.7	199.4	0.0	0.0
98.00		18.7	148.6	0.0	49.9	18.7	198.6	0.0	0.0
99.00		18.6	147.7	0.0	49.9	18.6	197.7	0.0	0.0
100.00		18.6	146.9	0.0	49.9	18.6	196.8	0.0	0.0

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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

101.00		18.5	146.0					0.0	49.9	18.5	195.9	0.0	0.0
102.00		18.5	145.1					0.0	49.9	18.5	195.0	0.0	0.0
103.00		18.4	144.2					0.0	49.9	18.4	194.1	0.0	0.0
104.00		18.4	143.3					0.0	49.9	18.4	193.2	0.0	0.0
105.00		18.3	142.4					0.0	49.9	18.3	192.3	0.0	0.0
106.00		18.3	141.5					0.0	49.9	18.3	191.4	0.0	0.0
107.00		18.2	140.6					0.0	49.9	18.2	190.5	0.0	0.0
108.00		18.1	139.7					0.0	49.9	18.1	189.6	0.0	0.0
109.00		18.1	138.8					0.0	49.9	18.1	188.7	0.0	0.0
110.00		9.0	137.9					0.0	49.9	9.0	187.8	0.0	0.0
110.00	Top - Section 3	9.0	0.0					0.0	0.0	9.0	0.1	0.0	0.0
111.00		18.0	119.9					0.0	49.9	18.0	169.8	0.0	0.0
112.00		17.9	119.1					0.0	49.9	17.9	169.1	0.0	0.0
113.00		17.8	118.4					0.0	49.9	17.8	168.3	0.0	0.0
114.00		17.8	117.6					0.0	49.9	17.8	167.5	0.0	0.0
115.00		17.7	116.8					0.0	49.9	17.7	166.7	0.0	0.0
116.00		17.6	116.0					0.0	49.9	17.6	165.9	0.0	0.0
117.00		17.6	115.2					0.0	49.9	17.6	165.2	0.0	0.0
118.00		17.5	114.4					0.0	49.9	17.5	164.4	0.0	0.0
119.00		17.4	113.7					0.0	49.9	17.4	163.6	0.0	0.0
120.00		17.4	112.9					0.0	49.9	17.4	162.8	0.0	0.0
121.00		17.3	112.1					0.0	49.9	17.3	162.0	0.0	0.0
122.00		17.2	111.3					0.0	49.9	17.2	161.2	0.0	0.0
123.00	Appertunance(s)	17.2	110.5	126.2	0.0	0.0	579.4	0.0	49.9	143.3	739.8	0.0	0.0
124.00		17.1	109.7					0.0	49.5	17.1	159.2	0.0	0.0
125.00		17.0	108.9					0.0	49.5	17.0	158.4	0.0	0.0
126.00		16.9	108.1					0.0	49.5	16.9	157.6	0.0	0.0
127.00		16.9	107.3					0.0	49.5	16.9	156.9	0.0	0.0
128.00		16.8	106.5					0.0	49.5	16.8	156.1	0.0	0.0
129.00		16.7	105.7					0.0	49.5	16.7	155.3	0.0	0.0
130.00		16.6	104.9					0.0	49.5	16.6	154.5	0.0	0.0
131.00		16.6	104.1					0.0	49.5	16.6	153.7	0.0	0.0
132.00		16.5	103.3					0.0	49.5	16.5	152.9	0.0	0.0
133.00		16.4	102.5					0.0	49.5	16.4	152.0	0.0	0.0
134.00	Appertunance(s)	16.3	101.7	474.2	0.0	0.0	3,544.6	0.0	49.5	490.6	3,695.8	0.0	0.0
135.00		16.3	100.9					0.0	37.7	16.3	138.6	0.0	0.0
136.00		16.2	100.1					0.0	37.7	16.2	137.8	0.0	0.0
137.00		16.1	99.3					0.0	37.7	16.1	137.0	0.0	0.0
138.00		16.0	98.5					0.0	37.7	16.0	136.2	0.0	0.0
139.00		15.9	97.7					0.0	37.7	15.9	135.4	0.0	0.0
140.00		15.8	96.9					0.0	37.7	15.8	134.6	0.0	0.0
141.00	Appertunance(s)	15.8	96.1	101.8	0.0	0.0	608.5	0.0	37.7	117.5	742.3	0.0	0.0
142.00		15.7	95.2					0.0	31.8	15.7	127.1	0.0	0.0
143.00		15.6	94.4					0.0	31.8	15.6	126.3	0.0	0.0
144.00		15.5	93.6					0.0	31.8	15.5	125.4	0.0	0.0
145.00		15.4	92.8					0.0	31.8	15.4	124.6	0.0	0.0
146.00		15.3	92.0					0.0	31.8	15.3	123.8	0.0	0.0
147.00		15.2	91.2					0.0	31.8	15.2	123.0	0.0	0.0
148.00		15.2	90.4					0.0	31.8	15.2	122.2	0.0	0.0
149.00		15.1	89.5					0.0	31.8	15.1	121.4	0.0	0.0
150.00	Appertunance(s)	7.5	88.7	1,438.4	0.0	3,207.5	9,470.1	0.0	31.8	1,446.0	9,590.6	0.0	0.0
								Totals:		5,080.93	50,423.6	0.00	0.00

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:27 PM

Customer: AT&T Mobility

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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	-50.42	-5.08	0.00	-642.84	0.00	642.84	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.177
1.00	-50.02	-5.06	0.00	-637.76	0.00	637.76	3,148.69	1,574.34	4,778.83	2,360.09	0.00	-0.01	0.176
2.00	-49.60	-5.05	0.00	-632.70	0.00	632.70	3,140.16	1,570.08	4,745.43	2,343.59	0.01	-0.03	0.175
3.00	-49.18	-5.04	0.00	-627.65	0.00	627.65	3,131.60	1,565.80	4,712.07	2,327.11	0.01	-0.04	0.175
4.00	-48.76	-5.03	0.00	-622.61	0.00	622.61	3,123.00	1,561.50	4,678.76	2,310.67	0.02	-0.06	0.174
5.00	-48.34	-5.01	0.00	-617.59	0.00	617.59	3,114.35	1,557.18	4,645.51	2,294.24	0.04	-0.07	0.174
6.00	-47.91	-5.00	0.00	-612.57	0.00	612.57	3,105.66	1,552.83	4,612.30	2,277.84	0.05	-0.09	0.173
7.00	-47.48	-4.98	0.00	-607.58	0.00	607.58	3,096.94	1,548.47	4,579.15	2,261.47	0.07	-0.10	0.172
8.00	-47.06	-4.97	0.00	-602.59	0.00	602.59	3,088.17	1,544.08	4,546.04	2,245.12	0.10	-0.12	0.172
8.50	-46.84	-4.97	0.00	-600.11	0.00	600.11	3,083.76	1,541.88	4,529.51	2,236.96	0.11	-0.12	0.171
8.50	-46.84	-4.97	0.00	-600.11	0.00	600.11	3,083.76	1,541.88	4,529.51	2,236.96	0.11	-0.12	0.283
9.00	-46.67	-4.96	0.00	-597.62	0.00	597.62	3,079.35	1,539.68	4,513.00	2,228.80	0.12	-0.13	0.283
10.00	-46.02	-4.85	0.00	-592.66	0.00	592.66	3,070.50	1,535.25	4,480.00	2,212.50	0.15	-0.15	0.283
11.00	-45.68	-4.84	0.00	-587.82	0.00	587.82	3,061.60	1,530.80	4,447.06	2,196.24	0.19	-0.18	0.283
12.00	-45.33	-4.83	0.00	-582.98	0.00	582.98	3,052.67	1,526.33	4,414.18	2,180.00	0.23	-0.20	0.282
13.00	-44.99	-4.83	0.00	-578.14	0.00	578.14	3,043.69	1,521.84	4,381.36	2,163.79	0.27	-0.23	0.282
14.00	-44.65	-4.82	0.00	-573.32	0.00	573.32	3,034.67	1,517.33	4,348.59	2,147.60	0.32	-0.25	0.282
15.00	-44.30	-4.81	0.00	-568.50	0.00	568.50	3,025.61	1,512.80	4,315.88	2,131.45	0.38	-0.28	0.281
16.00	-43.97	-4.81	0.00	-563.69	0.00	563.69	3,016.50	1,508.25	4,283.22	2,115.32	0.44	-0.30	0.281
17.00	-43.66	-4.81	0.00	-558.88	0.00	558.88	3,007.36	1,503.68	4,250.63	2,099.23	0.51	-0.33	0.281
18.00	-43.36	-4.81	0.00	-554.07	0.00	554.07	2,998.17	1,499.09	4,218.10	2,083.16	0.58	-0.35	0.280
19.00	-43.05	-4.81	0.00	-549.27	0.00	549.27	2,988.94	1,494.47	4,185.63	2,067.13	0.65	-0.38	0.280
20.00	-42.74	-4.80	0.00	-544.46	0.00	544.46	2,979.67	1,489.84	4,153.23	2,051.12	0.74	-0.40	0.280
21.00	-42.43	-4.80	0.00	-539.66	0.00	539.66	2,970.36	1,485.18	4,120.88	2,035.15	0.82	-0.43	0.279
22.00	-42.12	-4.80	0.00	-534.85	0.00	534.85	2,961.01	1,480.50	4,088.60	2,019.21	0.92	-0.46	0.279
23.00	-41.82	-4.80	0.00	-530.05	0.00	530.05	2,951.61	1,475.81	4,056.39	2,003.30	1.02	-0.48	0.279
24.00	-41.51	-4.80	0.00	-525.25	0.00	525.25	2,942.18	1,471.09	4,024.24	1,987.42	1.12	-0.51	0.278
25.00	-41.21	-4.80	0.00	-520.46	0.00	520.46	2,932.70	1,466.35	3,992.16	1,971.58	1.23	-0.53	0.278
26.00	-40.91	-4.79	0.00	-515.66	0.00	515.66	2,923.18	1,461.59	3,960.14	1,955.76	1.34	-0.56	0.278
27.00	-40.60	-4.79	0.00	-510.87	0.00	510.87	2,913.62	1,456.81	3,928.19	1,939.99	1.46	-0.59	0.277
28.00	-40.30	-4.79	0.00	-506.08	0.00	506.08	2,903.09	1,451.54	3,895.07	1,923.63	1.59	-0.61	0.277
29.00	-40.00	-4.79	0.00	-501.29	0.00	501.29	2,889.14	1,444.57	3,857.52	1,905.08	1.72	-0.64	0.277
30.00	-39.70	-4.78	0.00	-496.50	0.00	496.50	2,875.19	1,437.60	3,820.15	1,886.63	1.86	-0.67	0.277
31.00	-39.40	-4.78	0.00	-491.71	0.00	491.71	2,861.24	1,430.62	3,782.96	1,868.26	2.00	-0.70	0.277
31.50	-39.25	-4.78	0.00	-489.32	0.00	489.32	2,854.27	1,427.13	3,764.43	1,859.11	2.07	-0.71	0.277
32.00	-39.03	-4.78	0.00	-486.93	0.00	486.93	2,847.30	1,423.65	3,745.96	1,849.99	2.15	-0.72	0.277
33.00	-38.60	-4.77	0.00	-482.16	0.00	482.16	2,833.35	1,416.67	3,709.14	1,831.80	2.30	-0.75	0.277
34.00	-38.17	-4.77	0.00	-477.38	0.00	477.38	2,819.40	1,409.70	3,672.50	1,813.71	2.46	-0.78	0.277
35.00	-37.74	-4.76	0.00	-472.62	0.00	472.62	2,805.45	1,402.73	3,636.04	1,795.70	2.63	-0.80	0.277
35.67	-37.45	-4.76	0.00	-469.44	0.00	469.44	2,248.05	1,124.03	2,973.86	1,468.68	2.74	-0.82	0.336
36.00	-37.36	-4.76	0.00	-467.86	0.00	467.86	2,245.81	1,122.91	2,966.02	1,464.81	2.80	-0.83	0.336
37.00	-37.09	-4.75	0.00	-463.10	0.00	463.10	2,239.07	1,119.53	2,942.52	1,453.20	2.98	-0.86	0.335
38.00	-36.82	-4.75	0.00	-458.35	0.00	458.35	2,232.28	1,116.14	2,919.04	1,441.60	3.16	-0.90	0.334
39.00	-36.54	-4.75	0.00	-453.60	0.00	453.60	2,225.45	1,112.72	2,895.60	1,430.03	3.35	-0.93	0.334
40.00	-36.27	-4.75	0.00	-448.85	0.00	448.85	2,218.58	1,109.29	2,872.19	1,418.47	3.55	-0.96	0.333
41.00	-36.00	-4.74	0.00	-444.10	0.00	444.10	2,211.66	1,105.83	2,848.82	1,406.93	3.76	-0.99	0.332
42.00	-35.73	-4.74	0.00	-439.36	0.00	439.36	2,204.71	1,102.35	2,825.49	1,395.40	3.97	-1.02	0.331
43.00	-35.47	-4.73	0.00	-434.62	0.00	434.62	2,197.71	1,098.85	2,802.19	1,383.90	4.18	-1.05	0.330
44.00	-35.20	-4.73	0.00	-429.89	0.00	429.89	2,190.67	1,095.33	2,778.94	1,372.41	4.41	-1.09	0.329
45.00	-34.93	-4.73	0.00	-425.16	0.00	425.16	2,183.59	1,091.79	2,755.72	1,360.95	4.64	-1.12	0.328
46.00	-34.67	-4.72	0.00	-420.43	0.00	420.43	2,176.47	1,088.23	2,732.54	1,349.50	4.88	-1.15	0.327

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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

47.00	-34.40	-4.72	0.00	-415.71	0.00	415.71	2,169.30	1,084.65	2,709.41	1,338.07	5.12	-1.18	0.327
48.00	-34.14	-4.71	0.00	-410.99	0.00	410.99	2,162.10	1,081.05	2,686.31	1,326.67	5.37	-1.22	0.326
49.00	-33.88	-4.71	0.00	-406.28	0.00	406.28	2,154.85	1,077.43	2,663.26	1,315.28	5.63	-1.25	0.325
50.00	-33.61	-4.70	0.00	-401.57	0.00	401.57	2,147.56	1,073.78	2,640.25	1,303.92	5.90	-1.28	0.324
51.00	-33.35	-4.70	0.00	-396.87	0.00	396.87	2,140.23	1,070.12	2,617.28	1,292.58	6.17	-1.32	0.323
52.00	-33.09	-4.69	0.00	-392.18	0.00	392.18	2,132.86	1,066.43	2,594.37	1,281.26	6.45	-1.35	0.322
53.00	-32.83	-4.68	0.00	-387.49	0.00	387.49	2,125.45	1,062.72	2,571.49	1,269.96	6.74	-1.38	0.321
54.00	-32.57	-4.68	0.00	-382.80	0.00	382.80	2,118.00	1,059.00	2,548.66	1,258.69	7.03	-1.42	0.320
55.00	-32.32	-4.67	0.00	-378.13	0.00	378.13	2,110.50	1,055.25	2,525.88	1,247.44	7.33	-1.45	0.318
56.00	-32.06	-4.66	0.00	-373.46	0.00	373.46	2,102.96	1,051.48	2,503.15	1,236.21	7.64	-1.48	0.317
57.00	-31.80	-4.66	0.00	-368.79	0.00	368.79	2,095.38	1,047.69	2,480.47	1,225.01	7.95	-1.52	0.316
58.00	-31.55	-4.65	0.00	-364.14	0.00	364.14	2,087.76	1,043.88	2,457.84	1,213.83	8.27	-1.55	0.315
59.00	-31.30	-4.64	0.00	-359.49	0.00	359.49	2,080.10	1,040.05	2,435.26	1,202.68	8.60	-1.59	0.314
60.00	-31.04	-4.63	0.00	-354.85	0.00	354.85	2,072.39	1,036.20	2,412.72	1,191.55	8.94	-1.62	0.313
61.00	-30.79	-4.63	0.00	-350.21	0.00	350.21	2,064.65	1,032.32	2,390.25	1,180.45	9.28	-1.66	0.312
62.00	-30.54	-4.62	0.00	-345.59	0.00	345.59	2,056.86	1,028.43	2,367.82	1,169.38	9.63	-1.69	0.310
63.00	-30.29	-4.61	0.00	-340.97	0.00	340.97	2,049.03	1,024.52	2,345.45	1,158.33	9.99	-1.73	0.309
64.00	-30.04	-4.60	0.00	-336.36	0.00	336.36	2,041.16	1,020.58	2,323.13	1,147.31	10.36	-1.76	0.308
65.00	-29.79	-4.59	0.00	-331.76	0.00	331.76	2,033.25	1,016.62	2,300.87	1,136.31	10.73	-1.80	0.307
66.00	-29.55	-4.58	0.00	-327.16	0.00	327.16	2,025.30	1,012.65	2,278.67	1,125.35	11.11	-1.83	0.305
67.00	-29.30	-4.57	0.00	-322.58	0.00	322.58	2,016.93	1,008.47	2,256.11	1,114.21	11.50	-1.87	0.304
68.00	-29.05	-4.57	0.00	-318.01	0.00	318.01	2,005.31	1,002.65	2,230.04	1,101.33	11.89	-1.90	0.303
69.00	-28.81	-4.56	0.00	-313.44	0.00	313.44	1,993.69	996.84	2,204.11	1,088.53	12.29	-1.94	0.302
70.00	-28.57	-4.55	0.00	-308.89	0.00	308.89	1,982.06	991.03	2,178.34	1,075.80	12.70	-1.97	0.302
70.00	-28.57	-4.55	0.00	-308.88	0.00	308.88	1,982.06	991.03	2,178.33	1,075.80	12.70	-1.97	0.302
71.00	-28.23	-4.53	0.00	-304.34	0.00	304.34	1,970.44	985.22	2,152.72	1,063.15	13.12	-2.01	0.301
72.00	-27.90	-4.52	0.00	-299.81	0.00	299.81	1,958.82	979.41	2,127.25	1,050.57	13.54	-2.04	0.300
73.00	-27.57	-4.51	0.00	-295.29	0.00	295.29	1,947.19	973.60	2,101.94	1,038.07	13.97	-2.08	0.299
73.50	-27.41	-4.50	0.00	-293.04	0.00	293.04	1,473.95	736.97	1,624.52	802.29	14.19	-2.10	0.384
74.00	-27.30	-4.49	0.00	-290.79	0.00	290.79	1,471.40	735.70	1,616.91	798.53	14.41	-2.11	0.383
75.00	-27.07	-4.49	0.00	-286.30	0.00	286.30	1,466.26	733.13	1,601.72	791.03	14.86	-2.16	0.380
76.00	-26.85	-4.48	0.00	-281.81	0.00	281.81	1,461.09	730.55	1,586.54	783.53	15.32	-2.20	0.378
77.00	-26.64	-4.47	0.00	-277.33	0.00	277.33	1,455.88	727.94	1,571.38	776.05	15.78	-2.24	0.376
78.00	-26.42	-4.46	0.00	-272.86	0.00	272.86	1,450.62	725.31	1,556.25	768.57	16.25	-2.28	0.373
79.00	-26.20	-4.45	0.00	-268.40	0.00	268.40	1,445.32	722.66	1,541.14	761.11	16.74	-2.33	0.371
80.00	-25.98	-4.44	0.00	-263.95	0.00	263.95	1,439.98	719.99	1,526.06	753.66	17.23	-2.37	0.368
81.00	-25.77	-4.44	0.00	-259.50	0.00	259.50	1,434.60	717.30	1,511.01	746.23	17.73	-2.41	0.366
82.00	-25.55	-4.43	0.00	-255.07	0.00	255.07	1,429.18	714.59	1,495.98	738.81	18.24	-2.45	0.363
83.00	-25.34	-4.42	0.00	-250.64	0.00	250.64	1,423.71	711.86	1,480.97	731.40	18.76	-2.50	0.361
84.00	-25.13	-4.41	0.00	-246.23	0.00	246.23	1,418.21	709.10	1,466.00	724.00	19.29	-2.54	0.358
85.00	-24.91	-4.40	0.00	-241.82	0.00	241.82	1,412.66	706.33	1,451.06	716.62	19.82	-2.58	0.355
86.00	-24.70	-4.39	0.00	-237.43	0.00	237.43	1,407.07	703.53	1,436.14	709.26	20.37	-2.63	0.352
87.00	-24.49	-4.38	0.00	-233.04	0.00	233.04	1,401.44	700.72	1,421.26	701.91	20.92	-2.67	0.350
88.00	-24.28	-4.37	0.00	-228.66	0.00	228.66	1,395.76	697.88	1,406.40	694.57	21.48	-2.71	0.347
89.00	-24.07	-4.35	0.00	-224.30	0.00	224.30	1,390.05	695.02	1,391.58	687.25	22.06	-2.75	0.344
90.00	-23.87	-4.34	0.00	-219.94	0.00	219.94	1,384.29	692.15	1,376.80	679.95	22.64	-2.80	0.341
91.00	-23.66	-4.33	0.00	-215.60	0.00	215.60	1,378.50	689.25	1,362.04	672.66	23.23	-2.84	0.338
92.00	-23.45	-4.32	0.00	-211.27	0.00	211.27	1,372.66	686.33	1,347.32	665.39	23.83	-2.88	0.335
93.00	-23.25	-4.31	0.00	-206.95	0.00	206.95	1,366.78	683.39	1,332.64	658.14	24.43	-2.92	0.331
94.00	-23.04	-4.30	0.00	-202.64	0.00	202.64	1,360.85	680.43	1,317.99	650.91	25.05	-2.97	0.328
95.00	-22.84	-4.28	0.00	-198.35	0.00	198.35	1,354.89	677.44	1,303.39	643.69	25.68	-3.01	0.325
96.00	-22.64	-4.27	0.00	-194.06	0.00	194.06	1,348.88	674.44	1,288.81	636.50	26.31	-3.05	0.322
97.00	-22.44	-4.26	0.00	-189.79	0.00	189.79	1,342.84	671.42	1,274.28	629.32	26.96	-3.10	0.318
98.00	-22.24	-4.25	0.00	-185.53	0.00	185.53	1,336.75	668.37	1,259.79	622.16	27.61	-3.14	0.315
99.00	-22.04	-4.23	0.00	-181.29	0.00	181.29	1,330.62	665.31	1,245.34	615.03	28.27	-3.18	0.311
100.00	-21.84	-4.22	0.00	-177.05	0.00	177.05	1,324.45	662.22	1,230.93	607.91	28.94	-3.22	0.308
101.00	-21.64	-4.21	0.00	-172.83	0.00	172.83	1,318.23	659.12	1,216.56	600.81	29.62	-3.26	0.304

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 1.00 in Radial Ice 40 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

102.00	-21.45	-4.19	0.00	-168.63	0.00	168.63	1,311.98	655.99	1,202.23	593.74	30.31	-3.31	0.300
103.00	-21.25	-4.18	0.00	-164.44	0.00	164.44	1,305.68	652.84	1,187.95	586.68	31.00	-3.35	0.297
104.00	-21.05	-4.16	0.00	-160.26	0.00	160.26	1,299.34	649.67	1,173.71	579.65	31.71	-3.39	0.293
105.00	-20.86	-4.15	0.00	-156.10	0.00	156.10	1,292.96	646.48	1,159.52	572.64	32.42	-3.43	0.289
106.00	-20.67	-4.13	0.00	-151.95	0.00	151.95	1,284.28	642.14	1,143.36	564.66	33.15	-3.47	0.285
107.00	-20.48	-4.12	0.00	-147.82	0.00	147.82	1,274.98	637.49	1,126.77	556.47	33.88	-3.51	0.282
108.00	-20.28	-4.10	0.00	-143.70	0.00	143.70	1,265.69	632.84	1,110.30	548.34	34.62	-3.55	0.278
109.00	-20.09	-4.09	0.00	-139.60	0.00	139.60	1,256.39	628.19	1,093.96	540.26	35.36	-3.59	0.274
110.00	-19.91	-4.07	0.00	-135.51	0.00	135.51	1,247.09	623.54	1,077.73	532.25	36.12	-3.63	0.271
110.00	-19.91	-4.07	0.00	-135.51	0.00	135.51	1,247.09	623.54	1,077.72	532.25	36.12	-3.63	0.271
110.00	-19.91	-4.07	0.00	-135.51	0.00	135.51	853.22	426.61	741.74	366.32	36.12	-3.63	0.393
111.00	-19.73	-4.06	0.00	-131.44	0.00	131.44	849.66	424.83	733.10	362.05	36.89	-3.67	0.386
112.00	-19.56	-4.05	0.00	-127.38	0.00	127.38	846.05	423.02	724.47	357.79	37.66	-3.73	0.379
113.00	-19.39	-4.04	0.00	-123.33	0.00	123.33	842.40	421.20	715.86	353.53	38.45	-3.78	0.372
114.00	-19.22	-4.02	0.00	-119.30	0.00	119.30	838.71	419.35	707.25	349.29	39.24	-3.83	0.365
115.00	-19.05	-4.01	0.00	-115.27	0.00	115.27	834.98	417.49	698.66	345.04	40.05	-3.88	0.357
116.00	-18.89	-4.00	0.00	-111.26	0.00	111.26	831.20	415.60	690.08	340.81	40.87	-3.93	0.349
117.00	-18.72	-3.99	0.00	-107.26	0.00	107.26	827.39	413.69	681.52	336.58	41.69	-3.98	0.341
118.00	-18.55	-3.97	0.00	-103.27	0.00	103.27	823.53	411.76	672.98	332.36	42.53	-4.03	0.333
119.00	-18.39	-3.96	0.00	-99.30	0.00	99.30	819.63	409.81	664.45	328.14	43.38	-4.08	0.325
120.00	-18.22	-3.95	0.00	-95.34	0.00	95.34	815.69	407.84	655.93	323.94	44.24	-4.12	0.317
121.00	-18.06	-3.93	0.00	-91.40	0.00	91.40	811.71	405.85	647.44	319.75	45.11	-4.17	0.308
122.00	-17.90	-3.92	0.00	-87.46	0.00	87.46	807.68	403.84	638.96	315.56	45.98	-4.21	0.299
123.00	-17.17	-3.73	0.00	-83.55	0.00	83.55	803.62	401.81	630.51	311.38	46.87	-4.26	0.290
124.00	-17.01	-3.72	0.00	-79.82	0.00	79.82	799.51	399.76	622.07	307.22	47.77	-4.30	0.281
125.00	-16.85	-3.70	0.00	-76.10	0.00	76.10	795.36	397.68	613.66	303.06	48.67	-4.35	0.272
126.00	-16.69	-3.68	0.00	-72.40	0.00	72.40	791.17	395.59	605.27	298.92	49.59	-4.39	0.263
127.00	-16.53	-3.67	0.00	-68.72	0.00	68.72	786.94	393.47	596.90	294.79	50.51	-4.43	0.254
128.00	-16.38	-3.65	0.00	-65.05	0.00	65.05	782.67	391.33	588.56	290.67	51.44	-4.47	0.245
129.00	-16.22	-3.63	0.00	-61.41	0.00	61.41	778.35	389.18	580.24	286.56	52.38	-4.51	0.235
130.00	-16.06	-3.61	0.00	-57.78	0.00	57.78	774.00	387.00	571.95	282.46	53.32	-4.54	0.225
131.00	-15.91	-3.59	0.00	-54.16	0.00	54.16	769.60	384.80	563.68	278.38	54.28	-4.58	0.215
132.00	-15.76	-3.57	0.00	-50.57	0.00	50.57	765.16	382.58	555.44	274.31	55.24	-4.61	0.205
133.00	-15.60	-3.55	0.00	-47.00	0.00	47.00	760.68	380.34	547.23	270.25	56.21	-4.65	0.195
134.00	-11.96	-2.77	0.00	-43.45	0.00	43.45	756.16	378.08	539.04	266.21	57.18	-4.68	0.179
135.00	-11.82	-2.75	0.00	-40.68	0.00	40.68	751.59	375.80	530.89	262.19	58.17	-4.71	0.171
136.00	-11.68	-2.73	0.00	-37.93	0.00	37.93	746.99	373.49	522.77	258.17	59.15	-4.74	0.163
137.00	-11.55	-2.70	0.00	-35.20	0.00	35.20	742.34	371.17	514.67	254.18	60.15	-4.76	0.154
138.00	-11.41	-2.68	0.00	-32.50	0.00	32.50	737.65	368.82	506.61	250.20	61.15	-4.79	0.145
139.00	-11.28	-2.66	0.00	-29.81	0.00	29.81	732.92	366.46	498.59	246.23	62.15	-4.81	0.137
140.00	-11.14	-2.64	0.00	-27.15	0.00	27.15	728.15	364.07	490.59	242.29	63.16	-4.84	0.127
141.00	-10.41	-2.46	0.00	-24.52	0.00	24.52	721.91	360.95	481.68	237.89	64.18	-4.86	0.118
142.00	-10.29	-2.44	0.00	-22.06	0.00	22.06	714.93	357.47	472.37	233.29	65.20	-4.88	0.109
143.00	-10.16	-2.42	0.00	-19.62	0.00	19.62	707.96	353.98	463.15	228.73	66.22	-4.90	0.100
144.00	-10.04	-2.39	0.00	-17.20	0.00	17.20	700.99	350.49	454.01	224.22	67.24	-4.91	0.091
145.00	-9.91	-2.37	0.00	-14.81	0.00	14.81	694.01	347.01	444.97	219.76	68.27	-4.93	0.082
146.00	-9.79	-2.34	0.00	-12.44	0.00	12.44	687.04	343.52	436.02	215.34	69.31	-4.94	0.072
147.00	-9.67	-2.32	0.00	-10.10	0.00	10.10	680.07	340.03	427.16	210.96	70.34	-4.95	0.062
148.00	-9.55	-2.30	0.00	-7.78	0.00	7.78	673.09	336.55	418.40	206.63	71.38	-4.96	0.052
149.00	-9.43	-2.27	0.00	-5.48	0.00	5.48	666.12	333.06	409.72	202.34	72.42	-4.97	0.041
150.00	0.00	-1.45	0.00	-3.21	0.00	3.21	659.14	329.57	401.13	198.10	73.46	-4.98	0.016

Site Number:	302488	Code: ANSI/TIA-222-G	
Site Name:	Cntn - Canton, CT	Engineering Number: OAA694241_C3_01	2/7/2017 4:28:28 PM
Customer:	AT&T Mobility		

Load Case: 1.0D + 1.0W — Serviceability 60 mph — 38 Iterations

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

Wind Importance Factor : 1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	6.129	6.742	161.88	1.000	0.000	0.00	0.000	0.00	10.8	0.0	0.0
1.00		1.00	0.70	6.129	6.742	161.54	1.000	0.000	1.00	3.218	3.22	21.6	0.0	151.7
2.00		1.00	0.70	6.129	6.742	160.87	1.000	0.000	1.00	3.205	3.20	21.6	0.0	151.1
3.00		1.00	0.70	6.129	6.742	160.19	1.000	0.000	1.00	3.191	3.19	21.5	0.0	150.4
4.00		1.00	0.70	6.129	6.742	159.51	1.000	0.000	1.00	3.178	3.18	21.4	0.0	149.8
5.00		1.00	0.70	6.129	6.742	158.83	1.000	0.000	1.00	3.164	3.16	21.3	0.0	149.2
6.00		1.00	0.70	6.129	6.742	158.15	1.000	0.000	1.00	3.151	3.15	21.2	0.0	148.5
7.00		1.00	0.70	6.129	6.742	157.47	1.000	0.000	1.00	3.137	3.14	21.1	0.0	147.9
8.00		1.00	0.70	6.129	6.742	156.79	1.000	0.000	1.00	3.123	3.12	15.8	0.0	147.2
8.50	Reinf. Top	1.00	0.70	6.129	6.742	156.28	1.000	0.000	0.50	1.557	1.56	10.5	0.0	73.4
9.00		1.00	0.70	6.129	6.742	155.95	1.000	0.000	0.50	1.553	1.55	15.7	0.0	73.2
10.00	Appertunance(s)	1.00	0.70	6.129	6.742	155.44	1.000	0.000	1.00	3.096	3.10	20.8	0.0	145.9
11.00		1.00	0.70	6.129	6.742	154.76	1.000	0.000	1.00	3.083	3.08	20.7	0.0	145.3
12.00		1.00	0.70	6.129	6.742	154.08	1.000	0.000	1.00	3.069	3.07	20.6	0.0	144.6
13.00		1.00	0.70	6.129	6.742	153.40	1.000	0.000	1.00	3.056	3.06	20.6	0.0	144.0
14.00		1.00	0.70	6.129	6.742	152.72	1.000	0.000	1.00	3.042	3.04	20.5	0.0	143.4
15.00		1.00	0.70	6.129	6.742	152.04	1.000	0.000	1.00	3.029	3.03	20.4	0.0	142.7
16.00		1.00	0.70	6.129	6.742	151.36	1.000	0.000	1.00	3.015	3.02	20.3	0.0	142.1
17.00		1.00	0.70	6.129	6.742	150.69	1.000	0.000	1.00	3.002	3.00	20.2	0.0	141.4
18.00		1.00	0.70	6.129	6.742	150.01	1.000	0.000	1.00	2.988	2.99	20.1	0.0	140.8
19.00		1.00	0.70	6.129	6.742	149.33	1.000	0.000	1.00	2.975	2.97	20.0	0.0	140.1
20.00		1.00	0.70	6.129	6.742	148.65	1.000	0.000	1.00	2.961	2.96	19.9	0.0	139.5
21.00		1.00	0.70	6.129	6.742	147.97	1.000	0.000	1.00	2.948	2.95	19.8	0.0	138.8
22.00		1.00	0.70	6.129	6.742	147.29	1.000	0.000	1.00	2.934	2.93	19.7	0.0	138.2
23.00		1.00	0.70	6.129	6.742	146.61	1.000	0.000	1.00	2.921	2.92	19.6	0.0	137.6
24.00		1.00	0.70	6.129	6.742	145.93	1.000	0.000	1.00	2.907	2.91	19.6	0.0	136.9
25.00		1.00	0.70	6.129	6.742	145.26	1.000	0.000	1.00	2.894	2.89	19.5	0.0	136.3
26.00		1.00	0.70	6.129	6.742	144.58	1.000	0.000	1.00	2.880	2.88	19.4	0.0	135.6
27.00		1.00	0.70	6.129	6.742	143.90	1.000	0.000	1.00	2.867	2.87	19.3	0.0	135.0
28.00		1.00	0.70	6.129	6.742	143.22	1.000	0.000	1.00	2.853	2.85	19.2	0.0	134.3
29.00		1.00	0.70	6.129	6.742	142.54	1.000	0.000	1.00	2.840	2.84	19.1	0.0	133.7
30.00		1.00	0.70	6.129	6.742	141.86	1.000	0.000	1.00	2.826	2.83	19.1	0.0	133.1
31.00		1.00	0.70	6.163	6.779	141.58	1.000	0.000	1.00	2.813	2.81	14.3	0.0	132.4
31.50	Bot - Section 2	1.00	0.70	6.206	6.826	141.56	1.000	0.000	0.50	1.402	1.40	9.7	0.0	66.0
32.00		1.00	0.71	6.234	6.857	141.54	1.000	0.000	0.50	1.424	1.42	14.7	0.0	121.7
33.00		1.00	0.71	6.276	6.903	141.49	1.000	0.000	1.00	2.839	2.84	19.6	0.0	242.7
34.00		1.00	0.72	6.330	6.963	141.42	1.000	0.000	1.00	2.826	2.83	19.7	0.0	241.6
35.00		1.00	0.72	6.384	7.022	141.32	1.000	0.000	1.00	2.812	2.81	16.5	0.0	240.4
35.67	Top - Section 1	1.00	0.73	6.427	7.070	141.22	1.000	0.000	0.67	1.868	1.87	9.9	0.0	159.7
36.00		1.00	0.73	6.453	7.099	143.94	1.000	0.000	0.33	0.931	0.93	13.2	0.0	36.6
37.00		1.00	0.74	6.487	7.136	143.85	1.000	0.000	1.00	2.785	2.79	19.9	0.0	109.5
38.00		1.00	0.74	6.538	7.191	143.71	1.000	0.000	1.00	2.772	2.77	20.0	0.0	108.9
39.00		1.00	0.75	6.587	7.246	143.55	1.000	0.000	1.00	2.758	2.76	20.0	0.0	108.4
40.00		1.00	0.75	6.635	7.299	143.37	1.000	0.000	1.00	2.745	2.74	20.1	0.0	107.9
41.00		1.00	0.76	6.683	7.351	143.17	1.000	0.000	1.00	2.731	2.73	20.1	0.0	107.3
42.00		1.00	0.76	6.730	7.403	142.96	1.000	0.000	1.00	2.718	2.72	20.1	0.0	106.8
43.00		1.00	0.77	6.776	7.453	142.73	1.000	0.000	1.00	2.704	2.70	20.2	0.0	106.3
44.00		1.00	0.77	6.821	7.503	142.49	1.000	0.000	1.00	2.691	2.69	20.2	0.0	105.7
45.00		1.00	0.78	6.865	7.552	142.24	1.000	0.000	1.00	2.677	2.68	20.2	0.0	105.2
46.00		1.00	0.78	6.909	7.600	141.97	1.000	0.000	1.00	2.664	2.66	20.3	0.0	104.6
47.00		1.00	0.79	6.952	7.647	141.69	1.000	0.000	1.00	2.650	2.65	20.3	0.0	104.1

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 Iterations

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

Wind Importance Factor : 1.00

48.00		1.00	0.79	6.994	7.694	141.39	1.000	0.000	1.00	2.637	2.64	20.3	0.0	103.6
49.00		1.00	0.80	7.036	7.740	141.09	1.000	0.000	1.00	2.623	2.62	20.3	0.0	103.0
50.00		1.00	0.80	7.077	7.785	140.77	1.000	0.000	1.00	2.610	2.61	20.3	0.0	102.5
51.00		1.00	0.81	7.118	7.830	140.44	1.000	0.000	1.00	2.596	2.60	20.3	0.0	102.0
52.00		1.00	0.81	7.158	7.874	140.10	1.000	0.000	1.00	2.583	2.58	20.3	0.0	101.4
53.00		1.00	0.82	7.197	7.917	139.75	1.000	0.000	1.00	2.569	2.57	20.3	0.0	100.9
54.00		1.00	0.82	7.236	7.960	139.39	1.000	0.000	1.00	2.556	2.56	20.3	0.0	100.4
55.00		1.00	0.83	7.275	8.002	139.02	1.000	0.000	1.00	2.542	2.54	20.3	0.0	99.8
56.00		1.00	0.83	7.312	8.044	138.64	1.000	0.000	1.00	2.528	2.53	20.3	0.0	99.3
57.00		1.00	0.83	7.350	8.085	138.25	1.000	0.000	1.00	2.515	2.51	20.3	0.0	98.7
58.00		1.00	0.84	7.387	8.126	137.85	1.000	0.000	1.00	2.501	2.50	20.3	0.0	98.2
59.00		1.00	0.84	7.423	8.166	137.45	1.000	0.000	1.00	2.488	2.49	20.3	0.0	97.7
60.00		1.00	0.85	7.459	8.205	137.03	1.000	0.000	1.00	2.474	2.47	20.3	0.0	97.1
61.00		1.00	0.85	7.495	8.244	136.61	1.000	0.000	1.00	2.461	2.46	20.3	0.0	96.6
62.00		1.00	0.86	7.530	8.283	136.18	1.000	0.000	1.00	2.447	2.45	20.3	0.0	96.1
63.00		1.00	0.86	7.565	8.321	135.74	1.000	0.000	1.00	2.434	2.43	20.2	0.0	95.5
64.00		1.00	0.86	7.599	8.359	135.29	1.000	0.000	1.00	2.420	2.42	20.2	0.0	95.0
65.00		1.00	0.87	7.633	8.397	134.83	1.000	0.000	1.00	2.407	2.41	20.2	0.0	94.5
66.00		1.00	0.87	7.667	8.434	134.37	1.000	0.000	1.00	2.393	2.39	20.2	0.0	93.9
67.00		1.00	0.88	7.700	8.470	133.90	1.000	0.000	1.00	2.380	2.38	20.1	0.0	93.4
68.00		1.00	0.88	7.733	8.506	133.43	1.000	0.000	1.00	2.366	2.37	20.1	0.0	92.8
69.00		1.00	0.88	7.766	8.542	132.94	1.000	0.000	1.00	2.353	2.35	20.1	0.0	92.3
70.00		1.00	0.89	7.798	8.578	132.45	1.000	0.000	1.00	2.339	2.34	10.0	0.0	91.8
70.00	Bot - Section 3	1.00	0.89	7.814	8.595	132.20	1.000	0.000	0.00	0.001	0.00	10.2	0.0	0.0
71.00		1.00	0.89	7.830	8.613	131.96	1.000	0.000	1.00	2.368	2.37	20.4	0.0	165.7
72.00		1.00	0.89	7.861	8.647	131.45	1.000	0.000	1.00	2.355	2.36	20.3	0.0	164.8
73.00		1.00	0.90	7.893	8.682	130.94	1.000	0.000	1.00	2.342	2.34	15.2	0.0	163.8
73.50	Top - Section 2	1.00	0.90	7.916	8.707	130.56	1.000	0.000	0.50	1.167	1.17	10.1	0.0	81.6
74.00		1.00	0.90	7.931	8.724	132.76	1.000	0.000	0.50	1.162	1.16	15.2	0.0	36.5
75.00		1.00	0.90	7.954	8.750	132.37	1.000	0.000	1.00	2.315	2.31	20.2	0.0	72.8
76.00		1.00	0.91	7.985	8.783	131.85	1.000	0.000	1.00	2.301	2.30	20.2	0.0	72.4
77.00		1.00	0.91	8.015	8.816	131.32	1.000	0.000	1.00	2.288	2.29	20.1	0.0	72.0
78.00		1.00	0.91	8.044	8.849	130.79	1.000	0.000	1.00	2.274	2.27	20.1	0.0	71.5
79.00		1.00	0.92	8.074	8.881	130.25	1.000	0.000	1.00	2.261	2.26	20.1	0.0	71.1
80.00		1.00	0.92	8.103	8.914	129.71	1.000	0.000	1.00	2.247	2.25	20.0	0.0	70.7
81.00		1.00	0.92	8.132	8.945	129.16	1.000	0.000	1.00	2.234	2.23	20.0	0.0	70.2
82.00		1.00	0.93	8.161	8.977	128.60	1.000	0.000	1.00	2.220	2.22	19.9	0.0	69.8
83.00		1.00	0.93	8.189	9.008	128.04	1.000	0.000	1.00	2.207	2.21	19.9	0.0	69.4
84.00		1.00	0.93	8.218	9.039	127.48	1.000	0.000	1.00	2.193	2.19	19.8	0.0	68.9
85.00		1.00	0.94	8.246	9.070	126.91	1.000	0.000	1.00	2.180	2.18	19.7	0.0	68.5
86.00		1.00	0.94	8.273	9.101	126.33	1.000	0.000	1.00	2.166	2.17	19.7	0.0	68.1
87.00		1.00	0.94	8.301	9.131	125.75	1.000	0.000	1.00	2.152	2.15	19.6	0.0	67.7
88.00		1.00	0.95	8.328	9.161	125.17	1.000	0.000	1.00	2.139	2.14	19.6	0.0	67.2
89.00		1.00	0.95	8.355	9.191	124.58	1.000	0.000	1.00	2.125	2.13	19.5	0.0	66.8
90.00		1.00	0.95	8.382	9.220	123.98	1.000	0.000	1.00	2.112	2.11	19.4	0.0	66.4
91.00		1.00	0.96	8.409	9.250	123.39	1.000	0.000	1.00	2.098	2.10	19.4	0.0	65.9
92.00		1.00	0.96	8.435	9.279	122.78	1.000	0.000	1.00	2.085	2.08	19.3	0.0	65.5
93.00		1.00	0.96	8.462	9.308	122.18	1.000	0.000	1.00	2.071	2.07	19.2	0.0	65.1
94.00		1.00	0.96	8.488	9.336	121.57	1.000	0.000	1.00	2.058	2.06	19.2	0.0	64.7
95.00		1.00	0.97	8.513	9.365	120.95	1.000	0.000	1.00	2.044	2.04	19.1	0.0	64.2
96.00		1.00	0.97	8.539	9.393	120.33	1.000	0.000	1.00	2.031	2.03	19.0	0.0	63.8
97.00		1.00	0.97	8.565	9.421	119.71	1.000	0.000	1.00	2.017	2.02	19.0	0.0	63.4
98.00		1.00	0.98	8.590	9.449	119.08	1.000	0.000	1.00	2.004	2.00	18.9	0.0	62.9
99.00		1.00	0.98	8.615	9.476	118.45	1.000	0.000	1.00	1.990	1.99	18.8	0.0	62.5
100.0		1.00	0.98	8.640	9.504	117.82	1.000	0.000	1.00	1.977	1.98	18.7	0.0	62.1
101.0		1.00	0.99	8.665	9.531	117.18	1.000	0.000	1.00	1.963	1.96	18.7	0.0	61.6
102.0		1.00	0.99	8.689	9.558	116.53	1.000	0.000	1.00	1.950	1.95	18.6	0.0	61.2

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 Iterations

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

Wind Importance Factor : 1.00

103.0		1.00	0.99	8.713	9.585	115.89	1.000	0.000	1.00	1.936	1.94	18.5	0.0	60.8
104.0		1.00	0.99	8.738	9.611	115.24	1.000	0.000	1.00	1.923	1.92	18.4	0.0	60.4
105.0		1.00	1.00	8.762	9.638	114.59	1.000	0.000	1.00	1.909	1.91	18.4	0.0	59.9
106.0		1.00	1.00	8.786	9.664	113.93	1.000	0.000	1.00	1.896	1.90	18.3	0.0	59.5
107.0		1.00	1.00	8.809	9.690	113.27	1.000	0.000	1.00	1.882	1.88	18.2	0.0	59.1
108.0		1.00	1.00	8.833	9.716	112.61	1.000	0.000	1.00	1.869	1.87	18.1	0.0	58.6
109.0		1.00	1.01	8.856	9.742	111.94	1.000	0.000	1.00	1.855	1.86	18.0	0.0	58.2
110.0		1.00	1.01	8.879	9.767	111.27	1.000	0.000	1.00	1.842	1.84	9.0	0.0	57.8
110.0	Top - Section 3	1.00	1.01	8.891	9.780	110.93	1.000	0.000	0.00	0.001	0.00	9.0	0.0	0.0
111.0		1.00	1.01	8.903	9.793	110.60	1.000	0.000	1.00	1.827	1.83	17.9	0.0	43.1
112.0		1.00	1.01	8.925	9.818	109.92	1.000	0.000	1.00	1.815	1.81	17.8	0.0	42.8
113.0		1.00	1.02	8.948	9.843	109.24	1.000	0.000	1.00	1.801	1.80	17.7	0.0	42.5
114.0		1.00	1.02	8.971	9.868	108.56	1.000	0.000	1.00	1.787	1.79	17.6	0.0	42.2
115.0		1.00	1.02	8.993	9.893	107.87	1.000	0.000	1.00	1.774	1.77	17.5	0.0	41.9
116.0		1.00	1.03	9.016	9.917	107.18	1.000	0.000	1.00	1.760	1.76	17.4	0.0	41.5
117.0		1.00	1.03	9.038	9.942	106.49	1.000	0.000	1.00	1.747	1.75	17.3	0.0	41.2
118.0		1.00	1.03	9.060	9.966	105.79	1.000	0.000	1.00	1.733	1.73	17.2	0.0	40.9
119.0		1.00	1.03	9.082	9.990	105.10	1.000	0.000	1.00	1.720	1.72	17.1	0.0	40.6
120.0		1.00	1.04	9.104	10.01	104.40	1.000	0.000	1.00	1.706	1.71	17.0	0.0	40.2
121.0		1.00	1.04	9.126	10.03	103.69	1.000	0.000	1.00	1.693	1.69	16.9	0.0	39.9
122.0		1.00	1.04	9.147	10.06	102.99	1.000	0.000	1.00	1.679	1.68	16.8	0.0	39.6
123.0	Appertunance(s)	1.00	1.04	9.169	10.08	102.28	1.000	0.000	1.00	1.666	1.67	16.8	0.0	39.3
124.0		1.00	1.05	9.190	10.10	101.56	1.000	0.000	1.00	1.652	1.65	16.7	0.0	39.0
125.0		1.00	1.05	9.211	10.13	100.85	1.000	0.000	1.00	1.639	1.64	16.6	0.0	38.6
126.0		1.00	1.05	9.232	10.15	100.13	1.000	0.000	1.00	1.625	1.63	16.5	0.0	38.3
127.0		1.00	1.05	9.253	10.17	99.415	1.000	0.000	1.00	1.612	1.61	16.4	0.0	38.0
128.0		1.00	1.05	9.274	10.20	98.692	1.000	0.000	1.00	1.598	1.60	16.3	0.0	37.7
129.0		1.00	1.06	9.295	10.22	97.967	1.000	0.000	1.00	1.585	1.58	16.2	0.0	37.4
130.0		1.00	1.06	9.315	10.24	97.238	1.000	0.000	1.00	1.571	1.57	16.0	0.0	37.0
131.0		1.00	1.06	9.336	10.26	96.508	1.000	0.000	1.00	1.558	1.56	15.9	0.0	36.7
132.0		1.00	1.06	9.356	10.29	95.774	1.000	0.000	1.00	1.544	1.54	15.8	0.0	36.4
133.0		1.00	1.07	9.377	10.31	95.039	1.000	0.000	1.00	1.531	1.53	15.7	0.0	36.1
134.0	Appertunance(s)	1.00	1.07	9.397	10.33	94.300	1.000	0.000	1.00	1.517	1.52	15.6	0.0	35.7
135.0		1.00	1.07	9.417	10.35	93.560	1.000	0.000	1.00	1.504	1.50	15.5	0.0	35.4
136.0		1.00	1.07	9.437	10.38	92.817	1.000	0.000	1.00	1.490	1.49	15.4	0.0	35.1
137.0		1.00	1.08	9.457	10.40	92.071	1.000	0.000	1.00	1.477	1.48	15.3	0.0	34.8
138.0		1.00	1.08	9.476	10.42	91.323	1.000	0.000	1.00	1.463	1.46	15.2	0.0	34.5
139.0		1.00	1.08	9.496	10.44	90.573	1.000	0.000	1.00	1.449	1.45	15.1	0.0	34.1
140.0		1.00	1.08	9.515	10.46	89.821	1.000	0.000	1.00	1.436	1.44	15.0	0.0	33.8
141.0	Appertunance(s)	1.00	1.08	9.535	10.48	89.066	1.000	0.000	1.00	1.422	1.42	14.9	0.0	33.5
142.0		1.00	1.09	9.554	10.51	88.309	1.000	0.000	1.00	1.409	1.41	14.8	0.0	33.2
143.0		1.00	1.09	9.574	10.53	87.549	1.000	0.000	1.00	1.395	1.40	14.6	0.0	32.8
144.0		1.00	1.09	9.593	10.55	86.788	1.000	0.000	1.00	1.382	1.38	14.5	0.0	32.5
145.0		1.00	1.09	9.612	10.57	86.024	1.000	0.000	1.00	1.368	1.37	14.4	0.0	32.2
146.0		1.00	1.10	9.631	10.59	85.258	1.000	0.000	1.00	1.355	1.35	14.3	0.0	31.9
147.0		1.00	1.10	9.650	10.61	84.490	1.000	0.000	1.00	1.341	1.34	14.2	0.0	31.6
148.0		1.00	1.10	9.668	10.63	83.720	1.000	0.000	1.00	1.328	1.33	14.1	0.0	31.2
149.0		1.00	1.10	9.687	10.65	82.947	1.000	0.000	1.00	1.314	1.31	13.9	0.0	30.9
150.0	Appertunance(s)	1.00	1.10	9.706	10.67	82.173	1.000	0.000	1.00	1.301	1.30	6.9	0.0	30.6
							Totals:		150.00			2,829.6	0.0	13,371.9

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:37 PM

Customer: AT&T Mobility

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 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

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	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		10.8	0.0					0.0	0.0	10.8	0.0	0.0	0.0
1.00		21.6	151.7					4.5	108.4	26.1	260.2	0.0	0.0
2.00		21.6	151.1					4.5	108.4	26.1	259.5	0.0	0.0
3.00		21.5	150.4					4.5	108.4	26.0	258.9	0.0	0.0
4.00		21.4	149.8					4.5	108.4	25.9	258.2	0.0	0.0
5.00		21.3	149.2					4.5	108.4	25.8	257.6	0.0	0.0
6.00		21.2	148.5					4.5	108.4	25.7	256.9	0.0	0.0
7.00		21.1	147.9					4.5	108.4	25.6	256.3	0.0	0.0
8.00		15.8	147.2					4.5	108.4	20.3	255.7	0.0	0.0
8.50	Reinf. Top	10.5	73.4					2.2	54.2	12.7	127.6	0.0	0.0
9.00		15.7	73.2					2.2	20.8	17.9	94.0	0.0	0.0
10.00	Appertunance(s)	20.8	145.9	136.1	0.0	0.0	126.0	4.5	41.6	161.4	313.6	0.0	0.0
11.00		20.7	145.3					4.5	41.6	25.2	186.9	0.0	0.0
12.00		20.6	144.6					4.5	41.6	25.1	186.3	0.0	0.0
13.00		20.6	144.0					4.5	41.6	25.1	185.6	0.0	0.0
14.00		20.5	143.4					4.5	41.6	25.0	185.0	0.0	0.0
15.00		20.4	142.7					4.5	41.6	24.9	184.3	0.0	0.0
16.00		20.3	142.1					2.2	41.6	22.5	183.7	0.0	0.0
17.00		20.2	141.4					0.0	41.6	20.2	183.0	0.0	0.0
18.00		20.1	140.8					0.0	41.6	20.1	182.4	0.0	0.0
19.00		20.0	140.1					0.0	41.6	20.0	181.7	0.0	0.0
20.00		19.9	139.5					0.0	41.6	19.9	181.1	0.0	0.0
21.00		19.8	138.8					0.0	41.6	19.8	180.5	0.0	0.0
22.00		19.7	138.2					0.0	41.6	19.7	179.8	0.0	0.0
23.00		19.6	137.6					0.0	41.6	19.6	179.2	0.0	0.0
24.00		19.6	136.9					0.0	41.6	19.6	178.5	0.0	0.0
25.00		19.5	136.3					0.0	41.6	19.5	177.9	0.0	0.0
26.00		19.4	135.6					0.0	41.6	19.4	177.2	0.0	0.0
27.00		19.3	135.0					0.0	41.6	19.3	176.6	0.0	0.0
28.00		19.2	134.3					0.0	41.6	19.2	175.9	0.0	0.0
29.00		19.1	133.7					0.0	41.6	19.1	175.3	0.0	0.0
30.00		19.1	133.1					0.0	41.6	19.1	174.7	0.0	0.0
31.00		14.3	132.4					0.0	41.6	14.3	174.0	0.0	0.0
31.50	Bot - Section 2	9.7	66.0					0.0	20.8	9.7	86.8	0.0	0.0
32.00		14.7	121.7					0.0	20.8	14.7	142.5	0.0	0.0
33.00		19.6	242.7					0.0	41.6	19.6	284.4	0.0	0.0
34.00		19.7	241.6					0.0	41.6	19.7	283.2	0.0	0.0
35.00		16.5	240.4					0.0	41.6	16.5	282.0	0.0	0.0
35.67	Top - Section 1	9.9	159.7					0.0	27.8	9.9	187.4	0.0	0.0
36.00		13.2	36.6					0.0	13.9	13.2	50.4	0.0	0.0
37.00		19.9	109.5					0.0	41.6	19.9	151.1	0.0	0.0
38.00		20.0	108.9					0.0	41.6	20.0	150.5	0.0	0.0
39.00		20.0	108.4					0.0	41.6	20.0	150.0	0.0	0.0
40.00		20.1	107.9					0.0	41.6	20.1	149.5	0.0	0.0
41.00		20.1	107.3					0.0	41.6	20.1	148.9	0.0	0.0
42.00		20.1	106.8					0.0	41.6	20.1	148.4	0.0	0.0
43.00		20.2	106.3					0.0	41.6	20.2	147.9	0.0	0.0
44.00		20.2	105.7					0.0	41.6	20.2	147.3	0.0	0.0
45.00		20.2	105.2					0.0	41.6	20.2	146.8	0.0	0.0

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 Iterations

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

Wind Importance Factor : 1.00

46.00		20.3	104.6	0.0	41.6	20.3	146.3	0.0	0.0
47.00		20.3	104.1	0.0	41.6	20.3	145.7	0.0	0.0
48.00		20.3	103.6	0.0	41.6	20.3	145.2	0.0	0.0
49.00		20.3	103.0	0.0	41.6	20.3	144.6	0.0	0.0
50.00		20.3	102.5	0.0	41.6	20.3	144.1	0.0	0.0
51.00		20.3	102.0	0.0	41.6	20.3	143.6	0.0	0.0
52.00		20.3	101.4	0.0	41.6	20.3	143.0	0.0	0.0
53.00		20.3	100.9	0.0	41.6	20.3	142.5	0.0	0.0
54.00		20.3	100.4	0.0	41.6	20.3	142.0	0.0	0.0
55.00		20.3	99.8	0.0	41.6	20.3	141.4	0.0	0.0
56.00		20.3	99.3	0.0	41.6	20.3	140.9	0.0	0.0
57.00		20.3	98.7	0.0	41.6	20.3	140.4	0.0	0.0
58.00		20.3	98.2	0.0	41.6	20.3	139.8	0.0	0.0
59.00		20.3	97.7	0.0	41.6	20.3	139.3	0.0	0.0
60.00		20.3	97.1	0.0	41.6	20.3	138.7	0.0	0.0
61.00		20.3	96.6	0.0	41.6	20.3	138.2	0.0	0.0
62.00		20.3	96.1	0.0	41.6	20.3	137.7	0.0	0.0
63.00		20.2	95.5	0.0	41.6	20.2	137.1	0.0	0.0
64.00		20.2	95.0	0.0	41.6	20.2	136.6	0.0	0.0
65.00		20.2	94.5	0.0	41.6	20.2	136.1	0.0	0.0
66.00		20.2	93.9	0.0	41.6	20.2	135.5	0.0	0.0
67.00		20.1	93.4	0.0	41.6	20.1	135.0	0.0	0.0
68.00		20.1	92.8	0.0	41.6	20.1	134.4	0.0	0.0
69.00		20.1	92.3	0.0	41.6	20.1	133.9	0.0	0.0
70.00		10.0	91.8	0.0	41.6	10.0	133.4	0.0	0.0
70.00	Bot - Section 3	10.2	0.0	0.0	0.0	10.2	0.0	0.0	0.0
71.00		20.4	165.7	0.0	41.6	20.4	207.3	0.0	0.0
72.00		20.3	164.8	0.0	41.6	20.3	206.4	0.0	0.0
73.00		15.2	163.8	0.0	41.6	15.2	205.4	0.0	0.0
73.50	Top - Section 2	10.1	81.6	0.0	20.8	10.1	102.4	0.0	0.0
74.00		15.2	36.5	0.0	20.8	15.2	57.3	0.0	0.0
75.00		20.2	72.8	0.0	41.6	20.2	114.4	0.0	0.0
76.00		20.2	72.4	0.0	41.6	20.2	114.0	0.0	0.0
77.00		20.1	72.0	0.0	41.6	20.1	113.6	0.0	0.0
78.00		20.1	71.5	0.0	41.6	20.1	113.1	0.0	0.0
79.00		20.1	71.1	0.0	41.6	20.1	112.7	0.0	0.0
80.00		20.0	70.7	0.0	41.6	20.0	112.3	0.0	0.0
81.00		20.0	70.2	0.0	41.6	20.0	111.8	0.0	0.0
82.00		19.9	69.8	0.0	41.6	19.9	111.4	0.0	0.0
83.00		19.9	69.4	0.0	41.6	19.9	111.0	0.0	0.0
84.00		19.8	68.9	0.0	41.6	19.8	110.6	0.0	0.0
85.00		19.7	68.5	0.0	41.6	19.7	110.1	0.0	0.0
86.00		19.7	68.1	0.0	41.6	19.7	109.7	0.0	0.0
87.00		19.6	67.7	0.0	41.6	19.6	109.3	0.0	0.0
88.00		19.6	67.2	0.0	41.6	19.6	108.8	0.0	0.0
89.00		19.5	66.8	0.0	41.6	19.5	108.4	0.0	0.0
90.00		19.4	66.4	0.0	41.6	19.4	108.0	0.0	0.0
91.00		19.4	65.9	0.0	41.6	19.4	107.5	0.0	0.0
92.00		19.3	65.5	0.0	41.6	19.3	107.1	0.0	0.0
93.00		19.2	65.1	0.0	41.6	19.2	106.7	0.0	0.0
94.00		19.2	64.7	0.0	41.6	19.2	106.3	0.0	0.0
95.00		19.1	64.2	0.0	41.6	19.1	105.8	0.0	0.0
96.00		19.0	63.8	0.0	41.6	19.0	105.4	0.0	0.0
97.00		19.0	63.4	0.0	41.6	19.0	105.0	0.0	0.0
98.00		18.9	62.9	0.0	41.6	18.9	104.5	0.0	0.0
99.00		18.8	62.5	0.0	41.6	18.8	104.1	0.0	0.0
100.00		18.7	62.1	0.0	41.6	18.7	103.7	0.0	0.0

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 Iterations

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

Wind Importance Factor : 1.00

101.00		18.7	61.6					0.0	41.6	18.7	103.3	0.0	0.0
102.00		18.6	61.2					0.0	41.6	18.6	102.8	0.0	0.0
103.00		18.5	60.8					0.0	41.6	18.5	102.4	0.0	0.0
104.00		18.4	60.4					0.0	41.6	18.4	102.0	0.0	0.0
105.00		18.4	59.9					0.0	41.6	18.4	101.5	0.0	0.0
106.00		18.3	59.5					0.0	41.6	18.3	101.1	0.0	0.0
107.00		18.2	59.1					0.0	41.6	18.2	100.7	0.0	0.0
108.00		18.1	58.6					0.0	41.6	18.1	100.3	0.0	0.0
109.00		18.0	58.2					0.0	41.6	18.0	99.8	0.0	0.0
110.00		9.0	57.8					0.0	41.6	9.0	99.4	0.0	0.0
110.00	Top - Section 3	9.0	0.0					0.0	0.0	9.0	0.0	0.0	0.0
111.00		17.9	43.1					0.0	41.6	17.9	84.7	0.0	0.0
112.00		17.8	42.8					0.0	41.6	17.8	84.4	0.0	0.0
113.00		17.7	42.5					0.0	41.6	17.7	84.1	0.0	0.0
114.00		17.6	42.2					0.0	41.6	17.6	83.8	0.0	0.0
115.00		17.5	41.9					0.0	41.6	17.5	83.5	0.0	0.0
116.00		17.4	41.5					0.0	41.6	17.4	83.1	0.0	0.0
117.00		17.3	41.2					0.0	41.6	17.3	82.8	0.0	0.0
118.00		17.2	40.9					0.0	41.6	17.2	82.5	0.0	0.0
119.00		17.1	40.6					0.0	41.6	17.1	82.2	0.0	0.0
120.00		17.0	40.2					0.0	41.6	17.0	81.9	0.0	0.0
121.00		16.9	39.9					0.0	41.6	16.9	81.5	0.0	0.0
122.00		16.8	39.6					0.0	41.6	16.8	81.2	0.0	0.0
123.00	Appertunance(s)	16.8	39.3	154.0	0.0	0.0	131.2	0.0	41.6	170.7	212.1	0.0	0.0
124.00		16.7	39.0					0.0	41.3	16.7	80.2	0.0	0.0
125.00		16.6	38.6					0.0	41.3	16.6	79.9	0.0	0.0
126.00		16.5	38.3					0.0	41.3	16.5	79.6	0.0	0.0
127.00		16.4	38.0					0.0	41.3	16.4	79.3	0.0	0.0
128.00		16.3	37.7					0.0	41.3	16.3	79.0	0.0	0.0
129.00		16.2	37.4					0.0	41.3	16.2	78.6	0.0	0.0
130.00		16.0	37.0					0.0	41.3	16.0	78.3	0.0	0.0
131.00		15.9	36.7					0.0	41.3	15.9	78.0	0.0	0.0
132.00		15.8	36.4					0.0	41.3	15.8	77.7	0.0	0.0
133.00		15.7	36.1					0.0	41.3	15.7	77.3	0.0	0.0
134.00	Appertunance(s)	15.6	35.7	385.5	0.0	0.0	1,695.3	0.0	41.3	401.1	1,772.3	0.0	0.0
135.00		15.5	35.4					0.0	31.4	15.5	66.9	0.0	0.0
136.00		15.4	35.1					0.0	31.4	15.4	66.5	0.0	0.0
137.00		15.3	34.8					0.0	31.4	15.3	66.2	0.0	0.0
138.00		15.2	34.5					0.0	31.4	15.2	65.9	0.0	0.0
139.00		15.1	34.1					0.0	31.4	15.1	65.6	0.0	0.0
140.00		15.0	33.8					0.0	31.4	15.0	65.2	0.0	0.0
141.00	Appertunance(s)	14.9	33.5	110.7	0.0	0.0	79.2	0.0	31.4	125.6	144.1	0.0	0.0
142.00		14.8	33.2					0.0	26.5	14.8	59.7	0.0	0.0
143.00		14.6	32.8					0.0	26.5	14.6	59.4	0.0	0.0
144.00		14.5	32.5					0.0	26.5	14.5	59.0	0.0	0.0
145.00		14.4	32.2					0.0	26.5	14.4	58.7	0.0	0.0
146.00		14.3	31.9					0.0	26.5	14.3	58.4	0.0	0.0
147.00		14.2	31.6					0.0	26.5	14.2	58.1	0.0	0.0
148.00		14.1	31.2					0.0	26.5	14.1	57.8	0.0	0.0
149.00		13.9	30.9					0.0	26.5	13.9	57.4	0.0	0.0
150.00	Appertunance(s)	6.9	30.6	1,129.3	0.0	1,303.5	2,938.5	0.0	26.5	1,136.2	2,995.6	0.0	0.0
								Totals:		4,814.91	24,940.7	0.00	0.00

Site Number: 302488 Code: ANSI/TIA-222-G

Site Name: Cntn - Canton, CT Engineering Number: OAA694241_C3_01 2/7/2017 4:28:37 PM

Customer: AT&T Mobility

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 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	-24.94	-4.80	0.00	-496.34	0.00	496.34	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.133
1.00	-24.68	-4.78	0.00	-491.54	0.00	491.54	3,148.69	1,574.34	4,778.83	2,360.09	0.00	-0.01	0.133
2.00	-24.42	-4.76	0.00	-486.75	0.00	486.75	3,140.16	1,570.08	4,745.43	2,343.59	0.00	-0.02	0.132
3.00	-24.16	-4.74	0.00	-481.99	0.00	481.99	3,131.60	1,565.80	4,712.07	2,327.11	0.01	-0.03	0.131
4.00	-23.90	-4.72	0.00	-477.25	0.00	477.25	3,123.00	1,561.50	4,678.76	2,310.67	0.02	-0.04	0.131
5.00	-23.64	-4.70	0.00	-472.53	0.00	472.53	3,114.35	1,557.18	4,645.51	2,294.24	0.03	-0.06	0.130
6.00	-23.38	-4.68	0.00	-467.83	0.00	467.83	3,105.66	1,552.83	4,612.30	2,277.84	0.04	-0.07	0.129
7.00	-23.13	-4.65	0.00	-463.16	0.00	463.16	3,096.94	1,548.47	4,579.15	2,261.47	0.06	-0.08	0.129
8.00	-22.87	-4.64	0.00	-458.50	0.00	458.50	3,088.17	1,544.08	4,546.04	2,245.12	0.07	-0.09	0.128
8.50	-22.74	-4.63	0.00	-456.19	0.00	456.19	3,083.76	1,541.88	4,529.51	2,236.96	0.08	-0.09	0.127
8.50	-22.74	-4.63	0.00	-456.19	0.00	456.19	3,083.76	1,541.88	4,529.51	2,236.96	0.08	-0.09	0.211
9.00	-22.65	-4.61	0.00	-453.87	0.00	453.87	3,079.35	1,539.68	4,513.00	2,228.80	0.09	-0.10	0.211
10.00	-22.33	-4.46	0.00	-449.26	0.00	449.26	3,070.50	1,535.25	4,480.00	2,212.50	0.12	-0.12	0.210
11.00	-22.14	-4.44	0.00	-444.80	0.00	444.80	3,061.60	1,530.80	4,447.06	2,196.24	0.14	-0.14	0.210
12.00	-21.96	-4.42	0.00	-440.36	0.00	440.36	3,052.67	1,526.33	4,414.18	2,180.00	0.17	-0.16	0.209
13.00	-21.77	-4.40	0.00	-435.94	0.00	435.94	3,043.69	1,521.84	4,381.36	2,163.79	0.21	-0.17	0.209
14.00	-21.58	-4.38	0.00	-431.54	0.00	431.54	3,034.67	1,517.33	4,348.59	2,147.60	0.25	-0.19	0.208
15.00	-21.40	-4.37	0.00	-427.15	0.00	427.15	3,025.61	1,512.80	4,315.88	2,131.45	0.29	-0.21	0.207
16.00	-21.21	-4.35	0.00	-422.79	0.00	422.79	3,016.50	1,508.25	4,283.22	2,115.32	0.34	-0.23	0.207
17.00	-21.03	-4.34	0.00	-418.44	0.00	418.44	3,007.36	1,503.68	4,250.63	2,099.23	0.39	-0.25	0.206
18.00	-20.84	-4.32	0.00	-414.10	0.00	414.10	2,998.17	1,499.09	4,218.10	2,083.16	0.44	-0.27	0.206
19.00	-20.66	-4.31	0.00	-409.78	0.00	409.78	2,988.94	1,494.47	4,185.63	2,067.13	0.50	-0.29	0.205
20.00	-20.48	-4.29	0.00	-405.47	0.00	405.47	2,979.67	1,489.84	4,153.23	2,051.12	0.56	-0.31	0.205
21.00	-20.30	-4.28	0.00	-401.18	0.00	401.18	2,970.36	1,485.18	4,120.88	2,035.15	0.63	-0.33	0.204
22.00	-20.12	-4.27	0.00	-396.90	0.00	396.90	2,961.01	1,480.50	4,088.60	2,019.21	0.70	-0.34	0.203
23.00	-19.94	-4.25	0.00	-392.63	0.00	392.63	2,951.61	1,475.81	4,056.39	2,003.30	0.77	-0.36	0.203
24.00	-19.76	-4.24	0.00	-388.38	0.00	388.38	2,942.18	1,471.09	4,024.24	1,987.42	0.85	-0.38	0.202
25.00	-19.58	-4.22	0.00	-384.15	0.00	384.15	2,932.70	1,466.35	3,992.16	1,971.58	0.93	-0.40	0.202
26.00	-19.40	-4.21	0.00	-379.92	0.00	379.92	2,923.18	1,461.59	3,960.14	1,955.76	1.02	-0.42	0.201
27.00	-19.22	-4.20	0.00	-375.71	0.00	375.71	2,913.62	1,456.81	3,928.19	1,939.99	1.11	-0.44	0.200
28.00	-19.04	-4.18	0.00	-371.52	0.00	371.52	2,903.09	1,451.54	3,895.07	1,923.63	1.20	-0.46	0.200
29.00	-18.87	-4.17	0.00	-367.34	0.00	367.34	2,889.14	1,444.57	3,857.52	1,905.08	1.30	-0.48	0.199
30.00	-18.69	-4.15	0.00	-363.17	0.00	363.17	2,875.19	1,437.60	3,820.15	1,886.63	1.41	-0.50	0.199
31.00	-18.52	-4.14	0.00	-359.02	0.00	359.02	2,861.24	1,430.62	3,782.96	1,868.26	1.51	-0.52	0.199
31.50	-18.43	-4.13	0.00	-356.94	0.00	356.94	2,854.27	1,427.13	3,764.43	1,859.11	1.57	-0.53	0.198
32.00	-18.28	-4.12	0.00	-354.88	0.00	354.88	2,847.30	1,423.65	3,745.96	1,849.99	1.62	-0.54	0.198
33.00	-18.00	-4.11	0.00	-350.75	0.00	350.75	2,833.35	1,416.67	3,709.14	1,831.80	1.74	-0.56	0.198
34.00	-17.71	-4.09	0.00	-346.65	0.00	346.65	2,819.40	1,409.70	3,672.50	1,813.71	1.86	-0.58	0.197
35.00	-17.43	-4.08	0.00	-342.56	0.00	342.56	2,805.45	1,402.73	3,636.04	1,795.70	1.98	-0.60	0.197
35.67	-17.24	-4.07	0.00	-339.84	0.00	339.84	2,248.05	1,124.03	2,973.86	1,468.68	2.07	-0.61	0.239
36.00	-17.19	-4.06	0.00	-338.48	0.00	338.48	2,245.81	1,122.91	2,966.02	1,464.81	2.11	-0.62	0.239
37.00	-17.04	-4.04	0.00	-334.42	0.00	334.42	2,239.07	1,119.53	2,942.52	1,453.20	2.24	-0.64	0.238
38.00	-16.89	-4.03	0.00	-330.38	0.00	330.38	2,232.28	1,116.14	2,919.04	1,441.60	2.38	-0.67	0.237
39.00	-16.74	-4.01	0.00	-326.35	0.00	326.35	2,225.45	1,112.72	2,895.60	1,430.03	2.52	-0.69	0.236
40.00	-16.59	-4.00	0.00	-322.34	0.00	322.34	2,218.58	1,109.29	2,872.19	1,418.47	2.67	-0.71	0.235
41.00	-16.44	-3.98	0.00	-318.34	0.00	318.34	2,211.66	1,105.83	2,848.82	1,406.93	2.82	-0.73	0.234
42.00	-16.29	-3.97	0.00	-314.36	0.00	314.36	2,204.71	1,102.35	2,825.49	1,395.40	2.98	-0.76	0.233
43.00	-16.14	-3.95	0.00	-310.39	0.00	310.39	2,197.71	1,098.85	2,802.19	1,383.90	3.14	-0.78	0.232
44.00	-15.99	-3.94	0.00	-306.44	0.00	306.44	2,190.67	1,095.33	2,778.94	1,372.41	3.30	-0.80	0.231
45.00	-15.84	-3.92	0.00	-302.50	0.00	302.50	2,183.59	1,091.79	2,755.72	1,360.95	3.47	-0.83	0.230
46.00	-15.69	-3.90	0.00	-298.58	0.00	298.58	2,176.47	1,088.23	2,732.54	1,349.50	3.65	-0.85	0.228

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 Iterations

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

Wind Importance Factor : 1.00

47.00	-15.55	-3.89	0.00	-294.68	0.00	294.68	2,169.30	1,084.65	2,709.41	1,338.07	3.83	-0.87	0.227
48.00	-15.40	-3.87	0.00	-290.79	0.00	290.79	2,162.10	1,081.05	2,686.31	1,326.67	4.01	-0.90	0.226
49.00	-15.25	-3.86	0.00	-286.92	0.00	286.92	2,154.85	1,077.43	2,663.26	1,315.28	4.20	-0.92	0.225
50.00	-15.11	-3.84	0.00	-283.06	0.00	283.06	2,147.56	1,073.78	2,640.25	1,303.92	4.40	-0.94	0.224
51.00	-14.96	-3.82	0.00	-279.23	0.00	279.23	2,140.23	1,070.12	2,617.28	1,292.58	4.60	-0.97	0.223
52.00	-14.82	-3.81	0.00	-275.40	0.00	275.40	2,132.86	1,066.43	2,594.37	1,281.26	4.80	-0.99	0.222
53.00	-14.68	-3.79	0.00	-271.60	0.00	271.60	2,125.45	1,062.72	2,571.49	1,269.96	5.01	-1.01	0.221
54.00	-14.53	-3.77	0.00	-267.81	0.00	267.81	2,118.00	1,059.00	2,548.66	1,258.69	5.23	-1.04	0.220
55.00	-14.39	-3.75	0.00	-264.04	0.00	264.04	2,110.50	1,055.25	2,525.88	1,247.44	5.45	-1.06	0.218
56.00	-14.25	-3.74	0.00	-260.28	0.00	260.28	2,102.96	1,051.48	2,503.15	1,236.21	5.67	-1.08	0.217
57.00	-14.11	-3.72	0.00	-256.55	0.00	256.55	2,095.38	1,047.69	2,480.47	1,225.01	5.90	-1.11	0.216
58.00	-13.96	-3.70	0.00	-252.83	0.00	252.83	2,087.76	1,043.88	2,457.84	1,213.83	6.14	-1.13	0.215
59.00	-13.82	-3.69	0.00	-249.12	0.00	249.12	2,080.10	1,040.05	2,435.26	1,202.68	6.38	-1.15	0.214
60.00	-13.68	-3.67	0.00	-245.44	0.00	245.44	2,072.39	1,036.20	2,412.72	1,191.55	6.62	-1.18	0.213
61.00	-13.55	-3.65	0.00	-241.77	0.00	241.77	2,064.65	1,032.32	2,390.25	1,180.45	6.87	-1.20	0.211
62.00	-13.41	-3.63	0.00	-238.12	0.00	238.12	2,056.86	1,028.43	2,367.82	1,169.38	7.12	-1.23	0.210
63.00	-13.27	-3.62	0.00	-234.48	0.00	234.48	2,049.03	1,024.52	2,345.45	1,158.33	7.38	-1.25	0.209
64.00	-13.13	-3.60	0.00	-230.87	0.00	230.87	2,041.16	1,020.58	2,323.13	1,147.31	7.65	-1.27	0.208
65.00	-12.99	-3.58	0.00	-227.27	0.00	227.27	2,033.25	1,016.62	2,300.87	1,136.31	7.92	-1.30	0.206
66.00	-12.86	-3.56	0.00	-223.69	0.00	223.69	2,025.30	1,012.65	2,278.67	1,125.35	8.19	-1.32	0.205
67.00	-12.72	-3.54	0.00	-220.13	0.00	220.13	2,016.93	1,008.47	2,256.11	1,114.21	8.47	-1.35	0.204
68.00	-12.59	-3.53	0.00	-216.58	0.00	216.58	2,005.31	1,002.65	2,230.04	1,101.33	8.75	-1.37	0.203
69.00	-12.45	-3.51	0.00	-213.06	0.00	213.06	1,993.69	996.84	2,204.11	1,088.53	9.04	-1.39	0.202
70.00	-12.32	-3.50	0.00	-209.55	0.00	209.55	1,982.06	991.03	2,178.34	1,075.80	9.34	-1.42	0.201
70.00	-12.32	-3.49	0.00	-209.55	0.00	209.55	1,982.06	991.03	2,178.33	1,075.80	9.34	-1.42	0.201
71.00	-12.11	-3.47	0.00	-206.06	0.00	206.06	1,970.44	985.22	2,152.72	1,063.15	9.64	-1.44	0.200
72.00	-11.90	-3.45	0.00	-202.59	0.00	202.59	1,958.82	979.41	2,127.25	1,050.57	9.94	-1.47	0.199
73.00	-11.70	-3.43	0.00	-199.14	0.00	199.14	1,947.19	973.60	2,101.94	1,038.07	10.25	-1.49	0.198
73.50	-11.59	-3.42	0.00	-197.42	0.00	197.42	1,473.95	736.97	1,624.52	802.29	10.41	-1.50	0.254
74.00	-11.53	-3.41	0.00	-195.71	0.00	195.71	1,471.40	735.70	1,616.91	798.53	10.57	-1.51	0.253
75.00	-11.42	-3.39	0.00	-192.31	0.00	192.31	1,466.26	733.13	1,601.72	791.03	10.89	-1.54	0.251
76.00	-11.30	-3.37	0.00	-188.91	0.00	188.91	1,461.09	730.55	1,586.54	783.53	11.21	-1.57	0.249
77.00	-11.19	-3.36	0.00	-185.54	0.00	185.54	1,455.88	727.94	1,571.38	776.05	11.55	-1.60	0.247
78.00	-11.07	-3.34	0.00	-182.18	0.00	182.18	1,450.62	725.31	1,556.25	768.57	11.88	-1.63	0.245
79.00	-10.96	-3.32	0.00	-178.85	0.00	178.85	1,445.32	722.66	1,541.14	761.11	12.23	-1.66	0.243
80.00	-10.85	-3.30	0.00	-175.52	0.00	175.52	1,439.98	719.99	1,526.06	753.66	12.58	-1.68	0.240
81.00	-10.74	-3.28	0.00	-172.22	0.00	172.22	1,434.60	717.30	1,511.01	746.23	12.93	-1.71	0.238
82.00	-10.62	-3.27	0.00	-168.94	0.00	168.94	1,429.18	714.59	1,495.98	738.81	13.30	-1.74	0.236
83.00	-10.51	-3.25	0.00	-165.67	0.00	165.67	1,423.71	711.86	1,480.97	731.40	13.66	-1.77	0.234
84.00	-10.40	-3.23	0.00	-162.42	0.00	162.42	1,418.21	709.10	1,466.00	724.00	14.04	-1.80	0.232
85.00	-10.29	-3.21	0.00	-159.19	0.00	159.19	1,412.66	706.33	1,451.06	716.62	14.42	-1.83	0.229
86.00	-10.18	-3.19	0.00	-155.98	0.00	155.98	1,407.07	703.53	1,436.14	709.26	14.80	-1.85	0.227
87.00	-10.07	-3.18	0.00	-152.79	0.00	152.79	1,401.44	700.72	1,421.26	701.91	15.19	-1.88	0.225
88.00	-9.96	-3.16	0.00	-149.61	0.00	149.61	1,395.76	697.88	1,406.40	694.57	15.59	-1.91	0.223
89.00	-9.85	-3.14	0.00	-146.45	0.00	146.45	1,390.05	695.02	1,391.58	687.25	15.99	-1.94	0.220
90.00	-9.74	-3.12	0.00	-143.31	0.00	143.31	1,384.29	692.15	1,376.80	679.95	16.40	-1.97	0.218
91.00	-9.63	-3.10	0.00	-140.19	0.00	140.19	1,378.50	689.25	1,362.04	672.66	16.82	-1.99	0.215
92.00	-9.52	-3.08	0.00	-137.09	0.00	137.09	1,372.66	686.33	1,347.32	665.39	17.24	-2.02	0.213
93.00	-9.42	-3.07	0.00	-134.00	0.00	134.00	1,366.78	683.39	1,332.64	658.14	17.66	-2.05	0.211
94.00	-9.31	-3.05	0.00	-130.94	0.00	130.94	1,360.85	680.43	1,317.99	650.91	18.10	-2.08	0.208
95.00	-9.20	-3.03	0.00	-127.89	0.00	127.89	1,354.89	677.44	1,303.39	643.69	18.53	-2.10	0.205
96.00	-9.10	-3.01	0.00	-124.86	0.00	124.86	1,348.88	674.44	1,288.81	636.50	18.98	-2.13	0.203
97.00	-8.99	-2.99	0.00	-121.85	0.00	121.85	1,342.84	671.42	1,274.28	629.32	19.43	-2.16	0.200
98.00	-8.89	-2.97	0.00	-118.86	0.00	118.86	1,336.75	668.37	1,259.79	622.16	19.88	-2.19	0.198
99.00	-8.78	-2.95	0.00	-115.89	0.00	115.89	1,330.62	665.31	1,245.34	615.03	20.34	-2.21	0.195
100.00	-8.68	-2.94	0.00	-112.93	0.00	112.93	1,324.45	662.22	1,230.93	607.91	20.81	-2.24	0.192
101.00	-8.57	-2.92	0.00	-110.00	0.00	110.00	1,318.23	659.12	1,216.56	600.81	21.28	-2.27	0.190

Load Case: 1.0D + 1.0W Serviceability 60 mph 38 Iterations

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

Wind Importance Factor : 1.00

102.00	-8.47	-2.90	0.00	-107.08	0.00	107.08	1,311.98	655.99	1,202.23	593.74	21.76	-2.29	0.187
103.00	-8.37	-2.88	0.00	-104.18	0.00	104.18	1,305.68	652.84	1,187.95	586.68	22.24	-2.32	0.184
104.00	-8.26	-2.86	0.00	-101.30	0.00	101.30	1,299.34	649.67	1,173.71	579.65	22.73	-2.35	0.181
105.00	-8.16	-2.84	0.00	-98.44	0.00	98.44	1,292.96	646.48	1,159.52	572.64	23.23	-2.37	0.178
106.00	-8.06	-2.82	0.00	-95.60	0.00	95.60	1,284.28	642.14	1,143.36	564.66	23.73	-2.40	0.176
107.00	-7.96	-2.80	0.00	-92.78	0.00	92.78	1,274.98	637.49	1,126.77	556.47	24.23	-2.42	0.173
108.00	-7.86	-2.79	0.00	-89.98	0.00	89.98	1,265.69	632.84	1,110.30	548.34	24.74	-2.45	0.170
109.00	-7.76	-2.77	0.00	-87.19	0.00	87.19	1,256.39	628.19	1,093.96	540.26	25.26	-2.48	0.168
110.00	-7.66	-2.75	0.00	-84.42	0.00	84.42	1,247.09	623.54	1,077.73	532.25	25.78	-2.50	0.165
110.00	-7.66	-2.75	0.00	-84.42	0.00	84.42	1,247.09	623.54	1,077.72	532.25	25.78	-2.50	0.165
110.00	-7.66	-2.75	0.00	-84.42	0.00	84.42	853.22	426.61	741.74	366.32	25.78	-2.50	0.239
111.00	-7.57	-2.73	0.00	-81.68	0.00	81.68	849.66	424.83	733.10	362.05	26.30	-2.53	0.235
112.00	-7.49	-2.71	0.00	-78.95	0.00	78.95	846.05	423.02	724.47	357.79	26.84	-2.56	0.230
113.00	-7.40	-2.70	0.00	-76.23	0.00	76.23	842.40	421.20	715.86	353.53	27.38	-2.59	0.224
114.00	-7.32	-2.68	0.00	-73.54	0.00	73.54	838.71	419.35	707.25	349.29	27.92	-2.62	0.219
115.00	-7.24	-2.66	0.00	-70.86	0.00	70.86	834.98	417.49	698.66	345.04	28.47	-2.65	0.214
116.00	-7.15	-2.64	0.00	-68.20	0.00	68.20	831.20	415.60	690.08	340.81	29.03	-2.68	0.209
117.00	-7.07	-2.63	0.00	-65.56	0.00	65.56	827.39	413.69	681.52	336.58	29.60	-2.71	0.203
118.00	-6.99	-2.61	0.00	-62.93	0.00	62.93	823.53	411.76	672.98	332.36	30.17	-2.74	0.198
119.00	-6.90	-2.59	0.00	-60.32	0.00	60.32	819.63	409.81	664.45	328.14	30.75	-2.77	0.192
120.00	-6.82	-2.57	0.00	-57.73	0.00	57.73	815.69	407.84	655.93	323.94	31.33	-2.80	0.187
121.00	-6.74	-2.56	0.00	-55.16	0.00	55.16	811.71	405.85	647.44	319.75	31.92	-2.83	0.181
122.00	-6.66	-2.54	0.00	-52.60	0.00	52.60	807.68	403.84	638.96	315.56	32.51	-2.86	0.175
123.00	-6.45	-2.36	0.00	-50.07	0.00	50.07	803.62	401.81	630.51	311.38	33.12	-2.88	0.169
124.00	-6.37	-2.34	0.00	-47.71	0.00	47.71	799.51	399.76	622.07	307.22	33.72	-2.91	0.163
125.00	-6.29	-2.32	0.00	-45.37	0.00	45.37	795.36	397.68	613.66	303.06	34.33	-2.93	0.158
126.00	-6.21	-2.31	0.00	-43.04	0.00	43.04	791.17	395.59	605.27	298.92	34.95	-2.96	0.152
127.00	-6.13	-2.29	0.00	-40.74	0.00	40.74	786.94	393.47	596.90	294.79	35.57	-2.98	0.146
128.00	-6.06	-2.27	0.00	-38.45	0.00	38.45	782.67	391.33	588.56	290.67	36.20	-3.01	0.140
129.00	-5.98	-2.25	0.00	-36.18	0.00	36.18	778.35	389.18	580.24	286.56	36.83	-3.03	0.134
130.00	-5.90	-2.23	0.00	-33.93	0.00	33.93	774.00	387.00	571.95	282.46	37.47	-3.05	0.128
131.00	-5.82	-2.22	0.00	-31.69	0.00	31.69	769.60	384.80	563.68	278.38	38.11	-3.07	0.121
132.00	-5.74	-2.20	0.00	-29.47	0.00	29.47	765.16	382.58	555.44	274.31	38.76	-3.09	0.115
133.00	-5.67	-2.18	0.00	-27.28	0.00	27.28	760.68	380.34	547.23	270.25	39.41	-3.11	0.108
134.00	-3.92	-1.68	0.00	-25.10	0.00	25.10	756.16	378.08	539.04	266.21	40.06	-3.13	0.099
135.00	-3.85	-1.67	0.00	-23.41	0.00	23.41	751.59	375.80	530.89	262.19	40.72	-3.15	0.094
136.00	-3.79	-1.65	0.00	-21.74	0.00	21.74	746.99	373.49	522.77	258.17	41.38	-3.16	0.089
137.00	-3.72	-1.63	0.00	-20.10	0.00	20.10	742.34	371.17	514.67	254.18	42.04	-3.18	0.084
138.00	-3.65	-1.61	0.00	-18.47	0.00	18.47	737.65	368.82	506.61	250.20	42.71	-3.19	0.079
139.00	-3.59	-1.60	0.00	-16.85	0.00	16.85	732.92	366.46	498.59	246.23	43.38	-3.21	0.073
140.00	-3.52	-1.58	0.00	-15.26	0.00	15.26	728.15	364.07	490.59	242.29	44.05	-3.22	0.068
141.00	-3.39	-1.44	0.00	-13.68	0.00	13.68	721.91	360.95	481.68	237.89	44.73	-3.23	0.062
142.00	-3.33	-1.43	0.00	-12.24	0.00	12.24	714.93	357.47	472.37	233.29	45.40	-3.24	0.057
143.00	-3.27	-1.41	0.00	-10.81	0.00	10.81	707.96	353.98	463.15	228.73	46.08	-3.25	0.052
144.00	-3.21	-1.39	0.00	-9.40	0.00	9.40	700.99	350.49	454.01	224.22	46.77	-3.26	0.047
145.00	-3.15	-1.38	0.00	-8.01	0.00	8.01	694.01	347.01	444.97	219.76	47.45	-3.27	0.041
146.00	-3.10	-1.36	0.00	-6.63	0.00	6.63	687.04	343.52	436.02	215.34	48.14	-3.28	0.035
147.00	-3.04	-1.34	0.00	-5.27	0.00	5.27	680.07	340.03	427.16	210.96	48.82	-3.29	0.029
148.00	-2.98	-1.32	0.00	-3.93	0.00	3.93	673.09	336.55	418.40	206.63	49.51	-3.29	0.023
149.00	-2.93	-1.31	0.00	-2.61	0.00	2.61	666.12	333.06	409.72	202.34	50.20	-3.29	0.017
150.00	0.00	-1.14	0.00	-1.30	0.00	1.30	659.14	329.57	401.13	198.10	50.89	-3.30	0.007

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):	8	
Importance Factor (I_E):	1.00	
Site Coefficient F_a:	1.60	
Site Coeffiecient F_v:	2.40	
Response Modification Coefficient (R):	1.50	
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.19	
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):	3.41	
Redundancy Factor (p):	1.30	
Seismic Force Distribution Exponent (k):	2.00	
Total Unfactored Dead Load:	24.94	k
Seismic Base Shear (E):	0.97	k

Load Case (1.2 + 0.2Sds) * 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)
156	149.50	57	1,276	0.006	6	71
155	148.50	57	1,266	0.006	6	71
154	147.50	58	1,256	0.006	6	72
153	146.50	58	1,246	0.006	6	72
152	145.50	58	1,236	0.006	6	72
151	144.50	59	1,226	0.006	6	73
150	143.50	59	1,216	0.006	6	73
149	142.50	59	1,205	0.006	6	74
148	141.50	60	1,195	0.006	6	74
147	140.50	65	1,282	0.006	6	80
146	139.50	65	1,270	0.006	6	81
145	138.50	66	1,258	0.006	6	81
144	137.50	66	1,246	0.006	6	82
143	136.50	66	1,234	0.006	6	82
142	135.50	67	1,222	0.006	6	82
141	134.50	67	1,209	0.006	6	83
140	133.50	77	1,373	0.007	7	95
139	132.50	77	1,358	0.007	7	96
138	131.50	78	1,343	0.007	6	96
137	130.50	78	1,328	0.007	6	97
136	129.50	78	1,313	0.006	6	97
135	128.50	79	1,298	0.006	6	97
134	127.50	79	1,283	0.006	6	98

133	126.50	79	1,269	0.006	6	98
132	125.50	80	1,254	0.006	6	99
131	124.50	80	1,239	0.006	6	99
130	123.50	80	1,224	0.006	6	99
129	122.50	81	1,214	0.006	6	100
128	121.50	81	1,199	0.006	6	101
127	120.50	82	1,184	0.006	6	101
126	119.50	82	1,169	0.006	6	101
125	118.50	82	1,154	0.006	6	102
124	117.50	82	1,139	0.006	5	102
123	116.50	83	1,124	0.006	5	103
122	115.50	83	1,109	0.005	5	103
121	114.50	83	1,094	0.005	5	103
120	113.50	84	1,079	0.005	5	104
119	112.50	84	1,065	0.005	5	104
118	111.50	84	1,050	0.005	5	105
117	110.50	85	1,035	0.005	5	105
116	110.00	0	0	0.000	0	0
115	109.50	99	1,192	0.006	6	123
114	108.50	100	1,175	0.006	6	124
113	107.50	100	1,159	0.006	6	124
112	106.50	101	1,142	0.006	5	125
111	105.50	101	1,125	0.006	5	125
110	104.50	102	1,109	0.005	5	126
109	103.50	102	1,092	0.005	5	126
108	102.50	102	1,076	0.005	5	127
107	101.50	103	1,059	0.005	5	127
106	100.50	103	1,043	0.005	5	128
105	99.50	104	1,027	0.005	5	128
104	98.50	104	1,010	0.005	5	129
103	97.50	105	994	0.005	5	129
102	96.50	105	978	0.005	5	130
101	95.50	105	961	0.005	5	131
100	94.50	106	945	0.005	5	131
99	93.50	106	929	0.005	4	132
98	92.50	107	913	0.005	4	132
97	91.50	107	897	0.004	4	133
96	90.50	108	881	0.004	4	133
95	89.50	108	865	0.004	4	134
94	88.50	108	849	0.004	4	134
93	87.50	109	833	0.004	4	135
92	86.50	109	818	0.004	4	135
91	85.50	110	802	0.004	4	136
90	84.50	110	786	0.004	4	136
89	83.50	111	771	0.004	4	137
88	82.50	111	755	0.004	4	137
87	81.50	111	740	0.004	4	138
86	80.50	112	725	0.004	3	138
85	79.50	112	710	0.004	3	139
84	78.50	113	694	0.003	3	140
83	77.50	113	679	0.003	3	140
82	76.50	114	665	0.003	3	141
81	75.50	114	650	0.003	3	141
80	74.50	114	635	0.003	3	142
79	73.75	57	312	0.002	1	71
78	73.25	102	550	0.003	3	127
77	72.50	205	1,080	0.005	5	254
76	71.50	206	1,055	0.005	5	256
75	70.50	207	1,030	0.005	5	257
74	70.00	0	0	0.000	0	0
73	69.50	133	644	0.003	3	165
72	68.50	134	628	0.003	3	166
71	67.50	134	613	0.003	3	166
70	66.50	135	597	0.003	3	167

69	65.50	136	581	0.003	3	168
68	64.50	136	566	0.003	3	168
67	63.50	137	551	0.003	3	169
66	62.50	137	536	0.003	3	170
65	61.50	138	521	0.003	2	170
64	60.50	138	506	0.002	2	171
63	59.50	139	491	0.002	2	172
62	58.50	139	477	0.002	2	172
61	57.50	140	462	0.002	2	173
60	56.50	140	448	0.002	2	174
59	55.50	141	434	0.002	2	174
58	54.50	141	420	0.002	2	175
57	53.50	142	406	0.002	2	176
56	52.50	142	393	0.002	2	176
55	51.50	143	379	0.002	2	177
54	50.50	144	366	0.002	2	178
53	49.50	144	353	0.002	2	178
52	48.50	145	340	0.002	2	179
51	47.50	145	328	0.002	2	180
50	46.50	146	315	0.002	2	180
49	45.50	146	303	0.001	1	181
48	44.50	147	291	0.001	1	182
47	43.50	147	279	0.001	1	182
46	42.50	148	267	0.001	1	183
45	41.50	148	256	0.001	1	184
44	40.50	149	244	0.001	1	184
43	39.50	149	233	0.001	1	185
42	38.50	150	222	0.001	1	186
41	37.50	151	212	0.001	1	186
40	36.50	151	201	0.001	1	187
39	35.83	50	65	0.000	0	62
38	35.33	187	234	0.001	1	232
37	34.50	282	336	0.002	2	349
36	33.50	283	318	0.002	2	351
35	32.50	284	300	0.001	1	352
34	31.75	143	144	0.001	1	176
33	31.25	87	85	0.000	0	108
32	30.50	174	162	0.001	1	215
31	29.50	175	152	0.001	1	216
30	28.50	175	142	0.001	1	217
29	27.50	176	133	0.001	1	218
28	26.50	177	124	0.001	1	219
27	25.50	177	115	0.001	1	219
26	24.50	178	107	0.001	1	220
25	23.50	179	99	0.000	0	221
24	22.50	179	91	0.000	0	222
23	21.50	180	83	0.000	0	223
22	20.50	180	76	0.000	0	223
21	19.50	181	69	0.000	0	224
20	18.50	182	62	0.000	0	225
19	17.50	182	56	0.000	0	226
18	16.50	183	50	0.000	0	227
17	15.50	184	44	0.000	0	227
16	14.50	184	39	0.000	0	228
15	13.50	185	34	0.000	0	229
14	12.50	186	29	0.000	0	230
13	11.50	186	25	0.000	0	231
12	10.50	187	21	0.000	0	231
11	9.50	188	17	0.000	0	232
10	8.75	94	7	0.000	0	116
9	8.25	128	9	0.000	0	158
8	7.50	256	14	0.000	0	317
7	6.50	256	11	0.000	0	317
6	5.50	257	8	0.000	0	318

5	4.50	258	5	0.000	0	319
4	3.50	258	3	0.000	0	320
3	2.50	259	2	0.000	0	321
2	1.50	260	1	0.000	0	321
1	0.50	260	0	0.000	0	322
Andrew ABT-DMDF-ADBH	150.00	3	74	0.000	0	4
Powerwave Allgon 702	150.00	26	594	0.003	3	33
Powerwave TT19-08BP1	150.00	96	2,160	0.011	10	119
Raycap DC6-48-60-18-	150.00	33	738	0.004	4	41
Ericsson RRUS 11 (Ba	150.00	150	3,375	0.017	16	186
Ericsson RRUS 32 B2	150.00	159	3,577	0.018	17	197
12' Omni	150.00	40	900	0.004	4	50
12' Dipole	150.00	40	900	0.004	4	50
Powerwave 7770.00A	150.00	162	3,645	0.018	17	201
6' Yagi	150.00	25	563	0.003	3	31
CCI HPA-65R-BUU-H8	150.00	204	4,590	0.023	22	253
Flat Platform w/ Han	150.00	2,000	45,000	0.222	216	2,476
RFS APXV18-206517S-C	141.00	79	1,575	0.008	8	98
RFS ATMPP1412D-1CWA	134.00	38	673	0.003	3	46
RFS ATMAA1412D-1A20	134.00	39	700	0.003	3	48
RFS APX16DWV-16DWV-S	134.00	119	2,133	0.011	10	147
Low Profile Platform	134.00	1,500	26,934	0.133	129	1,857
Stand-Off	123.00	100	1,513	0.007	7	124
75" x 16.8" Panel	123.00	31	472	0.002	2	39
Channel Master Type	10.00	126	13	0.000	0	156
		24,941	202,711	1.000	973	30,881

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)
156	149.50	57	1,276	0.006	6	49
155	148.50	57	1,266	0.006	6	49
154	147.50	58	1,256	0.006	6	50
153	146.50	58	1,246	0.006	6	50
152	145.50	58	1,236	0.006	6	50
151	144.50	59	1,226	0.006	6	51
150	143.50	59	1,216	0.006	6	51
149	142.50	59	1,205	0.006	6	51
148	141.50	60	1,195	0.006	6	51
147	140.50	65	1,282	0.006	6	56
146	139.50	65	1,270	0.006	6	56
145	138.50	66	1,258	0.006	6	57
144	137.50	66	1,246	0.006	6	57
143	136.50	66	1,234	0.006	6	57
142	135.50	67	1,222	0.006	6	57
141	134.50	67	1,209	0.006	6	58
140	133.50	77	1,373	0.007	7	66
139	132.50	77	1,358	0.007	7	67
138	131.50	78	1,343	0.007	6	67
137	130.50	78	1,328	0.007	6	67
136	129.50	78	1,313	0.006	6	67
135	128.50	79	1,298	0.006	6	68
134	127.50	79	1,283	0.006	6	68
133	126.50	79	1,269	0.006	6	68
132	125.50	80	1,254	0.006	6	69
131	124.50	80	1,239	0.006	6	69
130	123.50	80	1,224	0.006	6	69
129	122.50	81	1,214	0.006	6	70
128	121.50	81	1,199	0.006	6	70

127	120.50	82	1,184	0.006	6	70
126	119.50	82	1,169	0.006	6	71
125	118.50	82	1,154	0.006	6	71
124	117.50	82	1,139	0.006	5	71
123	116.50	83	1,124	0.006	5	71
122	115.50	83	1,109	0.005	5	72
121	114.50	83	1,094	0.005	5	72
120	113.50	84	1,079	0.005	5	72
119	112.50	84	1,065	0.005	5	72
118	111.50	84	1,050	0.005	5	73
117	110.50	85	1,035	0.005	5	73
116	110.00	0	0	0.000	0	0
115	109.50	99	1,192	0.006	6	86
114	108.50	100	1,175	0.006	6	86
113	107.50	100	1,159	0.006	6	86
112	106.50	101	1,142	0.006	5	87
111	105.50	101	1,125	0.006	5	87
110	104.50	102	1,109	0.005	5	88
109	103.50	102	1,092	0.005	5	88
108	102.50	102	1,076	0.005	5	88
107	101.50	103	1,059	0.005	5	89
106	100.50	103	1,043	0.005	5	89
105	99.50	104	1,027	0.005	5	89
104	98.50	104	1,010	0.005	5	90
103	97.50	105	994	0.005	5	90
102	96.50	105	978	0.005	5	90
101	95.50	105	961	0.005	5	91
100	94.50	106	945	0.005	5	91
99	93.50	106	929	0.005	4	92
98	92.50	107	913	0.005	4	92
97	91.50	107	897	0.004	4	92
96	90.50	108	881	0.004	4	93
95	89.50	108	865	0.004	4	93
94	88.50	108	849	0.004	4	93
93	87.50	109	833	0.004	4	94
92	86.50	109	818	0.004	4	94
91	85.50	110	802	0.004	4	95
90	84.50	110	786	0.004	4	95
89	83.50	111	771	0.004	4	95
88	82.50	111	755	0.004	4	96
87	81.50	111	740	0.004	4	96
86	80.50	112	725	0.004	3	96
85	79.50	112	710	0.004	3	97
84	78.50	113	694	0.003	3	97
83	77.50	113	679	0.003	3	97
82	76.50	114	665	0.003	3	98
81	75.50	114	650	0.003	3	98
80	74.50	114	635	0.003	3	99
79	73.75	57	312	0.002	1	49
78	73.25	102	550	0.003	3	88
77	72.50	205	1,080	0.005	5	177
76	71.50	206	1,055	0.005	5	178
75	70.50	207	1,030	0.005	5	179
74	70.00	0	0	0.000	0	0
73	69.50	133	644	0.003	3	115
72	68.50	134	628	0.003	3	115
71	67.50	134	613	0.003	3	116
70	66.50	135	597	0.003	3	116
69	65.50	136	581	0.003	3	117
68	64.50	136	566	0.003	3	117
67	63.50	137	551	0.003	3	118
66	62.50	137	536	0.003	3	118
65	61.50	138	521	0.003	2	119
64	60.50	138	506	0.002	2	119

63	59.50	139	491	0.002	2	120
62	58.50	139	477	0.002	2	120
61	57.50	140	462	0.002	2	120
60	56.50	140	448	0.002	2	121
59	55.50	141	434	0.002	2	121
58	54.50	141	420	0.002	2	122
57	53.50	142	406	0.002	2	122
56	52.50	142	393	0.002	2	123
55	51.50	143	379	0.002	2	123
54	50.50	144	366	0.002	2	124
53	49.50	144	353	0.002	2	124
52	48.50	145	340	0.002	2	125
51	47.50	145	328	0.002	2	125
50	46.50	146	315	0.002	2	126
49	45.50	146	303	0.001	1	126
48	44.50	147	291	0.001	1	127
47	43.50	147	279	0.001	1	127
46	42.50	148	267	0.001	1	127
45	41.50	148	256	0.001	1	128
44	40.50	149	244	0.001	1	128
43	39.50	149	233	0.001	1	129
42	38.50	150	222	0.001	1	129
41	37.50	151	212	0.001	1	130
40	36.50	151	201	0.001	1	130
39	35.83	50	65	0.000	0	43
38	35.33	187	234	0.001	1	162
37	34.50	282	336	0.002	2	243
36	33.50	283	318	0.002	2	244
35	32.50	284	300	0.001	1	245
34	31.75	143	144	0.001	1	123
33	31.25	87	85	0.000	0	75
32	30.50	174	162	0.001	1	150
31	29.50	175	152	0.001	1	151
30	28.50	175	142	0.001	1	151
29	27.50	176	133	0.001	1	152
28	26.50	177	124	0.001	1	152
27	25.50	177	115	0.001	1	153
26	24.50	178	107	0.001	1	153
25	23.50	179	99	0.000	0	154
24	22.50	179	91	0.000	0	154
23	21.50	180	83	0.000	0	155
22	20.50	180	76	0.000	0	156
21	19.50	181	69	0.000	0	156
20	18.50	182	62	0.000	0	157
19	17.50	182	56	0.000	0	157
18	16.50	183	50	0.000	0	158
17	15.50	184	44	0.000	0	158
16	14.50	184	39	0.000	0	159
15	13.50	185	34	0.000	0	159
14	12.50	186	29	0.000	0	160
13	11.50	186	25	0.000	0	161
12	10.50	187	21	0.000	0	161
11	9.50	188	17	0.000	0	162
10	8.75	94	7	0.000	0	81
9	8.25	128	9	0.000	0	110
8	7.50	256	14	0.000	0	220
7	6.50	256	11	0.000	0	221
6	5.50	257	8	0.000	0	221
5	4.50	258	5	0.000	0	222
4	3.50	258	3	0.000	0	223
3	2.50	259	2	0.000	0	223
2	1.50	260	1	0.000	0	224
1	0.50	260	0	0.000	0	224
Andrew ABT-DMDF-ADBH	150.00	3	74	0.000	0	3

Powerwave Allgon 702	150.00	26	594	0.003	3	23
Powerwave TT19-08BP1	150.00	96	2,160	0.011	10	83
Raycap DC6-48-60-18-	150.00	33	738	0.004	4	28
Ericsson RRUS 11 (Ba	150.00	150	3,375	0.017	16	129
Ericsson RRUS 32 B2	150.00	159	3,577	0.018	17	137
12' Omni	150.00	40	900	0.004	4	34
12' Dipole	150.00	40	900	0.004	4	34
Powerwave 7770.00A	150.00	162	3,645	0.018	17	140
6' Yagi	150.00	25	563	0.003	3	22
CCI HPA-65R-BUU-H8	150.00	204	4,590	0.023	22	176
Flat Platform w/ Han	150.00	2,000	45,000	0.222	216	1,724
RFS APXV18-206517S-C	141.00	79	1,575	0.008	8	68
RFS ATMPP1412D-1CWA	134.00	38	673	0.003	3	32
RFS ATMAA1412D-1A20	134.00	39	700	0.003	3	34
RFS APX16DWV-16DWV-S	134.00	119	2,133	0.011	10	102
Low Profile Platform	134.00	1,500	26,934	0.133	129	1,293
Stand-Off	123.00	100	1,513	0.007	7	86
75" x 16.8" Panel	123.00	31	472	0.002	2	27
Channel Master Type	10.00	126	13	0.000	0	109
		24,941	202,711	1.000	973	21,494

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	-30.56	-0.97	0.00	-132.55	0.00	132.55	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.041
1.00	-30.24	-0.97	0.00	-131.58	0.00	131.58	3,148.69	1,574.34	4,778.83	2,360.09	0.00	0.00	0.041
2.00	-29.92	-0.97	0.00	-130.61	0.00	130.61	3,140.16	1,570.08	4,745.43	2,343.59	0.00	-0.01	0.041
3.00	-29.60	-0.98	0.00	-129.63	0.00	129.63	3,131.60	1,565.80	4,712.07	2,327.11	0.00	-0.01	0.040
4.00	-29.28	-0.98	0.00	-128.66	0.00	128.66	3,123.00	1,561.50	4,678.76	2,310.67	0.01	-0.01	0.040
5.00	-28.96	-0.98	0.00	-127.68	0.00	127.68	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.01	0.040
6.00	-28.64	-0.98	0.00	-126.70	0.00	126.70	3,105.66	1,552.83	4,612.30	2,277.84	0.01	-0.02	0.040
7.00	-28.33	-0.98	0.00	-125.72	0.00	125.72	3,096.94	1,548.47	4,579.15	2,261.47	0.02	-0.02	0.040
8.00	-28.17	-0.98	0.00	-124.74	0.00	124.74	3,088.17	1,544.08	4,546.04	2,245.12	0.02	-0.02	0.040
8.50	-28.05	-0.98	0.00	-124.25	0.00	124.25	3,083.76	1,541.88	4,529.51	2,236.96	0.02	-0.03	0.040
8.50	-28.05	-0.98	0.00	-124.25	0.00	124.25	3,083.76	1,541.88	4,529.51	2,236.96	0.02	-0.03	0.065
9.00	-27.82	-0.98	0.00	-123.76	0.00	123.76	3,079.35	1,539.68	4,513.00	2,228.80	0.03	-0.03	0.065
10.00	-27.43	-0.99	0.00	-122.78	0.00	122.78	3,070.50	1,535.25	4,480.00	2,212.50	0.03	-0.03	0.064
11.00	-27.20	-0.99	0.00	-121.79	0.00	121.79	3,061.60	1,530.80	4,447.06	2,196.24	0.04	-0.04	0.064
12.00	-26.97	-0.99	0.00	-120.80	0.00	120.80	3,052.67	1,526.33	4,414.18	2,180.00	0.05	-0.04	0.064
13.00	-26.74	-0.99	0.00	-119.81	0.00	119.81	3,043.69	1,521.84	4,381.36	2,163.79	0.06	-0.05	0.064
14.00	-26.51	-0.99	0.00	-118.82	0.00	118.82	3,034.67	1,517.33	4,348.59	2,147.60	0.07	-0.05	0.064
15.00	-26.29	-1.00	0.00	-117.82	0.00	117.82	3,025.61	1,512.80	4,315.88	2,131.45	0.08	-0.06	0.064
16.00	-26.06	-1.00	0.00	-116.83	0.00	116.83	3,016.50	1,508.25	4,283.22	2,115.32	0.09	-0.06	0.064
17.00	-25.83	-1.00	0.00	-115.83	0.00	115.83	3,007.36	1,503.68	4,250.63	2,099.23	0.10	-0.07	0.064
18.00	-25.61	-1.00	0.00	-114.83	0.00	114.83	2,998.17	1,499.09	4,218.10	2,083.16	0.12	-0.07	0.064
19.00	-25.38	-1.00	0.00	-113.83	0.00	113.83	2,988.94	1,494.47	4,185.63	2,067.13	0.14	-0.08	0.064
20.00	-25.16	-1.01	0.00	-112.82	0.00	112.82	2,979.67	1,489.84	4,153.23	2,051.12	0.15	-0.08	0.063
21.00	-24.94	-1.01	0.00	-111.82	0.00	111.82	2,970.36	1,485.18	4,120.88	2,035.15	0.17	-0.09	0.063
22.00	-24.72	-1.01	0.00	-110.81	0.00	110.81	2,961.01	1,480.50	4,088.60	2,019.21	0.19	-0.09	0.063
23.00	-24.49	-1.01	0.00	-109.80	0.00	109.80	2,951.61	1,475.81	4,056.39	2,003.30	0.21	-0.10	0.063
24.00	-24.27	-1.01	0.00	-108.79	0.00	108.79	2,942.18	1,471.09	4,024.24	1,987.42	0.23	-0.11	0.063
25.00	-24.06	-1.01	0.00	-107.78	0.00	107.78	2,932.70	1,466.35	3,992.16	1,971.58	0.25	-0.11	0.063
26.00	-23.84	-1.01	0.00	-106.77	0.00	106.77	2,923.18	1,461.59	3,960.14	1,955.76	0.28	-0.12	0.063
27.00	-23.62	-1.02	0.00	-105.75	0.00	105.75	2,913.62	1,456.81	3,928.19	1,939.99	0.30	-0.12	0.063
28.00	-23.40	-1.02	0.00	-104.74	0.00	104.74	2,903.09	1,451.54	3,895.07	1,923.63	0.33	-0.13	0.063
29.00	-23.18	-1.02	0.00	-103.72	0.00	103.72	2,889.14	1,444.57	3,857.52	1,905.08	0.36	-0.13	0.062
30.00	-22.97	-1.02	0.00	-102.71	0.00	102.71	2,875.19	1,437.60	3,820.15	1,886.63	0.38	-0.14	0.062
31.00	-22.86	-1.02	0.00	-101.69	0.00	101.69	2,861.24	1,430.62	3,782.96	1,868.26	0.41	-0.14	0.062
31.50	-22.69	-1.02	0.00	-101.18	0.00	101.18	2,854.27	1,427.13	3,764.43	1,859.11	0.43	-0.15	0.062
32.00	-22.33	-1.02	0.00	-100.67	0.00	100.67	2,847.30	1,423.65	3,745.96	1,849.99	0.45	-0.15	0.062
33.00	-21.98	-1.02	0.00	-99.65	0.00	99.65	2,833.35	1,416.67	3,709.14	1,831.80	0.48	-0.16	0.062
34.00	-21.63	-1.02	0.00	-98.63	0.00	98.63	2,819.40	1,409.70	3,672.50	1,813.71	0.51	-0.16	0.062
35.00	-21.40	-1.02	0.00	-97.61	0.00	97.61	2,805.45	1,402.73	3,636.04	1,795.70	0.54	-0.17	0.062
35.67	-21.34	-1.02	0.00	-96.93	0.00	96.93	2,248.05	1,124.03	2,973.86	1,468.68	0.57	-0.17	0.075
36.00	-21.15	-1.02	0.00	-96.60	0.00	96.60	2,245.81	1,122.91	2,966.02	1,464.81	0.58	-0.17	0.075
37.00	-20.96	-1.02	0.00	-95.58	0.00	95.58	2,239.07	1,119.53	2,942.52	1,453.20	0.62	-0.18	0.075
38.00	-20.78	-1.02	0.00	-94.56	0.00	94.56	2,232.28	1,116.14	2,919.04	1,441.60	0.65	-0.19	0.075
39.00	-20.59	-1.02	0.00	-93.54	0.00	93.54	2,225.45	1,112.72	2,895.60	1,430.03	0.69	-0.19	0.075
40.00	-20.41	-1.02	0.00	-92.52	0.00	92.52	2,218.58	1,109.29	2,872.19	1,418.47	0.74	-0.20	0.074
41.00	-20.23	-1.02	0.00	-91.50	0.00	91.50	2,211.66	1,105.83	2,848.82	1,406.93	0.78	-0.20	0.074
42.00	-20.04	-1.02	0.00	-90.48	0.00	90.48	2,204.71	1,102.35	2,825.49	1,395.40	0.82	-0.21	0.074
43.00	-19.86	-1.02	0.00	-89.45	0.00	89.45	2,197.71	1,098.85	2,802.19	1,383.90	0.87	-0.22	0.074
44.00	-19.68	-1.02	0.00	-88.43	0.00	88.43	2,190.67	1,095.33	2,778.94	1,372.41	0.91	-0.22	0.073
45.00	-19.50	-1.02	0.00	-87.41	0.00	87.41	2,183.59	1,091.79	2,755.72	1,360.95	0.96	-0.23	0.073
46.00	-19.32	-1.02	0.00	-86.39	0.00	86.39	2,176.47	1,088.23	2,732.54	1,349.50	1.01	-0.24	0.073
47.00	-19.14	-1.02	0.00	-85.36	0.00	85.36	2,169.30	1,084.65	2,709.41	1,338.07	1.06	-0.24	0.073
48.00	-18.96	-1.02	0.00	-84.34	0.00	84.34	2,162.10	1,081.05	2,686.31	1,326.67	1.11	-0.25	0.072
49.00	-18.78	-1.02	0.00	-83.32	0.00	83.32	2,154.85	1,077.43	2,663.26	1,315.28	1.17	-0.26	0.072
50.00	-18.60	-1.02	0.00	-82.30	0.00	82.30	2,147.56	1,073.78	2,640.25	1,303.92	1.22	-0.27	0.072
51.00	-18.42	-1.02	0.00	-81.28	0.00	81.28	2,140.23	1,070.12	2,617.28	1,292.58	1.28	-0.27	0.071

52.00	-18.25	-1.02	0.00	-80.25	0.00	80.25	2,132.86	1,066.43	2,594.37	1,281.26	1.33	-0.28	0.071
53.00	-18.07	-1.02	0.00	-79.23	0.00	79.23	2,125.45	1,062.72	2,571.49	1,269.96	1.39	-0.29	0.071
54.00	-17.90	-1.02	0.00	-78.21	0.00	78.21	2,118.00	1,059.00	2,548.66	1,258.69	1.45	-0.29	0.071
55.00	-17.72	-1.02	0.00	-77.20	0.00	77.20	2,110.50	1,055.25	2,525.88	1,247.44	1.52	-0.30	0.070
56.00	-17.55	-1.02	0.00	-76.18	0.00	76.18	2,102.96	1,051.48	2,503.15	1,236.21	1.58	-0.31	0.070
57.00	-17.37	-1.02	0.00	-75.16	0.00	75.16	2,095.38	1,047.69	2,480.47	1,225.01	1.64	-0.31	0.070
58.00	-17.20	-1.02	0.00	-74.14	0.00	74.14	2,087.76	1,043.88	2,457.84	1,213.83	1.71	-0.32	0.069
59.00	-17.03	-1.01	0.00	-73.13	0.00	73.13	2,080.10	1,040.05	2,435.26	1,202.68	1.78	-0.33	0.069
60.00	-16.86	-1.01	0.00	-72.11	0.00	72.11	2,072.39	1,036.20	2,412.72	1,191.55	1.85	-0.33	0.069
61.00	-16.69	-1.01	0.00	-71.10	0.00	71.10	2,064.65	1,032.32	2,390.25	1,180.45	1.92	-0.34	0.068
62.00	-16.52	-1.01	0.00	-70.09	0.00	70.09	2,056.86	1,028.43	2,367.82	1,169.38	1.99	-0.35	0.068
63.00	-16.35	-1.01	0.00	-69.08	0.00	69.08	2,049.03	1,024.52	2,345.45	1,158.33	2.06	-0.36	0.068
64.00	-16.18	-1.01	0.00	-68.07	0.00	68.07	2,041.16	1,020.58	2,323.13	1,147.31	2.14	-0.36	0.067
65.00	-16.01	-1.00	0.00	-67.07	0.00	67.07	2,033.25	1,016.62	2,300.87	1,136.31	2.22	-0.37	0.067
66.00	-15.84	-1.00	0.00	-66.06	0.00	66.06	2,025.30	1,012.65	2,278.67	1,125.35	2.29	-0.38	0.067
67.00	-15.68	-1.00	0.00	-65.06	0.00	65.06	2,016.93	1,008.47	2,256.11	1,114.21	2.37	-0.38	0.066
68.00	-15.51	-1.00	0.00	-64.06	0.00	64.06	2,005.31	1,002.65	2,230.04	1,101.33	2.46	-0.39	0.066
69.00	-15.35	-1.00	0.00	-63.06	0.00	63.06	1,993.69	996.84	2,204.11	1,088.53	2.54	-0.40	0.066
70.00	-15.35	-1.00	0.00	-62.07	0.00	62.07	1,982.06	991.03	2,178.34	1,075.80	2.62	-0.40	0.065
70.00	-15.09	-0.99	0.00	-62.07	0.00	62.07	1,982.06	991.03	2,178.33	1,075.80	2.62	-0.40	0.065
71.00	-14.83	-0.99	0.00	-61.08	0.00	61.08	1,970.44	985.22	2,152.72	1,063.15	2.71	-0.41	0.065
72.00	-14.58	-0.98	0.00	-60.09	0.00	60.09	1,958.82	979.41	2,127.25	1,050.57	2.79	-0.42	0.065
73.00	-14.45	-0.98	0.00	-59.11	0.00	59.11	1,947.19	973.60	2,101.94	1,038.07	2.88	-0.43	0.064
73.50	-14.38	-0.98	0.00	-58.62	0.00	58.62	1,473.95	736.97	1,624.52	802.29	2.93	-0.43	0.083
74.00	-14.24	-0.97	0.00	-58.13	0.00	58.13	1,471.40	735.70	1,616.91	798.53	2.97	-0.43	0.082
75.00	-14.10	-0.97	0.00	-57.16	0.00	57.16	1,466.26	733.13	1,601.72	791.03	3.06	-0.44	0.082
76.00	-13.96	-0.97	0.00	-56.18	0.00	56.18	1,461.09	730.55	1,586.54	783.53	3.16	-0.45	0.081
77.00	-13.82	-0.97	0.00	-55.21	0.00	55.21	1,455.88	727.94	1,571.38	776.05	3.25	-0.46	0.081
78.00	-13.68	-0.97	0.00	-54.25	0.00	54.25	1,450.62	725.31	1,556.25	768.57	3.35	-0.47	0.080
79.00	-13.54	-0.96	0.00	-53.28	0.00	53.28	1,445.32	722.66	1,541.14	761.11	3.45	-0.48	0.079
80.00	-13.40	-0.96	0.00	-52.32	0.00	52.32	1,439.98	719.99	1,526.06	753.66	3.55	-0.48	0.079
81.00	-13.26	-0.96	0.00	-51.36	0.00	51.36	1,434.60	717.30	1,511.01	746.23	3.65	-0.49	0.078
82.00	-13.13	-0.95	0.00	-50.40	0.00	50.40	1,429.18	714.59	1,495.98	738.81	3.76	-0.50	0.077
83.00	-12.99	-0.95	0.00	-49.44	0.00	49.44	1,423.71	711.86	1,480.97	731.40	3.86	-0.51	0.077
84.00	-12.85	-0.95	0.00	-48.49	0.00	48.49	1,418.21	709.10	1,466.00	724.00	3.97	-0.52	0.076
85.00	-12.72	-0.95	0.00	-47.54	0.00	47.54	1,412.66	706.33	1,451.06	716.62	4.08	-0.53	0.075
86.00	-12.58	-0.94	0.00	-46.60	0.00	46.60	1,407.07	703.53	1,436.14	709.26	4.19	-0.53	0.075
87.00	-12.45	-0.94	0.00	-45.66	0.00	45.66	1,401.44	700.72	1,421.26	701.91	4.30	-0.54	0.074
88.00	-12.31	-0.94	0.00	-44.72	0.00	44.72	1,395.76	697.88	1,406.40	694.57	4.42	-0.55	0.073
89.00	-12.18	-0.93	0.00	-43.78	0.00	43.78	1,390.05	695.02	1,391.58	687.25	4.53	-0.56	0.072
90.00	-12.04	-0.93	0.00	-42.85	0.00	42.85	1,384.29	692.15	1,376.80	679.95	4.65	-0.57	0.072
91.00	-11.91	-0.92	0.00	-41.92	0.00	41.92	1,378.50	689.25	1,362.04	672.66	4.77	-0.58	0.071
92.00	-11.78	-0.92	0.00	-41.00	0.00	41.00	1,372.66	686.33	1,347.32	665.39	4.89	-0.58	0.070
93.00	-11.65	-0.92	0.00	-40.08	0.00	40.08	1,366.78	683.39	1,332.64	658.14	5.02	-0.59	0.069
94.00	-11.52	-0.91	0.00	-39.16	0.00	39.16	1,360.85	680.43	1,317.99	650.91	5.14	-0.60	0.069
95.00	-11.39	-0.91	0.00	-38.25	0.00	38.25	1,354.89	677.44	1,303.39	643.69	5.27	-0.61	0.068
96.00	-11.26	-0.90	0.00	-37.34	0.00	37.34	1,348.88	674.44	1,288.81	636.50	5.40	-0.62	0.067
97.00	-11.13	-0.90	0.00	-36.44	0.00	36.44	1,342.84	671.42	1,274.28	629.32	5.53	-0.63	0.066
98.00	-11.00	-0.89	0.00	-35.54	0.00	35.54	1,336.75	668.37	1,259.79	622.16	5.66	-0.63	0.065
99.00	-10.87	-0.89	0.00	-34.65	0.00	34.65	1,330.62	665.31	1,245.34	615.03	5.79	-0.64	0.065
100.00	-10.74	-0.88	0.00	-33.76	0.00	33.76	1,324.45	662.22	1,230.93	607.91	5.93	-0.65	0.064
101.00	-10.61	-0.88	0.00	-32.88	0.00	32.88	1,318.23	659.12	1,216.56	600.81	6.07	-0.66	0.063
102.00	-10.49	-0.87	0.00	-32.00	0.00	32.00	1,311.98	655.99	1,202.23	593.74	6.21	-0.67	0.062
103.00	-10.36	-0.87	0.00	-31.12	0.00	31.12	1,305.68	652.84	1,187.95	586.68	6.35	-0.67	0.061
104.00	-10.23	-0.86	0.00	-30.25	0.00	30.25	1,299.34	649.67	1,173.71	579.65	6.49	-0.68	0.060
105.00	-10.11	-0.86	0.00	-29.39	0.00	29.39	1,292.96	646.48	1,159.52	572.64	6.63	-0.69	0.059
106.00	-9.98	-0.85	0.00	-28.53	0.00	28.53	1,284.28	642.14	1,143.36	564.66	6.78	-0.70	0.058
107.00	-9.86	-0.85	0.00	-27.68	0.00	27.68	1,274.98	637.49	1,126.77	556.47	6.92	-0.71	0.057
108.00	-9.74	-0.84	0.00	-26.84	0.00	26.84	1,265.69	632.84	1,110.30	548.34	7.07	-0.71	0.057
109.00	-9.61	-0.83	0.00	-26.00	0.00	26.00	1,256.39	628.19	1,093.96	540.26	7.22	-0.72	0.056
110.00	-9.61	-0.84	0.00	-25.16	0.00	25.16	1,247.09	623.54	1,077.73	532.25	7.37	-0.73	0.055
110.00	-9.51	-0.83	0.00	-25.16	0.00	25.16	1,247.09	623.54	1,077.72	532.25	7.37	-0.73	0.055
110.00	-9.51	-0.83	0.00	-25.16	0.00	25.16	853.22	426.61	741.74	366.32	7.37	-0.73	0.080
111.00	-9.40	-0.82	0.00	-24.33	0.00	24.33	849.66	424.83	733.10	362.05	7.53	-0.74	0.078

112.00	-9.30	-0.82	0.00	-23.51	0.00	23.51	846.05	423.02	724.47	357.79	7.68	-0.74	0.077
113.00	-9.20	-0.81	0.00	-22.69	0.00	22.69	842.40	421.20	715.86	353.53	7.84	-0.75	0.075
114.00	-9.09	-0.81	0.00	-21.87	0.00	21.87	838.71	419.35	707.25	349.29	8.00	-0.76	0.073
115.00	-8.99	-0.80	0.00	-21.06	0.00	21.06	834.98	417.49	698.66	345.04	8.16	-0.77	0.072
116.00	-8.89	-0.80	0.00	-20.26	0.00	20.26	831.20	415.60	690.08	340.81	8.32	-0.78	0.070
117.00	-8.79	-0.79	0.00	-19.46	0.00	19.46	827.39	413.69	681.52	336.58	8.49	-0.79	0.068
118.00	-8.68	-0.79	0.00	-18.67	0.00	18.67	823.53	411.76	672.98	332.36	8.65	-0.80	0.067
119.00	-8.58	-0.78	0.00	-17.88	0.00	17.88	819.63	409.81	664.45	328.14	8.82	-0.81	0.065
120.00	-8.48	-0.78	0.00	-17.10	0.00	17.10	815.69	407.84	655.93	323.94	8.99	-0.82	0.063
121.00	-8.38	-0.77	0.00	-16.32	0.00	16.32	811.71	405.85	647.44	319.75	9.16	-0.83	0.061
122.00	-8.28	-0.76	0.00	-15.55	0.00	15.55	807.68	403.84	638.96	315.56	9.34	-0.83	0.060
123.00	-8.02	-0.75	0.00	-14.79	0.00	14.79	803.62	401.81	630.51	311.38	9.51	-0.84	0.057
124.00	-7.92	-0.74	0.00	-14.04	0.00	14.04	799.51	399.76	622.07	307.22	9.69	-0.85	0.056
125.00	-7.82	-0.73	0.00	-13.30	0.00	13.30	795.36	397.68	613.66	303.06	9.87	-0.86	0.054
126.00	-7.72	-0.73	0.00	-12.57	0.00	12.57	791.17	395.59	605.27	298.92	10.05	-0.86	0.052
127.00	-7.63	-0.72	0.00	-11.84	0.00	11.84	786.94	393.47	596.90	294.79	10.23	-0.87	0.050
128.00	-7.53	-0.71	0.00	-11.12	0.00	11.12	782.67	391.33	588.56	290.67	10.41	-0.88	0.048
129.00	-7.43	-0.71	0.00	-10.41	0.00	10.41	778.35	389.18	580.24	286.56	10.60	-0.88	0.046
130.00	-7.33	-0.70	0.00	-9.70	0.00	9.70	774.00	387.00	571.95	282.46	10.78	-0.89	0.044
131.00	-7.24	-0.69	0.00	-9.00	0.00	9.00	769.60	384.80	563.68	278.38	10.97	-0.90	0.042
132.00	-7.14	-0.68	0.00	-8.31	0.00	8.31	765.16	382.58	555.44	274.31	11.16	-0.90	0.040
133.00	-7.05	-0.68	0.00	-7.63	0.00	7.63	760.68	380.34	547.23	270.25	11.35	-0.91	0.037
134.00	-4.87	-0.49	0.00	-6.95	0.00	6.95	756.16	378.08	539.04	266.21	11.54	-0.91	0.033
135.00	-4.79	-0.48	0.00	-6.46	0.00	6.46	751.59	375.80	530.89	262.19	11.73	-0.92	0.031
136.00	-4.70	-0.48	0.00	-5.97	0.00	5.97	746.99	373.49	522.77	258.17	11.92	-0.92	0.029
137.00	-4.62	-0.47	0.00	-5.50	0.00	5.50	742.34	371.17	514.67	254.18	12.12	-0.93	0.028
138.00	-4.54	-0.46	0.00	-5.03	0.00	5.03	737.65	368.82	506.61	250.20	12.31	-0.93	0.026
139.00	-4.46	-0.46	0.00	-4.56	0.00	4.56	732.92	366.46	498.59	246.23	12.51	-0.93	0.025
140.00	-4.38	-0.45	0.00	-4.10	0.00	4.10	728.15	364.07	490.59	242.29	12.70	-0.94	0.023
141.00	-4.21	-0.43	0.00	-3.66	0.00	3.66	721.91	360.95	481.68	237.89	12.90	-0.94	0.021
142.00	-4.14	-0.43	0.00	-3.22	0.00	3.22	714.93	357.47	472.37	233.29	13.10	-0.94	0.020
143.00	-4.06	-0.42	0.00	-2.79	0.00	2.79	707.96	353.98	463.15	228.73	13.30	-0.95	0.018
144.00	-3.99	-0.41	0.00	-2.37	0.00	2.37	700.99	350.49	454.01	224.22	13.49	-0.95	0.016
145.00	-3.92	-0.41	0.00	-1.96	0.00	1.96	694.01	347.01	444.97	219.76	13.69	-0.95	0.015
146.00	-3.85	-0.40	0.00	-1.55	0.00	1.55	687.04	343.52	436.02	215.34	13.89	-0.95	0.013
147.00	-3.77	-0.39	0.00	-1.16	0.00	1.16	680.07	340.03	427.16	210.96	14.09	-0.95	0.011
148.00	-3.70	-0.39	0.00	-0.76	0.00	0.76	673.09	336.55	418.40	206.63	14.29	-0.95	0.009
149.00	-3.63	-0.38	0.00	-0.38	0.00	0.38	666.12	333.06	409.72	202.34	14.49	-0.96	0.007
150.00	0.00	-0.32	0.00	0.00	0.00	0.00	659.14	329.57	401.13	198.10	14.69	-0.96	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	-21.27	-0.97	0.00	-128.32	0.00	128.32	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.038
1.00	-21.05	-0.97	0.00	-127.35	0.00	127.35	3,148.69	1,574.34	4,778.83	2,360.09	0.00	0.00	0.038
2.00	-20.82	-0.97	0.00	-126.37	0.00	126.37	3,140.16	1,570.08	4,745.43	2,343.59	0.00	-0.01	0.037
3.00	-20.60	-0.97	0.00	-125.40	0.00	125.40	3,131.60	1,565.80	4,712.07	2,327.11	0.00	-0.01	0.037
4.00	-20.38	-0.98	0.00	-124.43	0.00	124.43	3,123.00	1,561.50	4,678.76	2,310.67	0.00	-0.01	0.037
5.00	-20.16	-0.98	0.00	-123.45	0.00	123.45	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.01	0.037
6.00	-19.94	-0.98	0.00	-122.48	0.00	122.48	3,105.66	1,552.83	4,612.30	2,277.84	0.01	-0.02	0.037
7.00	-19.72	-0.98	0.00	-121.50	0.00	121.50	3,096.94	1,548.47	4,579.15	2,261.47	0.01	-0.02	0.037
8.00	-19.61	-0.98	0.00	-120.52	0.00	120.52	3,088.17	1,544.08	4,546.04	2,245.12	0.02	-0.02	0.037
8.50	-19.52	-0.98	0.00	-120.03	0.00	120.03	3,083.76	1,541.88	4,529.51	2,236.96	0.02	-0.02	0.037
8.50	-19.52	-0.98	0.00	-120.03	0.00	120.03	3,083.76	1,541.88	4,529.51	2,236.96	0.02	-0.02	0.060
9.00	-19.36	-0.98	0.00	-119.54	0.00	119.54	3,079.35	1,539.68	4,513.00	2,228.80	0.02	-0.03	0.060
10.00	-19.09	-0.98	0.00	-118.56	0.00	118.56	3,070.50	1,535.25	4,480.00	2,212.50	0.03	-0.03	0.060
11.00	-18.93	-0.98	0.00	-117.58	0.00	117.58	3,061.60	1,530.80	4,447.06	2,196.24	0.04	-0.04	0.060
12.00	-18.77	-0.98	0.00	-116.60	0.00	116.60	3,052.67	1,526.33	4,414.18	2,180.00	0.05	-0.04	0.060
13.00	-18.61	-0.99	0.00	-115.61	0.00	115.61	3,043.69	1,521.84	4,381.36	2,163.79	0.05	-0.05	0.060
14.00	-18.45	-0.99	0.00	-114.63	0.00	114.63	3,034.67	1,517.33	4,348.59	2,147.60	0.06	-0.05	0.059
15.00	-18.30	-0.99	0.00	-113.64	0.00	113.64	3,025.61	1,512.80	4,315.88	2,131.45	0.08	-0.06	0.059
16.00	-18.14	-0.99	0.00	-112.65	0.00	112.65	3,016.50	1,508.25	4,283.22	2,115.32	0.09	-0.06	0.059
17.00	-17.98	-0.99	0.00	-111.66	0.00	111.66	3,007.36	1,503.68	4,250.63	2,099.23	0.10	-0.07	0.059
18.00	-17.82	-0.99	0.00	-110.67	0.00	110.67	2,998.17	1,499.09	4,218.10	2,083.16	0.12	-0.07	0.059
19.00	-17.67	-0.99	0.00	-109.68	0.00	109.68	2,988.94	1,494.47	4,185.63	2,067.13	0.13	-0.08	0.059
20.00	-17.51	-0.99	0.00	-108.69	0.00	108.69	2,979.67	1,489.84	4,153.23	2,051.12	0.15	-0.08	0.059
21.00	-17.36	-0.99	0.00	-107.70	0.00	107.70	2,970.36	1,485.18	4,120.88	2,035.15	0.16	-0.09	0.059
22.00	-17.20	-1.00	0.00	-106.70	0.00	106.70	2,961.01	1,480.50	4,088.60	2,019.21	0.18	-0.09	0.059
23.00	-17.05	-1.00	0.00	-105.71	0.00	105.71	2,951.61	1,475.81	4,056.39	2,003.30	0.20	-0.10	0.059
24.00	-16.90	-1.00	0.00	-104.71	0.00	104.71	2,942.18	1,471.09	4,024.24	1,987.42	0.22	-0.10	0.058
25.00	-16.74	-1.00	0.00	-103.71	0.00	103.71	2,932.70	1,466.35	3,992.16	1,971.58	0.25	-0.11	0.058
26.00	-16.59	-1.00	0.00	-102.72	0.00	102.72	2,923.18	1,461.59	3,960.14	1,955.76	0.27	-0.11	0.058
27.00	-16.44	-1.00	0.00	-101.72	0.00	101.72	2,913.62	1,456.81	3,928.19	1,939.99	0.29	-0.12	0.058
28.00	-16.29	-1.00	0.00	-100.72	0.00	100.72	2,903.09	1,451.54	3,895.07	1,923.63	0.32	-0.12	0.058
29.00	-16.14	-1.00	0.00	-99.72	0.00	99.72	2,889.14	1,444.57	3,857.52	1,905.08	0.34	-0.13	0.058
30.00	-15.99	-1.00	0.00	-98.72	0.00	98.72	2,875.19	1,437.60	3,820.15	1,886.63	0.37	-0.13	0.058
31.00	-15.91	-1.00	0.00	-97.72	0.00	97.72	2,861.24	1,430.62	3,782.96	1,868.26	0.40	-0.14	0.058
31.50	-15.79	-1.00	0.00	-97.22	0.00	97.22	2,854.27	1,427.13	3,764.43	1,859.11	0.41	-0.14	0.058
32.00	-15.54	-1.00	0.00	-96.72	0.00	96.72	2,847.30	1,423.65	3,745.96	1,849.99	0.43	-0.14	0.058
33.00	-15.30	-1.00	0.00	-95.72	0.00	95.72	2,833.35	1,416.67	3,709.14	1,831.80	0.46	-0.15	0.058
34.00	-15.06	-1.00	0.00	-94.72	0.00	94.72	2,819.40	1,409.70	3,672.50	1,813.71	0.49	-0.16	0.058
35.00	-14.89	-1.00	0.00	-93.72	0.00	93.72	2,805.45	1,402.73	3,636.04	1,795.70	0.53	-0.16	0.058
35.67	-14.85	-1.00	0.00	-93.06	0.00	93.06	2,248.05	1,124.03	2,973.86	1,468.68	0.55	-0.16	0.070
36.00	-14.72	-1.00	0.00	-92.73	0.00	92.73	2,245.81	1,122.91	2,966.02	1,464.81	0.56	-0.17	0.070
37.00	-14.59	-1.00	0.00	-91.73	0.00	91.73	2,239.07	1,119.53	2,942.52	1,453.20	0.59	-0.17	0.070
38.00	-14.46	-1.00	0.00	-90.73	0.00	90.73	2,232.28	1,116.14	2,919.04	1,441.60	0.63	-0.18	0.069
39.00	-14.33	-1.00	0.00	-89.73	0.00	89.73	2,225.45	1,112.72	2,895.60	1,430.03	0.67	-0.18	0.069
40.00	-14.20	-1.00	0.00	-88.74	0.00	88.74	2,218.58	1,109.29	2,872.19	1,418.47	0.71	-0.19	0.069
41.00	-14.08	-1.00	0.00	-87.74	0.00	87.74	2,211.66	1,105.83	2,848.82	1,406.93	0.75	-0.20	0.069
42.00	-13.95	-1.00	0.00	-86.74	0.00	86.74	2,204.71	1,102.35	2,825.49	1,395.40	0.79	-0.20	0.068
43.00	-13.82	-1.00	0.00	-85.74	0.00	85.74	2,197.71	1,098.85	2,802.19	1,383.90	0.84	-0.21	0.068
44.00	-13.70	-1.00	0.00	-84.75	0.00	84.75	2,190.67	1,095.33	2,778.94	1,372.41	0.88	-0.22	0.068
45.00	-13.57	-1.00	0.00	-83.75	0.00	83.75	2,183.59	1,091.79	2,755.72	1,360.95	0.93	-0.22	0.068
46.00	-13.44	-1.00	0.00	-82.75	0.00	82.75	2,176.47	1,088.23	2,732.54	1,349.50	0.97	-0.23	0.067
47.00	-13.32	-1.00	0.00	-81.76	0.00	81.76	2,169.30	1,084.65	2,709.41	1,338.07	1.02	-0.24	0.067
48.00	-13.19	-0.99	0.00	-80.76	0.00	80.76	2,162.10	1,081.05	2,686.31	1,326.67	1.07	-0.24	0.067
49.00	-13.07	-0.99	0.00	-79.77	0.00	79.77	2,154.85	1,077.43	2,663.26	1,315.28	1.12	-0.25	0.067
50.00	-12.95	-0.99	0.00	-78.77	0.00	78.77	2,147.56	1,073.78	2,640.25	1,303.92	1.18	-0.25	0.066
51.00	-12.82	-0.99	0.00	-77.78	0.00	77.78	2,140.23	1,070.12	2,617.28	1,292.58	1.23	-0.26	0.066

52.00	-12.70	-0.99	0.00	-76.79	0.00	76.79	2,132.86	1,066.43	2,594.37	1,281.26	1.29	-0.27	0.066
53.00	-12.58	-0.99	0.00	-75.80	0.00	75.80	2,125.45	1,062.72	2,571.49	1,269.96	1.34	-0.27	0.066
54.00	-12.45	-0.99	0.00	-74.81	0.00	74.81	2,118.00	1,059.00	2,548.66	1,258.69	1.40	-0.28	0.065
55.00	-12.33	-0.99	0.00	-73.82	0.00	73.82	2,110.50	1,055.25	2,525.88	1,247.44	1.46	-0.29	0.065
56.00	-12.21	-0.99	0.00	-72.83	0.00	72.83	2,102.96	1,051.48	2,503.15	1,236.21	1.52	-0.29	0.065
57.00	-12.09	-0.99	0.00	-71.84	0.00	71.84	2,095.38	1,047.69	2,480.47	1,225.01	1.58	-0.30	0.064
58.00	-11.97	-0.98	0.00	-70.86	0.00	70.86	2,087.76	1,043.88	2,457.84	1,213.83	1.65	-0.31	0.064
59.00	-11.85	-0.98	0.00	-69.87	0.00	69.87	2,080.10	1,040.05	2,435.26	1,202.68	1.71	-0.31	0.064
60.00	-11.73	-0.98	0.00	-68.89	0.00	68.89	2,072.39	1,036.20	2,412.72	1,191.55	1.78	-0.32	0.063
61.00	-11.61	-0.98	0.00	-67.91	0.00	67.91	2,064.65	1,032.32	2,390.25	1,180.45	1.85	-0.33	0.063
62.00	-11.50	-0.98	0.00	-66.93	0.00	66.93	2,056.86	1,028.43	2,367.82	1,169.38	1.92	-0.33	0.063
63.00	-11.38	-0.97	0.00	-65.96	0.00	65.96	2,049.03	1,024.52	2,345.45	1,158.33	1.99	-0.34	0.062
64.00	-11.26	-0.97	0.00	-64.98	0.00	64.98	2,041.16	1,020.58	2,323.13	1,147.31	2.06	-0.35	0.062
65.00	-11.14	-0.97	0.00	-64.01	0.00	64.01	2,033.25	1,016.62	2,300.87	1,136.31	2.13	-0.35	0.062
66.00	-11.03	-0.97	0.00	-63.04	0.00	63.04	2,025.30	1,012.65	2,278.67	1,125.35	2.21	-0.36	0.061
67.00	-10.91	-0.97	0.00	-62.07	0.00	62.07	2,016.93	1,008.47	2,256.11	1,114.21	2.28	-0.37	0.061
68.00	-10.80	-0.96	0.00	-61.11	0.00	61.11	2,005.31	1,002.65	2,230.04	1,101.33	2.36	-0.37	0.061
69.00	-10.68	-0.96	0.00	-60.14	0.00	60.14	1,993.69	996.84	2,204.11	1,088.53	2.44	-0.38	0.061
70.00	-10.68	-0.96	0.00	-59.18	0.00	59.18	1,982.06	991.03	2,178.34	1,075.80	2.52	-0.39	0.060
70.00	-10.50	-0.96	0.00	-59.18	0.00	59.18	1,982.06	991.03	2,178.33	1,075.80	2.52	-0.39	0.060
71.00	-10.32	-0.95	0.00	-58.23	0.00	58.23	1,970.44	985.22	2,152.72	1,063.15	2.60	-0.40	0.060
72.00	-10.15	-0.95	0.00	-57.28	0.00	57.28	1,958.82	979.41	2,127.25	1,050.57	2.69	-0.40	0.060
73.00	-10.06	-0.94	0.00	-56.33	0.00	56.33	1,947.19	973.60	2,101.94	1,038.07	2.77	-0.41	0.059
73.50	-10.01	-0.94	0.00	-55.86	0.00	55.86	1,473.95	736.97	1,624.52	802.29	2.82	-0.41	0.076
74.00	-9.91	-0.94	0.00	-55.39	0.00	55.39	1,471.40	735.70	1,616.91	798.53	2.86	-0.42	0.076
75.00	-9.81	-0.94	0.00	-54.45	0.00	54.45	1,466.26	733.13	1,601.72	791.03	2.95	-0.42	0.076
76.00	-9.71	-0.93	0.00	-53.51	0.00	53.51	1,461.09	730.55	1,586.54	783.53	3.04	-0.43	0.075
77.00	-9.62	-0.93	0.00	-52.58	0.00	52.58	1,455.88	727.94	1,571.38	776.05	3.13	-0.44	0.074
78.00	-9.52	-0.93	0.00	-51.65	0.00	51.65	1,450.62	725.31	1,556.25	768.57	3.22	-0.45	0.074
79.00	-9.42	-0.93	0.00	-50.72	0.00	50.72	1,445.32	722.66	1,541.14	761.11	3.32	-0.46	0.073
80.00	-9.33	-0.92	0.00	-49.79	0.00	49.79	1,439.98	719.99	1,526.06	753.66	3.41	-0.46	0.073
81.00	-9.23	-0.92	0.00	-48.87	0.00	48.87	1,434.60	717.30	1,511.01	746.23	3.51	-0.47	0.072
82.00	-9.13	-0.92	0.00	-47.95	0.00	47.95	1,429.18	714.59	1,495.98	738.81	3.61	-0.48	0.071
83.00	-9.04	-0.91	0.00	-47.03	0.00	47.03	1,423.71	711.86	1,480.97	731.40	3.71	-0.49	0.071
84.00	-8.94	-0.91	0.00	-46.12	0.00	46.12	1,418.21	709.10	1,466.00	724.00	3.81	-0.50	0.070
85.00	-8.85	-0.91	0.00	-45.21	0.00	45.21	1,412.66	706.33	1,451.06	716.62	3.92	-0.50	0.069
86.00	-8.75	-0.90	0.00	-44.30	0.00	44.30	1,407.07	703.53	1,436.14	709.26	4.03	-0.51	0.069
87.00	-8.66	-0.90	0.00	-43.40	0.00	43.40	1,401.44	700.72	1,421.26	701.91	4.13	-0.52	0.068
88.00	-8.57	-0.90	0.00	-42.50	0.00	42.50	1,395.76	697.88	1,406.40	694.57	4.24	-0.53	0.067
89.00	-8.47	-0.89	0.00	-41.61	0.00	41.61	1,390.05	695.02	1,391.58	687.25	4.35	-0.54	0.067
90.00	-8.38	-0.89	0.00	-40.71	0.00	40.71	1,384.29	692.15	1,376.80	679.95	4.47	-0.54	0.066
91.00	-8.29	-0.88	0.00	-39.83	0.00	39.83	1,378.50	689.25	1,362.04	672.66	4.58	-0.55	0.065
92.00	-8.20	-0.88	0.00	-38.94	0.00	38.94	1,372.66	686.33	1,347.32	665.39	4.70	-0.56	0.064
93.00	-8.11	-0.88	0.00	-38.06	0.00	38.06	1,366.78	683.39	1,332.64	658.14	4.82	-0.57	0.064
94.00	-8.01	-0.87	0.00	-37.19	0.00	37.19	1,360.85	680.43	1,317.99	650.91	4.94	-0.58	0.063
95.00	-7.92	-0.87	0.00	-36.32	0.00	36.32	1,354.89	677.44	1,303.39	643.69	5.06	-0.58	0.062
96.00	-7.83	-0.86	0.00	-35.45	0.00	35.45	1,348.88	674.44	1,288.81	636.50	5.18	-0.59	0.062
97.00	-7.74	-0.86	0.00	-34.59	0.00	34.59	1,342.84	671.42	1,274.28	629.32	5.31	-0.60	0.061
98.00	-7.65	-0.85	0.00	-33.73	0.00	33.73	1,336.75	668.37	1,259.79	622.16	5.43	-0.61	0.060
99.00	-7.56	-0.85	0.00	-32.88	0.00	32.88	1,330.62	665.31	1,245.34	615.03	5.56	-0.61	0.059
100.00	-7.47	-0.84	0.00	-32.03	0.00	32.03	1,324.45	662.22	1,230.93	607.91	5.69	-0.62	0.058
101.00	-7.39	-0.84	0.00	-31.18	0.00	31.18	1,318.23	659.12	1,216.56	600.81	5.82	-0.63	0.058
102.00	-7.30	-0.83	0.00	-30.35	0.00	30.35	1,311.98	655.99	1,202.23	593.74	5.95	-0.64	0.057
103.00	-7.21	-0.83	0.00	-29.51	0.00	29.51	1,305.68	652.84	1,187.95	586.68	6.09	-0.64	0.056
104.00	-7.12	-0.82	0.00	-28.69	0.00	28.69	1,299.34	649.67	1,173.71	579.65	6.22	-0.65	0.055
105.00	-7.03	-0.82	0.00	-27.86	0.00	27.86	1,292.96	646.48	1,159.52	572.64	6.36	-0.66	0.054
106.00	-6.95	-0.81	0.00	-27.05	0.00	27.05	1,284.28	642.14	1,143.36	564.66	6.50	-0.67	0.053
107.00	-6.86	-0.81	0.00	-26.24	0.00	26.24	1,274.98	637.49	1,126.77	556.47	6.64	-0.67	0.053
108.00	-6.78	-0.80	0.00	-25.43	0.00	25.43	1,265.69	632.84	1,110.30	548.34	6.78	-0.68	0.052
109.00	-6.69	-0.79	0.00	-24.63	0.00	24.63	1,256.39	628.19	1,093.96	540.26	6.93	-0.69	0.051
110.00	-6.69	-0.79	0.00	-23.84	0.00	23.84	1,247.09	623.54	1,077.73	532.25	7.07	-0.70	0.050
110.00	-6.62	-0.79	0.00	-23.84	0.00	23.84	1,247.09	623.54	1,077.72	532.25	7.07	-0.70	0.050
110.00	-6.62	-0.79	0.00	-23.84	0.00	23.84	853.22	426.61	741.74	366.32	7.07	-0.70	0.073
111.00	-6.54	-0.78	0.00	-23.05	0.00	23.05	849.66	424.83	733.10	362.05	7.22	-0.70	0.071

112.00	-6.47	-0.78	0.00	-22.26	0.00	22.26	846.05	423.02	724.47	357.79	7.36	-0.71	0.070
113.00	-6.40	-0.77	0.00	-21.48	0.00	21.48	842.40	421.20	715.86	353.53	7.51	-0.72	0.068
114.00	-6.33	-0.77	0.00	-20.71	0.00	20.71	838.71	419.35	707.25	349.29	7.67	-0.73	0.067
115.00	-6.26	-0.76	0.00	-19.94	0.00	19.94	834.98	417.49	698.66	345.04	7.82	-0.74	0.065
116.00	-6.18	-0.76	0.00	-19.18	0.00	19.18	831.20	415.60	690.08	340.81	7.98	-0.75	0.064
117.00	-6.11	-0.75	0.00	-18.42	0.00	18.42	827.39	413.69	681.52	336.58	8.13	-0.76	0.062
118.00	-6.04	-0.75	0.00	-17.67	0.00	17.67	823.53	411.76	672.98	332.36	8.29	-0.76	0.060
119.00	-5.97	-0.74	0.00	-16.92	0.00	16.92	819.63	409.81	664.45	328.14	8.45	-0.77	0.059
120.00	-5.90	-0.74	0.00	-16.18	0.00	16.18	815.69	407.84	655.93	323.94	8.62	-0.78	0.057
121.00	-5.83	-0.73	0.00	-15.44	0.00	15.44	811.71	405.85	647.44	319.75	8.78	-0.79	0.055
122.00	-5.76	-0.72	0.00	-14.71	0.00	14.71	807.68	403.84	638.96	315.56	8.95	-0.80	0.054
123.00	-5.58	-0.71	0.00	-13.99	0.00	13.99	803.62	401.81	630.51	311.38	9.11	-0.80	0.052
124.00	-5.51	-0.70	0.00	-13.28	0.00	13.28	799.51	399.76	622.07	307.22	9.28	-0.81	0.050
125.00	-5.44	-0.69	0.00	-12.58	0.00	12.58	795.36	397.68	613.66	303.06	9.45	-0.82	0.048
126.00	-5.37	-0.69	0.00	-11.89	0.00	11.89	791.17	395.59	605.27	298.92	9.62	-0.82	0.047
127.00	-5.31	-0.68	0.00	-11.20	0.00	11.20	786.94	393.47	596.90	294.79	9.80	-0.83	0.045
128.00	-5.24	-0.67	0.00	-10.52	0.00	10.52	782.67	391.33	588.56	290.67	9.97	-0.84	0.043
129.00	-5.17	-0.67	0.00	-9.85	0.00	9.85	778.35	389.18	580.24	286.56	10.15	-0.84	0.041
130.00	-5.10	-0.66	0.00	-9.18	0.00	9.18	774.00	387.00	571.95	282.46	10.33	-0.85	0.039
131.00	-5.04	-0.65	0.00	-8.52	0.00	8.52	769.60	384.80	563.68	278.38	10.50	-0.85	0.037
132.00	-4.97	-0.65	0.00	-7.86	0.00	7.86	765.16	382.58	555.44	274.31	10.68	-0.86	0.035
133.00	-4.90	-0.64	0.00	-7.22	0.00	7.22	760.68	380.34	547.23	270.25	10.87	-0.87	0.033
134.00	-3.39	-0.47	0.00	-6.58	0.00	6.58	756.16	378.08	539.04	266.21	11.05	-0.87	0.029
135.00	-3.33	-0.46	0.00	-6.11	0.00	6.11	751.59	375.80	530.89	262.19	11.23	-0.87	0.028
136.00	-3.27	-0.45	0.00	-5.65	0.00	5.65	746.99	373.49	522.77	258.17	11.41	-0.88	0.026
137.00	-3.22	-0.45	0.00	-5.20	0.00	5.20	742.34	371.17	514.67	254.18	11.60	-0.88	0.025
138.00	-3.16	-0.44	0.00	-4.76	0.00	4.76	737.65	368.82	506.61	250.20	11.78	-0.89	0.023
139.00	-3.10	-0.43	0.00	-4.32	0.00	4.32	732.92	366.46	498.59	246.23	11.97	-0.89	0.022
140.00	-3.05	-0.43	0.00	-3.88	0.00	3.88	728.15	364.07	490.59	242.29	12.16	-0.89	0.020
141.00	-2.93	-0.41	0.00	-3.46	0.00	3.46	721.91	360.95	481.68	237.89	12.34	-0.90	0.019
142.00	-2.88	-0.40	0.00	-3.05	0.00	3.05	714.93	357.47	472.37	233.29	12.53	-0.90	0.017
143.00	-2.83	-0.40	0.00	-2.64	0.00	2.64	707.96	353.98	463.15	228.73	12.72	-0.90	0.016
144.00	-2.78	-0.39	0.00	-2.25	0.00	2.25	700.99	350.49	454.01	224.22	12.91	-0.90	0.014
145.00	-2.73	-0.38	0.00	-1.86	0.00	1.86	694.01	347.01	444.97	219.76	13.10	-0.91	0.012
146.00	-2.68	-0.38	0.00	-1.47	0.00	1.47	687.04	343.52	436.02	215.34	13.29	-0.91	0.011
147.00	-2.63	-0.37	0.00	-1.09	0.00	1.09	680.07	340.03	427.16	210.96	13.48	-0.91	0.009
148.00	-2.58	-0.36	0.00	-0.72	0.00	0.72	673.09	336.55	418.40	206.63	13.67	-0.91	0.007
149.00	-2.53	-0.36	0.00	-0.36	0.00	0.36	666.12	333.06	409.72	202.34	13.86	-0.91	0.006
150.00	0.00	-0.32	0.00	0.00	0.00	0.00	659.14	329.57	401.13	198.10	14.05	-0.91	0.000

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}):	0.19
Desing Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Period Based on Rayleigh Method (sec):	3.41
Redundancy Factor (p):	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)
156	149.50	57	1.877	1.914	1.116	0.351	17	71
155	148.50	57	1.852	1.787	1.070	0.335	17	71
154	147.50	58	1.828	1.667	1.025	0.319	16	72
153	146.50	58	1.803	1.551	0.982	0.304	15	72
152	145.50	58	1.778	1.442	0.940	0.289	15	72
151	144.50	59	1.754	1.337	0.900	0.274	14	73
150	143.50	59	1.730	1.238	0.861	0.260	13	73
149	142.50	59	1.706	1.144	0.823	0.246	13	74
148	141.50	60	1.682	1.055	0.787	0.232	12	74
147	140.50	65	1.658	0.970	0.752	0.219	12	80
146	139.50	65	1.635	0.890	0.718	0.206	12	81
145	138.50	66	1.611	0.814	0.686	0.194	11	81
144	137.50	66	1.588	0.742	0.654	0.181	10	82
143	136.50	66	1.565	0.674	0.624	0.169	10	82
142	135.50	67	1.542	0.611	0.595	0.158	9	82
141	134.50	67	1.520	0.550	0.566	0.146	8	83
140	133.50	77	1.497	0.494	0.539	0.135	9	95
139	132.50	77	1.475	0.441	0.513	0.124	8	96
138	131.50	78	1.453	0.391	0.488	0.114	8	96
137	130.50	78	1.431	0.344	0.464	0.104	7	97
136	129.50	78	1.409	0.301	0.441	0.094	6	97
135	128.50	79	1.387	0.260	0.419	0.085	6	97
134	127.50	79	1.366	0.222	0.397	0.075	5	98
133	126.50	79	1.344	0.186	0.377	0.066	5	98
132	125.50	80	1.323	0.154	0.357	0.058	4	99
131	124.50	80	1.302	0.123	0.338	0.050	3	99
130	123.50	80	1.281	0.095	0.320	0.042	3	99
129	122.50	81	1.261	0.069	0.302	0.034	2	100
128	121.50	81	1.240	0.046	0.286	0.026	2	101
127	120.50	82	1.220	0.024	0.270	0.019	1	101
126	119.50	82	1.200	0.004	0.254	0.013	1	101
125	118.50	82	1.180	-0.014	0.240	0.006	0	102
124	117.50	82	1.160	-0.030	0.226	0.000	0	102
123	116.50	83	1.140	-0.045	0.213	-0.006	0	103

122	115.50	83	1.121	-0.058	0.200	-0.012	-1	103
121	114.50	83	1.101	-0.069	0.188	-0.017	-1	103
120	113.50	84	1.082	-0.079	0.176	-0.022	-2	104
119	112.50	84	1.063	-0.088	0.165	-0.027	-2	104
118	111.50	84	1.044	-0.096	0.154	-0.031	-2	105
117	110.50	85	1.026	-0.103	0.144	-0.035	-3	105
116	110.00	0	1.016	-0.105	0.140	-0.037	0	0
115	109.50	99	1.007	-0.108	0.135	-0.039	-3	123
114	108.50	100	0.989	-0.113	0.126	-0.043	-4	124
113	107.50	100	0.971	-0.116	0.117	-0.046	-4	124
112	106.50	101	0.953	-0.119	0.109	-0.049	-4	125
111	105.50	101	0.935	-0.120	0.101	-0.052	-5	125
110	104.50	102	0.917	-0.121	0.094	-0.054	-5	126
109	103.50	102	0.900	-0.122	0.087	-0.056	-5	126
108	102.50	102	0.883	-0.121	0.081	-0.058	-5	127
107	101.50	103	0.865	-0.120	0.075	-0.059	-5	127
106	100.50	103	0.848	-0.119	0.069	-0.061	-5	128
105	99.50	104	0.832	-0.117	0.063	-0.061	-6	128
104	98.50	104	0.815	-0.115	0.058	-0.062	-6	129
103	97.50	105	0.799	-0.112	0.053	-0.062	-6	129
102	96.50	105	0.782	-0.108	0.049	-0.062	-6	130
101	95.50	105	0.766	-0.105	0.045	-0.061	-6	131
100	94.50	106	0.750	-0.101	0.041	-0.061	-6	131
99	93.50	106	0.734	-0.097	0.037	-0.060	-5	132
98	92.50	107	0.719	-0.092	0.034	-0.058	-5	132
97	91.50	107	0.703	-0.088	0.030	-0.056	-5	133
96	90.50	108	0.688	-0.083	0.028	-0.054	-5	133
95	89.50	108	0.673	-0.078	0.025	-0.052	-5	134
94	88.50	108	0.658	-0.073	0.022	-0.049	-5	134
93	87.50	109	0.643	-0.068	0.020	-0.046	-4	135
92	86.50	109	0.629	-0.063	0.018	-0.043	-4	135
91	85.50	110	0.614	-0.058	0.016	-0.040	-4	136
90	84.50	110	0.600	-0.053	0.015	-0.036	-3	136
89	83.50	111	0.586	-0.048	0.013	-0.032	-3	137
88	82.50	111	0.572	-0.043	0.012	-0.028	-3	137
87	81.50	111	0.558	-0.037	0.010	-0.023	-2	138
86	80.50	112	0.544	-0.032	0.009	-0.019	-2	138
85	79.50	112	0.531	-0.027	0.009	-0.014	-1	139
84	78.50	113	0.518	-0.023	0.008	-0.010	-1	140
83	77.50	113	0.505	-0.018	0.007	-0.005	-1	140
82	76.50	114	0.492	-0.013	0.007	-0.001	0	141
81	75.50	114	0.479	-0.008	0.006	0.004	0	141
80	74.50	114	0.466	-0.004	0.006	0.008	1	142
79	73.75	57	0.457	-0.001	0.006	0.012	1	71
78	73.25	102	0.451	0.001	0.006	0.014	1	127
77	72.50	205	0.442	0.005	0.006	0.017	3	254
76	71.50	206	0.429	0.009	0.006	0.021	4	256
75	70.50	207	0.418	0.013	0.006	0.025	4	257
74	70.00	0	0.412	0.014	0.006	0.027	0	0
73	69.50	133	0.406	0.016	0.006	0.028	3	165
72	68.50	134	0.394	0.020	0.007	0.032	4	166
71	67.50	134	0.383	0.023	0.007	0.035	4	166
70	66.50	135	0.371	0.027	0.008	0.038	4	167
69	65.50	136	0.360	0.030	0.008	0.041	5	168
68	64.50	136	0.349	0.033	0.009	0.043	5	168
67	63.50	137	0.339	0.036	0.009	0.045	5	169
66	62.50	137	0.328	0.039	0.010	0.048	6	170
65	61.50	138	0.318	0.041	0.011	0.049	6	170
64	60.50	138	0.307	0.044	0.012	0.051	6	171
63	59.50	139	0.297	0.046	0.012	0.052	6	172
62	58.50	139	0.287	0.048	0.013	0.054	6	172
61	57.50	140	0.278	0.050	0.014	0.055	7	173
60	56.50	140	0.268	0.052	0.015	0.056	7	174
59	55.50	141	0.259	0.054	0.016	0.056	7	174

58	54.50	141	0.250	0.055	0.017	0.057	7	175
57	53.50	142	0.240	0.057	0.018	0.058	7	176
56	52.50	142	0.232	0.058	0.019	0.058	7	176
55	51.50	143	0.223	0.060	0.020	0.058	7	177
54	50.50	144	0.214	0.061	0.021	0.059	7	178
53	49.50	144	0.206	0.062	0.022	0.059	7	178
52	48.50	145	0.198	0.063	0.024	0.059	7	179
51	47.50	145	0.190	0.064	0.025	0.059	7	180
50	46.50	146	0.182	0.065	0.026	0.059	7	180
49	45.50	146	0.174	0.066	0.027	0.059	7	181
48	44.50	147	0.166	0.066	0.028	0.058	7	182
47	43.50	147	0.159	0.067	0.029	0.058	7	182
46	42.50	148	0.152	0.068	0.030	0.058	7	183
45	41.50	148	0.145	0.068	0.031	0.058	7	184
44	40.50	149	0.138	0.069	0.032	0.058	7	184
43	39.50	149	0.131	0.069	0.033	0.057	7	185
42	38.50	150	0.125	0.070	0.034	0.057	7	186
41	37.50	151	0.118	0.070	0.035	0.057	7	186
40	36.50	151	0.112	0.070	0.036	0.057	7	187
39	35.83	50	0.108	0.071	0.036	0.056	2	62
38	35.33	187	0.105	0.071	0.037	0.056	9	232
37	34.50	282	0.100	0.071	0.037	0.056	14	349
36	33.50	283	0.094	0.071	0.038	0.056	14	351
35	32.50	284	0.089	0.071	0.039	0.056	14	352
34	31.75	143	0.085	0.071	0.039	0.055	7	176
33	31.25	87	0.082	0.072	0.039	0.055	4	108
32	30.50	174	0.078	0.072	0.040	0.055	8	215
31	29.50	175	0.073	0.072	0.040	0.055	8	216
30	28.50	175	0.068	0.072	0.041	0.054	8	217
29	27.50	176	0.064	0.072	0.041	0.054	8	218
28	26.50	177	0.059	0.072	0.041	0.054	8	219
27	25.50	177	0.055	0.071	0.042	0.054	8	219
26	24.50	178	0.050	0.071	0.042	0.053	8	220
25	23.50	179	0.046	0.071	0.042	0.053	8	221
24	22.50	179	0.043	0.070	0.042	0.053	8	222
23	21.50	180	0.039	0.070	0.041	0.052	8	223
22	20.50	180	0.035	0.069	0.041	0.052	8	223
21	19.50	181	0.032	0.069	0.041	0.051	8	224
20	18.50	182	0.029	0.068	0.040	0.051	8	225
19	17.50	182	0.026	0.067	0.040	0.050	8	226
18	16.50	183	0.023	0.066	0.039	0.050	8	227
17	15.50	184	0.020	0.064	0.038	0.049	8	227
16	14.50	184	0.018	0.063	0.037	0.048	8	228
15	13.50	185	0.015	0.061	0.036	0.047	8	229
14	12.50	186	0.013	0.059	0.034	0.046	7	230
13	11.50	186	0.011	0.056	0.033	0.045	7	231
12	10.50	187	0.009	0.054	0.031	0.043	7	231
11	9.50	188	0.008	0.051	0.029	0.042	7	232
10	8.75	94	0.006	0.048	0.028	0.040	3	116
9	8.25	128	0.006	0.047	0.026	0.039	4	158
8	7.50	256	0.005	0.044	0.025	0.037	8	317
7	6.50	256	0.004	0.040	0.022	0.035	8	317
6	5.50	257	0.003	0.035	0.019	0.032	7	318
5	4.50	258	0.002	0.030	0.016	0.028	6	319
4	3.50	258	0.001	0.024	0.013	0.024	5	320
3	2.50	259	0.001	0.018	0.010	0.019	4	321
2	1.50	260	0.000	0.011	0.006	0.012	3	321
1	0.50	260	0.000	0.004	0.002	0.005	1	322
Andrew ABT-DMDF-	150.00	3	1.890	1.980	1.140	0.359	1	4
Powerwave Allgon 702	150.00	26	1.890	1.980	1.140	0.359	8	33
Powerwave TT19-	150.00	96	1.890	1.980	1.140	0.359	30	119
Raycap DC6-48-60-18-	150.00	33	1.890	1.980	1.140	0.359	10	41
Ericsson RRUS 11 (Ba	150.00	150	1.890	1.980	1.140	0.359	47	186
Ericsson RRUS 32 B2	150.00	159	1.890	1.980	1.140	0.359	49	197

12' Omni	150.00	40	1.890	1.980	1.140	0.359	12	50
12' Dipole	150.00	40	1.890	1.980	1.140	0.359	12	50
Powerwave 7770.00A	150.00	162	1.890	1.980	1.140	0.359	50	201
6' Yagi	150.00	25	1.890	1.980	1.140	0.359	8	31
CCI HPA-65R-BUU-H8	150.00	204	1.890	1.980	1.140	0.359	63	253
Flat Platform w/ Han	150.00	2,000	1.890	1.980	1.140	0.359	622	2,476
RFS APXV18-206517S-C	141.00	79	1.670	1.012	0.769	0.226	15	98
RFS ATMPP1412D-1CWA	134.00	38	1.508	0.522	0.553	0.141	5	46
RFS ATMAA1412D-1A20	134.00	39	1.508	0.522	0.553	0.141	5	48
RFS APX16DWV-16DWV-	134.00	119	1.508	0.522	0.553	0.141	14	147
Low Profile Platform	134.00	1,500	1.508	0.522	0.553	0.141	183	1,857
Stand-Off	123.00	100	1.271	0.082	0.311	0.038	3	124
75" x 16.8" Panel	123.00	31	1.271	0.082	0.311	0.038	1	39
Channel Master Type	10.00	126	0.008	0.052	0.030	0.043	5	156
		24,941	129.510	49.169	41.640	12.125	1,794	30,881

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)
156	149.50	57	1.877	1.914	1.116	0.351	17	49
155	148.50	57	1.852	1.787	1.070	0.335	17	49
154	147.50	58	1.828	1.667	1.025	0.319	16	50
153	146.50	58	1.803	1.551	0.982	0.304	15	50
152	145.50	58	1.778	1.442	0.940	0.289	15	50
151	144.50	59	1.754	1.337	0.900	0.274	14	51
150	143.50	59	1.730	1.238	0.861	0.260	13	51
149	142.50	59	1.706	1.144	0.823	0.246	13	51
148	141.50	60	1.682	1.055	0.787	0.232	12	51
147	140.50	65	1.658	0.970	0.752	0.219	12	56
146	139.50	65	1.635	0.890	0.718	0.206	12	56
145	138.50	66	1.611	0.814	0.686	0.194	11	57
144	137.50	66	1.588	0.742	0.654	0.181	10	57
143	136.50	66	1.565	0.674	0.624	0.169	10	57
142	135.50	67	1.542	0.611	0.595	0.158	9	57
141	134.50	67	1.520	0.550	0.566	0.146	8	58
140	133.50	77	1.497	0.494	0.539	0.135	9	66
139	132.50	77	1.475	0.441	0.513	0.124	8	67
138	131.50	78	1.453	0.391	0.488	0.114	8	67
137	130.50	78	1.431	0.344	0.464	0.104	7	67
136	129.50	78	1.409	0.301	0.441	0.094	6	67
135	128.50	79	1.387	0.260	0.419	0.085	6	68
134	127.50	79	1.366	0.222	0.397	0.075	5	68
133	126.50	79	1.344	0.186	0.377	0.066	5	68
132	125.50	80	1.323	0.154	0.357	0.058	4	69
131	124.50	80	1.302	0.123	0.338	0.050	3	69
130	123.50	80	1.281	0.095	0.320	0.042	3	69
129	122.50	81	1.261	0.069	0.302	0.034	2	70
128	121.50	81	1.240	0.046	0.286	0.026	2	70
127	120.50	82	1.220	0.024	0.270	0.019	1	70
126	119.50	82	1.200	0.004	0.254	0.013	1	71
125	118.50	82	1.180	-0.014	0.240	0.006	0	71
124	117.50	82	1.160	-0.030	0.226	0.000	0	71
123	116.50	83	1.140	-0.045	0.213	-0.006	0	71
122	115.50	83	1.121	-0.058	0.200	-0.012	-1	72
121	114.50	83	1.101	-0.069	0.188	-0.017	-1	72
120	113.50	84	1.082	-0.079	0.176	-0.022	-2	72
119	112.50	84	1.063	-0.088	0.165	-0.027	-2	72
118	111.50	84	1.044	-0.096	0.154	-0.031	-2	73

117	110.50	85	1.026	-0.103	0.144	-0.035	-3	73
116	110.00	0	1.016	-0.105	0.140	-0.037	0	0
115	109.50	99	1.007	-0.108	0.135	-0.039	-3	86
114	108.50	100	0.989	-0.113	0.126	-0.043	-4	86
113	107.50	100	0.971	-0.116	0.117	-0.046	-4	86
112	106.50	101	0.953	-0.119	0.109	-0.049	-4	87
111	105.50	101	0.935	-0.120	0.101	-0.052	-5	87
110	104.50	102	0.917	-0.121	0.094	-0.054	-5	88
109	103.50	102	0.900	-0.122	0.087	-0.056	-5	88
108	102.50	102	0.883	-0.121	0.081	-0.058	-5	88
107	101.50	103	0.865	-0.120	0.075	-0.059	-5	89
106	100.50	103	0.848	-0.119	0.069	-0.061	-5	89
105	99.50	104	0.832	-0.117	0.063	-0.061	-6	89
104	98.50	104	0.815	-0.115	0.058	-0.062	-6	90
103	97.50	105	0.799	-0.112	0.053	-0.062	-6	90
102	96.50	105	0.782	-0.108	0.049	-0.062	-6	90
101	95.50	105	0.766	-0.105	0.045	-0.061	-6	91
100	94.50	106	0.750	-0.101	0.041	-0.061	-6	91
99	93.50	106	0.734	-0.097	0.037	-0.060	-5	92
98	92.50	107	0.719	-0.092	0.034	-0.058	-5	92
97	91.50	107	0.703	-0.088	0.030	-0.056	-5	92
96	90.50	108	0.688	-0.083	0.028	-0.054	-5	93
95	89.50	108	0.673	-0.078	0.025	-0.052	-5	93
94	88.50	108	0.658	-0.073	0.022	-0.049	-5	93
93	87.50	109	0.643	-0.068	0.020	-0.046	-4	94
92	86.50	109	0.629	-0.063	0.018	-0.043	-4	94
91	85.50	110	0.614	-0.058	0.016	-0.040	-4	95
90	84.50	110	0.600	-0.053	0.015	-0.036	-3	95
89	83.50	111	0.586	-0.048	0.013	-0.032	-3	95
88	82.50	111	0.572	-0.043	0.012	-0.028	-3	96
87	81.50	111	0.558	-0.037	0.010	-0.023	-2	96
86	80.50	112	0.544	-0.032	0.009	-0.019	-2	96
85	79.50	112	0.531	-0.027	0.009	-0.014	-1	97
84	78.50	113	0.518	-0.023	0.008	-0.010	-1	97
83	77.50	113	0.505	-0.018	0.007	-0.005	-1	97
82	76.50	114	0.492	-0.013	0.007	-0.001	0	98
81	75.50	114	0.479	-0.008	0.006	0.004	0	98
80	74.50	114	0.466	-0.004	0.006	0.008	1	99
79	73.75	57	0.457	-0.001	0.006	0.012	1	49
78	73.25	102	0.451	0.001	0.006	0.014	1	88
77	72.50	205	0.442	0.005	0.006	0.017	3	177
76	71.50	206	0.429	0.009	0.006	0.021	4	178
75	70.50	207	0.418	0.013	0.006	0.025	4	179
74	70.00	0	0.412	0.014	0.006	0.027	0	0
73	69.50	133	0.406	0.016	0.006	0.028	3	115
72	68.50	134	0.394	0.020	0.007	0.032	4	115
71	67.50	134	0.383	0.023	0.007	0.035	4	116
70	66.50	135	0.371	0.027	0.008	0.038	4	116
69	65.50	136	0.360	0.030	0.008	0.041	5	117
68	64.50	136	0.349	0.033	0.009	0.043	5	117
67	63.50	137	0.339	0.036	0.009	0.045	5	118
66	62.50	137	0.328	0.039	0.010	0.048	6	118
65	61.50	138	0.318	0.041	0.011	0.049	6	119
64	60.50	138	0.307	0.044	0.012	0.051	6	119
63	59.50	139	0.297	0.046	0.012	0.052	6	120
62	58.50	139	0.287	0.048	0.013	0.054	6	120
61	57.50	140	0.278	0.050	0.014	0.055	7	120
60	56.50	140	0.268	0.052	0.015	0.056	7	121
59	55.50	141	0.259	0.054	0.016	0.056	7	121
58	54.50	141	0.250	0.055	0.017	0.057	7	122
57	53.50	142	0.240	0.057	0.018	0.058	7	122
56	52.50	142	0.232	0.058	0.019	0.058	7	123
55	51.50	143	0.223	0.060	0.020	0.058	7	123
54	50.50	144	0.214	0.061	0.021	0.059	7	124

53	49.50	144	0.206	0.062	0.022	0.059	7	124
52	48.50	145	0.198	0.063	0.024	0.059	7	125
51	47.50	145	0.190	0.064	0.025	0.059	7	125
50	46.50	146	0.182	0.065	0.026	0.059	7	126
49	45.50	146	0.174	0.066	0.027	0.059	7	126
48	44.50	147	0.166	0.066	0.028	0.058	7	127
47	43.50	147	0.159	0.067	0.029	0.058	7	127
46	42.50	148	0.152	0.068	0.030	0.058	7	127
45	41.50	148	0.145	0.068	0.031	0.058	7	128
44	40.50	149	0.138	0.069	0.032	0.058	7	128
43	39.50	149	0.131	0.069	0.033	0.057	7	129
42	38.50	150	0.125	0.070	0.034	0.057	7	129
41	37.50	151	0.118	0.070	0.035	0.057	7	130
40	36.50	151	0.112	0.070	0.036	0.057	7	130
39	35.83	50	0.108	0.071	0.036	0.056	2	43
38	35.33	187	0.105	0.071	0.037	0.056	9	162
37	34.50	282	0.100	0.071	0.037	0.056	14	243
36	33.50	283	0.094	0.071	0.038	0.056	14	244
35	32.50	284	0.089	0.071	0.039	0.056	14	245
34	31.75	143	0.085	0.071	0.039	0.055	7	123
33	31.25	87	0.082	0.072	0.039	0.055	4	75
32	30.50	174	0.078	0.072	0.040	0.055	8	150
31	29.50	175	0.073	0.072	0.040	0.055	8	151
30	28.50	175	0.068	0.072	0.041	0.054	8	151
29	27.50	176	0.064	0.072	0.041	0.054	8	152
28	26.50	177	0.059	0.072	0.041	0.054	8	152
27	25.50	177	0.055	0.071	0.042	0.054	8	153
26	24.50	178	0.050	0.071	0.042	0.053	8	153
25	23.50	179	0.046	0.071	0.042	0.053	8	154
24	22.50	179	0.043	0.070	0.042	0.053	8	154
23	21.50	180	0.039	0.070	0.041	0.052	8	155
22	20.50	180	0.035	0.069	0.041	0.052	8	156
21	19.50	181	0.032	0.069	0.041	0.051	8	156
20	18.50	182	0.029	0.068	0.040	0.051	8	157
19	17.50	182	0.026	0.067	0.040	0.050	8	157
18	16.50	183	0.023	0.066	0.039	0.050	8	158
17	15.50	184	0.020	0.064	0.038	0.049	8	158
16	14.50	184	0.018	0.063	0.037	0.048	8	159
15	13.50	185	0.015	0.061	0.036	0.047	8	159
14	12.50	186	0.013	0.059	0.034	0.046	7	160
13	11.50	186	0.011	0.056	0.033	0.045	7	161
12	10.50	187	0.009	0.054	0.031	0.043	7	161
11	9.50	188	0.008	0.051	0.029	0.042	7	162
10	8.75	94	0.006	0.048	0.028	0.040	3	81
9	8.25	128	0.006	0.047	0.026	0.039	4	110
8	7.50	256	0.005	0.044	0.025	0.037	8	220
7	6.50	256	0.004	0.040	0.022	0.035	8	221
6	5.50	257	0.003	0.035	0.019	0.032	7	221
5	4.50	258	0.002	0.030	0.016	0.028	6	222
4	3.50	258	0.001	0.024	0.013	0.024	5	223
3	2.50	259	0.001	0.018	0.010	0.019	4	223
2	1.50	260	0.000	0.011	0.006	0.012	3	224
1	0.50	260	0.000	0.004	0.002	0.005	1	224
Andrew ABT-DMDF-	150.00	3	1.890	1.980	1.140	0.359	1	3
Powerwave Allgon 702	150.00	26	1.890	1.980	1.140	0.359	8	23
Powerwave TT19-	150.00	96	1.890	1.980	1.140	0.359	30	83
Raycap DC6-48-60-18-	150.00	33	1.890	1.980	1.140	0.359	10	28
Ericsson RRUS 11 (Ba	150.00	150	1.890	1.980	1.140	0.359	47	129
Ericsson RRUS 32 B2	150.00	159	1.890	1.980	1.140	0.359	49	137
12' Omni	150.00	40	1.890	1.980	1.140	0.359	12	34
12' Dipole	150.00	40	1.890	1.980	1.140	0.359	12	34
Powerwave 7770.00A	150.00	162	1.890	1.980	1.140	0.359	50	140
6' Yagi	150.00	25	1.890	1.980	1.140	0.359	8	22
CCI HPA-65R-BUU-H8	150.00	204	1.890	1.980	1.140	0.359	63	176

Flat Platform w/ Han	150.00	2,000	1.890	1.980	1.140	0.359	622	1,724
RFS APXV18-206517S-C	141.00	79	1.670	1.012	0.769	0.226	15	68
RFS ATMPP1412D-1CWA	134.00	38	1.508	0.522	0.553	0.141	5	32
RFS ATMAA1412D-1A20	134.00	39	1.508	0.522	0.553	0.141	5	34
RFS APX16DWV-16DWV-	134.00	119	1.508	0.522	0.553	0.141	14	102
Low Profile Platform	134.00	1,500	1.508	0.522	0.553	0.141	183	1,293
Stand-Off	123.00	100	1.271	0.082	0.311	0.038	3	86
75" x 16.8" Panel	123.00	31	1.271	0.082	0.311	0.038	1	27
Channel Master Type	10.00	126	0.008	0.052	0.030	0.043	5	109
		24,941	129.510	49.169	41.640	12.125	1,794	21,494

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	-30.56	-1.79	0.00	-233.33	0.00	233.33	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.067
1.00	-30.24	-1.79	0.00	-231.54	0.00	231.54	3,148.69	1,574.34	4,778.83	2,360.09	0.00	-0.01	0.067
2.00	-29.92	-1.79	0.00	-229.75	0.00	229.75	3,140.16	1,570.08	4,745.43	2,343.59	0.00	-0.01	0.066
3.00	-29.60	-1.79	0.00	-227.96	0.00	227.96	3,131.60	1,565.80	4,712.07	2,327.11	0.00	-0.02	0.066
4.00	-29.28	-1.78	0.00	-226.17	0.00	226.17	3,123.00	1,561.50	4,678.76	2,310.67	0.01	-0.02	0.066
5.00	-28.96	-1.78	0.00	-224.39	0.00	224.39	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.03	0.066
6.00	-28.64	-1.77	0.00	-222.61	0.00	222.61	3,105.66	1,552.83	4,612.30	2,277.84	0.02	-0.03	0.065
7.00	-28.33	-1.77	0.00	-220.83	0.00	220.83	3,096.94	1,548.47	4,579.15	2,261.47	0.03	-0.04	0.065
8.00	-28.17	-1.77	0.00	-219.06	0.00	219.06	3,088.17	1,544.08	4,546.04	2,245.12	0.04	-0.04	0.065
8.50	-28.05	-1.76	0.00	-218.18	0.00	218.18	3,083.76	1,541.88	4,529.51	2,236.96	0.04	-0.04	0.065
8.50	-28.05	-1.76	0.00	-218.18	0.00	218.18	3,083.76	1,541.88	4,529.51	2,236.96	0.04	-0.04	0.107
9.00	-27.82	-1.76	0.00	-217.30	0.00	217.30	3,079.35	1,539.68	4,513.00	2,228.80	0.04	-0.05	0.107
10.00	-27.43	-1.75	0.00	-215.54	0.00	215.54	3,070.50	1,535.25	4,480.00	2,212.50	0.06	-0.06	0.106
11.00	-27.20	-1.75	0.00	-213.78	0.00	213.78	3,061.60	1,530.80	4,447.06	2,196.24	0.07	-0.06	0.106
12.00	-26.97	-1.75	0.00	-212.04	0.00	212.04	3,052.67	1,526.33	4,414.18	2,180.00	0.08	-0.07	0.106
13.00	-26.74	-1.74	0.00	-210.29	0.00	210.29	3,043.69	1,521.84	4,381.36	2,163.79	0.10	-0.08	0.106
14.00	-26.51	-1.74	0.00	-208.55	0.00	208.55	3,034.67	1,517.33	4,348.59	2,147.60	0.12	-0.09	0.106
15.00	-26.28	-1.73	0.00	-206.81	0.00	206.81	3,025.61	1,512.80	4,315.88	2,131.45	0.14	-0.10	0.106
16.00	-26.06	-1.73	0.00	-205.08	0.00	205.08	3,016.50	1,508.25	4,283.22	2,115.32	0.16	-0.11	0.106
17.00	-25.83	-1.73	0.00	-203.35	0.00	203.35	3,007.36	1,503.68	4,250.63	2,099.23	0.18	-0.12	0.105
18.00	-25.61	-1.72	0.00	-201.62	0.00	201.62	2,998.17	1,499.09	4,218.10	2,083.16	0.21	-0.13	0.105
19.00	-25.38	-1.72	0.00	-199.90	0.00	199.90	2,988.94	1,494.47	4,185.63	2,067.13	0.24	-0.14	0.105
20.00	-25.16	-1.71	0.00	-198.18	0.00	198.18	2,979.67	1,489.84	4,153.23	2,051.12	0.27	-0.15	0.105
21.00	-24.93	-1.71	0.00	-196.47	0.00	196.47	2,970.36	1,485.18	4,120.88	2,035.15	0.30	-0.16	0.105
22.00	-24.71	-1.70	0.00	-194.76	0.00	194.76	2,961.01	1,480.50	4,088.60	2,019.21	0.33	-0.17	0.105
23.00	-24.49	-1.70	0.00	-193.06	0.00	193.06	2,951.61	1,475.81	4,056.39	2,003.30	0.37	-0.18	0.105
24.00	-24.27	-1.69	0.00	-191.36	0.00	191.36	2,942.18	1,471.09	4,024.24	1,987.42	0.41	-0.18	0.105
25.00	-24.05	-1.69	0.00	-189.67	0.00	189.67	2,932.70	1,466.35	3,992.16	1,971.58	0.45	-0.19	0.104
26.00	-23.83	-1.68	0.00	-187.98	0.00	187.98	2,923.18	1,461.59	3,960.14	1,955.76	0.49	-0.20	0.104
27.00	-23.61	-1.68	0.00	-186.30	0.00	186.30	2,913.62	1,456.81	3,928.19	1,939.99	0.53	-0.21	0.104
28.00	-23.40	-1.67	0.00	-184.62	0.00	184.62	2,903.09	1,451.54	3,895.07	1,923.63	0.58	-0.22	0.104
29.00	-23.18	-1.67	0.00	-182.94	0.00	182.94	2,889.14	1,444.57	3,857.52	1,905.08	0.63	-0.23	0.104
30.00	-22.96	-1.66	0.00	-181.28	0.00	181.28	2,875.19	1,437.60	3,820.15	1,886.63	0.68	-0.24	0.104
31.00	-22.86	-1.66	0.00	-179.61	0.00	179.61	2,861.24	1,430.62	3,782.96	1,868.26	0.73	-0.25	0.104
31.50	-22.68	-1.66	0.00	-178.78	0.00	178.78	2,854.27	1,427.13	3,764.43	1,859.11	0.75	-0.26	0.104
32.00	-22.33	-1.64	0.00	-177.96	0.00	177.96	2,847.30	1,423.65	3,745.96	1,849.99	0.78	-0.26	0.104
33.00	-21.98	-1.63	0.00	-176.31	0.00	176.31	2,833.35	1,416.67	3,709.14	1,831.80	0.84	-0.27	0.104
34.00	-21.63	-1.62	0.00	-174.68	0.00	174.68	2,819.40	1,409.70	3,672.50	1,813.71	0.90	-0.28	0.104
35.00	-21.40	-1.61	0.00	-173.06	0.00	173.06	2,805.45	1,402.73	3,636.04	1,795.70	0.96	-0.29	0.104
35.67	-21.33	-1.61	0.00	-171.99	0.00	171.99	2,248.05	1,124.03	2,973.86	1,468.68	1.00	-0.30	0.127
36.00	-21.15	-1.61	0.00	-171.45	0.00	171.45	2,245.81	1,122.91	2,966.02	1,464.81	1.02	-0.30	0.126
37.00	-20.96	-1.60	0.00	-169.84	0.00	169.84	2,239.07	1,119.53	2,942.52	1,453.20	1.08	-0.31	0.126
38.00	-20.77	-1.60	0.00	-168.24	0.00	168.24	2,232.28	1,116.14	2,919.04	1,441.60	1.15	-0.33	0.126
39.00	-20.59	-1.59	0.00	-166.64	0.00	166.64	2,225.45	1,112.72	2,895.60	1,430.03	1.22	-0.34	0.126
40.00	-20.40	-1.59	0.00	-165.05	0.00	165.05	2,218.58	1,109.29	2,872.19	1,418.47	1.29	-0.35	0.126
41.00	-20.22	-1.58	0.00	-163.46	0.00	163.46	2,211.66	1,105.83	2,848.82	1,406.93	1.37	-0.36	0.125
42.00	-20.04	-1.58	0.00	-161.88	0.00	161.88	2,204.71	1,102.35	2,825.49	1,395.40	1.44	-0.37	0.125
43.00	-19.85	-1.58	0.00	-160.30	0.00	160.30	2,197.71	1,098.85	2,802.19	1,383.90	1.52	-0.38	0.125
44.00	-19.67	-1.57	0.00	-158.72	0.00	158.72	2,190.67	1,095.33	2,778.94	1,372.41	1.61	-0.40	0.125
45.00	-19.49	-1.57	0.00	-157.15	0.00	157.15	2,183.59	1,091.79	2,755.72	1,360.95	1.69	-0.41	0.124
46.00	-19.31	-1.56	0.00	-155.58	0.00	155.58	2,176.47	1,088.23	2,732.54	1,349.50	1.78	-0.42	0.124
47.00	-19.13	-1.56	0.00	-154.02	0.00	154.02	2,169.30	1,084.65	2,709.41	1,338.07	1.87	-0.43	0.124
48.00	-18.95	-1.55	0.00	-152.46	0.00	152.46	2,162.10	1,081.05	2,686.31	1,326.67	1.96	-0.45	0.124
49.00	-18.77	-1.55	0.00	-150.91	0.00	150.91	2,154.85	1,077.43	2,663.26	1,315.28	2.05	-0.46	0.123
50.00	-18.59	-1.54	0.00	-149.36	0.00	149.36	2,147.56	1,073.78	2,640.25	1,303.92	2.15	-0.47	0.123
51.00	-18.42	-1.54	0.00	-147.82	0.00	147.82	2,140.23	1,070.12	2,617.28	1,292.58	2.25	-0.48	0.123

52.00	-18.24	-1.53	0.00	-146.28	0.00	146.28	2,132.86	1,066.43	2,594.37	1,281.26	2.35	-0.49	0.123
53.00	-18.06	-1.53	0.00	-144.75	0.00	144.75	2,125.45	1,062.72	2,571.49	1,269.96	2.46	-0.51	0.122
54.00	-17.89	-1.52	0.00	-143.22	0.00	143.22	2,118.00	1,059.00	2,548.66	1,258.69	2.56	-0.52	0.122
55.00	-17.71	-1.52	0.00	-141.70	0.00	141.70	2,110.50	1,055.25	2,525.88	1,247.44	2.67	-0.53	0.122
56.00	-17.54	-1.52	0.00	-140.18	0.00	140.18	2,102.96	1,051.48	2,503.15	1,236.21	2.79	-0.54	0.122
57.00	-17.37	-1.51	0.00	-138.66	0.00	138.66	2,095.38	1,047.69	2,480.47	1,225.01	2.90	-0.56	0.121
58.00	-17.19	-1.51	0.00	-137.15	0.00	137.15	2,087.76	1,043.88	2,457.84	1,213.83	3.02	-0.57	0.121
59.00	-17.02	-1.50	0.00	-135.64	0.00	135.64	2,080.10	1,040.05	2,435.26	1,202.68	3.14	-0.58	0.121
60.00	-16.85	-1.50	0.00	-134.14	0.00	134.14	2,072.39	1,036.20	2,412.72	1,191.55	3.27	-0.60	0.121
61.00	-16.68	-1.49	0.00	-132.64	0.00	132.64	2,064.65	1,032.32	2,390.25	1,180.45	3.39	-0.61	0.120
62.00	-16.51	-1.49	0.00	-131.15	0.00	131.15	2,056.86	1,028.43	2,367.82	1,169.38	3.52	-0.62	0.120
63.00	-16.34	-1.49	0.00	-129.66	0.00	129.66	2,049.03	1,024.52	2,345.45	1,158.33	3.65	-0.64	0.120
64.00	-16.17	-1.48	0.00	-128.17	0.00	128.17	2,041.16	1,020.58	2,323.13	1,147.31	3.79	-0.65	0.120
65.00	-16.00	-1.48	0.00	-126.69	0.00	126.69	2,033.25	1,016.62	2,300.87	1,136.31	3.92	-0.66	0.119
66.00	-15.83	-1.48	0.00	-125.21	0.00	125.21	2,025.30	1,012.65	2,278.67	1,125.35	4.06	-0.68	0.119
67.00	-15.67	-1.48	0.00	-123.73	0.00	123.73	2,016.93	1,008.47	2,256.11	1,114.21	4.21	-0.69	0.119
68.00	-15.50	-1.47	0.00	-122.25	0.00	122.25	2,005.31	1,002.65	2,230.04	1,101.33	4.35	-0.70	0.119
69.00	-15.34	-1.47	0.00	-120.78	0.00	120.78	1,993.69	996.84	2,204.11	1,088.53	4.50	-0.72	0.119
70.00	-15.34	-1.47	0.00	-119.30	0.00	119.30	1,982.06	991.03	2,178.34	1,075.80	4.65	-0.73	0.119
70.00	-15.08	-1.47	0.00	-119.30	0.00	119.30	1,982.06	991.03	2,178.33	1,075.80	4.65	-0.73	0.119
71.00	-14.82	-1.46	0.00	-117.84	0.00	117.84	1,970.44	985.22	2,152.72	1,063.15	4.81	-0.74	0.118
72.00	-14.57	-1.46	0.00	-116.37	0.00	116.37	1,958.82	979.41	2,127.25	1,050.57	4.97	-0.76	0.118
73.00	-14.44	-1.46	0.00	-114.91	0.00	114.91	1,947.19	973.60	2,101.94	1,038.07	5.13	-0.77	0.118
73.50	-14.37	-1.46	0.00	-114.18	0.00	114.18	1,473.95	736.97	1,624.52	802.29	5.21	-0.78	0.152
74.00	-14.23	-1.46	0.00	-113.45	0.00	113.45	1,471.40	735.70	1,616.91	798.53	5.29	-0.79	0.152
75.00	-14.09	-1.46	0.00	-111.99	0.00	111.99	1,466.26	733.13	1,601.72	791.03	5.46	-0.80	0.151
76.00	-13.95	-1.47	0.00	-110.52	0.00	110.52	1,461.09	730.55	1,586.54	783.53	5.62	-0.82	0.151
77.00	-13.81	-1.47	0.00	-109.06	0.00	109.06	1,455.88	727.94	1,571.38	776.05	5.80	-0.84	0.150
78.00	-13.67	-1.47	0.00	-107.59	0.00	107.59	1,450.62	725.31	1,556.25	768.57	5.97	-0.85	0.149
79.00	-13.53	-1.47	0.00	-106.12	0.00	106.12	1,445.32	722.66	1,541.14	761.11	6.16	-0.87	0.149
80.00	-13.39	-1.48	0.00	-104.64	0.00	104.64	1,439.98	719.99	1,526.06	753.66	6.34	-0.89	0.148
81.00	-13.25	-1.48	0.00	-103.16	0.00	103.16	1,434.60	717.30	1,511.01	746.23	6.53	-0.90	0.147
82.00	-13.11	-1.49	0.00	-101.68	0.00	101.68	1,429.18	714.59	1,495.98	738.81	6.72	-0.92	0.147
83.00	-12.97	-1.49	0.00	-100.19	0.00	100.19	1,423.71	711.86	1,480.97	731.40	6.91	-0.94	0.146
84.00	-12.84	-1.50	0.00	-98.70	0.00	98.70	1,418.21	709.10	1,466.00	724.00	7.11	-0.95	0.145
85.00	-12.70	-1.50	0.00	-97.20	0.00	97.20	1,412.66	706.33	1,451.06	716.62	7.31	-0.97	0.145
86.00	-12.56	-1.51	0.00	-95.70	0.00	95.70	1,407.07	703.53	1,436.14	709.26	7.52	-0.99	0.144
87.00	-12.43	-1.51	0.00	-94.20	0.00	94.20	1,401.44	700.72	1,421.26	701.91	7.73	-1.01	0.143
88.00	-12.29	-1.52	0.00	-92.68	0.00	92.68	1,395.76	697.88	1,406.40	694.57	7.94	-1.02	0.142
89.00	-12.16	-1.53	0.00	-91.16	0.00	91.16	1,390.05	695.02	1,391.58	687.25	8.15	-1.04	0.141
90.00	-12.03	-1.53	0.00	-89.64	0.00	89.64	1,384.29	692.15	1,376.80	679.95	8.37	-1.06	0.141
91.00	-11.89	-1.54	0.00	-88.11	0.00	88.11	1,378.50	689.25	1,362.04	672.66	8.60	-1.07	0.140
92.00	-11.76	-1.54	0.00	-86.57	0.00	86.57	1,372.66	686.33	1,347.32	665.39	8.82	-1.09	0.139
93.00	-11.63	-1.55	0.00	-85.02	0.00	85.02	1,366.78	683.39	1,332.64	658.14	9.05	-1.11	0.138
94.00	-11.50	-1.56	0.00	-83.47	0.00	83.47	1,360.85	680.43	1,317.99	650.91	9.29	-1.13	0.137
95.00	-11.37	-1.56	0.00	-81.91	0.00	81.91	1,354.89	677.44	1,303.39	643.69	9.53	-1.15	0.136
96.00	-11.24	-1.57	0.00	-80.35	0.00	80.35	1,348.88	674.44	1,288.81	636.50	9.77	-1.16	0.135
97.00	-11.11	-1.58	0.00	-78.78	0.00	78.78	1,342.84	671.42	1,274.28	629.32	10.01	-1.18	0.133
98.00	-10.98	-1.58	0.00	-77.20	0.00	77.20	1,336.75	668.37	1,259.79	622.16	10.26	-1.20	0.132
99.00	-10.85	-1.59	0.00	-75.62	0.00	75.62	1,330.62	665.31	1,245.34	615.03	10.52	-1.22	0.131
100.00	-10.72	-1.60	0.00	-74.03	0.00	74.03	1,324.45	662.22	1,230.93	607.91	10.77	-1.23	0.130
101.00	-10.59	-1.60	0.00	-72.43	0.00	72.43	1,318.23	659.12	1,216.56	600.81	11.03	-1.25	0.129
102.00	-10.46	-1.61	0.00	-70.83	0.00	70.83	1,311.98	655.99	1,202.23	593.74	11.30	-1.27	0.127
103.00	-10.34	-1.61	0.00	-69.23	0.00	69.23	1,305.68	652.84	1,187.95	586.68	11.56	-1.29	0.126
104.00	-10.21	-1.62	0.00	-67.61	0.00	67.61	1,299.34	649.67	1,173.71	579.65	11.84	-1.30	0.125
105.00	-10.08	-1.62	0.00	-66.00	0.00	66.00	1,292.96	646.48	1,159.52	572.64	12.11	-1.32	0.123
106.00	-9.96	-1.63	0.00	-64.37	0.00	64.37	1,284.28	642.14	1,143.36	564.66	12.39	-1.34	0.122
107.00	-9.83	-1.63	0.00	-62.75	0.00	62.75	1,274.98	637.49	1,126.77	556.47	12.67	-1.36	0.120
108.00	-9.71	-1.63	0.00	-61.12	0.00	61.12	1,265.69	632.84	1,110.30	548.34	12.96	-1.37	0.119
109.00	-9.59	-1.64	0.00	-59.48	0.00	59.48	1,256.39	628.19	1,093.96	540.26	13.25	-1.39	0.118
110.00	-9.59	-1.64	0.00	-57.84	0.00	57.84	1,247.09	623.54	1,077.73	532.25	13.54	-1.41	0.116
110.00	-9.48	-1.64	0.00	-57.84	0.00	57.84	1,247.09	623.54	1,077.72	532.25	13.54	-1.41	0.116
110.00	-9.48	-1.64	0.00	-57.84	0.00	57.84	853.22	426.61	741.74	366.32	13.54	-1.41	0.169
111.00	-9.38	-1.64	0.00	-56.20	0.00	56.20	849.66	424.83	733.10	362.05	13.84	-1.42	0.166

112.00	-9.27	-1.65	0.00	-54.56	0.00	54.56	846.05	423.02	724.47	357.79	14.14	-1.45	0.163
113.00	-9.17	-1.65	0.00	-52.91	0.00	52.91	842.40	421.20	715.86	353.53	14.44	-1.47	0.161
114.00	-9.06	-1.65	0.00	-51.27	0.00	51.27	838.71	419.35	707.25	349.29	14.75	-1.49	0.158
115.00	-8.96	-1.65	0.00	-49.61	0.00	49.61	834.98	417.49	698.66	345.04	15.07	-1.51	0.155
116.00	-8.86	-1.65	0.00	-47.96	0.00	47.96	831.20	415.60	690.08	340.81	15.39	-1.53	0.151
117.00	-8.75	-1.65	0.00	-46.31	0.00	46.31	827.39	413.69	681.52	336.58	15.71	-1.56	0.148
118.00	-8.65	-1.65	0.00	-44.65	0.00	44.65	823.53	411.76	672.98	332.36	16.04	-1.58	0.145
119.00	-8.55	-1.65	0.00	-43.00	0.00	43.00	819.63	409.81	664.45	328.14	16.37	-1.60	0.141
120.00	-8.45	-1.65	0.00	-41.35	0.00	41.35	815.69	407.84	655.93	323.94	16.71	-1.62	0.138
121.00	-8.35	-1.65	0.00	-39.69	0.00	39.69	811.71	405.85	647.44	319.75	17.05	-1.64	0.134
122.00	-8.25	-1.65	0.00	-38.04	0.00	38.04	807.68	403.84	638.96	315.56	17.39	-1.66	0.131
123.00	-7.98	-1.64	0.00	-36.39	0.00	36.39	803.62	401.81	630.51	311.38	17.74	-1.68	0.127
124.00	-7.88	-1.63	0.00	-34.76	0.00	34.76	799.51	399.76	622.07	307.22	18.09	-1.70	0.123
125.00	-7.79	-1.63	0.00	-33.13	0.00	33.13	795.36	397.68	613.66	303.06	18.45	-1.71	0.119
126.00	-7.69	-1.62	0.00	-31.50	0.00	31.50	791.17	395.59	605.27	298.92	18.81	-1.73	0.115
127.00	-7.59	-1.62	0.00	-29.88	0.00	29.88	786.94	393.47	596.90	294.79	19.18	-1.75	0.111
128.00	-7.49	-1.61	0.00	-28.26	0.00	28.26	782.67	391.33	588.56	290.67	19.55	-1.77	0.107
129.00	-7.39	-1.60	0.00	-26.65	0.00	26.65	778.35	389.18	580.24	286.56	19.92	-1.78	0.103
130.00	-7.30	-1.60	0.00	-25.04	0.00	25.04	774.00	387.00	571.95	282.46	20.29	-1.80	0.098
131.00	-7.20	-1.59	0.00	-23.45	0.00	23.45	769.60	384.80	563.68	278.38	20.67	-1.82	0.094
132.00	-7.11	-1.58	0.00	-21.86	0.00	21.86	765.16	382.58	555.44	274.31	21.05	-1.83	0.089
133.00	-7.01	-1.57	0.00	-20.29	0.00	20.29	760.68	380.34	547.23	270.25	21.44	-1.84	0.084
134.00	-4.84	-1.28	0.00	-18.72	0.00	18.72	756.16	378.08	539.04	266.21	21.83	-1.86	0.077
135.00	-4.75	-1.27	0.00	-17.44	0.00	17.44	751.59	375.80	530.89	262.19	22.22	-1.87	0.073
136.00	-4.67	-1.26	0.00	-16.16	0.00	16.16	746.99	373.49	522.77	258.17	22.61	-1.88	0.069
137.00	-4.59	-1.25	0.00	-14.90	0.00	14.90	742.34	371.17	514.67	254.18	23.01	-1.90	0.065
138.00	-4.51	-1.24	0.00	-13.66	0.00	13.66	737.65	368.82	506.61	250.20	23.41	-1.91	0.061
139.00	-4.43	-1.22	0.00	-12.42	0.00	12.42	732.92	366.46	498.59	246.23	23.81	-1.92	0.056
140.00	-4.35	-1.21	0.00	-11.20	0.00	11.20	728.15	364.07	490.59	242.29	24.21	-1.93	0.052
141.00	-4.18	-1.18	0.00	-9.99	0.00	9.99	721.91	360.95	481.68	237.89	24.61	-1.94	0.048
142.00	-4.10	-1.16	0.00	-8.82	0.00	8.82	714.93	357.47	472.37	233.29	25.02	-1.94	0.044
143.00	-4.03	-1.15	0.00	-7.66	0.00	7.66	707.96	353.98	463.15	228.73	25.43	-1.95	0.039
144.00	-3.96	-1.13	0.00	-6.51	0.00	6.51	700.99	350.49	454.01	224.22	25.84	-1.96	0.035
145.00	-3.89	-1.11	0.00	-5.38	0.00	5.38	694.01	347.01	444.97	219.76	26.25	-1.96	0.030
146.00	-3.82	-1.10	0.00	-4.27	0.00	4.27	687.04	343.52	436.02	215.34	26.66	-1.97	0.025
147.00	-3.75	-1.08	0.00	-3.17	0.00	3.17	680.07	340.03	427.16	210.96	27.07	-1.97	0.021
148.00	-3.67	-1.06	0.00	-2.10	0.00	2.10	673.09	336.55	418.40	206.63	27.48	-1.97	0.016
149.00	-3.60	-1.04	0.00	-1.04	0.00	1.04	666.12	333.06	409.72	202.34	27.90	-1.98	0.011
150.00	0.00	-0.91	0.00	0.00	0.00	0.00	659.14	329.57	401.13	198.10	28.31	-1.98	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	-21.27	-1.79	0.00	-225.32	0.00	225.32	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.063
1.00	-21.05	-1.79	0.00	-223.53	0.00	223.53	3,148.69	1,574.34	4,778.83	2,360.09	0.00	-0.01	0.062
2.00	-20.82	-1.79	0.00	-221.74	0.00	221.74	3,140.16	1,570.08	4,745.43	2,343.59	0.00	-0.01	0.062
3.00	-20.60	-1.79	0.00	-219.95	0.00	219.95	3,131.60	1,565.80	4,712.07	2,327.11	0.00	-0.02	0.062
4.00	-20.38	-1.78	0.00	-218.16	0.00	218.16	3,123.00	1,561.50	4,678.76	2,310.67	0.01	-0.02	0.062
5.00	-20.16	-1.78	0.00	-216.38	0.00	216.38	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.03	0.062
6.00	-19.94	-1.77	0.00	-214.61	0.00	214.61	3,105.66	1,552.83	4,612.30	2,277.84	0.02	-0.03	0.061
7.00	-19.71	-1.76	0.00	-212.84	0.00	212.84	3,096.94	1,548.47	4,579.15	2,261.47	0.03	-0.04	0.061
8.00	-19.60	-1.76	0.00	-211.07	0.00	211.07	3,088.17	1,544.08	4,546.04	2,245.12	0.03	-0.04	0.061
8.50	-19.52	-1.76	0.00	-210.19	0.00	210.19	3,083.76	1,541.88	4,529.51	2,236.96	0.04	-0.04	0.061
8.50	-19.52	-1.76	0.00	-210.19	0.00	210.19	3,083.76	1,541.88	4,529.51	2,236.96	0.04	-0.04	0.100
9.00	-19.36	-1.75	0.00	-209.31	0.00	209.31	3,079.35	1,539.68	4,513.00	2,228.80	0.04	-0.05	0.100
10.00	-19.09	-1.74	0.00	-207.56	0.00	207.56	3,070.50	1,535.25	4,480.00	2,212.50	0.05	-0.05	0.100
11.00	-18.93	-1.74	0.00	-205.82	0.00	205.82	3,061.60	1,530.80	4,447.06	2,196.24	0.07	-0.06	0.100
12.00	-18.77	-1.73	0.00	-204.08	0.00	204.08	3,052.67	1,526.33	4,414.18	2,180.00	0.08	-0.07	0.100
13.00	-18.61	-1.73	0.00	-202.35	0.00	202.35	3,043.69	1,521.84	4,381.36	2,163.79	0.10	-0.08	0.100
14.00	-18.45	-1.72	0.00	-200.62	0.00	200.62	3,034.67	1,517.33	4,348.59	2,147.60	0.11	-0.09	0.099
15.00	-18.29	-1.72	0.00	-198.89	0.00	198.89	3,025.61	1,512.80	4,315.88	2,131.45	0.13	-0.10	0.099
16.00	-18.14	-1.71	0.00	-197.17	0.00	197.17	3,016.50	1,508.25	4,283.22	2,115.32	0.15	-0.11	0.099
17.00	-17.98	-1.71	0.00	-195.46	0.00	195.46	3,007.36	1,503.68	4,250.63	2,099.23	0.18	-0.11	0.099
18.00	-17.82	-1.70	0.00	-193.75	0.00	193.75	2,998.17	1,499.09	4,218.10	2,083.16	0.20	-0.12	0.099
19.00	-17.67	-1.70	0.00	-192.05	0.00	192.05	2,988.94	1,494.47	4,185.63	2,067.13	0.23	-0.13	0.099
20.00	-17.51	-1.69	0.00	-190.35	0.00	190.35	2,979.67	1,489.84	4,153.23	2,051.12	0.26	-0.14	0.099
21.00	-17.35	-1.68	0.00	-188.66	0.00	188.66	2,970.36	1,485.18	4,120.88	2,035.15	0.29	-0.15	0.099
22.00	-17.20	-1.68	0.00	-186.98	0.00	186.98	2,961.01	1,480.50	4,088.60	2,019.21	0.32	-0.16	0.098
23.00	-17.05	-1.67	0.00	-185.30	0.00	185.30	2,951.61	1,475.81	4,056.39	2,003.30	0.36	-0.17	0.098
24.00	-16.89	-1.67	0.00	-183.63	0.00	183.63	2,942.18	1,471.09	4,024.24	1,987.42	0.39	-0.18	0.098
25.00	-16.74	-1.66	0.00	-181.96	0.00	181.96	2,932.70	1,466.35	3,992.16	1,971.58	0.43	-0.19	0.098
26.00	-16.59	-1.66	0.00	-180.30	0.00	180.30	2,923.18	1,461.59	3,960.14	1,955.76	0.47	-0.20	0.098
27.00	-16.43	-1.65	0.00	-178.64	0.00	178.64	2,913.62	1,456.81	3,928.19	1,939.99	0.51	-0.21	0.098
28.00	-16.28	-1.64	0.00	-176.99	0.00	176.99	2,903.09	1,451.54	3,895.07	1,923.63	0.56	-0.21	0.098
29.00	-16.13	-1.64	0.00	-175.35	0.00	175.35	2,889.14	1,444.57	3,857.52	1,905.08	0.60	-0.22	0.098
30.00	-15.98	-1.63	0.00	-173.72	0.00	173.72	2,875.19	1,437.60	3,820.15	1,886.63	0.65	-0.23	0.098
31.00	-15.91	-1.63	0.00	-172.08	0.00	172.08	2,861.24	1,430.62	3,782.96	1,868.26	0.70	-0.24	0.098
31.50	-15.78	-1.62	0.00	-171.27	0.00	171.27	2,854.27	1,427.13	3,764.43	1,859.11	0.73	-0.25	0.098
32.00	-15.54	-1.61	0.00	-170.46	0.00	170.46	2,847.30	1,423.65	3,745.96	1,849.99	0.75	-0.25	0.098
33.00	-15.29	-1.60	0.00	-168.85	0.00	168.85	2,833.35	1,416.67	3,709.14	1,831.80	0.81	-0.26	0.098
34.00	-15.05	-1.58	0.00	-167.25	0.00	167.25	2,819.40	1,409.70	3,672.50	1,813.71	0.86	-0.27	0.098
35.00	-14.89	-1.58	0.00	-165.67	0.00	165.67	2,805.45	1,402.73	3,636.04	1,795.70	0.92	-0.28	0.098
35.67	-14.85	-1.58	0.00	-164.62	0.00	164.62	2,248.05	1,124.03	2,973.86	1,468.68	0.96	-0.29	0.119
36.00	-14.72	-1.57	0.00	-164.09	0.00	164.09	2,245.81	1,122.91	2,966.02	1,464.81	0.98	-0.29	0.119
37.00	-14.59	-1.56	0.00	-162.52	0.00	162.52	2,239.07	1,119.53	2,942.52	1,453.20	1.04	-0.30	0.118
38.00	-14.46	-1.56	0.00	-160.96	0.00	160.96	2,232.28	1,116.14	2,919.04	1,441.60	1.11	-0.31	0.118
39.00	-14.33	-1.55	0.00	-159.40	0.00	159.40	2,225.45	1,112.72	2,895.60	1,430.03	1.17	-0.32	0.118
40.00	-14.20	-1.55	0.00	-157.85	0.00	157.85	2,218.58	1,109.29	2,872.19	1,418.47	1.24	-0.34	0.118
41.00	-14.07	-1.54	0.00	-156.30	0.00	156.30	2,211.66	1,105.83	2,848.82	1,406.93	1.31	-0.35	0.117
42.00	-13.94	-1.54	0.00	-154.76	0.00	154.76	2,204.71	1,102.35	2,825.49	1,395.40	1.39	-0.36	0.117
43.00	-13.82	-1.53	0.00	-153.22	0.00	153.22	2,197.71	1,098.85	2,802.19	1,383.90	1.46	-0.37	0.117
44.00	-13.69	-1.53	0.00	-151.69	0.00	151.69	2,190.67	1,095.33	2,778.94	1,372.41	1.54	-0.38	0.117
45.00	-13.56	-1.52	0.00	-150.17	0.00	150.17	2,183.59	1,091.79	2,755.72	1,360.95	1.62	-0.39	0.117
46.00	-13.44	-1.51	0.00	-148.65	0.00	148.65	2,176.47	1,088.23	2,732.54	1,349.50	1.71	-0.40	0.116
47.00	-13.31	-1.51	0.00	-147.13	0.00	147.13	2,169.30	1,084.65	2,709.41	1,338.07	1.79	-0.42	0.116
48.00	-13.19	-1.50	0.00	-145.62	0.00	145.62	2,162.10	1,081.05	2,686.31	1,326.67	1.88	-0.43	0.116
49.00	-13.06	-1.50	0.00	-144.12	0.00	144.12	2,154.85	1,077.43	2,663.26	1,315.28	1.97	-0.44	0.116
50.00	-12.94	-1.49	0.00	-142.62	0.00	142.62	2,147.56	1,073.78	2,640.25	1,303.92	2.07	-0.45	0.115
51.00	-12.81	-1.49	0.00	-141.13	0.00	141.13	2,140.23	1,070.12	2,617.28	1,292.58	2.16	-0.46	0.115

52.00	-12.69	-1.48	0.00	-139.64	0.00	139.64	2,132.86	1,066.43	2,594.37	1,281.26	2.26	-0.47	0.115
53.00	-12.57	-1.48	0.00	-138.16	0.00	138.16	2,125.45	1,062.72	2,571.49	1,269.96	2.36	-0.49	0.115
54.00	-12.45	-1.47	0.00	-136.69	0.00	136.69	2,118.00	1,059.00	2,548.66	1,258.69	2.46	-0.50	0.114
55.00	-12.33	-1.46	0.00	-135.22	0.00	135.22	2,110.50	1,055.25	2,525.88	1,247.44	2.57	-0.51	0.114
56.00	-12.20	-1.46	0.00	-133.75	0.00	133.75	2,102.96	1,051.48	2,503.15	1,236.21	2.68	-0.52	0.114
57.00	-12.08	-1.45	0.00	-132.29	0.00	132.29	2,095.38	1,047.69	2,480.47	1,225.01	2.79	-0.53	0.114
58.00	-11.96	-1.45	0.00	-130.84	0.00	130.84	2,087.76	1,043.88	2,457.84	1,213.83	2.90	-0.55	0.114
59.00	-11.84	-1.44	0.00	-129.39	0.00	129.39	2,080.10	1,040.05	2,435.26	1,202.68	3.02	-0.56	0.113
60.00	-11.72	-1.44	0.00	-127.95	0.00	127.95	2,072.39	1,036.20	2,412.72	1,191.55	3.14	-0.57	0.113
61.00	-11.60	-1.44	0.00	-126.51	0.00	126.51	2,064.65	1,032.32	2,390.25	1,180.45	3.26	-0.58	0.113
62.00	-11.49	-1.43	0.00	-125.07	0.00	125.07	2,056.86	1,028.43	2,367.82	1,169.38	3.38	-0.60	0.113
63.00	-11.37	-1.43	0.00	-123.64	0.00	123.64	2,049.03	1,024.52	2,345.45	1,158.33	3.51	-0.61	0.112
64.00	-11.25	-1.42	0.00	-122.21	0.00	122.21	2,041.16	1,020.58	2,323.13	1,147.31	3.63	-0.62	0.112
65.00	-11.13	-1.42	0.00	-120.79	0.00	120.79	2,033.25	1,016.62	2,300.87	1,136.31	3.77	-0.63	0.112
66.00	-11.02	-1.42	0.00	-119.37	0.00	119.37	2,025.30	1,012.65	2,278.67	1,125.35	3.90	-0.65	0.112
67.00	-10.90	-1.41	0.00	-117.95	0.00	117.95	2,016.93	1,008.47	2,256.11	1,114.21	4.04	-0.66	0.111
68.00	-10.79	-1.41	0.00	-116.54	0.00	116.54	2,005.31	1,002.65	2,230.04	1,101.33	4.18	-0.67	0.111
69.00	-10.67	-1.41	0.00	-115.13	0.00	115.13	1,993.69	996.84	2,204.11	1,088.53	4.32	-0.69	0.111
70.00	-10.67	-1.41	0.00	-113.72	0.00	113.72	1,982.06	991.03	2,178.34	1,075.80	4.46	-0.70	0.111
70.00	-10.49	-1.40	0.00	-113.72	0.00	113.72	1,982.06	991.03	2,178.33	1,075.80	4.46	-0.70	0.111
71.00	-10.31	-1.40	0.00	-112.32	0.00	112.32	1,970.44	985.22	2,152.72	1,063.15	4.61	-0.71	0.111
72.00	-10.14	-1.40	0.00	-110.92	0.00	110.92	1,958.82	979.41	2,127.25	1,050.57	4.76	-0.73	0.111
73.00	-10.05	-1.40	0.00	-109.52	0.00	109.52	1,947.19	973.60	2,101.94	1,038.07	4.92	-0.74	0.111
73.50	-10.00	-1.40	0.00	-108.82	0.00	108.82	1,473.95	736.97	1,624.52	802.29	4.99	-0.75	0.142
74.00	-9.90	-1.40	0.00	-108.12	0.00	108.12	1,471.40	735.70	1,616.91	798.53	5.07	-0.75	0.142
75.00	-9.80	-1.40	0.00	-106.73	0.00	106.73	1,466.26	733.13	1,601.72	791.03	5.23	-0.77	0.142
76.00	-9.70	-1.40	0.00	-105.33	0.00	105.33	1,461.09	730.55	1,586.54	783.53	5.39	-0.78	0.141
77.00	-9.60	-1.40	0.00	-103.93	0.00	103.93	1,455.88	727.94	1,571.38	776.05	5.56	-0.80	0.141
78.00	-9.51	-1.40	0.00	-102.53	0.00	102.53	1,450.62	725.31	1,556.25	768.57	5.73	-0.81	0.140
79.00	-9.41	-1.41	0.00	-101.13	0.00	101.13	1,445.32	722.66	1,541.14	761.11	5.90	-0.83	0.139
80.00	-9.31	-1.41	0.00	-99.72	0.00	99.72	1,439.98	719.99	1,526.06	753.66	6.08	-0.85	0.139
81.00	-9.22	-1.41	0.00	-98.31	0.00	98.31	1,434.60	717.30	1,511.01	746.23	6.26	-0.86	0.138
82.00	-9.12	-1.42	0.00	-96.90	0.00	96.90	1,429.18	714.59	1,495.98	738.81	6.44	-0.88	0.138
83.00	-9.02	-1.42	0.00	-95.48	0.00	95.48	1,423.71	711.86	1,480.97	731.40	6.62	-0.90	0.137
84.00	-8.93	-1.42	0.00	-94.06	0.00	94.06	1,418.21	709.10	1,466.00	724.00	6.81	-0.91	0.136
85.00	-8.83	-1.43	0.00	-92.64	0.00	92.64	1,412.66	706.33	1,451.06	716.62	7.01	-0.93	0.136
86.00	-8.74	-1.43	0.00	-91.21	0.00	91.21	1,407.07	703.53	1,436.14	709.26	7.20	-0.94	0.135
87.00	-8.65	-1.44	0.00	-89.77	0.00	89.77	1,401.44	700.72	1,421.26	701.91	7.40	-0.96	0.134
88.00	-8.55	-1.45	0.00	-88.33	0.00	88.33	1,395.76	697.88	1,406.40	694.57	7.61	-0.98	0.133
89.00	-8.46	-1.45	0.00	-86.89	0.00	86.89	1,390.05	695.02	1,391.58	687.25	7.81	-0.99	0.133
90.00	-8.36	-1.46	0.00	-85.44	0.00	85.44	1,384.29	692.15	1,376.80	679.95	8.02	-1.01	0.132
91.00	-8.27	-1.46	0.00	-83.98	0.00	83.98	1,378.50	689.25	1,362.04	672.66	8.24	-1.03	0.131
92.00	-8.18	-1.47	0.00	-82.52	0.00	82.52	1,372.66	686.33	1,347.32	665.39	8.45	-1.04	0.130
93.00	-8.09	-1.48	0.00	-81.05	0.00	81.05	1,366.78	683.39	1,332.64	658.14	8.67	-1.06	0.129
94.00	-8.00	-1.48	0.00	-79.57	0.00	79.57	1,360.85	680.43	1,317.99	650.91	8.90	-1.08	0.128
95.00	-7.90	-1.49	0.00	-78.09	0.00	78.09	1,354.89	677.44	1,303.39	643.69	9.12	-1.09	0.127
96.00	-7.81	-1.49	0.00	-76.60	0.00	76.60	1,348.88	674.44	1,288.81	636.50	9.36	-1.11	0.126
97.00	-7.72	-1.50	0.00	-75.11	0.00	75.11	1,342.84	671.42	1,274.28	629.32	9.59	-1.13	0.125
98.00	-7.63	-1.51	0.00	-73.61	0.00	73.61	1,336.75	668.37	1,259.79	622.16	9.83	-1.14	0.124
99.00	-7.54	-1.51	0.00	-72.10	0.00	72.10	1,330.62	665.31	1,245.34	615.03	10.07	-1.16	0.123
100.00	-7.45	-1.52	0.00	-70.59	0.00	70.59	1,324.45	662.22	1,230.93	607.91	10.31	-1.18	0.122
101.00	-7.36	-1.52	0.00	-69.07	0.00	69.07	1,318.23	659.12	1,216.56	600.81	10.56	-1.20	0.121
102.00	-7.27	-1.53	0.00	-67.55	0.00	67.55	1,311.98	655.99	1,202.23	593.74	10.82	-1.21	0.119
103.00	-7.19	-1.53	0.00	-66.02	0.00	66.02	1,305.68	652.84	1,187.95	586.68	11.07	-1.23	0.118
104.00	-7.10	-1.54	0.00	-64.49	0.00	64.49	1,299.34	649.67	1,173.71	579.65	11.33	-1.25	0.117
105.00	-7.01	-1.54	0.00	-62.95	0.00	62.95	1,292.96	646.48	1,159.52	572.64	11.59	-1.26	0.115
106.00	-6.92	-1.55	0.00	-61.40	0.00	61.40	1,284.28	642.14	1,143.36	564.66	11.86	-1.28	0.114
107.00	-6.84	-1.55	0.00	-59.86	0.00	59.86	1,274.98	637.49	1,126.77	556.47	12.13	-1.30	0.113
108.00	-6.75	-1.56	0.00	-58.30	0.00	58.30	1,265.69	632.84	1,110.30	548.34	12.40	-1.31	0.112
109.00	-6.66	-1.56	0.00	-56.75	0.00	56.75	1,256.39	628.19	1,093.96	540.26	12.68	-1.33	0.110
110.00	-6.66	-1.56	0.00	-55.19	0.00	55.19	1,247.09	623.54	1,077.73	532.25	12.96	-1.34	0.109
110.00	-6.59	-1.56	0.00	-55.19	0.00	55.19	1,247.09	623.54	1,077.72	532.25	12.96	-1.34	0.109
110.00	-6.59	-1.56	0.00	-55.19	0.00	55.19	853.22	426.61	741.74	366.32	12.96	-1.34	0.158
111.00	-6.52	-1.56	0.00	-53.63	0.00	53.63	849.66	424.83	733.10	362.05	13.24	-1.36	0.156

112.00	-6.44	-1.57	0.00	-52.06	0.00	52.06	846.05	423.02	724.47	357.79	13.53	-1.38	0.153
113.00	-6.37	-1.57	0.00	-50.49	0.00	50.49	842.40	421.20	715.86	353.53	13.82	-1.40	0.150
114.00	-6.30	-1.57	0.00	-48.92	0.00	48.92	838.71	419.35	707.25	349.29	14.12	-1.42	0.148
115.00	-6.23	-1.57	0.00	-47.35	0.00	47.35	834.98	417.49	698.66	345.04	14.42	-1.44	0.145
116.00	-6.15	-1.57	0.00	-45.78	0.00	45.78	831.20	415.60	690.08	340.81	14.72	-1.47	0.142
117.00	-6.08	-1.57	0.00	-44.21	0.00	44.21	827.39	413.69	681.52	336.58	15.03	-1.49	0.139
118.00	-6.01	-1.57	0.00	-42.63	0.00	42.63	823.53	411.76	672.98	332.36	15.34	-1.51	0.136
119.00	-5.94	-1.57	0.00	-41.06	0.00	41.06	819.63	409.81	664.45	328.14	15.66	-1.53	0.132
120.00	-5.87	-1.57	0.00	-39.49	0.00	39.49	815.69	407.84	655.93	323.94	15.98	-1.55	0.129
121.00	-5.80	-1.57	0.00	-37.91	0.00	37.91	811.71	405.85	647.44	319.75	16.31	-1.56	0.126
122.00	-5.73	-1.57	0.00	-36.34	0.00	36.34	807.68	403.84	638.96	315.56	16.64	-1.58	0.122
123.00	-5.55	-1.56	0.00	-34.78	0.00	34.78	803.62	401.81	630.51	311.38	16.97	-1.60	0.119
124.00	-5.48	-1.55	0.00	-33.22	0.00	33.22	799.51	399.76	622.07	307.22	17.31	-1.62	0.115
125.00	-5.41	-1.55	0.00	-31.67	0.00	31.67	795.36	397.68	613.66	303.06	17.65	-1.64	0.111
126.00	-5.34	-1.54	0.00	-30.12	0.00	30.12	791.17	395.59	605.27	298.92	18.00	-1.66	0.108
127.00	-5.27	-1.54	0.00	-28.57	0.00	28.57	786.94	393.47	596.90	294.79	18.34	-1.67	0.104
128.00	-5.20	-1.53	0.00	-27.03	0.00	27.03	782.67	391.33	588.56	290.67	18.70	-1.69	0.100
129.00	-5.14	-1.53	0.00	-25.50	0.00	25.50	778.35	389.18	580.24	286.56	19.05	-1.70	0.096
130.00	-5.07	-1.52	0.00	-23.97	0.00	23.97	774.00	387.00	571.95	282.46	19.41	-1.72	0.091
131.00	-5.00	-1.51	0.00	-22.46	0.00	22.46	769.60	384.80	563.68	278.38	19.77	-1.73	0.087
132.00	-4.93	-1.50	0.00	-20.95	0.00	20.95	765.16	382.58	555.44	274.31	20.14	-1.75	0.083
133.00	-4.87	-1.49	0.00	-19.45	0.00	19.45	760.68	380.34	547.23	270.25	20.50	-1.76	0.078
134.00	-3.36	-1.23	0.00	-17.96	0.00	17.96	756.16	378.08	539.04	266.21	20.88	-1.78	0.072
135.00	-3.30	-1.22	0.00	-16.73	0.00	16.73	751.59	375.80	530.89	262.19	21.25	-1.79	0.068
136.00	-3.24	-1.21	0.00	-15.51	0.00	15.51	746.99	373.49	522.77	258.17	21.62	-1.80	0.064
137.00	-3.19	-1.20	0.00	-14.30	0.00	14.30	742.34	371.17	514.67	254.18	22.00	-1.81	0.061
138.00	-3.13	-1.18	0.00	-13.10	0.00	13.10	737.65	368.82	506.61	250.20	22.38	-1.82	0.057
139.00	-3.07	-1.17	0.00	-11.92	0.00	11.92	732.92	366.46	498.59	246.23	22.77	-1.83	0.053
140.00	-3.02	-1.16	0.00	-10.75	0.00	10.75	728.15	364.07	490.59	242.29	23.15	-1.84	0.049
141.00	-2.90	-1.13	0.00	-9.59	0.00	9.59	721.91	360.95	481.68	237.89	23.54	-1.85	0.044
142.00	-2.85	-1.11	0.00	-8.46	0.00	8.46	714.93	357.47	472.37	233.29	23.92	-1.86	0.040
143.00	-2.80	-1.10	0.00	-7.35	0.00	7.35	707.96	353.98	463.15	228.73	24.31	-1.86	0.036
144.00	-2.75	-1.08	0.00	-6.25	0.00	6.25	700.99	350.49	454.01	224.22	24.71	-1.87	0.032
145.00	-2.70	-1.07	0.00	-5.16	0.00	5.16	694.01	347.01	444.97	219.76	25.10	-1.88	0.027
146.00	-2.65	-1.05	0.00	-4.10	0.00	4.10	687.04	343.52	436.02	215.34	25.49	-1.88	0.023
147.00	-2.60	-1.03	0.00	-3.05	0.00	3.05	680.07	340.03	427.16	210.96	25.88	-1.88	0.018
148.00	-2.55	-1.02	0.00	-2.01	0.00	2.01	673.09	336.55	418.40	206.63	26.28	-1.89	0.014
149.00	-2.50	-1.00	0.00	-1.00	0.00	1.00	666.12	333.06	409.72	202.34	26.67	-1.89	0.009
150.00	0.00	-0.91	0.00	0.00	0.00	0.00	659.14	329.57	401.13	198.10	27.07	-1.89	0.000

Analysis Summary

Load Case	Reactions Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Max Usage Elev (ft)	Interaction Ratio
1.2D + 1.6W	18.48	0.00	29.92	0.00	0.00	1928.51	73.50	0.97
0.9D + 1.6W	18.47	0.00	22.44	0.00	0.00	1882.12	73.50	0.93
1.2D + 1.0Di + 1.0Wi	5.08	0.00	50.42	0.00	0.00	642.84	110.00	0.39
(1.2 + 0.2Sds) * DL + E ELFM	0.97	0.00	30.56	0.00	0.00	132.55	73.50	0.08
(1.2 + 0.2Sds) * DL + E EMAM	1.79	0.00	30.56	0.00	0.00	233.33	110.00	0.17
(0.9 - 0.2Sds) * DL + E ELFM	0.97	0.00	21.27	0.00	0.00	128.32	73.50	0.08
(0.9 - 0.2Sds) * DL + E EMAM	1.79	0.00	21.27	0.00	0.00	225.32	110.00	0.16
1.0D + 1.0W	4.80	0.00	24.94	0.00	0.00	496.34	73.50	0.25

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	Upper Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Lower Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Max Member Pu (kip)	phiPn (kip)	Ratio
0.00	8.50	(4) SOL-#20 All Thre	163.4	6.5	25.3	195.2	12.0	17	20	0.0	12.0	0	0	202.1	296.2	0.682

Code Rev.	***G***	**Date**	2/7/2017
		Engineer	AT
		Site #	302488
Moment	1928.5 k-ft	**Carrier**	AT&T
Axial	29.9 k		

Base/Flange Plate	Plate Type	***Baseplate***	
	Pole Diameter	37.38	in
	Pole Thickness	0.375	in
	Plate Length	44	in
	Plate Thickness	2.5	in
	Plate Fy	60	ksi
	Weld Length	0.25	in
	ϕ_s Resistance	1400.64	k-in
	Applied	565.98	k-in
Stiffeners	#	***0***	

Bolts	#	***8***	
	Bolt Circle	44	in
	(R)adial / (S)quare	S	
	Bolt Gap	6	in
●	Diameter	2.25	in
	Hole Diameter	2.625	in
	Type	A615-75	
	Fy	75	ksi
	Fu	100	ksi
	ϕ_s Resistance	259.82	k
	Applied	161.94	k
Reinforcement	#	***4***	
●	DYW. Circle	44.255	in
	Offset Angle	0	°
	Type	#20	
	Diameter	2.5	in
	Fu	100	ksi
	ϕ_s Resistance	269.98	k
	Applied	144.77	k
Extra Bolts O	#	***0***	

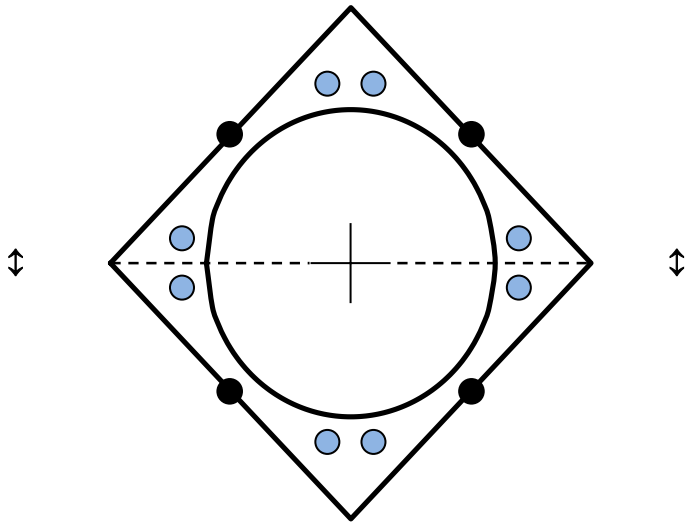


Plate Stress Ratio:
0.40 (Pass)

Bolt Stress Ratio:
0.62 (Pass)

Reinforcement Stress Ratio:
0.54 (Pass)

Base/Flange Plate	Plate Type	***Flange***	***@ 110.0 ft***
	Pole Diameter	21.25	in
	Pole Thickness	0.1875	in
	Plate Diameter	28.5	in
	Plate Thickness	1	in
	Plate Fy	60	ksi
	Weld Length	0.25	in
	ϕ_s Resistance	75.10	k-in
	Applied	72.36	k-in
Stiffeners	#	***0***	

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	50.34	k
Reinforcement ●	#	***0***	
Extra Bolts O	#	***0***	

Code Rev. ***G***

Moment	328.3 k-ft
Axial	7.6 k

Date	7/14/2014
Engineer	AT
Site #	302488
Carrier	AT&T

Required Flange Thickness:

0.98 in OK

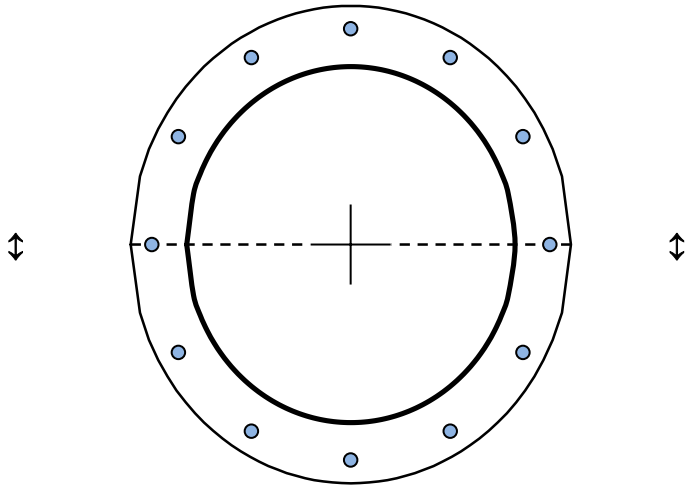


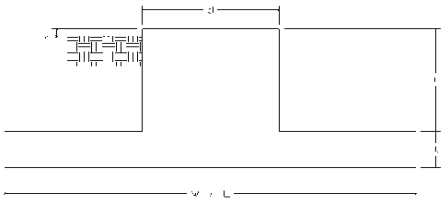
Plate Stress Ratio:

0.96 (Pass)

Bolt Stress Ratio:

0.92 (Pass)

Site Name:	Cntn-Canton CT	*Program Last Updated:*	*5/13/2014*
Site Number:	302488		
Engineering Number:	OAA694241		
Engineer:	AT		
Date:	02/07/17		
Tower Type:	MP		



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

Design / Analysis / Mapping:	Analysis				
Compression/Leg:	29.9	k	Concrete Strength (f'_c):	4000	psi
Uplift/Leg:	0.0	k	Pad Tension Steel Depth:	32.00	in
Total Shear:	18.5	k	ϕ_{Shear}:	0.75	
Moment:	1928.5	k-ft	$\phi_{Flexure\ /\ Tension}$:	0.90	
Tower + Appurtenance Weight:	29.9	k	$\phi_{Compression:}$	0.65	
Depth to Base of Foundation (l + t - h):	8.00	ft	β:	0.85	
Diameter of Pier (d):	5.00	ft	Bottom Pad Rebar Size #:	10	
Height of Pier above Ground (h):	0.50		# of Bottom Pad Rebar:	35	
Width of Pad (W):	18.00	ft	Pad Bottom Steel Area:	44.45	in^2
Length of Pad (L):	18.00	ft	Pad Steel F_y:	60000	psi
Thickness of Pad (t):	3.00	ft	Top Pad Rebar Size #:	10	
Tower Leg Center to Center:	0.00	ft	# of Top Pad Rebar:	35	
Number of Tower Legs:	1.0	(1 if MP or GT)	Pad Top Steel Area:	44.45	in^2
Tower Center from Mat Center:	0.00	ft	Pier Rebar Size #:	11	
Depth Below Ground Surface to Water Table:	3.50	ft	Pier Steel Area (Single Bar):	1.56	in^2
Unit Weight of Concrete:	150.0	pcf	# of Pier Rebar:	14	
Unit Weight of Soil Above Water Table:	115.0	pcf	Pier Steel F_y:	60000	psi
Unit Weight of Water:	62.4	pcf	Pier Cage Diameter:	52.0	in
Unit Weight of Soil Below Water Table:	50.0	pcf	Rebar Strain Limit:	0.008	
Friction Angle of Uplift:	15.0	Degrees	Steel Elastic Modulus:	29000	ksi
Ultimate Coefficient of Shear Friction:	0.35		Tie Rebar Size #:	4	
Ultimate Compressive Bearing Pressure:	12000.0	psf	Tie Steel Area (Single Bar):	0.20	in^2
Ultimate Passive Pressure on Pad Face:	0.0	psf	Tie Spacing:	12	in
$\phi_{Soil\ and\ Concrete\ Weight}$:	0.9		Tie Steel F_y:	60000	psi
ϕ_{Soil}:	0.75				

Overturning Moment Usage

Design OTM:	2085.6	k-ft
OTM Resistance:	2432.8	k-ft
Design OTM / OTM Resistance:	0.86	Result: OK

Soil Bearing Pressure Usage

Net Bearing Pressure:	3965	psf
Factored Nominal Bearing Pressure:	9000	psf
Net Bearing Pressure/Factored Nominal Bearing Pressure:	0.44	Result: OK
Load Direction Controling Design Bearing Pressure:	Diagonal to Pad Edge	

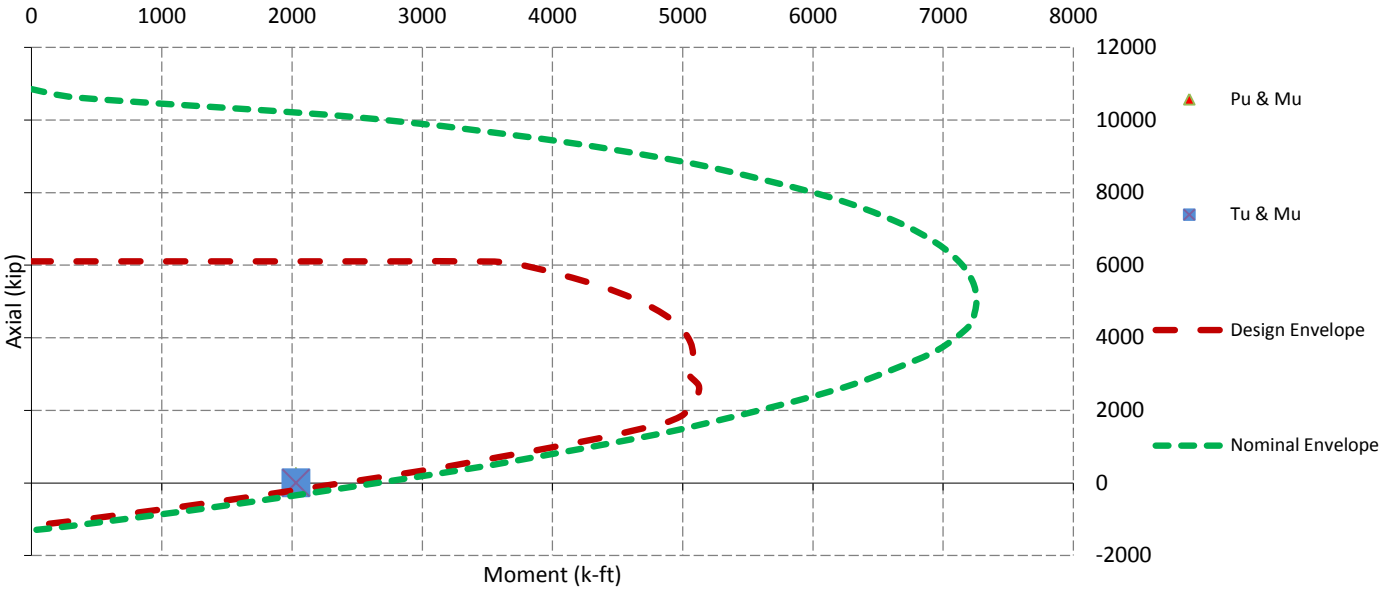
Sliding Factor of Safety

Total Factored Sliding Resistance:	70.8	k
Sliding Design / Sliding Resistance:	0.26	Result: OK

One Way Shear, Flexual Capacity, and Punching Shear

Factored One Way Shear (V_u):	138.9	k
One Way Shear Capacity (ϕV_c):	550.9	k - ACI11.3.1.1
V_u / ϕV_c:	0.25	Result: OK
Load Direction Controling Shear Capacity:	Diagonal to Pad Edge	
Lower Steel Pad Factored Moment (M_u):	812.3	k-ft
Lower Steel Pad Moment Capacity (ϕM_n):	6092.1	k-ft - ACI10.3
M_u / ϕM_n:	0.13	Result: OK
Load Direction Controling Flexural Capacity:	Parallel to Pad Edge	
Upper Steel Pad Factored Moment (M_u):	449.0	k-ft
Upper Steel Pad Moment Capacity (ϕM_n):	6092.1	k-ft
M_u / ϕM_n:	0.07	Result: OK
Lower Pad Flexural Reinforcement Ratio:	0.0064	OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Upper Pad Flexural Reinforcement Ratio:	0.0064	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 ($\phi_c V_n$):	1754.8	k - ACI11.12.2.1
V_u / ϕV_c:	0.00	Result: OK
Factored Moment in Pier (M_u):	2030.2	k-ft
Pier Moment Capacity (ϕM_n):	2508.6	k-ft
M_u / ϕM_n:	0.81	Result: OK
Factored Shear in Pier (V_u):	18.5	k
Pier Shear Capacity (ϕV_n):	269.7	k
V_u / ϕV_c:	0.07	Result: OK
Pier Shear Reinforcement Ratio:	0.0007	No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0	k
Pier Tension Capacity (ϕT_n):	1179.4	k
T_u / ϕT_n:	0.00	Result: OK
Factored Compression in Pier (P_u):	29.9	k
Pier Compression Capacity (ϕP_n):	4960.3	k - ACI10.3.6.2
P_u / ϕP_n:	0.01	Result: OK
Pier Compression Reinforcement Ratio:	0.008	OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
$M_u/\phi_B M_n + T_u/\phi_T T_n$:	0.81	Result: OK

Nominal and Design Moment Capacity and Factored Design Loads



Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CT1020

Canton Hoffman Rd
4 Hoffman Rd
Canton, CT 6019

February 10, 2017

Centerline Communications Project Number: 950006-033

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**3.28 %**

February 10, 2017

AT&T Mobility – New England
Attn: John Benedetto, RF Manager
550 Cochituate Road
Suite 550 – 13&14
Framingham, MA 06040

Emissions Analysis for Site: **CT1020 – Canton Hoffman Rd**

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed AT&T facility located at **4 Hoffman Rd, Canton, CT**, for the purpose of determining whether the emissions from the Proposed AT&T 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 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ 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 population 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 population 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.

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 700 and 850 MHz Bands are approximately 467 $\mu W/cm^2$ and 567 $\mu W/cm^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) bands is 1000 $\mu W/cm^2$. 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 performed for the proposed AT&T Wireless antenna facility located at **4 Hoffman Rd, Canton, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T 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.

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. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
UMTS	850 MHz	2	30
LTE	700 MHz	2	60
LTE	1900 MHz (PCS)	2	60
GSM	850 MHz	2	30
GSM	1900 MHz (PCS)	2	30

Table 1: Channel Data Table

The following antennas listed in *Table 2* were used in the modeling for transmission in the 700 MHz, 850 MHz and 1900 MHz (PCS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. 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.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Powerwave 7770	150
A	2	CCI HPA-65R-BUU-H8	150
A	3	Powerwave 7770	150
B	1	Powerwave 7770	150
B	2	CCI HPA-65R-BUU-H8	150
B	3	Powerwave 7770	150
C	1	Powerwave 7770	150
C	2	CCI HPA-65R-BUU-H8	150
C	3	Powerwave 7770	150

Table 2: Antenna Data

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

RESULTS

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.25
Antenna A2	CCI HPA-65R-BUU-H8	700 MHz / 1900 MHz (PCS)	13.15 / 14.95	4	240	6,229.75	1.57
Antenna A3	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	0.48
						Sector A Composite MPE%	**2.30**
Antenna B1	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.25
Antenna B2	CCI HPA-65R-BUU-H8	700 MHz / 1900 MHz (PCS)	13.15 / 14.95	4	240	6,229.75	1.57
Antenna B3	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	0.48
						Sector B Composite MPE%	**2.30**
Antenna C1	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.25
Antenna C2	CCI HPA-65R-BUU-H8	700 MHz / 1900 MHz (PCS)	13.15 / 14.95	4	240	6,229.75	1.57
Antenna C3	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	0.48
						Sector C Composite MPE%	**2.30**

Table 3: AT&T Emissions Levels

The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum AT&T MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each AT&T Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	**MPE%**
AT&T – Max Sector Value	**2.30 %**
T-Mobile	0.62 %
MetroPCS	0.36 %
Site Total MPE %:	**3.28 %**

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	2.30 %
AT&T Sector B Total:	2.30 %
AT&T Sector C Total:	2.30 %
Site Total:	3.28 %

Table 5: Site MPE Summary

FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

AT&T _ Frequency Band / Technology (All Sectors)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
AT&T 850 MHz UMTS	2	414.12	150	1.44	850 MHz	567	0.25%
AT&T 700 MHz LTE	2	1,239.23	150	4.30	700 MHz	467	0.92%
AT&T 1900 MHz (PCS) LTE	2	1,875.65	150	6.50	1900 MHz (PCS)	1000	0.65%
AT&T 850 MHz GSM	2	414.12	150	1.44	850 MHz	567	0.25%
AT&T 1900 MHz (PCS) GSM	2	656.33	150	2.28	1900 MHz (PCS)	1000	0.23%
						Total:	2.30%

Table 6: AT&T Maximum Sector MPE Power Values

Summary

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

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

AT&T Sector	Power Density Value (%)
Sector A:	2.30 %
Sector B:	2.30 %
Sector C:	2.30 %
AT&T Maximum Total (per sector):	2.30 %
Site Total:	3.28 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **3.28 %** of the allowable FCC established general population 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.

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