JENNIFER ILIADES
978-944-1804
CENTERLINE COMMUNICATIONS, LLC
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

0.0 LBS **LTR** **1 OF 1**

SHIP TO:
TOWN OF WINCHESTER
(860) 379-2713
ALTHEA CANDY PEREZ, MAYOR
338 MAIN STREET
WINCHESTER TOWN HALL
WINSTED CT 06098

CT 067 9-02

UPS 2ND DAY AIR **2**
TRACKING #: 1Z 9Y4 503 02 3325 6188

BILLING: P/P

Reference No.1: CT1071 - CSC to Althea Candy Perez

XOL 18.03.09 NV45 99.0A 04/2018

Proof of Delivery

Close Window

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number:	1Z9Y45030233256188
Service:	UPS 2nd Day Air®
Shipped/Billed On:	06/13/2018
Delivered On:	06/18/2018 10:43 A.M.
Delivered To:	WINSTED, CT, US
Received By:	BESSETTE
Left At:	Office

Thank you for giving us this opportunity to serve you.

Sincerely,

UPS

Tracking results provided by UPS: 06/22/2018 9:02 A.M. ET

JENNIFER ILIADES
978-944-1804
CENTERLINE COMMUNICATIONS, LLC
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

0.0 LBS **LTR** **1 OF 1**

SHIP TO:
TOWN OF WINCHESTER
(860) 738-6962
ROBERT GEIGER, TOWN MANAGER
338 MAIN STREET
WINCHESTER TOWN HALL
WINSTED CT 06098

CT 067 9-02

UPS 2ND DAY AIR **2**
TRACKING #: 1Z 9Y4 503 02 3899 5577

BILLING: P/P

Reference No.1: CT1071 - CSC to Robert Geiger

XOL 18.03.09 NV45 99.0A 04/2018

Proof of Delivery

Close Window

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number:	1Z9Y45030238995577
Service:	UPS 2nd Day Air®
Shipped/Billed On:	06/13/2018
Delivered On:	06/15/2018 12:00 P.M.
Delivered To:	WINSTED, CT, US
Received By:	CAROLE
Left At:	Front Desk

Thank you for giving us this opportunity to serve you.

Sincerely,

UPS

Tracking results provided by UPS: 06/22/2018 9:04 A.M. ET

JENNIFER ILIADES
978-944-1804
CENTERLINE COMMUNICATIONS, LLC
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

0.0 LBS LTR 1 OF 1

SHIP TO:
PLANNING AND COMMUNITY DEVELOPMENT
860-738-6593
STEVEN SADLOWSKI, DIRECTOR
338 MAIN STREET
WINCHESTER TOWN HALL
WINSTED CT 06098

CT 067 9-02

UPS 2ND DAY AIR **2**
TRACKING #: 1Z 9Y4 503 02 2262 7968

BILLING: P/P

Reference No.1: CT1071 - CSC to Steven Sadlowski

XOL 18.03.09 NV45 99.0A 04/2018

Proof of Delivery

Close Window

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number:	1Z9Y45030222627968
Service:	UPS 2nd Day Air®
Shipped/Billed On:	06/13/2018
Delivered On:	06/15/2018 12:00 P.M.
Delivered To:	WINSTED, CT, US
Received By:	CAROLE
Left At:	Front Desk

Thank you for giving us this opportunity to serve you.

Sincerely,

UPS

Tracking results provided by UPS: 06/22/2018 9:01 A.M. ET

JENNIFER ILIADES
978-944-1804
CENTERLINE COMMUNICATIONS, LLC
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

0.0 LBS **LTR** **1 OF 1**

SHIP TO:
RYAN TIERNEY
781-428-7250
AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN MA 01801-1053

MA 018 9-04

UPS 2ND DAY AIR **2**
TRACKING #: 1Z 9Y4 503 02 2630 9796

BILLING: P/P

Reference No.1: CT1071 - CSC to ATC

XOL 18.03.09 NV45 99.0A 04/2018

Proof of Delivery

Close Window

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number:	1Z9Y45030226309796
Service:	UPS 2nd Day Air®
Shipped/Billed On:	06/13/2018
Delivered On:	06/15/2018 11:20 A.M.
Delivered To:	WOBURN, MA, US
Received By:	ANCRI
Left At:	Front Desk

Thank you for giving us this opportunity to serve you.

Sincerely,

UPS

Tracking results provided by UPS: 06/22/2018 9:03 A.M. ET

JENNIFER ILIADES
978-944-1804
CENTERLINE COMMUNICATIONS, LLC
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

0.0 LBS LTR **1 OF 1**

SHIP TO:
RYAN TIERNEY, AMERICAN TOWER
781-428-7250
W STOW REV TRUST C/O AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN MA 01801

MA 018 9-04

UPS 2ND DAY AIR **2**
TRACKING #: 1Z 9Y4 503 02 0533 9767

BILLING: P/P

Reference No.1: CT1071 - CSC to W P Stow Rev Trust

XOL 18.03.09 NV45 99.0A 04/2018

Proof of Delivery

Close Window

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number:	1Z9Y45030205339767
Service:	UPS 2nd Day Air®
Shipped/Billed On:	06/13/2018
Delivered On:	06/15/2018 11:20 A.M.
Delivered To:	WOBURN, MA, US
Received By:	ANCRI
Left At:	Front Desk

Thank you for giving us this opportunity to serve you.

Sincerely,

UPS

Tracking results provided by UPS: 06/22/2018 9:03 A.M. ET

June 13, 2018

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

Regarding: Notice of Exempt Modification – AT&T Site CT1071
Address: 108 Oakdale Avenue, a/k/a 15 Oakdale Avenue, Winchester, CT 06098

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC ("AT&T") currently maintains a wireless telecommunications facility on an existing 180-foot monopole at the above-referenced address, latitude 41.9216861, longitude -73.0494989. Said monopole is owned and operated by American Tower Corporation.

AT&T desires to modify its existing telecommunications facility by swapping (3) antennas, adding (1) surge arrestor and accompanying feedlines and adding (3) remote radio heads. The centerline height of the existing antennas is and will remain at 184 feet.

Please accept this letter as notification pursuant to R.C.S.A §16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Althea Candy Perez, Mayor of the Town of Winchester, Robert Geiger, Town Manager of the Town of Winchester, Steven Sadlowski, Director of Planning and Community Development of the Town of Winchester, American Tower Corporation as tower owner and William P. Stow Revocable Trust, c/o American Tower Corporation, as property owner.

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

1. The proposed modifications will not result in an increase in the height of the existing structure.

2. The proposed modifications will not require an extension of the site boundary.

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

4. The operation of the modified facility will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety

standard. *Please see the RF emissions calculation for AT&T's modified facility enclosed herewith.*

5. The proposed modifications will not cause an ineligible change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading. *Please see the structural analysis dated October 24, 2017 by American Tower Corporation enclosed herewith.*

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

Sincerely,

Jennifer Iliades
Site Acquisition Consultant
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
jiliades@clinellc.com

Enclosures: Exhibit 1 – Field Card and GIS Map
Exhibit 2 – Construction Drawings
Exhibit 3 – Structural Analysis
Exhibit 4 – RF Emissions Analysis Report Evaluation

cc: Althea Candy Perez, Mayor, Town of Winchester
Robert Geiger, Town Manager, Town of Winchester
Steven Sadlowski, Director of Planning and Community Development, Town of Winchester
American Tower Corporation, Tower Owner
William P. Stow Revocable Trust, c/o American Tower Corporation, Property Owner

EXHIBIT 1

108 OAKDALE AVE

Location	108 OAKDALE AVE	**Mblu**	028/ 151/ 002-1/ /
Acct#	103466	**Owner**	STOW WILLIAM P REVOCABLE TRUST
Assessment	$94,850	**Appraisal**	$135,500
PID	4991	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$25,900	$109,600	$135,500

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$18,130	$76,720	$94,850

Owner of Record

Owner	STOW WILLIAM P REVOCABLE TRUST	**Sale Price**	$0
Co-Owner	C/O AMERICAN TOWER #302506	**Certificate**	
		Book & Page	411/ 779
		Sale Date	03/12/2013
		Instrument	29

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
STOW WILLIAM P REVOCABLE TRUST	$0		411/ 779	29	03/12/2013
STOW WILLIAM P & RICHARD D	$0		00260/0171		11/16/1995

Building Information

Building 1 : Section 1

Year Built: 2004
Living Area: 360
Replacement Cost
Less Depreciation: $13,500

Building Attributes	
Field	**Description**

STYLE	Warehse Prefab
MODEL	Ind/Comm
Stories:	1
Occupancy	1
Exterior Wall 1	Pre-cast Concr
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Metal/Tin
Interior Wall 1	Minimum
Interior Wall 2	
Interior Floor 1	Concrete Slab
Interior Floor 2	
Heating Fuel	Gas/Oil
Heating Type	Hot Air-no Duc
AC Type	None
Bldg Use	Tele Tower
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	NONE
Ceiling/Wall	NONE
Rooms/Prtns	LIGHT
Wall Height	12

Building Photo

(http://images.vgsi.com/photos/WinchesterCTPhotos//\01\00\49/

Building Layout

(http://images.vgsi.com/photos/WinchesterCTPhotos//Sketches/4

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	360	360
SLB	Slab	360	0
		720	360

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 4310
Description Tele Tower

Land Line Valuation

Size (Acres) 3.39
Depth

Zone	RR	**Assessed Value**	$76,720
Alt Land Appr	No	**Appraised Value**	$109,600
Category			

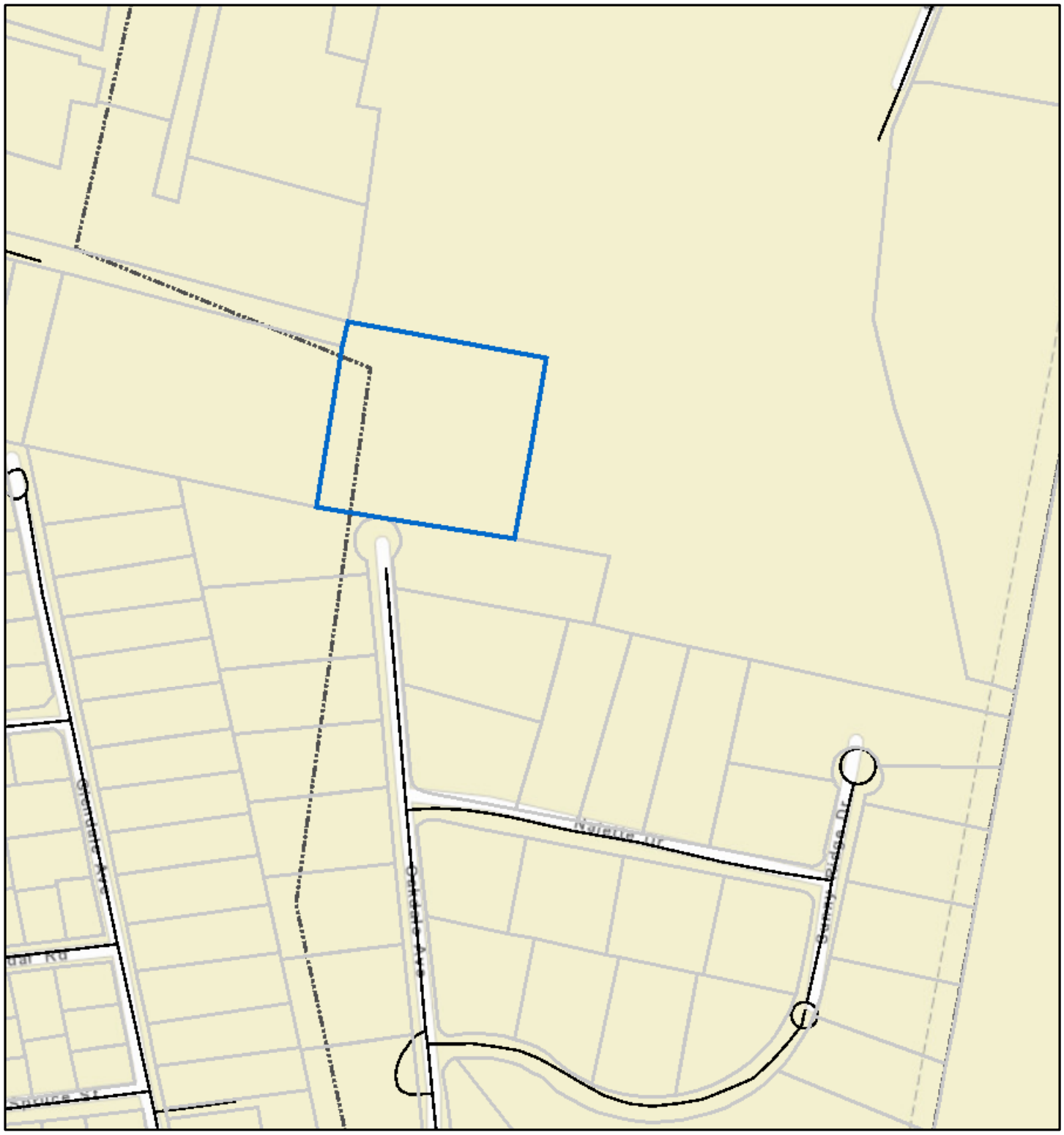
Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
SHD8	Shd Com Mas			252 S.F.	$6,200	1
SHD8	Shd Com Mas			252 S.F.	$6,200	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$25,900	$109,600	$135,500
2016	$19,900	$109,600	$129,500
2012	$13,700	$109,600	$123,300

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$18,130	$76,720	$94,850
2016	$13,930	$76,720	$90,650
2012	$9,590	$76,720	$86,310



June 13, 2018

1:4,514

0 0.0375 0.075 0.15 mi

0 0.05 0.1 0.2 km

EXHIBIT 2

PROJECT INFORMATION

SCOPE OF WORK:	REPLACE (3) EXISTING ANTENNAS WITH (3) NEW ANTENNAS ON EXISTING MONOPOLE. INSTALL (5) RRU & ADD (1) DC FIBER SQUID. REPLACE (6) DIPLEXERS WITH LOW BAND COMBINERS. INSTALL FIBER, POWER AND SUPPORTING EQUIPMENT ON EXISTING TOWER AND INSIDE EXISTING SHELTER.
SITE ADDRESS:	15 OAKDALE AVENUE WINSTED, CT 06098
LATITUDE:	41° 55' 18.069" N (NAD 83)*
LONGITUDE:	73° 02' 58.196" W (NAD 83)* *PER EXISTING AT&T PLANS
CURRENT USE:	TELECOMMUNICATIONS FACILITY
PROPOSED USE:	TELECOMMUNICATIONS FACILITY
NAME OF APPLICANT:	AT&T MOBILITY 500 ENTERPRISE DRIVE SUITE 3A ROCKY HILL, CT 06067

DRAWING INDEX

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

STRUCTURAL NOTE:

1. AS REQUIRED UNDER TIA/EIA 222G – STANDARD, CENTERLINE COMMUNICATIONS SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE TOWER PREPARED BY A LICENSED CONNECTICUT STRUCTURAL ENGINEER CERTIFYING THAT, THE EXISTING TOWER AND ANY REQUIRED IMPROVEMENTS AND REINFORCEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, SUPPORTS AND APPURTENANCES AND COMPLIES WITH THE CURRENT CONNECTICUT STATE BUILDING CODE AND EIA/TIA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY IMPROVEMENTS AND REINFORCEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWINGS OR OTHERWISE NOTED IN THE STRUCTURAL ANALYSIS.

CONTACT INFORMATION

CONTACT	CONTACT	COMPANY	PHONE NO.
ENGINEERING:	BENJAMIN REVETTE, P.E.	DEWBERRY ENGINEERS INC.	(617) 695-3400
SAC:	MEREDITH PAYNTER	CENTERLINE COMMUNICATIONS	(508) 673-9116

at&t Mobility

SITE NAME: WINSTED/WINCHESTER 3C/4C
SITE NUMBER: CT1071

VICINITY MAP

DIRECTIONS: HEAD NORTHEAST ON ENTERPRISE DR TOWARD CAPITAL BLVD. TURN LEFT ONTO CAPITAL BLVD. USE THE LEFT 2 LANES TO TURN LEFT ONTO STATE HWY 411. TURN LEFT TO MERGE ONTO I-91 S. TAKE EXIT 22N TO MERGE ONTO CT-9 N TOWARD NEW BRITAIN. USE THE LEFT LANE TO TAKE EXIT 32 FOR I-84 W TOWARD WATERBURY. USE THE RIGHT 2 LANES TO TAKE EXIT 39 TOWARD FARMINGTON/CT-4. CONTINUE ONTO STATE HWY 508. STATE HWY 508 TURNS SLIGHTLY RIGHT AND BECOMES CT-4 W. SLIGHT RIGHT TO STAY ON CT-4 W. CONTINUE ONTO CT-179 N. TURN RIGHT ONTO BRIDGE ST. TURN LEFT ONTO CT-179 N/RIVER RD. USE THE LEFT 2 LANES TO TURN LEFT ONTO US-44 W. TURN RIGHT AT W WEST HILL RD. TURN LEFT ONTO OLD NEW HARTFORD RD. TURN LEFT ONTO OAKDALE AVE. SITE WILL BE ON THE RIGHT.

APPLICABLE BUILDING CODES AND STANDARDS

CONTRACTOR'S WORK SHALL COMPLY WITH PROJECT STANDARD NOTES, SYMBOLS AND DETAILS (SEE DRAWING INDEX FOR STANDARD NOTES AND DETAILS INCLUDED WITH TYPICAL DRAWING PACKAGE). CONTRACTOR WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:
INTERNATIONAL BUILDING CODE (IBC 2012)

ELECTRICAL CODE:
NATIONAL ELECTRICAL CODE (NEC 2014)

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS.
AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

ANSI T1.311, FOR TELECOM – DC POWER SYSTEMS – TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

Dewberry®
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310

CENTERLINE COMMUNICATIONS
95 RYAN DRIVE, SUITE 1
RAYNHAM, MA 02767

at&t Mobility
500 ENTERPRISE DRIVE
SUITE 3A
ROCKY HILL, CT 06067

WINSTED/WINCHESTER 3C/4C
SITE NO. CT1071

15 OAKDALE AVENUE
WINSTED, CT 06098

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/02/17	ISSUED FOR CONSTRUCTION	JCM	DAS	BBR
A	10/18/17	ISSUED FOR REVIEW	JCM	DAS	BBR

SCALE: AS SHOWN | DESIGNED BY: DAS | DRAWN BY: MR

STATE OF CONNECTICUT
BENJAMIN B. REVETTE
LICENSED PROFESSIONAL ENGINEER

AT&T MOBILITY
FRAMINGHAM, MA 01701

TITLE SHEET

DEWBERRY NO.	DRAWING NUMBER	REV
50093723/50093734	T01	0

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   PROJECT MANAGEMENT – CENTERLINE COMMUNICATIONS
   CONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – AT&T MOBILITY
   OEM – ORIGINAL EQUIPMENT MANUFACTURER
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF PROJECT MANAGEMENT.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
5. DRAWINGS PROVIDED HERE ARE NOT TO SCALE UNLESS OTHERWISE NOTED AND ARE INTENDED TO SHOW OUTLINE ONLY.
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY PROJECT MANAGEMENT.
9. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. CONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. CONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH PROJECT MANAGEMENT.
10. THE CONTRACTOR SHALL PROTECT EXISTING & PROPOSED IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
11. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
14. CONTRACTOR SHALL NOTIFY DEWBERRY 48 HOURS IN ADVANCE OF POURING CONCRETE, OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS & POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEER REVIEW.
15. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. CONTRACTOR SHALL NOTIFY PROJECT MANAGEMENT OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
16. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY CONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
17. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.

SITE WORK GENERAL NOTES:

1. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO:
   A) FALL PROTECTION
   B) CONFINED SPACE
   C) ELECTRICAL SAFETY
   D) TRENCHING & EXCAVATION.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES, TOP SOIL AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE AT&T SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE TRANSMISSION EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION, SEE SOIL COMPACTION NOTES.
11. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
12. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL JURISDICTION'S GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000 PSI) MAY BE USED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE (UNO). SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF.....1 1/2 IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....3/4 IN.
   BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
7. CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC 1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TESTS PERFORMED AT THE SUPPLIER'S PLANT,
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
   FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
8. AS AN ALTERNATIVE TO ITEM 7, TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS UNLESS NOTED OTHERWISE. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE 3/4"Ø CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.
7. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL EXPOSE UNDISTURBED NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
3. AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
4. COMPACTED SUBBASE SHALL BE UNIFORM & LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.
5. AS AN ALTERNATIVE TO ITEMS 2 AND 3 PROOFROLL THE SUBGRADE SOILS WITH 5 PASSES OF A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). ANY SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL, AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
   CONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, AT&T ANTENNA PLATFORM LOCATION AND ANTENNAS TO BE REPLACED.
2. COORDINATION OF WORK:
   CONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH PROJECT MANAGEMENT.
3. CABLE LADDER RACK:
   CONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO ANY NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
2. CONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO NEW BTS EQUIPMENT. CONTRACTOR SHALL SUBMIT MODIFICATIONS TO PROJECT MANAGEMENT FOR APPROVAL.
3. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
4. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
5. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
6. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
7. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.
8. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
9. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
10. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
11. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (SIZE 14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL.) PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS.
13. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (SIZE 6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
14. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
15. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (SIZE 14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
16. ALL POWER AND POWER GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
17. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
18. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
19. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
20. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
21. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
22. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
23. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
24. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
25. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
26. CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
27. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
28. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
29. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
30. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
31. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM PROJECT MANAGEMENT BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
32. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

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Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310

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SITE NO. CT1071
15 OAKDALE AVENUE
WINSTED, CT 06098

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/02/17	ISSUED FOR CONSTRUCTION	JCM	DAS	BBR
A	10/18/17	ISSUED FOR REVIEW	JCM	DAS	BBR

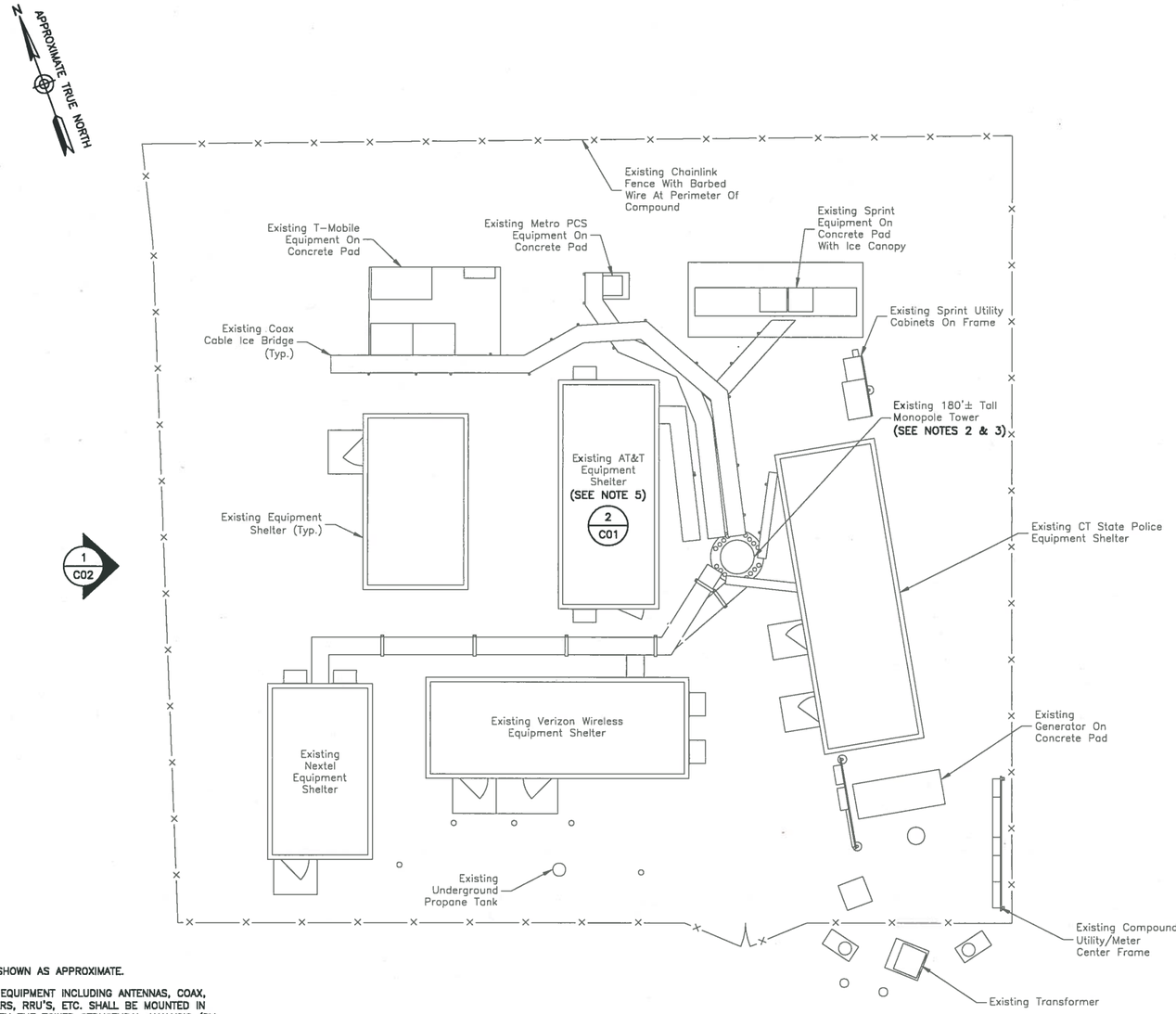
SCALE: AS SHOWN | DESIGNED BY: DAS | DRAWN BY: MR

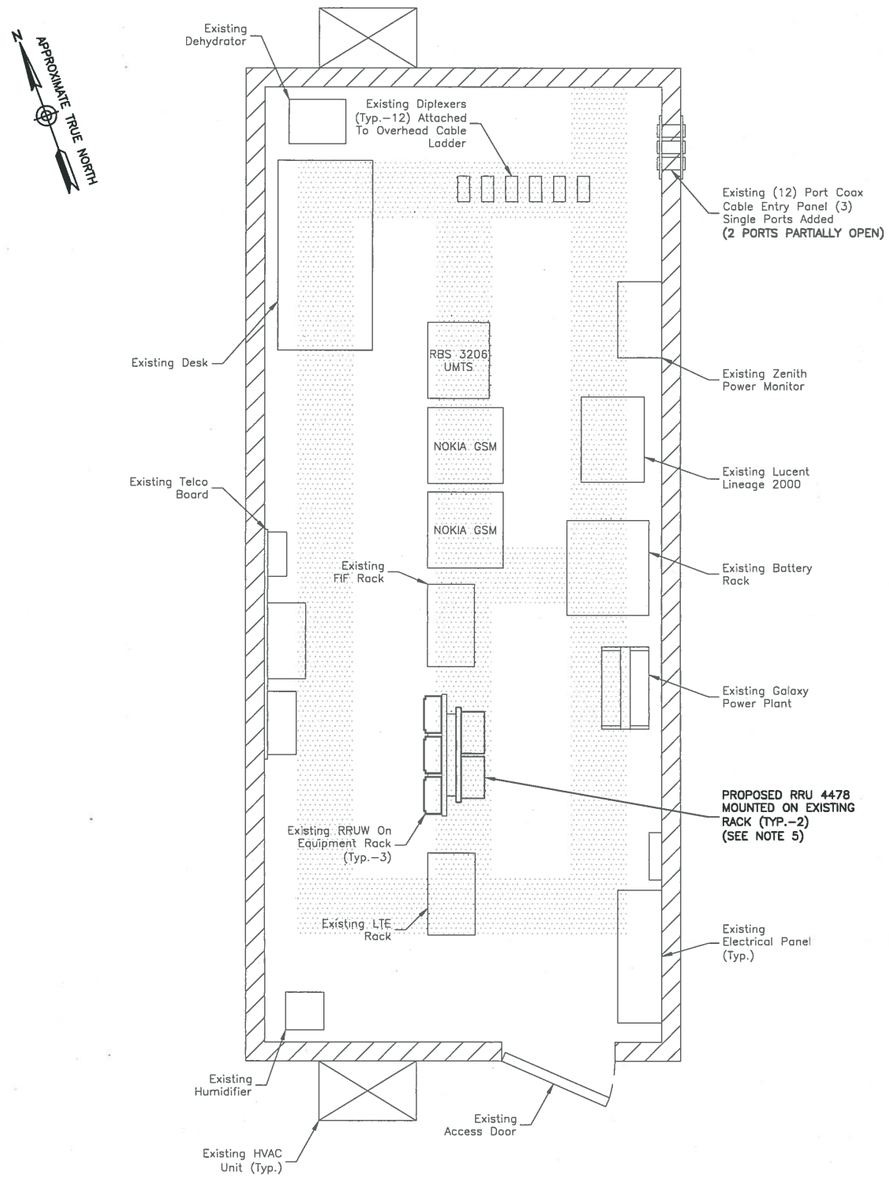
STATE OF CONNECTICUT
BENJAMIN B. REVETTE
PROFESSIONAL ENGINEER

AT&T MOBILITY
FRAMINGHAM, MA 01701

GENERAL NOTES

DEWBERRY NO.	DRAWING NUMBER	REV
50093723/50093734	G01	0





NOTES:

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, SURGE ARRESTORS, RRU'S, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS (BY OTHERS).
3. DEWBERRY WAS NOT PROVIDED WITH OR CONTRACTED TO PERFORM A STRUCTURAL ANALYSIS ON THIS TOWER. TOWER RELATED IMPROVEMENTS ARE NOT TO BE INSTALLED WITHOUT A PASSING STRUCTURAL ANALYSIS. SEE STRUCTURAL NOTE ON SHEET T01.
4. NOT ALL INFORMATION SHOWN FOR CLARITY.
5. EQUIPMENT MODIFICATION SCOPE:
   - ADD LTE 700 RRUS-B14 4478 & SURGE ARRESTORS.
   - REPLACE DUS WITH 5216.
   - INSTALL (1) XMU.
   - DECOMMISSION EXISTING GSM.
   - DECOMMISSION EXISTING UMTS 1900.

PROPOSED SITE PLAN 1

SCALE: 1/16"=1' FOR 11"x17"
1/8"=1' FOR 22"x34"

0' 4' 8' 16'

PROPOSED SHELTER PLAN 2

SCALE: 1/4"=1' FOR 11"x17"
1/2"=1' FOR 22"x34"

0' 1' 2' 4'

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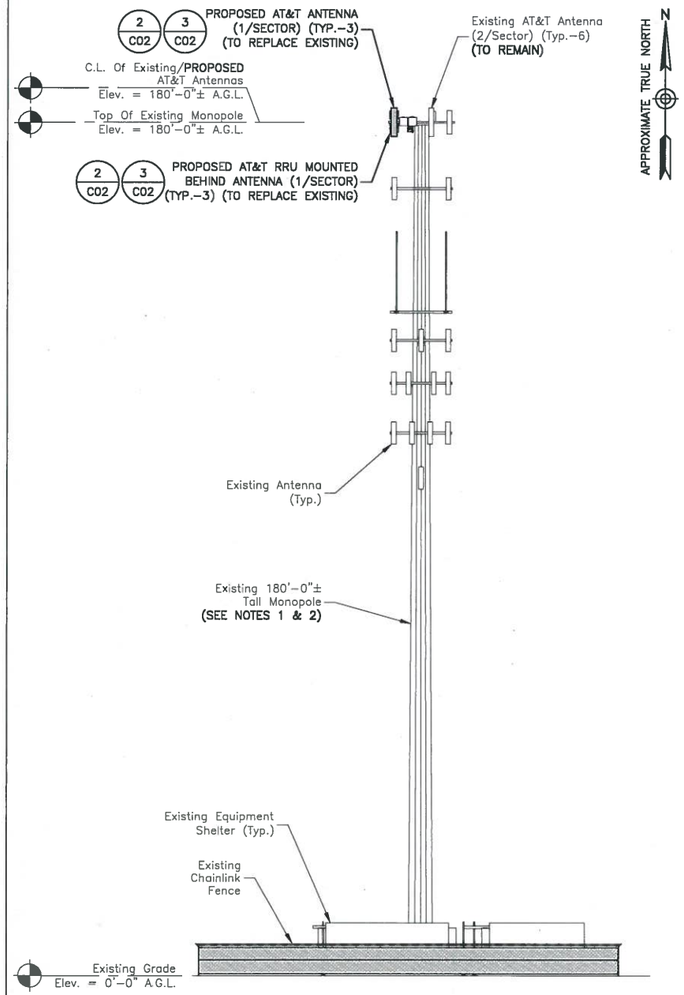
SCALE: AS SHOWN | DESIGNED BY: DAS | DRAWN BY: MR | CHECKED BY: BBR

STATE OF CONNECTICUT
BENJAMIN B. REVETTE
LICENSED
PROFESSIONAL ENGINEER

AT&T MOBILITY
FRAMINGHAM, MA 01701

PROPOSED SITE PLAN & SHELTER PLAN

DEWBERRY NO.	DRAWING NUMBER	REV
50093723/50093734	C01	0



PROPOSED ELEVATION

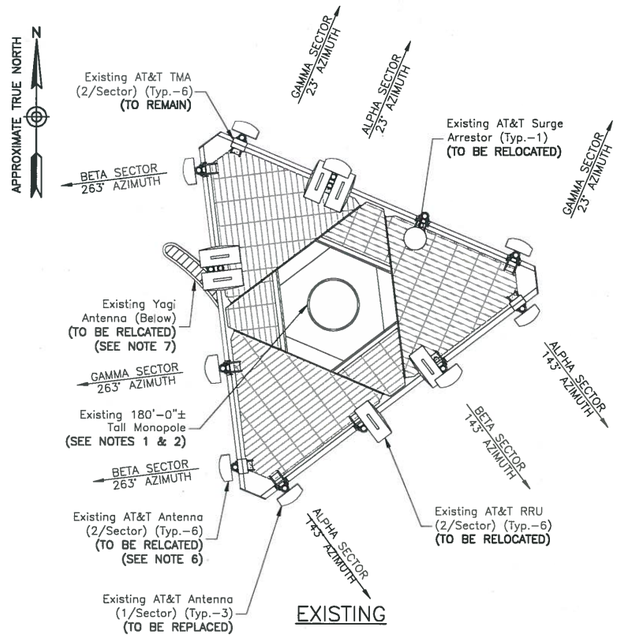
SCALE: 1/32"=1' FOR 11"x17"
1/16"=1' FOR 22"x34"

1

0' 8' 16' 32'

NOTES:

1. ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, SURGE ARRESTORS, RRU'S, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS (BY OTHERS).
2. DEWBERRY WAS NOT PROVIDED WITH OR CONTRACTED TO PERFORM A STRUCTURAL ANALYSIS ON THIS TOWER. TOWER RELATED IMPROVEMENTS ARE NOT TO BE INSTALLED WITHOUT A PASSING STRUCTURAL ANALYSIS. SEE STRUCTURAL NOTE ON SHEET T01.
3. NOT ALL INFORMATION SHOWN FOR CLARITY.
4. CONTRACTOR SHALL INSTALL ALL PROPOSED EQUIPMENT IN ACCORDANCE WITH THE ANTENNA MOUNT ANALYSIS REPORT BY DEWBERRY ENGINEERS INC. DATED 01/02/18 AND IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. CONTRACTOR SHALL INSTALL EXISTING/PROPOSED ANTENNAS TO BE CENTERED ON THE EXISTING CO-LOCATION PLATFORM MOUNT, FOR AN APPROXIMATE CENTERLINE OF 180'-0".



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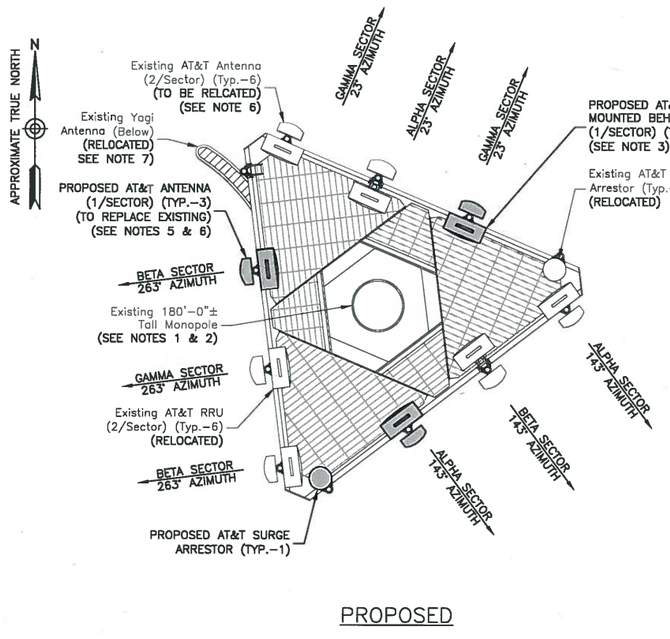


PROPOSED

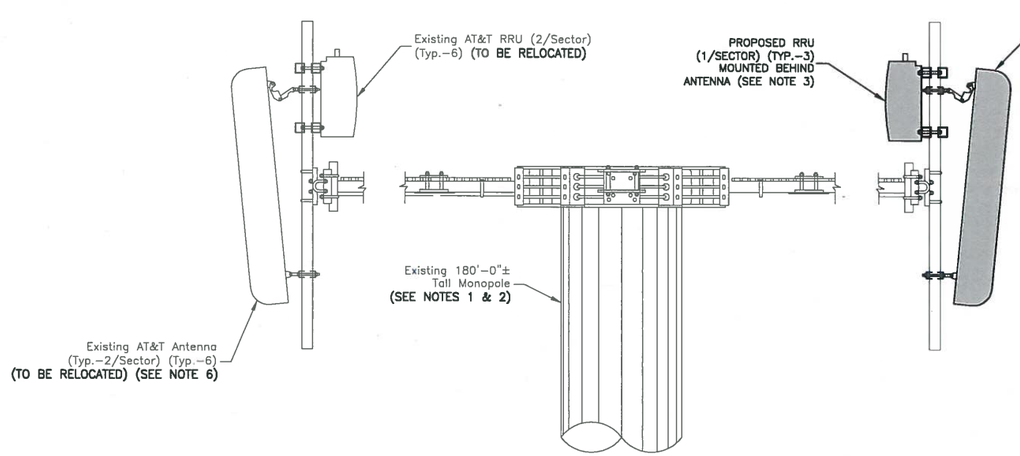
ANTENNA ORIENTATION PLAN

SCALE: N.T.S.

2

NOTES:

1. ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, SURGE ARRESTORS, RRU'S, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS (BY OTHERS) AND MANUFACTURER SPECIFICATIONS.
2. DEWBERRY WAS NOT PROVIDED WITH OR CONTRACTED TO PERFORM A STRUCTURAL ANALYSIS ON THIS TOWER. TOWER RELATED IMPROVEMENTS ARE NOT TO BE INSTALLED WITHOUT A PASSING STRUCTURAL ANALYSIS. SEE STRUCTURAL NOTE ON SHEET T01.
3. PLEASE SEE RFDS FOR RRU FREQUENCY AND MODEL NUMBER.
4. ALL SPACING REQUIREMENTS FOR PROPOSED RRU MOUNTS SHALL BE CONFIRMED AND SHALL NOT IMPEDE CLIMBING PEGS, TIE OFF FEATURES, OR OTHER EXISTING SAFETY FEATURES. ALL MOUNTS SHALL MAINTAIN EXISTING/PROPOSED MANUFACTURER REQUIREMENTS AND SHALL NOT EXCEED THE TOP OF THE TOWER OR INTERFERE WITH OTHER RAD CENTERS.
5. ANTENNA SPACING REQUIREMENTS:
   - 3'-0" MINIMUM SEPARATION BETWEEN LTE ANTENNAS
   - 6'-0" MINIMUM SEPARATION BETWEEN 700BC & 700DE
6. CONTRACTOR SHALL INSTALL ALL PROPOSED EQUIPMENT IN ACCORDANCE WITH THE ANTENNA MOUNT ANALYSIS REPORT BY DEWBERRY ENGINEERS INC. DATED 01/02/18 AND IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. CONTRACTOR SHALL INSTALL EXISTING/PROPOSED ANTENNAS TO BE CENTERED ON THE EXISTING CO-LOCATION PLATFORM MOUNT, FOR AN APPROXIMATE CENTERLINE OF 180'-0".
7. COORDINATE YAGI ANTENNA RE-LOCATION WITH TOWER OWNER & AT&T C.M.



PROPOSED ANTENNA MOUNTING DETAIL

SCALE: N.T.S.

3

NOTES:

1. ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, SURGE ARRESTORS, RRU'S, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS (BY OTHERS) AND MANUFACTURER SPECIFICATIONS.
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3. PLEASE SEE RFDS FOR RRU FREQUENCY AND MODEL NUMBER.
4. ALL SPACING REQUIREMENTS FOR PROPOSED RRU MOUNTS SHALL BE CONFIRMED AND SHALL NOT IMPEDE CLIMBING PEGS, TIE OFF FEATURES, OR OTHER EXISTING SAFETY FEATURES. ALL MOUNTS SHALL MAINTAIN EXISTING/PROPOSED MANUFACTURER REQUIREMENTS AND SHALL NOT EXCEED THE TOP OF THE TOWER OR INTERFERE WITH OTHER RAD CENTERS.
5. ANTENNA SPACING REQUIREMENTS:
   - 3'-0" MINIMUM SEPARATION BETWEEN LTE ANTENNAS
   - 6'-0" MINIMUM SEPARATION BETWEEN 700BC & 700DE
6. CONTRACTOR SHALL INSTALL ALL PROPOSED EQUIPMENT IN ACCORDANCE WITH THE ANTENNA MOUNT ANALYSIS REPORT BY DEWBERRY ENGINEERS INC. DATED 01/02/18 AND IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. CONTRACTOR SHALL INSTALL EXISTING/PROPOSED ANTENNAS TO BE CENTERED ON THE EXISTING CO-LOCATION PLATFORM MOUNT, FOR AN APPROXIMATE CENTERLINE OF 180'-0".

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Dewberry Engineers Inc.
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SCALE: AS SHOWN | DESIGNED BY: DAS | DRAWN BY: MR

STATE OF CONNECTICUT
BENJAMIN B. REVETTE
180
PROFESSIONAL ENGINEER

AT&T MOBILITY
FRAMINGHAM, MA 01701

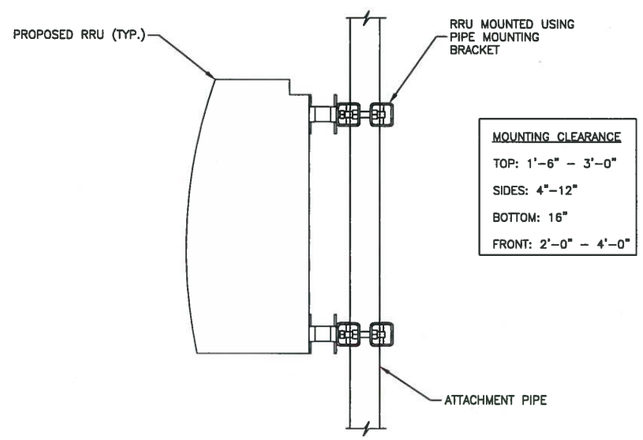
PROPOSED ELEVATION & CONSTRUCITON DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50093723/50093734	C02	0

FINAL EQUIPMENT CONFIGURATION

SECTOR	BAND	ANTENNA	SIZE (INCHES) (LxWxD)	RAD. CENTER	AZIMUTH	TMA	RRU	SIZE (INCHES) (LxWxD)	COAX JUMPERS	FIBER JUMPERS
ALPHA	UMTS 850	POWERWAVE 7770	55.0x11.0x5.0	184	143	(E) TT19-08BP111-001	-	-	E (2)	-
	LTE 700 BC/PCS	KMW AM-X-CD-16-65-00 T-RET	72.0x11.8x5.9	184	23	-	(E) RRUS-11 700 (B/C) (E) RRUS-12 1900 (PCS)	19.7 x 17.0 x 7.2 20.4 x 18.5 x 7.5	-	-
	LTE 700 B14/AWS	CCI HPA-65R-BUU-H6	72.0x14.8x9.0	184	23	-	(P) 4478 700D (B14) (SHARED WITH BETA) (IN SHELTER) (P) RRUS-32 (WCS)	15.0 x 13.2 x 7.4 27.2 x 12.1 x 7.0	E (2)	E (1)
	-	-	-	-	-	-	-	-	-	-
BETA	UMTS 850	POWERWAVE 7770	55.0x11.0x5.0	184	263	(E) TT19-08BP111-001	-	-	E (2)	-
	LTE 700 BC/PCS	KMW AM-X-CD-16-65-00 T-RET	72.0x11.8x5.9	184	143	-	(E) RRUS-11 700 (B/C) (E) RRUS-12 1900 (PCS)	19.7 x 17.0 x 7.2 20.4 x 18.5 x 7.5	-	-
	LTE 700 B14/AWS	CCI HPA-65R-BUU-H6	72.0x14.8x9.0	184	143	-	(P) 4478 700D (B14) (SHARED WITH ALPHA) (IN SHELTER) (P) RRUS-32 (WCS)	15.0 x 13.2 x 7.4 27.2 x 12.1 x 7.0	E (2)	E (1)
	-	-	-	-	-	-	-	-	-	-
GAMMA	UMTS 850	POWERWAVE 7770	55.0x11.0x5.0	184	23	(E) TT19-08BP111-001	-	-	E (2)	-
	LTE 700 BC/PCS	KMW AM-X-CD-16-65-00 T-RET	72.0x11.8x5.9	184	263	-	(E) RRUS-11 700 (B/C) (E) RRUS-12 1900 (PCS)	19.7 x 17.0 x 7.2 20.4 x 18.5 x 7.5	-	-
	LTE 700 B14/AWS	CCI HPA-65R-BUU-H6	72.0x14.8x9.0	184	263	-	(P) 4478 700D (B14) (IN SHELTER) (P) RRUS-32 (WCS)	15.0 x 13.2 x 7.4 27.2 x 12.1 x 7.0	E (2)	E (1)
	-	-	-	-	-	-	-	-	-	-

FINAL EQUIPMENT CONFIGURATION 1
SCALE: N.T.S.



REMOTE ATTACHMENT DETAIL 2
SCALE: N.T.S.

Dewberry®
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310

CENTERLINE COMMUNICATIONS
95 RYAN DRIVE, SUITE 1
RAYNHAM, MA 02767

at&t Mobility
500 ENTERPRISE DRIVE
SUITE 3A
ROCKY HILL, CT 06067

WINSTED/WINCHESTER 3C/4C
SITE NO. CT1071

15 OAKDALE AVENUE
WINSTED, CT 06098

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/02/17	ISSUED FOR CONSTRUCTION	JCM	DAS	BBR
A	10/18/17	ISSUED FOR REVIEW	JCM	DAS	BBR

SCALE: AS SHOWN | DESIGNED BY: DAS | DRAWN BY: MR

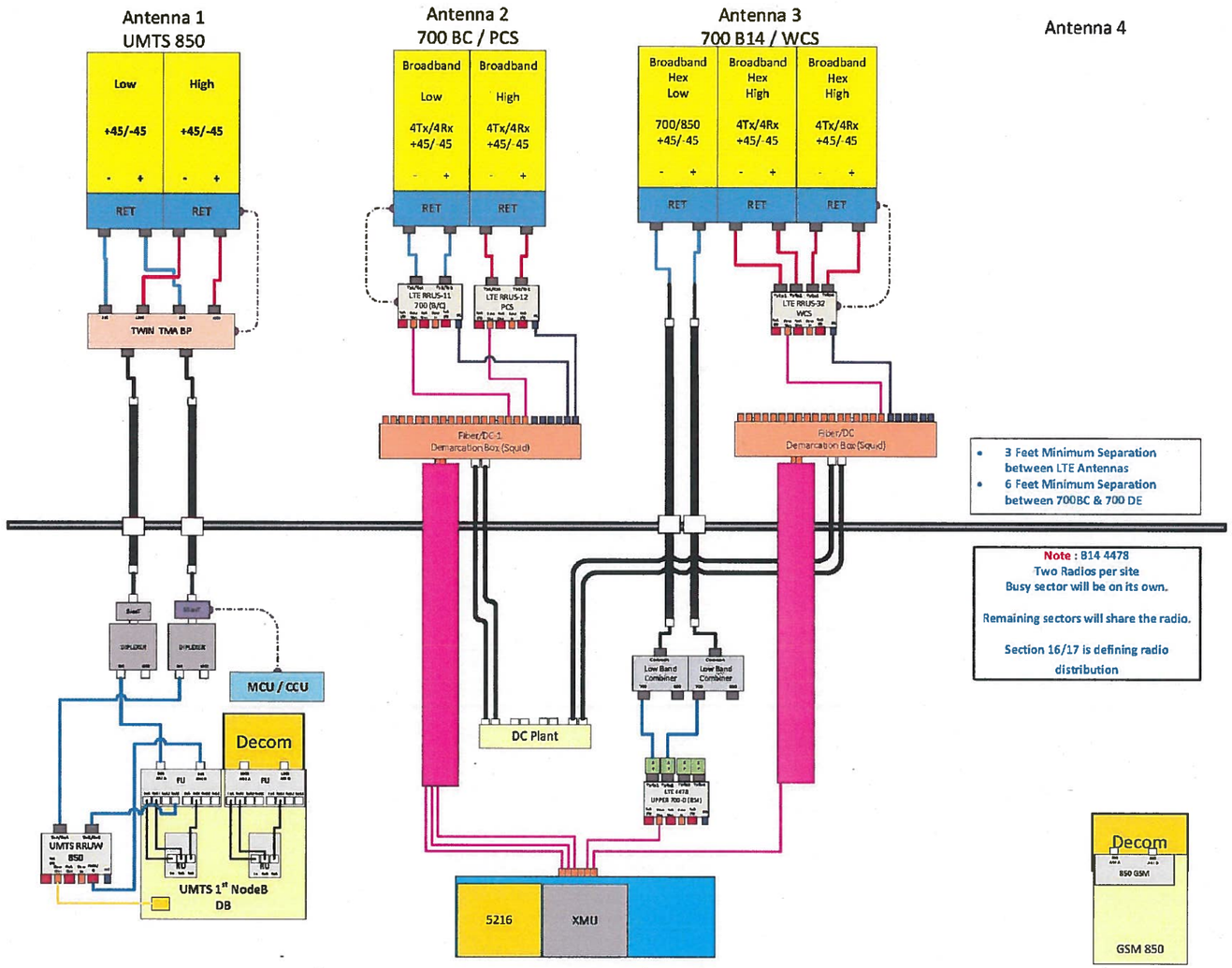
STATE OF CONNECTICUT
BENJAMIN B. REVETTE
21611
REGISTERED
PROFESSIONAL ENGINEER

AT&T MOBILITY
FRAMINGHAM, MA 01701

FINAL EQUIPMENT CONFIGURATION & RRU DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50093723/50093734	C03	0

Diagram - Sector	A/1	Diagram File Name - CT1071_A_B_C_WCS_700B14_d1.vsd					
Atoll Site Name -	CTV1071	Location Name -	WINSTED/WINCHESTER	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND
Comments:							



EQUIPMENT PLUMBING DIAGRAM

SCALE: N.T.S.

1

NOTES:

1. EQUIPMENT PLUMBING DIAGRAM PER RFDS VERSION 1 DATED 04/19/17.
2. CONTRACTOR TO VERIFY FINAL EQUIPMENT CONFIGURATION AND SEPARATIONS WITH AT&T PRIOR TO CONSTRUCTION.

Dewberry®
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310

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A	10/18/17	ISSUED FOR REVIEW	JCM	DAS	BBR

SCALE: AS SHOWN | DESIGNED BY: DAS | DRAWN BY: MR

STATE OF CONNECTICUT
BENJAMIN B. REVETTE
LICENSED
PROFESSIONAL ENGINEER

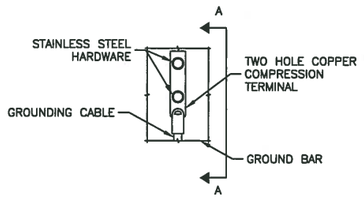
AT&T MOBILITY
FRAMINGHAM, MA 01701

EQUIPMENT PLUMBING DIAGRAM

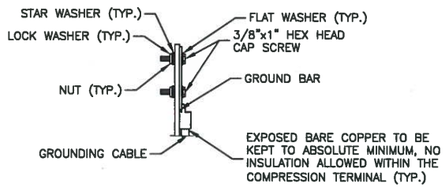
DEWBERRY NO.	DRAWING NUMBER	REV
50093723/50093734	C04	0

GROUNDING NOTES:

1. THE CONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ). THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE CONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS. ALL AVAILABLE GROUNDING ELECTRODES SHALL BE CONNECTED TOGETHER IN ACCORDANCE WITH THE NEC.
3. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. USE OF OTHER METHODS MUST BE PRE-APPROVED BY CONTRACTOR IN WRITING.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS ON TOWER SITES AND 10 OHMS OR LESS ON ROOFTOP SITES. WHEN ADDING ELECTRODES, CONTRACTOR SHALL MAINTAIN A MINIMUM DISTANCE BETWEEN THE ADDED ELECTRODE AND ANY OTHER EXISTING ELECTRODE EQUAL TO THE BURIED LENGTH OF THE ROD. IDEALLY, CONTRACTOR SHALL STRIVE TO KEEP THE SEPARATION DISTANCE EQUAL TO TWICE THE BURIED LENGTH OF THE RODS.
5. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
6. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE AND UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
7. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO TRANSMISSION EQUIPMENT.
8. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK-TO-BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. IN ALL CASES, BENDS SHALL BE MADE WITH A MINIMUM BEND RADIUS OF 8 INCHES.
11. EACH INTERIOR TRANSMISSION CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH 6 AWG STRANDED, GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRE UNLESS NOTED OTHERWISE IN THE DETAILS. EACH OUTDOOR CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER WIRE UNLESS NOTED OTHERWISE IN THE DETAILS.
12. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE 2 AWG SOLID TIN-PLATED COPPER UNLESS OTHERWISE INDICATED.
13. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE. CONNECTIONS TO ABOVE GRADE UNITS SHALL BE MADE WITH EXOTHERMIC WELDS WHERE PRACTICAL OR WITH 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS. HIGH PRESSURE CRIMP CONNECTORS MAY ONLY BE USED WITH WRITTEN PERMISSION FROM CENTERLINE COMMUNICATIONS COMMUNICATIONS MARKET REPRESENTATIVE.
14. EXOTHERMIC WELDS SHALL BE PERMITTED ON TOWERS ONLY WITH THE EXPRESS APPROVAL OF THE TOWER MANUFACTURER OR THE CONTRACTORS STRUCTURAL ENGINEER.
15. ALL WIRE TO WIRE GROUND CONNECTIONS TO THE INTERIOR GROUND RING SHALL BE FORMED USING HIGH PRESS CRIMPS OR SPLIT BOLT CONNECTORS WHERE INDICATED IN THE DETAILS.
16. ON ROOFTOP SITES WHERE EXOTHERMIC WELDS ARE A FIRE HAZARD COPPER COMPRESSION CAP CONNECTORS MAY BE USED FOR WIRE TO WIRE CONNECTORS. 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS SHALL BE USED FOR CONNECTION TO ALL ROOFTOP TRANSMISSION EQUIPMENT AND STRUCTURAL STEEL.
17. COAX BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR USING TWO-HOLE MECHANICAL TYPE BRASS CONNECTORS AND STAINLESS STEEL HARDWARE.
18. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
19. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
20. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
21. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER GROUND CONDUCTOR. DURING EXCAVATION FOR NEW GROUND CONDUCTORS, IF EXISTING GROUND CONDUCTORS ARE ENCOUNTERED, BOND EXISTING GROUND CONDUCTORS TO NEW CONDUCTORS.
22. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT WITH LISTED BONDING FITTINGS.



ELEVATION

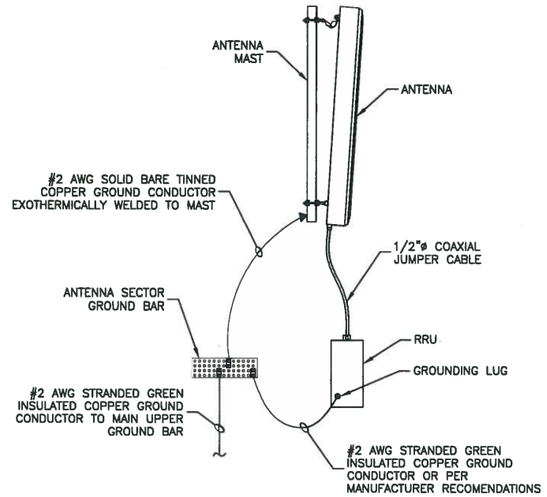


NOTES:

1. DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL 1

SCALE: N.T.S.



NOTES:

1. VERIFY EXISTING GROUNDING SYSTEM IS INSTALLED PER AT&T STANDARDS.
2. BOND NEW EQUIPMENT INTO EXISTING GROUND SYSTEM IN ACCORDANCE WITH AT&T STANDARDS & MANUFACTURER RECOMMENDATIONS.

TYPICAL ANTENNA/RRU GROUNDING DETAIL 2

SCALE: N.T.S

Dewberry®
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310

CENTERLINE COMMUNICATIONS
95 RYAN DRIVE, SUITE 1
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SCALE: AS SHOWN | DESIGNED BY: DAS | DRAWN BY: MR

STATE OF CONNECTICUT
BENJAMIN B. REVETTE
0027
PROFESSIONAL ENGINEER

AT&T MOBILITY
FRAMINGHAM, MA 01701

GROUNDING DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50093723/50093734	E01	0

EXHIBIT 3

AMERICAN TOWER®
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Structural Analysis Report

Structure	:	**180 ft Monopole**
ATC Site Name	:	**Winchester CT 3, CT**
ATC Site Number	:	**302506**
Engineering Number	:	**OAA714359_C3_01**
Proposed Carrier	:	**AT&T Mobility**
Carrier Site Name	:	**Winsted CT**
Carrier Site Number	:	**CT1071**
Site Location	:	**15 Oakdale Avenue** **Winsted, CT 06098-1862** **41.921700,-73.049500**
County	:	**Litchfield**
Date	:	**October 24, 2017**
Max Usage	:	**85%**
Result	:	**Pass**

Prepared By:
Trevor Ridilla
Structural Engineer I

Reviewed By:

STATE OF CONNECTICUT
ESHA KAUSHAL MODI
32593
LICENSED
PROFESSIONAL ENGINEER

Oct 24 2017 4:06 PM cosign

COA: PEC.0001553

AMERICAN TOWER®
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Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 180 ft monopole to reflect the change in loading by AT&T Mobility.

Supporting Documents

Tower Drawings	EEI Job #7676, dated August 21, 2000
Foundation Drawing	SNET Project #F301804.10/F04, dated August 23, 2000
Geotechnical Report	Welti Project: Whalen's Hill, dated February 8, 2000
Modifications	ATC Job #42523432, dated October 24, 2008 ATC Job #50492933, dated October 15, 2012

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:	90 mph (3-Second Gust, Vasd) / 115 mph (3-Second Gust, Vult)
Basic Wind Speed w/ Ice:	40 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
Structure Class:	III
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					
185.0	187.0	1	4' Omni	-	-	Other
184.0	184.0	1	Andrew ABT-DMDF-ADBH	Low Profile Platform	(12) 1 5/8" Coax (2) 0.78" 8 AWG 6 (1) 0.40" Fiber (1) 3" Conduit	AT&T Mobility
		3	Powerwave LGP21401			
		3	Ericsson RRUS 11 (Band 12)			
		3	Ericsson RRUS-12 B2			
		3	Powerwave 7770.00			
		3	KMW AM-X-CD-16-65-00T-RET			
167.0	167.0	3	Ericsson KRY 112 144/1	T-Arms	(12) 1 5/8" Coax (1) 1 1/4" Hybriflex	T-Mobile
		3	Ericsson AIR 21, 1.3 M, B2A B4P			
		3	Ericsson AIR 21, 1.3M, B4A B2P			
150.0	150.0	1	Sinclair SD210-SF2P4SNM	Side Arm	(1) 1 5/8" Coax	Litchfield County Dispatch
140.0	149.0	1	Sinclair SC432D-HF6LDF (I40-G06)	Side Arms	(6) 1 5/8" Coax (1) 7/8" Coax (1) 1/2" Coax (2) 3/8" Coax	Ct Police Dept.
		2	Decibel DB809DK-XT			
	141.0	1	Telewave ANT150D (5 lbs)			
		2	Bird 432-83H-01-T			
135.0	135.0	3	Alcatel-Lucent 800MHz RRH w/ Notch Filter	Platform w/ Handrails	(3) 1 1/4" Hybriflex (1) 7/8" Fiber	Sprint Nextel
		3	Alcatel-Lucent 1900MHz RRH			
		3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield			
		3	RFS APXVTM14-C-I20			
		3	RFS APXVSPP18-C-A20			
125.0	125.0	6	RFS FD9R6004/2C-3L (3.1 lbs)	Low Profile Platform	(6) 1 5/8" Coax (1) 1 5/8" Hybriflex	Verizon
		3	Nokia B5 RRH4x40-850			
		3	Alcatel-Lucent RRH2x60 700			
		1	RFS DB-B1-6C-12AB-0Z			
		3	Alcatel-Lucent B66a RRH4x45 (AWS-3)			
		2	Antel LPA-80080/6CF			
		1	Antel LPA-80063/6CF			
112.0	112.0	12	Decibel DB844H90E-XY	Low Profile Platform	(12) 1 1/4" Coax	Sprint Nextel
105.0	105.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8" Coax	Metro PCS
96.0	96.0	2	Andrew DB586	Side Arms	(2) 7/8" Coax (1) 1/2" Coax	Eversource Energy
		1	Bird 429-83H-01-T			
79.0	79.0	1	PCTEL GPS-TMG-HR-26N	Flush	(1) 1/2" Coax	Sprint Nextel
30.0	30.0	1	GPS	Flush	(1) 7/8" Coax	Verizon

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
184.0	184.0	3	Powerwave 7770.00	-	-	AT&T Mobility
		3	Powerwave LGP21401			

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
184.0	184.0	3	Powerwave TT19-08BP111-001	Low Profile Platform	(2) 0.78" 8 AWG 6 (1) 0.39" Fiber Trunk	
		2	Raycap DC6-48-60-18-8F (23.5" Height)			
		3	Ericsson RRUS 32 (50.8 lbs)			
		3	CCI HPA-65R-BUU-H6			

[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	56%	Pass
Shaft	67%	Pass
Base Plate	29%	Pass
Reinforcement	63%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	3,922.1	44%
Axial (Kips)	69.5	6%
Shear (Kips)	33.4	85%

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) (°)
180.0	Powerwave Allgon TT19-08BP111-001	AT&T Mobility	3.106	2.259
	Raycap DC6-48-60-18-8F (23.5" Height)			
	Ericsson RRUS 32 (50.8 lbs)			
	CCI HPA-65R-BUU-H6			

***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:

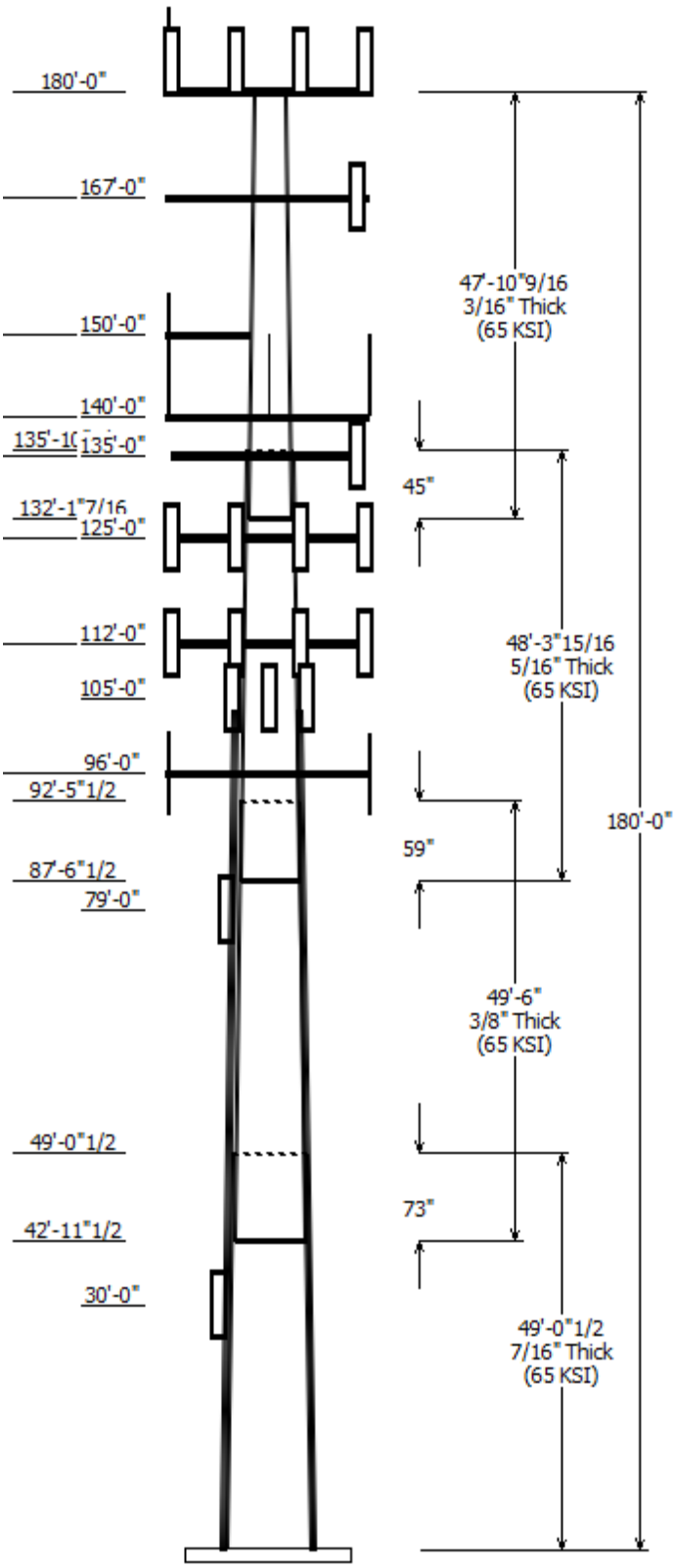
-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

-- 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

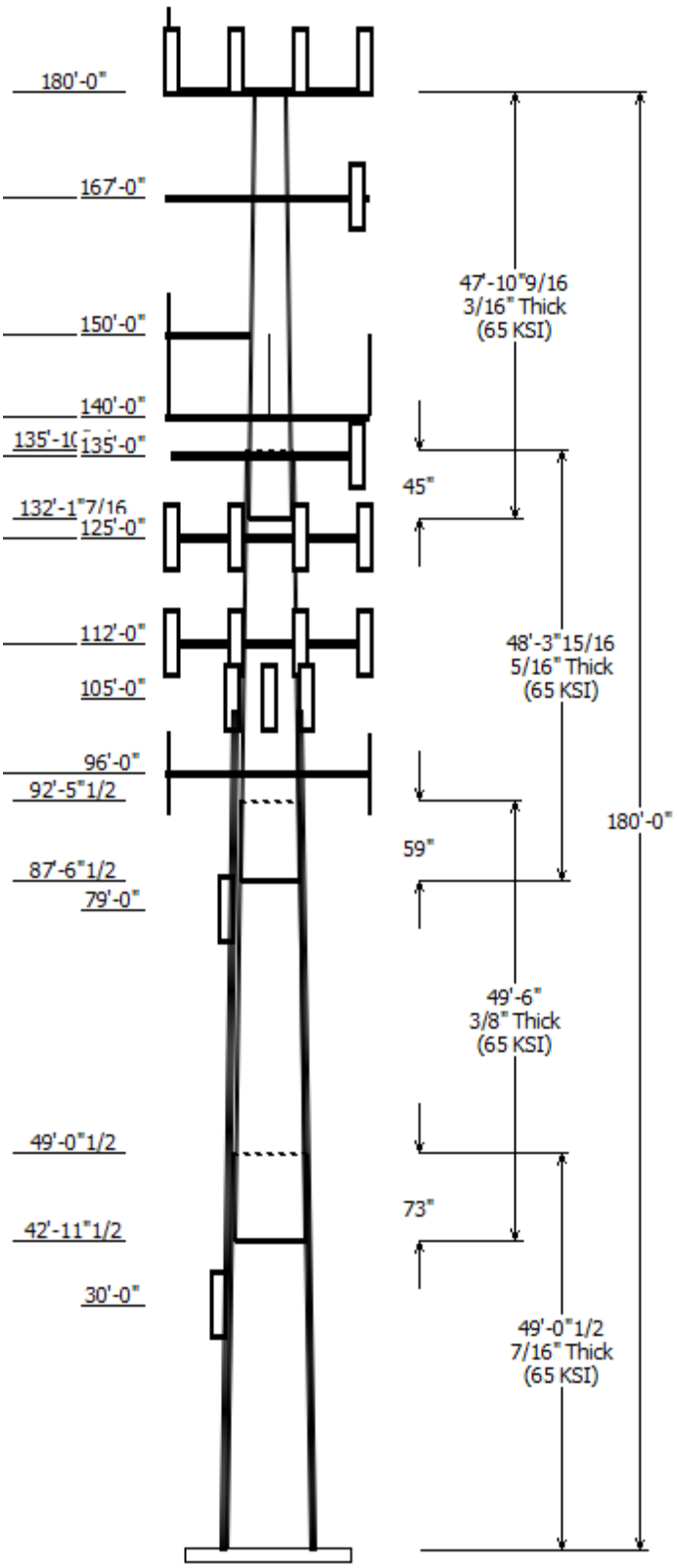
Pole :	302506	Code:	ANSI/TIA-222-G
Description :	180 ft EEI Monopole		
Client :	AT&T MOBILITY	Struct Class :	III
Location :	Winchester CT 3, CT		
Shape :	18 Sides	Exposure :	B
Height :	180.00 (ft)	Topo :	1
Base Elev (ft):	0.00		
Taper:	0.219444 (in/ft)		

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	49.040	41.98	52.75	0.438		0.000	0.219400	65
2	49.500	33.21	44.07	0.375	Slip Joint	73.000	0.219400	65
3	48.330	24.30	34.91	0.313	Slip Joint	59.000	0.219400	65
4	47.880	15.00	25.50	0.188	Slip Joint	45.000	0.219400	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
180.000	184.000	1	Andrew ABT-DMDF-ADBH
180.000	184.000	3	Powerwave Allgon 7770.00
180.000	184.000	2	Raycap DC6-48-60-18-8F (23.5"
180.000	184.000	3	Powerwave Allgon TT19-
180.000	184.000	3	Ericsson RRUS 32 (50.8 lbs)
180.000	184.000	1	Flat Low Profile Platform
180.000	184.000	3	KMW AM-X-CD-16-65-00T-RET
180.000	184.000	3	CCI HPA-65R-BUU-H6
180.000	184.000	3	Ericsson RRUS-12 B2
180.000	184.000	3	Ericsson RRUS 11 (Band 12)
180.000	184.000	3	Powerwave Allgon LGP21401
180.000	187.000	1	4' Omni
167.000	167.000	3	Round T-Arm
167.000	167.000	3	Ericsson AIR 21, 1.3M, B4A B2P
167.000	167.000	3	Ericsson AIR 21, 1.3 M, B2A B4
167.000	167.000	3	Ericsson KRY 112 144/1
150.000	150.000	1	Round Side Arm
150.000	150.000	1	Sinclair SD210-SF2P4SNM
140.000	149.000	2	Decibel DB809DK-XT
140.000	149.000	1	Sinclair SC432D-HF6LDF (I40-G0
140.000	141.000	2	Bird 432-83H-01-T
140.000	140.000	3	Round Side Arm
140.000	141.000	1	Telewave ANT150D (5 lbs)
135.000	135.000	1	Flat Platform w/ Handrails
135.000	135.000	3	RFS APXVSPP18-C-A20
135.000	135.000	3	RFS APXVTM14-C-I20
135.000	135.000	3	Alcatel-Lucent TD-RRH8x20-25
135.000	135.000	3	Alcatel-Lucent 1900MHz RRH
135.000	135.000	3	Alcatel-Lucent 800 MHz RRH
125.000	125.000	6	RFS FD9R6004/2C-3L (3.1 lbs)
125.000	125.000	3	Alcatel-Lucent B66a RRH4x45
125.000	125.000	1	RFS DB-B1-6C-12AB-0Z
125.000	125.000	3	Alcatel-Lucent RRH2x60 700
125.000	125.000	3	Nokia B5 RRH4x40-850
125.000	125.000	1	Round Low Profile Platform
125.000	125.000	1	Antel LPA-80063/6CF
125.000	125.000	2	Antel LPA-80080/6CF
112.000	112.000	1	Round Low Profile Platform
112.000	112.000	12	Decibel DB844H90E-XY
105.000	105.000	3	RFS APXV18-206517S-C
96.000	96.000	3	Flat Side Arm
96.000	96.000	1	Bird 429-83H-01-T
96.000	96.000	2	Andrew DB586
79.000	79.000	1	PCTEL GPS-TMG-HR-26N



30.000	30.000	1	GPS

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
112.5	125.0	1 5/8" Coax	Yes
112.5	167.0	1 5/8" Coax	Yes
0.000	184.0	0.39" (10mm)	No
0.000	184.0	0.40" Fiber Cable	No
0.000	184.0	0.78" 8 AWG 6	No
0.000	184.0	0.78" 8 AWG 6	No
0.000	184.0	1 5/8" Coax	No
0.000	184.0	3" Conduit	No
0.000	135.0	1 1/4" Hybriflex	No
0.000	135.0	7/8" Fiber	No
0.000	140.0	1 5/8" Coax	No
0.000	140.0	1/2" Coax	No
0.000	140.0	3/8" Coax	No
0.000	140.0	7/8" Coax	No
0.000	150.0	1 5/8" Coax	No
0.000	167.0	1 1/4" Hybriflex	No
0.000	30.000	7/8" Coax	Yes
0.000	79.000	1/2" Coax	No
0.000	96.000	1/2" Coax	No
0.000	96.000	7/8" Coax	No
0.000	105.0	1 5/8" Coax	Yes
0.000	112.0	1 1/4" Coax	Yes
0.000	112.5	1 5/8" Coax	Yes
0.000	112.5	1 5/8" Coax	Yes
0.000	112.5	Reinforcement	Yes
0.000	125.0	1 5/8" Hybriflex	No

Load Cases

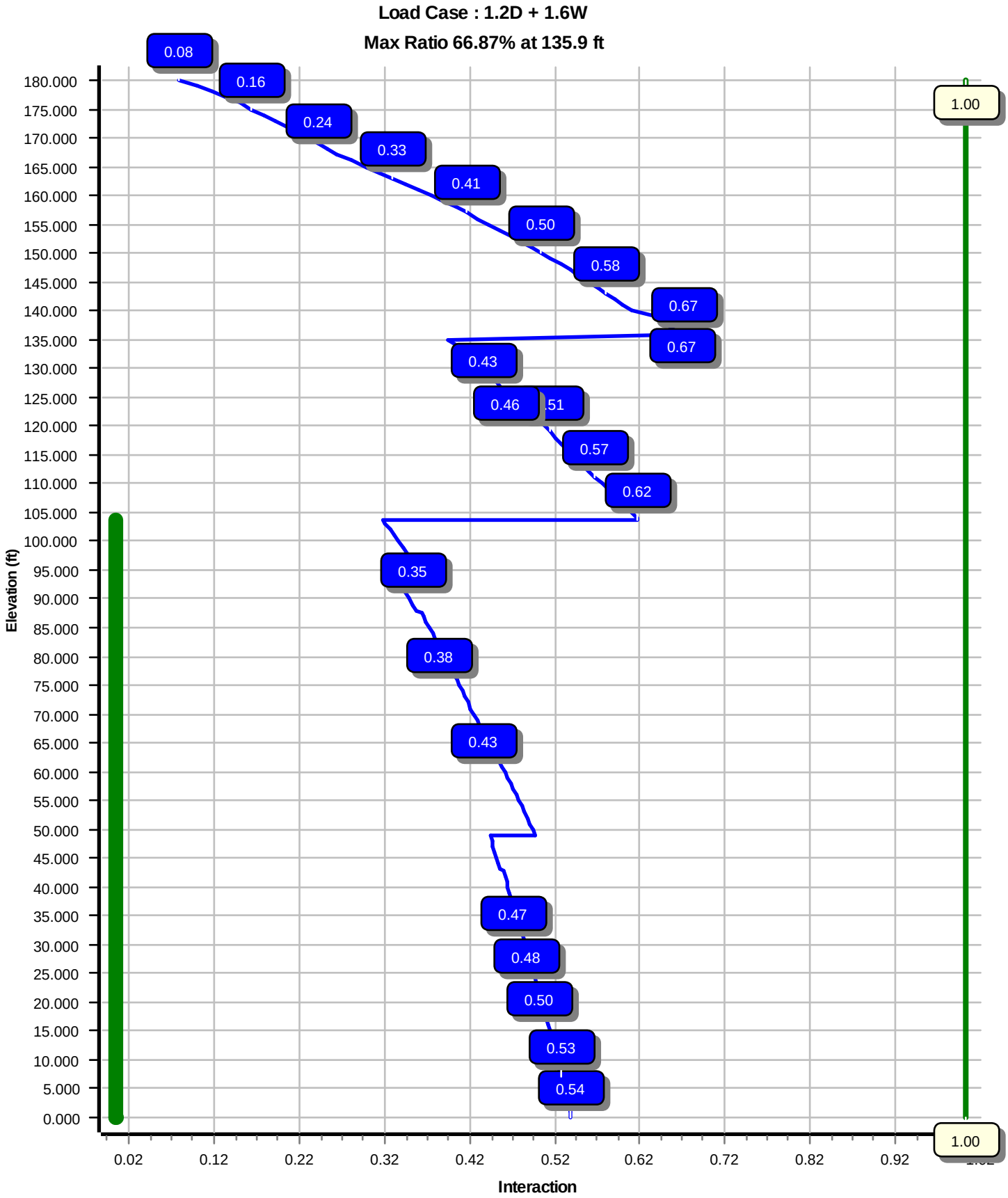
1.2D + 1.6W	90 mph with No Ice
0.9D + 1.6W	90 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	40 mph with 1.00 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) 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	3922.10	33.42	69.50
0.9D + 1.6W	3769.71	31.95	52.12
1.2D + 1.0Di + 1.0Wi	793.01	6.02	143.82
(1.2 + 0.2Sds) * DL + E ELFM	403.05	2.94	71.18
(1.2 + 0.2Sds) * DL + E EMAM	383.39	3.26	71.18
(0.9 - 0.2Sds) * DL + E ELFM	395.60	2.94	49.59
(0.9 - 0.2Sds) * DL + E EMAM	375.32	3.25	49.59
1.0D + 1.0W	1056.35	8.91	57.93

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000


Load Case : 1.2D + 1.6W
Max Ratio 66.87% at 135.9 ft
0.08
0.16
0.24
0.33
0.41
0.50
0.58
0.67
0.67
0.43
0.46
0.51
0.57
0.62
0.35
0.38
0.43
0.47
0.48
0.50
0.53
0.54
1.00
1.00
Elevation (ft)
180.000
175.000
170.000
165.000
160.000
155.000
150.000
145.000
140.000
135.000
130.000
125.000
120.000
115.000
110.000
105.000
100.000
95.000
90.000
85.000
80.000
75.000
70.000
65.000
60.000
55.000
50.000
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
0.02
0.12
0.22
0.32
0.42
0.52
0.62
0.72
0.82
0.92
Interaction

Site Number:	302506	Code: ANSI/TIA-222-G	
Site Name:	Winchester CT 3, CT	Engineering Number:OAA714359_C3_01	10/24/2017 12:31:27 PM
Customer:	AT&T MOBILITY		

Analysis Parameters

Location:	LITCHFIELD County, CT	Height (ft):	180
Code:	ANSI/TIA-222-G	Base Diameter (in):	52.75
Shape:	18 Sides	Top Diameter (in):	15.00
Pole Type:	Taper	Taper (in/ft) :	0.219
Pole Manfacturer:	EEI	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	III	Design Wind Speed Without Ice:	90 mph
Exposure Category:	B	Design Wind Speed With Ice:	40 mph
Topographic Category:	1	Operational Wind Speed:	60 mph
Crest Height:	0.0 ft	Design Ice Thickness:	1.00 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods				
Site Class:	D - Stiff Soil				
Period Based on Rayleigh Method (sec):	2.66				
T_L (sec):	6	p:	1.3	C_s:	0.039
S_s:	0.177	S_1:	0.065	C_s Max:	0.039
F_a:	1.600	F_v:	2.400	C_s Min:	0.030
S_{ds}:	0.189	S_{d1}:	0.104		

Load Cases

1.2D + 1.6W	90 mph with No Ice
0.9D + 1.6W	90 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	40 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)
1-18	49.040	0.4375	65		0.00	10,875	52.75	0.00	72.64	25115.3	19.50	120.57	41.98	49.04	57.70	12585.4	15.16	95.97	0.219444
2-18	49.500	0.3750	65	Slip	73.00	7,672	44.07	42.96	52.01	12548.0	18.96	117.53	33.21	92.46	39.08	5323.8	13.85	88.56	0.219444
3-18	48.330	0.3125	65	Slip	59.00	4,779	34.91	87.54	34.32	5191.7	17.94	111.73	24.30	135.87	23.80	1731.6	11.95	77.79	0.219444
4-18	47.880	0.1875	65	Slip	45.00	1,946	25.50	132.12	15.07	1220.4	22.22	136.04	15.00	180.00	8.81	244.4	12.34	80.00	0.219444
				Shaft Weight		25,271													

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)
180.00	4' Omni	1	10.00	1.000	1.00	135.13	2.602	1.00	0.000	7.000
180.00	Andrew ABT-DMDF-ADBH	1	1.10	0.050	0.50	17.77	0.288	0.50	0.000	4.000
180.00	CCI HPA-65R-BUU-H6	3	51.00	9.660	0.69	521.12	12.071	0.69	0.000	4.000
180.00	Ericsson RRUS 11 (Band 12)	3	50.00	2.570	0.50	212.43	3.747	0.50	0.000	4.000
180.00	Ericsson RRUS 32 (50.8 lbs)	3	50.80	2.690	0.67	221.45	3.988	0.67	0.000	4.000
180.00	Ericsson RRUS-12 B2	3	58.00	3.150	0.50	195.55	5.124	0.50	0.000	4.000
180.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	2,601.64	58.563	1.00	0.000	4.000
180.00	KMW AM-X-CD-16-65-00T-	3	48.50	8.020	0.67	415.18	10.316	0.67	0.000	4.000
180.00	Powerwave Allgon 7770.00	3	35.00	5.510	0.65	301.91	7.390	0.65	0.000	4.000
180.00	Powerwave Allgon LGP21401	3	14.10	1.100	0.50	87.82	1.954	0.50	0.000	4.000
180.00	Powerwave Allgon TT19-	3	16.00	0.640	0.50	77.89	1.206	0.50	0.000	4.000
180.00	Raycap DC6-48-60-18-8F	2	20.00	1.110	1.00	181.17	3.028	1.00	0.000	4.000
167.00	Ericsson AIR 21, 1.3 M, B2A	3	83.00	6.050	0.71	406.54	7.981	0.71	0.000	0.000
167.00	Ericsson AIR 21, 1.3M, B4A	3	81.50	6.090	0.70	404.96	8.027	0.70	0.000	0.000
167.00	Ericsson KRY 112 144/1	3	11.00	0.410	0.50	50.04	0.895	0.50	0.000	0.000
167.00	Round T-Arm	3	250.00	9.700	0.67	602.70	23.613	0.67	0.000	0.000
150.00	Round Side Arm	1	150.00	5.200	0.67	272.12	9.736	0.67	0.000	0.000
150.00	Sinclair SD210-SF2P4SNM	1	8.30	1.370	1.00	85.68	8.950	1.00	0.000	0.000
140.00	Bird 432-83H-01-T	2	25.00	1.400	0.50	96.87	2.700	0.50	0.000	1.000
140.00	Decibel DB809DK-XT	2	64.00	6.350	1.00	390.37	18.907	1.00	0.000	9.000
140.00	Round Side Arm	3	150.00	5.200	0.67	271.28	9.705	0.67	0.000	0.000
140.00	Sinclair SC432D-HF6LDF (I40-	1	34.00	5.030	1.00	462.70	12.311	1.00	0.000	9.000
140.00	Telewave ANT150D (5 lbs)	1	5.00	1.090	0.50	19.37	2.102	0.50	0.000	1.000
135.00	Alcatel-Lucent 1900MHz RRH	3	44.00	3.260	0.50	276.93	3.659	0.50	0.000	0.000
135.00	Alcatel-Lucent 800 MHz RRH	3	61.80	2.500	0.50	259.82	3.210	0.50	0.000	0.000
135.00	Alcatel-Lucent TD-RRH8x20-	3	70.00	4.050	0.50	226.13	6.245	0.50	0.000	0.000
135.00	Flat Platform w/ Handrails	1	2000.00	31.600	1.00	4,347.72	57.421	1.00	0.000	0.000
135.00	RFS APXVSPP18-C-A20	3	57.00	8.020	0.69	428.43	10.244	0.69	0.000	0.000
135.00	RFS APXVTM14-C-I20	3	52.90	6.340	0.66	280.35	9.937	0.66	0.000	0.000
125.00	Alcatel-Lucent B66a	3	67.00	2.660	0.50	228.82	3.895	0.50	0.000	0.000
125.00	Alcatel-Lucent RRH2x60 700	3	56.70	2.150	0.50	211.07	3.236	0.50	0.000	0.000
125.00	Antel LPA-80063/6CF	1	27.00	9.590	0.76	542.79	11.899	0.76	0.000	0.000
125.00	Antel LPA-80080/6CF	2	21.00	8.630	0.65	380.57	6.366	0.65	0.000	0.000
125.00	Nokia B5 RRH4x40-850	3	48.50	1.320	0.50	149.79	2.174	0.50	0.000	0.000
125.00	RFS DB-B1-6C-12AB-0Z	1	21.40	2.510	0.67	197.49	3.639	0.67	0.000	0.000
125.00	RFS FD9R6004/2C-3L (3.1 lbs)	6	3.10	0.360	0.69	34.00	0.811	0.69	0.000	0.000
125.00	Round Low Profile Platform	1	1500.00	21.700	1.00	2,562.06	53.172	1.00	0.000	0.000
112.00	Decibel DB844H90E-XY	12	14.00	3.610	0.74	221.33	4.536	0.74	0.000	0.000
112.00	Round Low Profile Platform	1	1500.00	21.700	1.00	2,550.41	52.827	1.00	0.000	0.000
105.00	RFS APXV18-206517S-C	3	26.40	5.160	0.68	250.66	7.224	0.68	0.000	0.000
96.00	Andrew DB586	2	8.30	0.740	1.00	108.36	2.685	1.00	0.000	0.000
96.00	Bird 429-83H-01-T	1	20.00	0.920	0.50	101.04	1.699	0.50	0.000	0.000
96.00	Flat Side Arm	3	150.00	6.300	0.67	266.77	10.224	0.67	0.000	0.000
79.00	PCTEL GPS-TMG-HR-26N	1	0.60	0.090	1.00	24.30	0.495	1.00	0.000	0.000
30.00	GPS	1	10.00	1.000	1.00	72.80	1.524	1.00	0.000	0.000

Totals 112 11850.20 38,210.68 Number of Loadings : 45

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	184.00	1	0.39" (10mm) Fiber	0.39	0.06	N	0.00	N	AT&T Mobility
0.00	184.00	1	0.40" Fiber Cable	0.40	0.09	N	0.00	N	AT&T Mobility
0.00	184.00	2	0.78" 8 AWG 6	0.78	0.59	N	0.00	N	AT&T Mobility
0.00	184.00	2	0.78" 8 AWG 6	0.78	0.59	N	0.00	N	AT&T Mobility
0.00	184.00	12	1 5/8" Coax	1.98	0.82	N	0.00	N	AT&T Mobility
0.00	184.00	1	3" Conduit	3.50	7.58	N	0.00	N	AT&T Mobility
0.00	167.00	1	1 1/4" Hybriflex	1.54	1.00	N	0.00	N	T-Mobile
112.50	167.00	12	1 5/8" Coax	1.98	0.82	N	3.96	Y	T-Mobile
0.00	150.00	1	1 5/8" Coax	1.98	0.82	N	0.00	N	Litchfield County Dispatch
0.00	140.00	6	1 5/8" Coax	1.98	0.82	N	0.00	N	CT Police Dept.
0.00	140.00	1	1/2" Coax	0.63	0.15	N	0.00	N	CT Police Dept.
0.00	140.00	2	3/8" Coax	0.44	0.08	N	0.00	N	CT Police Dept.
0.00	140.00	1	7/8" Coax	1.09	0.33	N	0.00	N	CT Police Dept.
0.00	135.00	3	1 1/4" Hybriflex	1.54	1.00	N	0.00	N	Sprint Nextel
0.00	135.00	1	7/8" Fiber	0.88	0.70	N	0.00	N	Sprint Nextel
0.00	125.00	1	1 5/8" Hybriflex	1.98	1.30	N	0.00	N	Verizon
112.50	125.00	6	1 5/8" Coax	1.98	0.82	N	3.96	Y	Verizon
0.00	112.50	12	1 5/8" Coax	1.98	0.82	N	0.00	Y	T-Mobile
0.00	112.50	6	1 5/8" Coax	1.98	0.82	N	0.00	Y	Verizon
0.00	112.50	1	Reinforcement	9.27	43.00	N	3.35	Y	--
0.00	112.00	12	1 1/4" Coax	1.55	0.63	N	4.65	Y	Sprint Nextel
0.00	105.00	6	1 5/8" Coax	1.98	0.82	N	0.00	Y	Metro PCS
0.00	96.00	1	1/2" Coax	0.63	0.15	N	0.00	N	Eversource Energy
0.00	96.00	2	7/8" Coax	1.09	0.33	N	0.00	N	Eversource Energy
0.00	79.00	1	1/2" Coax	0.63	0.15	N	0.00	N	Sprint Nextel
0.00	30.00	1	7/8" Coax	1.09	0.33	N	0.00	Y	Verizon

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connections			Connectors	Continuation?
						Description	Spacing (in)	Len (in)		
0.00	103.7	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.13	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		0.4375	52.750	72.640	25,115.3	19.50	120.57	78.5	937.8	0.0	0.0	19.64	8,846	0.0
1.00		0.4375	52.531	72.335	24,800.6	19.41	120.07	78.6	929.9	0.0	246.7	19.64	8,781	66.8
2.00		0.4375	52.311	72.030	24,488.5	19.32	119.57	78.7	922.0	0.0	245.6	19.64	8,715	66.8
3.00		0.4375	52.092	71.726	24,179.0	19.23	119.07	78.8	914.2	0.0	244.6	19.64	8,650	66.8
4.00		0.4375	51.872	71.421	23,872.2	19.14	118.57	78.9	906.4	0.0	243.5	19.64	8,585	66.8
5.00		0.4375	51.653	71.116	23,567.9	19.05	118.06	79.0	898.7	0.0	242.5	19.64	8,521	66.8
6.00		0.4375	51.433	70.812	23,266.3	18.97	117.56	79.1	891.0	0.0	241.5	19.64	8,457	66.8
7.00		0.4375	51.214	70.507	22,967.2	18.88	117.06	79.2	883.3	0.0	240.4	19.64	8,393	66.8
8.00		0.4375	50.994	70.202	22,670.7	18.79	116.56	79.3	875.6	0.0	239.4	19.64	8,329	66.8
9.00		0.4375	50.775	69.897	22,376.8	18.70	116.06	79.4	868.0	0.0	238.4	19.64	8,265	66.8
10.00		0.4375	50.556	69.593	22,085.4	18.61	115.56	79.5	860.4	0.0	237.3	19.64	8,202	66.8
11.00		0.4375	50.336	69.288	21,796.6	18.52	115.05	79.6	852.9	0.0	236.3	19.64	8,139	66.8
12.00		0.4375	50.117	68.983	21,510.2	18.44	114.55	79.7	845.4	0.0	235.3	19.64	8,076	66.8
13.00		0.4375	49.897	68.679	21,226.5	18.35	114.05	79.8	837.9	0.0	234.2	19.64	8,013	66.8
14.00		0.4375	49.678	68.374	20,945.2	18.26	113.55	79.9	830.4	0.0	233.2	19.64	7,951	66.8
15.00		0.4375	49.458	68.069	20,666.4	18.17	113.05	80.0	823.0	0.0	232.1	19.64	7,889	66.8
16.00		0.4375	49.239	67.764	20,390.1	18.08	112.55	80.1	815.6	0.0	231.1	19.64	7,827	66.8
17.00		0.4375	49.019	67.460	20,116.3	17.99	112.04	80.2	808.3	0.0	230.1	19.64	7,765	66.8
18.00		0.4375	48.800	67.155	19,844.9	17.90	111.54	80.3	801.0	0.0	229.0	19.64	7,704	66.8
19.00		0.4375	48.581	66.850	19,576.0	17.82	111.04	80.4	793.7	0.0	228.0	19.64	7,643	66.8
20.00		0.4375	48.361	66.546	19,309.5	17.73	110.54	80.5	786.4	0.0	227.0	19.64	7,582	66.8
21.00		0.4375	48.142	66.241	19,045.5	17.64	110.04	80.7	779.2	0.0	225.9	19.64	7,521	66.8
22.00		0.4375	47.922	65.936	18,783.8	17.55	109.54	80.8	772.0	0.0	224.9	19.64	7,461	66.8
23.00		0.4375	47.703	65.631	18,524.6	17.46	109.03	80.9	764.9	0.0	223.8	19.64	7,401	66.8
24.00		0.4375	47.483	65.327	18,267.8	17.37	108.53	81.0	757.8	0.0	222.8	19.64	7,341	66.8
25.00		0.4375	47.264	65.022	18,013.3	17.29	108.03	81.1	750.7	0.0	221.8	19.64	7,281	66.8
26.00		0.4375	47.044	64.717	17,761.3	17.20	107.53	81.2	743.6	0.0	220.7	19.64	7,222	66.8
27.00		0.4375	46.825	64.413	17,511.6	17.11	107.03	81.3	736.6	0.0	219.7	19.64	7,162	66.8
28.00		0.4375	46.606	64.108	17,264.2	17.02	106.53	81.4	729.6	0.0	218.7	19.64	7,103	66.8
29.00		0.4375	46.386	63.803	17,019.2	16.93	106.03	81.5	722.7	0.0	217.6	19.64	7,045	66.8
30.00		0.4375	46.167	63.498	16,776.5	16.84	105.52	81.6	715.7	0.0	216.6	19.64	6,986	66.8
31.00		0.4375	45.947	63.194	16,536.2	16.75	105.02	81.7	708.9	0.0	215.6	19.64	6,928	66.8
32.00		0.4375	45.728	62.889	16,298.1	16.67	104.52	81.8	702.0	0.0	214.5	19.64	6,870	66.8
33.00		0.4375	45.508	62.584	16,062.4	16.58	104.02	81.9	695.2	0.0	213.5	19.64	6,812	66.8
34.00		0.4375	45.289	62.280	15,828.9	16.49	103.52	82.0	688.4	0.0	212.4	19.64	6,755	66.8
35.00		0.4375	45.069	61.975	15,597.7	16.40	103.02	82.1	681.6	0.0	211.4	19.64	6,698	66.8
36.00		0.4375	44.850	61.670	15,368.7	16.31	102.51	82.2	674.9	0.0	210.4	19.64	6,641	66.8
37.00		0.4375	44.631	61.365	15,142.0	16.22	102.01	82.3	668.2	0.0	209.3	19.64	6,584	66.8
38.00		0.4375	44.411	61.061	14,917.6	16.14	101.51	82.4	661.6	0.0	208.3	19.64	6,527	66.8
39.00		0.4375	44.192	60.756	14,695.4	16.05	101.01	82.5	655.0	0.0	207.3	19.64	6,471	66.8
40.00		0.4375	43.972	60.451	14,475.4	15.96	100.51	82.6	648.4	0.0	206.2	19.64	6,415	66.8
41.00		0.4375	43.753	60.147	14,257.6	15.87	100.01	82.6	641.8	0.0	205.2	19.64	6,359	66.8
42.00		0.4375	43.533	59.842	14,042.0	15.78	99.50	82.6	635.3	0.0	204.1	19.64	6,304	66.8
42.96	Bot - Section 2	0.4375	43.323	59.550	13,837.8	15.70	99.02	82.6	629.1	0.0	194.3	19.64	6,251	63.9
43.00		0.4375	43.314	59.537	13,828.6	15.69	99.00	82.6	628.8	0.0	16.5	19.64	6,439	2.9
44.00		0.4375	43.094	59.232	13,617.3	15.61	98.50	82.6	622.4	0.0	378.6	19.64	6,383	66.8
45.00		0.4375	42.875	58.928	13,408.2	15.52	98.00	82.6	616.0	0.0	376.6	19.64	6,327	66.8
46.00		0.4375	42.656	58.623	13,201.3	15.43	97.50	82.6	609.6	0.0	374.7	19.64	6,272	66.8
47.00		0.4375	42.436	58.318	12,996.5	15.34	97.00	82.6	603.2	0.0	372.8	19.64	6,216	66.8
48.00		0.4375	42.217	58.014	12,793.9	15.25	96.50	82.6	596.9	0.0	370.9	19.64	6,162	66.8
49.00		0.4375	41.997	57.709	12,593.3	15.16	95.99	82.6	590.6	0.0	368.9	19.64	6,107	66.8
49.04	Top - Section 1	0.3750	42.738	50.421	11,432.7	18.33	113.97	79.8	526.9	0.0	14.7	19.64	6,105	2.7
50.00		0.3750	42.528	50.171	11,263.0	18.23	113.41	80.0	521.6	0.0	164.3	19.64	6,053	64.1
51.00		0.3750	42.308	49.909	11,088.0	18.13	112.82	80.1	516.2	0.0	170.3	19.64	5,998	66.8
52.00		0.3750	42.089	49.648	10,914.8	18.03	112.24	80.2	510.8	0.0	169.4	19.64	5,944	66.8
53.00		0.3750	41.869	49.387	10,743.5	17.92	111.65	80.3	505.4	0.0	168.5	19.64	5,891	66.8
54.00		0.3750	41.650	49.126	10,573.9	17.82	111.07	80.4	500.0	0.0	167.6	19.64	5,837	66.8
55.00		0.3750	41.431	48.865	10,406.2	17.72	110.48	80.6	494.7	0.0	166.7	19.64	5,784	66.8

56.00		0.3750	41.211	48.603	10,240.2	17.61	109.90	80.7	489.4	0.0	165.8	19.64	5,731	66.8
57.00		0.3750	40.992	48.342	10,076.0	17.51	109.31	80.8	484.1	0.0	164.9	19.64	5,678	66.8
58.00		0.3750	40.772	48.081	9,913.6	17.41	108.73	80.9	478.9	0.0	164.1	19.64	5,626	66.8
59.00		0.3750	40.553	47.820	9,752.9	17.30	108.14	81.0	473.7	0.0	163.2	19.64	5,574	66.8
60.00		0.3750	40.333	47.559	9,594.0	17.20	107.56	81.2	468.5	0.0	162.3	19.64	5,522	66.8
61.00		0.3750	40.114	47.298	9,436.8	17.10	106.97	81.3	463.4	0.0	161.4	19.64	5,470	66.8
62.00		0.3750	39.894	47.036	9,281.3	17.00	106.39	81.4	458.2	0.0	160.5	19.64	5,419	66.8
63.00		0.3750	39.675	46.775	9,127.5	16.89	105.80	81.5	453.1	0.0	159.6	19.64	5,367	66.8
64.00		0.3750	39.456	46.514	8,975.5	16.79	105.21	81.7	448.1	0.0	158.7	19.64	5,316	66.8
65.00		0.3750	39.236	46.253	8,825.1	16.69	104.63	81.8	443.0	0.0	157.8	19.64	5,266	66.8
66.00		0.3750	39.017	45.992	8,676.5	16.58	104.04	81.9	438.0	0.0	156.9	19.64	5,215	66.8
67.00		0.3750	38.797	45.730	8,529.5	16.48	103.46	82.0	433.0	0.0	156.1	19.64	5,165	66.8
68.00		0.3750	38.578	45.469	8,384.2	16.38	102.87	82.1	428.1	0.0	155.2	19.64	5,115	66.8
69.00		0.3750	38.358	45.208	8,240.5	16.27	102.29	82.3	423.1	0.0	154.3	19.64	5,065	66.8
70.00		0.3750	38.139	44.947	8,098.5	16.17	101.70	82.4	418.2	0.0	153.4	19.64	5,015	66.8
71.00		0.3750	37.919	44.686	7,958.2	16.07	101.12	82.5	413.4	0.0	152.5	19.64	4,966	66.8
72.00		0.3750	37.700	44.424	7,819.4	15.96	100.53	82.6	408.5	0.0	151.6	19.64	4,917	66.8
73.00		0.3750	37.481	44.163	7,682.3	15.86	99.95	82.6	403.7	0.0	150.7	19.64	4,868	66.8
74.00		0.3750	37.261	43.902	7,546.8	15.76	99.36	82.6	398.9	0.0	149.8	19.64	4,820	66.8
75.00		0.3750	37.042	43.641	7,412.9	15.65	98.78	82.6	394.2	0.0	148.9	19.64	4,771	66.8
76.00		0.3750	36.822	43.380	7,280.6	15.55	98.19	82.6	389.4	0.0	148.1	19.64	4,723	66.8
77.00		0.3750	36.603	43.119	7,149.9	15.45	97.61	82.6	384.7	0.0	147.2	19.64	4,675	66.8
78.00		0.3750	36.383	42.857	7,020.8	15.34	97.02	82.6	380.1	0.0	146.3	19.64	4,628	66.8
79.00		0.3750	36.164	42.596	6,893.2	15.24	96.44	82.6	375.4	0.0	145.4	19.64	4,581	66.8
80.00		0.3750	35.944	42.335	6,767.2	15.14	95.85	82.6	370.8	0.0	144.5	19.64	4,533	66.8
81.00		0.3750	35.725	42.074	6,642.7	15.03	95.27	82.6	366.2	0.0	143.6	19.64	4,487	66.8
82.00		0.3750	35.506	41.813	6,519.7	14.93	94.68	82.6	361.7	0.0	142.7	19.64	4,440	66.8
83.00		0.3750	35.286	41.551	6,398.3	14.83	94.10	82.6	357.1	0.0	141.8	19.64	4,394	66.8
84.00		0.3750	35.067	41.290	6,278.4	14.73	93.51	82.6	352.6	0.0	140.9	19.64	4,348	66.8
85.00		0.3750	34.847	41.029	6,160.0	14.62	92.93	82.6	348.2	0.0	140.1	19.64	4,302	66.8
86.00		0.3750	34.628	40.768	6,043.1	14.52	92.34	82.6	343.7	0.0	139.2	19.64	4,256	66.8
87.00		0.3750	34.408	40.507	5,927.7	14.42	91.76	82.6	339.3	0.0	138.3	19.64	4,211	66.8
87.54	Bot - Section 3	0.3750	34.290	40.366	5,866.0	14.36	91.44	82.6	336.9	0.0	74.3	19.64	4,186	36.1
88.00		0.3750	34.189	40.246	5,813.8	14.31	91.17	82.6	334.9	0.0	116.8	19.64	4,295	30.7
89.00		0.3750	33.969	39.984	5,701.4	14.21	90.59	82.6	330.6	0.0	252.6	19.64	4,249	66.8
90.00		0.3750	33.750	39.723	5,590.4	14.11	90.00	82.6	326.2	0.0	250.9	19.64	4,204	66.8
91.00		0.3750	33.531	39.462	5,480.8	14.00	89.41	82.6	321.9	0.0	249.3	19.64	4,159	66.8
92.00		0.3750	33.311	39.201	5,372.7	13.90	88.83	82.6	317.7	0.0	247.7	19.64	4,114	66.8
92.46	Top - Section 2	0.3125	33.836	33.250	4,721.1	17.33	108.27	81.0	274.8	0.0	112.5	19.64	4,093	30.5
93.00		0.3125	33.717	33.132	4,670.9	17.26	107.89	81.1	272.9	0.0	61.4	19.64	4,069	36.3
94.00		0.3125	33.497	32.914	4,579.4	17.14	107.19	81.2	269.3	0.0	112.4	19.64	4,025	66.8
95.00		0.3125	33.278	32.696	4,489.2	17.01	106.49	81.4	265.7	0.0	111.6	19.64	3,981	66.8
96.00		0.3125	33.058	32.479	4,400.1	16.89	105.79	81.5	262.2	0.0	110.9	19.64	3,937	66.8
97.00		0.3125	32.839	32.261	4,312.2	16.77	105.08	81.7	258.6	0.0	110.1	19.64	3,893	66.8
98.00		0.3125	32.619	32.043	4,225.5	16.64	104.38	81.8	255.1	0.0	109.4	19.64	3,850	66.8
99.00		0.3125	32.400	31.826	4,140.0	16.52	103.68	82.0	251.7	0.0	108.7	19.64	3,806	66.8
100.0		0.3125	32.181	31.608	4,055.7	16.39	102.98	82.1	248.2	0.0	107.9	19.64	3,764	66.8
101.0		0.3125	31.961	31.390	3,972.4	16.27	102.28	82.3	244.8	0.0	107.2	19.64	3,721	66.8
102.0		0.3125	31.742	31.173	3,890.4	16.15	101.57	82.4	241.4	0.0	106.4	19.64	3,678	66.8
103.0		0.3125	31.522	30.955	3,809.5	16.02	100.87	82.6	238.0	0.0	105.7	19.64	3,636	66.8
103.7	Reinf. Top	0.3125	31.358	30.792	3,749.5	15.93	100.34	82.6	235.5	0.0	78.8	19.64	3,605	50.1
104.0		0.3125	31.303	30.737	3,729.7	15.90	100.17	82.6	234.7	0.0	26.2			
105.0		0.3125	31.083	30.520	3,651.0	15.78	99.47	82.6	231.3	0.0	104.2			
106.0		0.3125	30.864	30.302	3,573.4	15.65	98.76	82.6	228.0	0.0	103.5			
107.0		0.3125	30.644	30.084	3,497.0	15.53	98.06	82.6	224.8	0.0	102.7			
108.0		0.3125	30.425	29.867	3,421.6	15.40	97.36	82.6	221.5	0.0	102.0			
109.0		0.3125	30.206	29.649	3,347.4	15.28	96.66	82.6	218.3	0.0	101.3			
110.0		0.3125	29.986	29.431	3,274.2	15.16	95.96	82.6	215.1	0.0	100.5			
111.0		0.3125	29.767	29.214	3,202.1	15.03	95.25	82.6	211.9	0.0	99.8			
112.0		0.3125	29.547	28.996	3,131.1	14.91	94.55	82.6	208.7	0.0	99.0			
113.0		0.3125	29.328	28.778	3,061.1	14.78	93.85	82.6	205.6	0.0	98.3			
114.0		0.3125	29.108	28.561	2,992.2	14.66	93.15	82.6	202.5	0.0	97.6			
115.0		0.3125	28.889	28.343	2,924.3	14.54	92.44	82.6	199.4	0.0	96.8			
116.0		0.3125	28.669	28.126	2,857.4	14.41	91.74	82.6	196.3	0.0	96.1			

117.0		0.3125	28.450	27.908	2,791.6	14.29	91.04	82.6	193.3	0.0	95.3
118.0		0.3125	28.231	27.690	2,726.8	14.17	90.34	82.6	190.2	0.0	94.6
119.0		0.3125	28.011	27.473	2,663.0	14.04	89.64	82.6	187.2	0.0	93.9
120.0		0.3125	27.792	27.255	2,600.2	13.92	88.93	82.6	184.3	0.0	93.1
121.0		0.3125	27.572	27.037	2,538.4	13.79	88.23	82.6	181.3	0.0	92.4
122.0		0.3125	27.353	26.820	2,477.6	13.67	87.53	82.6	178.4	0.0	91.6
123.0		0.3125	27.133	26.602	2,417.7	13.55	86.83	82.6	175.5	0.0	90.9
124.0		0.3125	26.914	26.384	2,358.9	13.42	86.12	82.6	172.6	0.0	90.2
125.0		0.3125	26.694	26.167	2,301.0	13.30	85.42	82.6	169.8	0.0	89.4
126.0		0.3125	26.475	25.949	2,244.0	13.18	84.72	82.6	166.9	0.0	88.7
127.0		0.3125	26.256	25.731	2,188.1	13.05	84.02	82.6	164.1	0.0	87.9
128.0		0.3125	26.036	25.514	2,133.0	12.93	83.32	82.6	161.4	0.0	87.2
129.0		0.3125	25.817	25.296	2,078.9	12.80	82.61	82.6	158.6	0.0	86.4
130.0		0.3125	25.597	25.078	2,025.7	12.68	81.91	82.6	155.9	0.0	85.7
131.0		0.3125	25.378	24.861	1,973.4	12.56	81.21	82.6	153.2	0.0	85.0
132.0		0.3125	25.158	24.643	1,922.0	12.43	80.51	82.6	150.5	0.0	84.2
132.1	Bot - Section 4	0.3125	25.132	24.617	1,915.9	12.42	80.42	82.6	150.2	0.0	10.0
133.0		0.3125	24.939	24.425	1,871.5	12.31	79.80	82.6	147.8	0.0	118.4
134.0		0.3125	24.719	24.208	1,821.9	12.18	79.10	82.6	145.2	0.0	133.4
135.0		0.3125	24.500	23.990	1,773.2	12.06	78.40	82.6	142.6	0.0	132.2
135.8	Top - Section 3	0.1875	24.684	14.578	1,105.3	21.45	131.65	76.2	88.2	0.0	114.0
136.0		0.1875	24.656	14.561	1,101.4	21.42	131.50	76.2	88.0	0.0	6.5
137.0		0.1875	24.436	14.430	1,072.0	21.22	130.33	76.4	86.4	0.0	49.3
138.0		0.1875	24.217	14.300	1,043.2	21.01	129.16	76.7	84.8	0.0	48.9
139.0		0.1875	23.997	14.169	1,014.9	20.80	127.99	76.9	83.3	0.0	48.4
140.0		0.1875	23.778	14.039	987.1	20.60	126.81	77.2	81.8	0.0	48.0
141.0		0.1875	23.558	13.908	959.8	20.39	125.64	77.4	80.2	0.0	47.5
142.0		0.1875	23.339	13.777	933.0	20.18	124.47	77.7	78.7	0.0	47.1
143.0		0.1875	23.119	13.647	906.7	19.98	123.30	77.9	77.2	0.0	46.7
144.0		0.1875	22.900	13.516	880.9	19.77	122.13	78.1	75.8	0.0	46.2
145.0		0.1875	22.681	13.386	855.6	19.57	120.96	78.4	74.3	0.0	45.8
146.0		0.1875	22.461	13.255	830.8	19.36	119.79	78.6	72.9	0.0	45.3
147.0		0.1875	22.242	13.125	806.5	19.15	118.62	78.9	71.4	0.0	44.9
148.0		0.1875	22.022	12.994	782.7	18.95	117.45	79.1	70.0	0.0	44.4
149.0		0.1875	21.803	12.863	759.3	18.74	116.28	79.4	68.6	0.0	44.0
150.0		0.1875	21.583	12.733	736.4	18.53	115.11	79.6	67.2	0.0	43.5
151.0		0.1875	21.364	12.602	714.0	18.33	113.94	79.8	65.8	0.0	43.1
152.0		0.1875	21.144	12.472	692.0	18.12	112.77	80.1	64.5	0.0	42.7
153.0		0.1875	20.925	12.341	670.5	17.91	111.60	80.3	63.1	0.0	42.2
154.0		0.1875	20.706	12.210	649.5	17.71	110.43	80.6	61.8	0.0	41.8
155.0		0.1875	20.486	12.080	628.8	17.50	109.26	80.8	60.5	0.0	41.3
156.0		0.1875	20.267	11.949	608.7	17.30	108.09	81.1	59.2	0.0	40.9
157.0		0.1875	20.047	11.819	588.9	17.09	106.92	81.3	57.9	0.0	40.4
158.0		0.1875	19.828	11.688	569.6	16.88	105.75	81.5	56.6	0.0	40.0
159.0		0.1875	19.608	11.557	550.7	16.68	104.58	81.8	55.3	0.0	39.5
160.0		0.1875	19.389	11.427	532.3	16.47	103.41	82.0	54.1	0.0	39.1
161.0		0.1875	19.169	11.296	514.2	16.26	102.24	82.3	52.8	0.0	38.7
162.0		0.1875	18.950	11.166	496.6	16.06	101.07	82.5	51.6	0.0	38.2
163.0		0.1875	18.731	11.035	479.4	15.85	99.90	82.6	50.4	0.0	37.8
164.0		0.1875	18.511	10.904	462.6	15.64	98.73	82.6	49.2	0.0	37.3
165.0		0.1875	18.292	10.774	446.2	15.44	97.56	82.6	48.0	0.0	36.9
166.0		0.1875	18.072	10.643	430.1	15.23	96.39	82.6	46.9	0.0	36.4
167.0		0.1875	17.853	10.513	414.5	15.03	95.21	82.6	45.7	0.0	36.0
168.0		0.1875	17.633	10.382	399.2	14.82	94.04	82.6	44.6	0.0	35.6
169.0		0.1875	17.414	10.251	384.4	14.61	92.87	82.6	43.5	0.0	35.1
170.0		0.1875	17.194	10.121	369.8	14.41	91.70	82.6	42.4	0.0	34.7
171.0		0.1875	16.975	9.990	355.7	14.20	90.53	82.6	41.3	0.0	34.2
172.0		0.1875	16.756	9.860	341.9	13.99	89.36	82.6	40.2	0.0	33.8
173.0		0.1875	16.536	9.729	328.5	13.79	88.19	82.6	39.1	0.0	33.3
174.0		0.1875	16.317	9.599	315.5	13.58	87.02	82.6	38.1	0.0	32.9
175.0		0.1875	16.097	9.468	302.8	13.37	85.85	82.6	37.0	0.0	32.4
176.0		0.1875	15.878	9.337	290.4	13.17	84.68	82.6	36.0	0.0	32.0
177.0		0.1875	15.658	9.207	278.4	12.96	83.51	82.6	35.0	0.0	31.6
178.0		0.1875	15.439	9.076	266.7	12.76	82.34	82.6	34.0	0.0	31.1

179.0	0.1875	15.219	8.946	255.4	12.55	81.17	82.6	33.1	0.0	30.7	
180.0	0.1875	15.000	8.815	244.4	12.34	80.00	82.6	32.1	0.0	30.2	
										25,271.1	6,930.5

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:31:28 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.15

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		46.4	0.0					0.0	0.0	46.4	0.0	0.0	0.0
1.00		92.7	296.0					0.0	204.8	92.7	500.8	0.0	0.0
2.00		92.5	294.7					0.0	204.8	92.5	499.5	0.0	0.0
3.00		92.3	293.5					0.0	204.8	92.3	498.3	0.0	0.0
4.00		92.0	292.3					0.0	204.8	92.0	497.0	0.0	0.0
5.00		91.8	291.0					0.0	204.8	91.8	495.8	0.0	0.0
6.00		91.6	289.8					0.0	204.8	91.6	494.5	0.0	0.0
7.00		91.3	288.5					0.0	204.8	91.3	493.3	0.0	0.0
8.00		91.1	287.3					0.0	204.8	91.1	492.0	0.0	0.0
9.00		90.8	286.0					0.0	204.8	90.8	490.8	0.0	0.0
10.00		90.6	284.8					0.0	204.8	90.6	489.6	0.0	0.0
11.00		90.4	283.5					0.0	204.8	90.4	488.3	0.0	0.0
12.00		90.1	282.3					0.0	204.8	90.1	487.1	0.0	0.0
13.00		89.9	281.1					0.0	204.8	89.9	485.8	0.0	0.0
14.00		89.7	279.8					0.0	204.8	89.7	484.6	0.0	0.0
15.00		89.4	278.6					0.0	204.8	89.4	483.3	0.0	0.0
16.00		89.2	277.3					0.0	204.8	89.2	482.1	0.0	0.0
17.00		89.0	276.1					0.0	204.8	89.0	480.8	0.0	0.0
18.00		88.7	274.8					0.0	204.8	88.7	479.6	0.0	0.0
19.00		88.5	273.6					0.0	204.8	88.5	478.4	0.0	0.0
20.00		88.3	272.3					0.0	204.8	88.3	477.1	0.0	0.0
21.00		88.0	271.1					0.0	204.8	88.0	475.9	0.0	0.0
22.00		87.8	269.9					0.0	204.8	87.8	474.6	0.0	0.0
23.00		87.5	268.6					0.0	204.8	87.5	473.4	0.0	0.0
24.00		87.3	267.4					0.0	204.8	87.3	472.1	0.0	0.0
25.00		87.1	266.1					0.0	204.8	87.1	470.9	0.0	0.0
26.00		86.8	264.9					0.0	204.8	86.8	469.6	0.0	0.0
27.00		86.6	263.6					0.0	204.8	86.6	468.4	0.0	0.0
28.00		86.4	262.4					0.0	204.8	86.4	467.2	0.0	0.0
29.00		86.1	261.2					0.0	204.8	86.1	465.9	0.0	0.0
30.00	Appertunance(s)	86.1	259.9	27.9	0.0	0.0	12.0	0.0	204.8	114.1	476.7	0.0	0.0
31.00		86.5	258.7					0.0	204.4	86.5	463.0	0.0	0.0
32.00		87.1	257.4					0.0	204.4	87.1	461.8	0.0	0.0
33.00		87.6	256.2					0.0	204.4	87.6	460.5	0.0	0.0
34.00		88.1	254.9					0.0	204.4	88.1	459.3	0.0	0.0
35.00		88.6	253.7					0.0	204.4	88.6	458.1	0.0	0.0
36.00		89.1	252.4					0.0	204.4	89.1	456.8	0.0	0.0
37.00		89.5	251.2					0.0	204.4	89.5	455.6	0.0	0.0
38.00		89.9	250.0					0.0	204.4	89.9	454.3	0.0	0.0
39.00		90.4	248.7					0.0	204.4	90.4	453.1	0.0	0.0
40.00		90.8	247.5					0.0	204.4	90.8	451.8	0.0	0.0
41.00		91.1	246.2					0.0	204.4	91.1	450.6	0.0	0.0
42.00		89.5	245.0					0.0	204.4	89.5	449.3	0.0	0.0
42.96	Bot - Section 2	45.9	233.2					0.0	195.5	45.9	428.7	0.0	0.0
43.00		48.9	19.8					0.0	8.9	48.9	28.7	0.0	0.0
44.00		93.8	454.3					0.0	204.4	93.8	658.6	0.0	0.0
45.00		94.2	452.0					0.0	204.4	94.2	656.3	0.0	0.0
46.00		94.5	449.7					0.0	204.4	94.5	654.0	0.0	0.0

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

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

Wind Importance Factor : 1.15

47.00		94.8	447.4					0.0	204.4	94.8	651.7	0.0	0.0
48.00		95.1	445.0					0.0	204.4	95.1	649.4	0.0	0.0
49.00		49.5	442.7					0.0	204.4	49.5	647.1	0.0	0.0
49.04	Top - Section 1	47.4	17.6					0.0	8.2	47.4	25.8	0.0	0.0
50.00		93.1	197.2					0.0	196.2	93.1	393.4	0.0	0.0
51.00		95.2	204.3					0.0	204.4	95.2	408.7	0.0	0.0
52.00		95.5	203.3					0.0	204.4	95.5	407.6	0.0	0.0
53.00		95.7	202.2					0.0	204.4	95.7	406.6	0.0	0.0
54.00		95.9	201.1					0.0	204.4	95.9	405.5	0.0	0.0
55.00		96.2	200.1					0.0	204.4	96.2	404.4	0.0	0.0
56.00		96.4	199.0					0.0	204.4	96.4	403.4	0.0	0.0
57.00		96.6	197.9					0.0	204.4	96.6	402.3	0.0	0.0
58.00		96.8	196.9					0.0	204.4	96.8	401.2	0.0	0.0
59.00		97.0	195.8					0.0	204.4	97.0	400.2	0.0	0.0
60.00		97.1	194.7					0.0	204.4	97.1	399.1	0.0	0.0
61.00		97.3	193.7					0.0	204.4	97.3	398.0	0.0	0.0
62.00		97.5	192.6					0.0	204.4	97.5	397.0	0.0	0.0
63.00		97.6	191.5					0.0	204.4	97.6	395.9	0.0	0.0
64.00		118.3	190.5					0.0	204.4	118.3	394.8	0.0	0.0
65.00		138.8	189.4					26.5	204.4	165.3	393.8	0.0	0.0
66.00		138.6	188.3					26.5	204.4	165.2	392.7	0.0	0.0
67.00		138.4	187.3					26.6	204.4	165.1	391.6	0.0	0.0
68.00		138.2	186.2					26.7	204.4	164.9	390.6	0.0	0.0
69.00		138.0	185.1					26.8	204.4	164.8	389.5	0.0	0.0
70.00		137.8	184.1					26.9	204.4	164.7	388.4	0.0	0.0
71.00		137.6	183.0					26.9	204.4	164.5	387.4	0.0	0.0
72.00		137.3	181.9					27.0	204.4	164.3	386.3	0.0	0.0
73.00		137.1	180.9					27.1	204.4	164.2	385.2	0.0	0.0
74.00		136.8	179.8					27.2	204.4	164.0	384.2	0.0	0.0
75.00		136.5	178.7					27.3	204.4	163.8	383.1	0.0	0.0
76.00		136.2	177.7					27.3	204.4	163.5	382.0	0.0	0.0
77.00		135.9	176.6					27.4	204.4	163.3	381.0	0.0	0.0
78.00		135.6	175.5					27.5	204.4	163.1	379.9	0.0	0.0
79.00	Appertunance(s)	135.3	174.5	3.3	0.0	0.0	0.7	27.6	204.4	166.1	379.6	0.0	0.0
80.00		134.9	173.4					27.6	204.2	162.6	377.6	0.0	0.0
81.00		134.6	172.3					27.7	204.2	162.3	376.5	0.0	0.0
82.00		134.2	171.3					27.8	204.2	162.0	375.5	0.0	0.0
83.00		133.9	170.2					27.8	204.2	161.7	374.4	0.0	0.0
84.00		133.5	169.1					27.9	204.2	161.4	373.3	0.0	0.0
85.00		133.1	168.1					28.0	204.2	161.1	372.3	0.0	0.0
86.00		132.7	167.0					28.0	204.2	160.7	371.2	0.0	0.0
87.00		101.9	165.9					28.1	204.2	130.0	370.1	0.0	0.0
87.54	Bot - Section 3	66.6	89.1					15.2	110.2	81.8	199.4	0.0	0.0
88.00		98.0	140.1					13.0	93.9	110.9	234.1	0.0	0.0
89.00		133.9	303.1					28.2	204.2	162.1	507.3	0.0	0.0
90.00		133.5	301.1					28.3	204.2	161.8	505.3	0.0	0.0
91.00		133.0	299.2					28.4	204.2	161.4	503.4	0.0	0.0
92.00		96.6	297.2					28.4	204.2	125.1	501.4	0.0	0.0
92.46	Top - Section 2	66.2	135.1					13.0	93.2	79.2	228.3	0.0	0.0
93.00		101.9	73.7					15.5	111.0	117.4	184.6	0.0	0.0
94.00		131.7	134.8					28.6	204.2	160.2	339.0	0.0	0.0
95.00		131.2	134.0					28.6	204.2	159.8	338.1	0.0	0.0
96.00	Appertunance(s)	130.7	133.1	565.1	0.0	0.0	583.9	28.7	204.2	724.6	921.2	0.0	0.0
97.00		130.2	132.2					28.8	203.2	159.0	335.4	0.0	0.0
98.00		129.8	131.3					28.8	203.2	158.6	334.5	0.0	0.0
99.00		129.3	130.4					28.9	203.2	158.1	333.6	0.0	0.0
100.00		128.8	129.5					28.9	203.2	157.7	332.7	0.0	0.0

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

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

Wind Importance Factor : 1.15

101.00		128.2	128.6					29.0	203.2	157.2	331.8	0.0	0.0
102.00		127.7	127.7					29.1	203.2	156.8	330.9	0.0	0.0
103.00		111.3	126.8					29.1	203.2	140.5	330.1	0.0	0.0
103.75	Reinf. Top	63.5	94.5					21.9	152.4	85.3	247.0	0.0	0.0
104.00		79.0	31.4					7.3	30.8	86.3	62.2	0.0	0.0
105.00	Appertunance(s)	126.1	125.1	420.6	0.0	0.0	95.0	29.2	123.1	575.9	343.2	0.0	0.0
106.00		125.6	124.2					29.3	117.2	154.9	241.3	0.0	0.0
107.00		125.0	123.3					29.4	117.2	154.4	240.4	0.0	0.0
108.00		124.4	122.4					29.4	117.2	153.8	239.6	0.0	0.0
109.00		123.9	121.5					29.5	117.2	153.3	238.7	0.0	0.0
110.00		123.3	120.6					29.5	117.2	152.8	237.8	0.0	0.0
111.00		122.7	119.7					29.6	117.2	152.3	236.9	0.0	0.0
112.00	Appertunance(s)	103.0	118.8	1,926.9	0.0	0.0	2,001.6	29.6	117.2	2,059.5	2,237.6	0.0	0.0
113.00		102.4	118.0					0.0	82.3	102.4	200.2	0.0	0.0
114.00		120.9	117.1					32.1	56.5	153.0	173.5	0.0	0.0
115.00		120.3	116.2					32.2	56.5	152.4	172.7	0.0	0.0
116.00		119.7	115.3					32.2	56.5	151.9	171.8	0.0	0.0
117.00		119.0	114.4					32.2	56.5	151.3	170.9	0.0	0.0
118.00		118.4	113.5					32.3	56.5	150.7	170.0	0.0	0.0
119.00		117.8	112.6					32.3	56.5	150.1	169.1	0.0	0.0
120.00		117.1	111.7					32.4	56.5	149.5	168.2	0.0	0.0
121.00		116.5	110.8					32.4	56.5	148.9	167.3	0.0	0.0
122.00		115.8	110.0					32.4	56.5	148.3	166.4	0.0	0.0
123.00		115.2	109.1					32.5	56.5	147.6	165.5	0.0	0.0
124.00		114.5	108.2					32.5	56.5	147.0	164.7	0.0	0.0
125.00	Appertunance(s)	92.1	107.3	1,948.6	0.0	0.0	2,550.7	32.5	56.5	2,073.3	2,714.5	0.0	0.0
126.00		70.0	106.4					0.0	49.0	70.0	155.4	0.0	0.0
127.00		69.8	105.5					0.0	49.0	69.8	154.5	0.0	0.0
128.00		69.6	104.6					0.0	49.0	69.6	153.6	0.0	0.0
129.00		69.4	103.7					0.0	49.0	69.4	152.8	0.0	0.0
130.00		69.2	102.8					0.0	49.0	69.2	151.9	0.0	0.0
131.00		69.0	102.0					0.0	49.0	69.0	151.0	0.0	0.0
132.00		38.6	101.1					0.0	49.0	38.6	150.1	0.0	0.0
132.12	Bot - Section 4	34.8	12.0					0.0	5.9	34.8	17.9	0.0	0.0
133.00		65.4	142.1					0.0	43.1	65.4	185.2	0.0	0.0
134.00		69.4	160.1					0.0	49.0	69.4	209.1	0.0	0.0
135.00	Appertunance(s)	64.7	158.7	2,769.0	0.0	0.0	3,428.5	0.0	49.0	2,833.7	3,636.2	0.0	0.0
135.87	Top - Section 3	34.5	136.8					0.0	38.8	34.5	175.6	0.0	0.0
136.00		38.7	7.7					0.0	5.8	38.7	13.6	0.0	0.0
137.00		68.3	59.2					0.0	44.6	68.3	103.8	0.0	0.0
138.00		68.1	58.7					0.0	44.6	68.1	103.2	0.0	0.0
139.00		67.9	58.1					0.0	44.6	67.9	102.7	0.0	0.0
140.00	Appertunance(s)	67.6	57.6	1,191.8	0.0	6,104.3	800.4	0.0	44.6	1,259.4	902.6	0.0	0.0
141.00		67.4	57.1					0.0	37.9	67.4	95.0	0.0	0.0
142.00		67.2	56.5					0.0	37.9	67.2	94.4	0.0	0.0
143.00		66.9	56.0					0.0	37.9	66.9	93.9	0.0	0.0
144.00		66.7	55.5					0.0	37.9	66.7	93.4	0.0	0.0
145.00		66.5	54.9					0.0	37.9	66.5	92.8	0.0	0.0
146.00		66.2	54.4					0.0	37.9	66.2	92.3	0.0	0.0
147.00		66.0	53.9					0.0	37.9	66.0	91.8	0.0	0.0
148.00		65.7	53.3					0.0	37.9	65.7	91.2	0.0	0.0
149.00		65.5	52.8					0.0	37.9	65.5	90.7	0.0	0.0
150.00	Appertunance(s)	65.2	52.3	202.6	0.0	0.0	190.0	0.0	37.9	267.9	280.1	0.0	0.0
151.00		65.0	51.7					0.0	36.9	65.0	88.6	0.0	0.0
152.00		64.7	51.2					0.0	36.9	64.7	88.1	0.0	0.0
153.00		64.5	50.7					0.0	36.9	64.5	87.6	0.0	0.0
154.00		64.2	50.1					0.0	36.9	64.2	87.0	0.0	0.0

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

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

Wind Importance Factor : 1.15

155.00		64.0	49.6					0.0	36.9	64.0	86.5	0.0	0.0
156.00		63.7	49.1					0.0	36.9	63.7	86.0	0.0	0.0
157.00		63.4	48.5					0.0	36.9	63.4	85.4	0.0	0.0
158.00		63.2	48.0					0.0	36.9	63.2	84.9	0.0	0.0
159.00		62.9	47.5					0.0	36.9	62.9	84.4	0.0	0.0
160.00		75.5	46.9					0.0	36.9	75.5	83.8	0.0	0.0
161.00		87.9	46.4					16.9	36.9	104.7	83.3	0.0	0.0
162.00		87.0	45.9					16.9	36.9	103.9	82.8	0.0	0.0
163.00		86.2	45.3					16.9	36.9	103.1	82.2	0.0	0.0
164.00		85.3	44.8					16.9	36.9	102.2	81.7	0.0	0.0
165.00		84.4	44.3					16.9	36.9	101.4	81.2	0.0	0.0
166.00		83.6	43.7					16.9	36.9	100.5	80.6	0.0	0.0
167.00	Appertunance(s)	63.8	43.2	1,626.6	0.0	0.0	1,531.8	17.0	36.9	1,707.4	1,611.9	0.0	0.0
168.00		44.3	42.7					0.0	23.9	44.3	66.6	0.0	0.0
169.00		43.8	42.1					0.0	23.9	43.8	66.0	0.0	0.0
170.00		43.4	41.6					0.0	23.9	43.4	65.5	0.0	0.0
171.00		42.9	41.1					0.0	23.9	42.9	65.0	0.0	0.0
172.00		42.4	40.5					0.0	23.9	42.4	64.4	0.0	0.0
173.00		41.9	40.0					0.0	23.9	41.9	63.9	0.0	0.0
174.00		41.4	39.5					0.0	23.9	41.4	63.4	0.0	0.0
175.00		40.9	38.9					0.0	23.9	40.9	62.8	0.0	0.0
176.00		40.4	38.4					0.0	23.9	40.4	62.3	0.0	0.0
177.00		39.9	37.9					0.0	23.9	39.9	61.8	0.0	0.0
178.00		39.5	37.3					0.0	23.9	39.5	61.2	0.0	0.0
179.00		39.0	36.8					0.0	23.9	39.0	60.7	0.0	0.0
180.00	Appertunance(s)	19.4	36.3	3,727.0	0.0	15,021.1	3,025.6	0.0	23.9	3,746.4	3,085.7	0.0	0.0
								Totals:		33,450.0	69,512.8	0.00	0.00

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:31:46 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.15

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	-69.50	-33.42	0.00	-3,922.10	0.00	3,922.10	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.536
1.00	-68.98	-33.37	0.00	-3,888.68	0.00	3,888.68	5,115.23	2,557.61	10,943.3	5,479.82	0.00	-0.03	0.535
2.00	-68.46	-33.31	0.00	-3,855.31	0.00	3,855.31	5,100.42	2,550.21	10,865.3	5,440.75	0.01	-0.07	0.533
3.00	-67.95	-33.26	0.00	-3,822.00	0.00	3,822.00	5,085.56	2,542.78	10,787.4	5,401.75	0.03	-0.10	0.532
4.00	-67.43	-33.21	0.00	-3,788.74	0.00	3,788.74	5,070.64	2,535.32	10,709.7	5,362.83	0.06	-0.13	0.530
5.00	-66.92	-33.15	0.00	-3,755.53	0.00	3,755.53	5,055.67	2,527.83	10,632.1	5,323.99	0.09	-0.16	0.529
6.00	-66.40	-33.10	0.00	-3,722.38	0.00	3,722.38	5,040.63	2,520.32	10,554.7	5,285.22	0.13	-0.20	0.527
7.00	-65.89	-33.04	0.00	-3,689.29	0.00	3,689.29	5,025.54	2,512.77	10,477.4	5,246.53	0.17	-0.23	0.525
8.00	-65.38	-32.99	0.00	-3,656.25	0.00	3,656.25	5,010.40	2,505.20	10,400.3	5,207.92	0.22	-0.26	0.524
9.00	-64.87	-32.93	0.00	-3,623.26	0.00	3,623.26	4,995.19	2,497.60	10,323.4	5,169.39	0.28	-0.30	0.522
10.00	-64.36	-32.88	0.00	-3,590.33	0.00	3,590.33	4,979.93	2,489.97	10,246.6	5,130.93	0.35	-0.33	0.520
11.00	-63.85	-32.82	0.00	-3,557.46	0.00	3,557.46	4,964.61	2,482.31	10,170.0	5,092.56	0.42	-0.36	0.519
12.00	-63.35	-32.76	0.00	-3,524.64	0.00	3,524.64	4,949.24	2,474.62	10,093.5	5,054.27	0.50	-0.40	0.517
13.00	-62.84	-32.71	0.00	-3,491.87	0.00	3,491.87	4,933.81	2,466.90	10,017.2	5,016.06	0.59	-0.43	0.515
14.00	-62.34	-32.65	0.00	-3,459.17	0.00	3,459.17	4,918.32	2,459.16	9,941.08	4,977.93	0.68	-0.47	0.514
15.00	-61.84	-32.59	0.00	-3,426.52	0.00	3,426.52	4,902.77	2,451.39	9,865.10	4,939.88	0.79	-0.50	0.512
16.00	-61.34	-32.54	0.00	-3,393.92	0.00	3,393.92	4,887.17	2,443.58	9,789.30	4,901.92	0.89	-0.53	0.510
17.00	-60.84	-32.48	0.00	-3,361.39	0.00	3,361.39	4,871.51	2,435.75	9,713.66	4,864.05	1.01	-0.57	0.508
18.00	-60.34	-32.42	0.00	-3,328.91	0.00	3,328.91	4,855.79	2,427.89	9,638.20	4,826.26	1.13	-0.60	0.507
19.00	-59.84	-32.36	0.00	-3,296.49	0.00	3,296.49	4,840.02	2,420.01	9,562.90	4,788.56	1.26	-0.64	0.505
20.00	-59.35	-32.31	0.00	-3,264.13	0.00	3,264.13	4,824.18	2,412.09	9,487.79	4,750.94	1.40	-0.67	0.503
21.00	-58.86	-32.25	0.00	-3,231.82	0.00	3,231.82	4,808.29	2,404.15	9,412.84	4,713.42	1.54	-0.70	0.501
22.00	-58.36	-32.19	0.00	-3,199.57	0.00	3,199.57	4,792.35	2,396.17	9,338.08	4,675.98	1.70	-0.74	0.499
23.00	-57.87	-32.13	0.00	-3,167.39	0.00	3,167.39	4,776.35	2,388.17	9,263.49	4,638.63	1.86	-0.77	0.497
24.00	-57.38	-32.07	0.00	-3,135.26	0.00	3,135.26	4,760.29	2,380.14	9,189.09	4,601.37	2.02	-0.81	0.495
25.00	-56.89	-32.01	0.00	-3,103.19	0.00	3,103.19	4,744.17	2,372.08	9,114.87	4,564.21	2.19	-0.84	0.494
26.00	-56.40	-31.95	0.00	-3,071.18	0.00	3,071.18	4,728.00	2,364.00	9,040.83	4,527.13	2.38	-0.88	0.492
27.00	-55.92	-31.89	0.00	-3,039.23	0.00	3,039.23	4,711.76	2,355.88	8,966.98	4,490.15	2.56	-0.91	0.490
28.00	-55.43	-31.83	0.00	-3,007.34	0.00	3,007.34	4,695.48	2,347.74	8,893.31	4,453.26	2.76	-0.95	0.488
29.00	-54.95	-31.77	0.00	-2,975.51	0.00	2,975.51	4,679.13	2,339.57	8,819.83	4,416.47	2.96	-0.98	0.486
30.00	-54.46	-31.68	0.00	-2,943.74	0.00	2,943.74	4,662.73	2,331.36	8,746.54	4,379.77	3.17	-1.02	0.484
31.00	-53.97	-31.62	0.00	-2,912.05	0.00	2,912.05	4,646.27	2,323.14	8,673.45	4,343.17	3.39	-1.05	0.482
32.00	-53.49	-31.56	0.00	-2,880.44	0.00	2,880.44	4,629.75	2,314.88	8,600.55	4,306.67	3.61	-1.09	0.479
33.00	-53.02	-31.49	0.00	-2,848.88	0.00	2,848.88	4,613.18	2,306.59	8,527.84	4,270.26	3.84	-1.12	0.477
34.00	-52.54	-31.43	0.00	-2,817.39	0.00	2,817.39	4,596.55	2,298.27	8,455.33	4,233.95	4.08	-1.16	0.475
35.00	-52.06	-31.36	0.00	-2,785.96	0.00	2,785.96	4,579.86	2,289.93	8,383.01	4,197.74	4.33	-1.19	0.473
36.00	-51.59	-31.30	0.00	-2,754.60	0.00	2,754.60	4,563.12	2,281.56	8,310.90	4,161.63	4.58	-1.23	0.471
37.00	-51.12	-31.23	0.00	-2,723.30	0.00	2,723.30	4,546.32	2,273.16	8,238.99	4,125.62	4.85	-1.26	0.469
38.00	-50.65	-31.16	0.00	-2,692.07	0.00	2,692.07	4,529.46	2,264.73	8,167.27	4,089.71	5.11	-1.30	0.467
39.00	-50.18	-31.09	0.00	-2,660.92	0.00	2,660.92	4,512.54	2,256.27	8,095.77	4,053.90	5.39	-1.33	0.464
40.00	-49.71	-31.02	0.00	-2,629.83	0.00	2,629.83	4,491.22	2,245.61	8,016.71	4,014.31	5.67	-1.37	0.462
41.00	-49.24	-30.95	0.00	-2,598.81	0.00	2,598.81	4,468.58	2,234.29	7,935.69	3,973.74	5.96	-1.41	0.461
42.00	-48.77	-30.88	0.00	-2,567.86	0.00	2,567.86	4,445.95	2,222.97	7,855.09	3,933.38	6.26	-1.44	0.459
42.96	-48.34	-30.83	0.00	-2,538.33	0.00	2,538.33	4,424.29	2,212.15	7,778.37	3,894.97	6.56	-1.48	0.457
43.00	-48.30	-30.80	0.00	-2,536.99	0.00	2,536.99	4,423.31	2,211.65	7,774.90	3,893.23	6.57	-1.48	0.453
44.00	-47.62	-30.72	0.00	-2,506.19	0.00	2,506.19	4,400.67	2,200.33	7,695.11	3,853.28	6.88	-1.51	0.451
45.00	-46.95	-30.64	0.00	-2,475.47	0.00	2,475.47	4,378.03	2,189.01	7,615.75	3,813.53	7.20	-1.55	0.449
46.00	-46.28	-30.55	0.00	-2,444.83	0.00	2,444.83	4,355.39	2,177.70	7,536.79	3,773.99	7.53	-1.58	0.447
47.00	-45.61	-30.47	0.00	-2,414.28	0.00	2,414.28	4,332.75	2,166.38	7,458.24	3,734.66	7.87	-1.62	0.445
48.00	-44.95	-30.38	0.00	-2,383.81	0.00	2,383.81	4,310.11	2,155.06	7,380.10	3,695.54	8.21	-1.65	0.443
49.00	-44.29	-30.33	0.00	-2,353.43	0.00	2,353.43	4,287.47	2,143.74	7,302.38	3,656.62	8.56	-1.69	0.441

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:31:47 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.15

Dead Load Factor : 1.20

Wind Load Factor : 1.60

49.04	-44.26	-30.29	0.00	-2,352.22	0.00	2,352.22	3,622.99	1,811.50	6,300.42	3,154.89	8.58	-1.69	0.495
50.00	-43.85	-30.22	0.00	-2,323.14	0.00	2,323.14	3,610.23	1,805.12	6,246.74	3,128.01	8.92	-1.73	0.492
51.00	-43.43	-30.14	0.00	-2,292.92	0.00	2,292.92	3,596.89	1,798.44	6,190.96	3,100.08	9.29	-1.76	0.489
52.00	-43.00	-30.06	0.00	-2,262.78	0.00	2,262.78	3,583.49	1,791.74	6,135.33	3,072.23	9.66	-1.80	0.486
53.00	-42.58	-29.98	0.00	-2,232.73	0.00	2,232.73	3,570.03	1,785.02	6,079.85	3,044.45	10.04	-1.84	0.482
54.00	-42.16	-29.90	0.00	-2,202.75	0.00	2,202.75	3,556.52	1,778.26	6,024.52	3,016.74	10.43	-1.88	0.479
55.00	-41.73	-29.82	0.00	-2,172.85	0.00	2,172.85	3,542.95	1,771.47	5,969.33	2,989.10	10.83	-1.92	0.476
56.00	-41.32	-29.73	0.00	-2,143.04	0.00	2,143.04	3,529.32	1,764.66	5,914.30	2,961.55	11.23	-1.95	0.473
57.00	-40.90	-29.65	0.00	-2,113.31	0.00	2,113.31	3,515.63	1,757.82	5,859.42	2,934.06	11.65	-1.99	0.469
58.00	-40.48	-29.57	0.00	-2,083.66	0.00	2,083.66	3,501.89	1,750.94	5,804.69	2,906.66	12.07	-2.03	0.466
59.00	-40.06	-29.48	0.00	-2,054.09	0.00	2,054.09	3,488.09	1,744.04	5,750.12	2,879.33	12.50	-2.07	0.462
60.00	-39.65	-29.40	0.00	-2,024.61	0.00	2,024.61	3,474.23	1,737.12	5,695.71	2,852.09	12.94	-2.10	0.459
61.00	-39.24	-29.31	0.00	-1,995.22	0.00	1,995.22	3,460.32	1,730.16	5,641.45	2,824.92	13.38	-2.14	0.455
62.00	-38.82	-29.22	0.00	-1,965.91	0.00	1,965.91	3,446.35	1,723.17	5,587.36	2,797.83	13.83	-2.18	0.452
63.00	-38.41	-29.13	0.00	-1,936.69	0.00	1,936.69	3,432.32	1,716.16	5,533.43	2,770.83	14.30	-2.22	0.448
64.00	-38.00	-29.03	0.00	-1,907.55	0.00	1,907.55	3,418.23	1,709.12	5,479.66	2,743.90	14.76	-2.26	0.445
65.00	-37.60	-28.87	0.00	-1,878.53	0.00	1,878.53	3,404.09	1,702.05	5,426.05	2,717.06	15.24	-2.29	0.441
66.00	-37.19	-28.71	0.00	-1,849.66	0.00	1,849.66	3,389.89	1,694.95	5,372.62	2,690.30	15.73	-2.33	0.437
67.00	-36.79	-28.56	0.00	-1,820.95	0.00	1,820.95	3,375.64	1,687.82	5,319.35	2,663.63	16.22	-2.37	0.434
68.00	-36.39	-28.40	0.00	-1,792.39	0.00	1,792.39	3,361.32	1,680.66	5,266.25	2,637.04	16.72	-2.41	0.430
69.00	-35.99	-28.24	0.00	-1,763.99	0.00	1,763.99	3,346.95	1,673.48	5,213.32	2,610.53	17.23	-2.44	0.426
70.00	-35.59	-28.08	0.00	-1,735.75	0.00	1,735.75	3,332.53	1,666.26	5,160.56	2,584.12	17.74	-2.48	0.423
71.00	-35.19	-27.93	0.00	-1,707.67	0.00	1,707.67	3,318.04	1,659.02	5,107.98	2,557.79	18.27	-2.52	0.419
72.00	-34.79	-27.77	0.00	-1,679.74	0.00	1,679.74	3,300.52	1,650.26	5,051.01	2,529.26	18.80	-2.56	0.415
73.00	-34.40	-27.61	0.00	-1,651.98	0.00	1,651.98	3,281.11	1,640.56	4,991.50	2,499.46	19.34	-2.59	0.412
74.00	-34.00	-27.45	0.00	-1,624.37	0.00	1,624.37	3,261.71	1,630.85	4,932.34	2,469.84	19.89	-2.63	0.409
75.00	-33.61	-27.29	0.00	-1,596.92	0.00	1,596.92	3,242.30	1,621.15	4,873.54	2,440.39	20.44	-2.67	0.406
76.00	-33.22	-27.13	0.00	-1,569.63	0.00	1,569.63	3,222.90	1,611.45	4,815.08	2,411.12	21.00	-2.70	0.402
77.00	-32.83	-26.97	0.00	-1,542.50	0.00	1,542.50	3,203.49	1,601.75	4,756.98	2,382.03	21.57	-2.74	0.399
78.00	-32.44	-26.81	0.00	-1,515.53	0.00	1,515.53	3,184.09	1,592.04	4,699.23	2,353.11	22.15	-2.78	0.395
79.00	-32.05	-26.64	0.00	-1,488.73	0.00	1,488.73	3,164.68	1,582.34	4,641.84	2,324.37	22.74	-2.81	0.392
80.00	-31.67	-26.48	0.00	-1,462.08	0.00	1,462.08	3,145.28	1,572.64	4,584.79	2,295.80	23.33	-2.85	0.389
81.00	-31.28	-26.32	0.00	-1,435.60	0.00	1,435.60	3,125.87	1,562.94	4,528.10	2,267.42	23.93	-2.89	0.385
82.00	-30.90	-26.16	0.00	-1,409.28	0.00	1,409.28	3,106.47	1,553.24	4,471.77	2,239.21	24.54	-2.92	0.381
83.00	-30.52	-26.00	0.00	-1,383.12	0.00	1,383.12	3,087.07	1,543.53	4,415.78	2,211.17	25.16	-2.96	0.378
84.00	-30.14	-25.84	0.00	-1,357.12	0.00	1,357.12	3,067.66	1,533.83	4,360.15	2,183.32	25.78	-3.00	0.374
85.00	-29.76	-25.68	0.00	-1,331.28	0.00	1,331.28	3,048.26	1,524.13	4,304.87	2,155.63	26.41	-3.03	0.371
86.00	-29.38	-25.52	0.00	-1,305.60	0.00	1,305.60	3,028.85	1,514.43	4,249.94	2,128.13	27.05	-3.07	0.367
87.00	-29.00	-25.38	0.00	-1,280.09	0.00	1,280.09	3,009.45	1,504.72	4,195.37	2,100.80	27.70	-3.10	0.363
87.54	-28.80	-25.30	0.00	-1,266.38	0.00	1,266.38	2,998.97	1,499.48	4,166.05	2,086.12	28.05	-3.12	0.361
88.00	-28.56	-25.18	0.00	-1,254.75	0.00	1,254.75	2,990.04	1,495.02	4,141.15	2,073.65	28.35	-3.14	0.355
89.00	-28.05	-25.01	0.00	-1,229.56	0.00	1,229.56	2,970.64	1,485.32	4,087.28	2,046.68	29.02	-3.17	0.351
90.00	-27.54	-24.84	0.00	-1,204.55	0.00	1,204.55	2,951.23	1,475.62	4,033.76	2,019.88	29.68	-3.21	0.347
91.00	-27.03	-24.67	0.00	-1,179.71	0.00	1,179.71	2,931.83	1,465.91	3,980.60	1,993.26	30.36	-3.24	0.343
92.00	-26.53	-24.52	0.00	-1,155.05	0.00	1,155.05	2,912.42	1,456.21	3,927.79	1,966.81	31.04	-3.28	0.339
92.46	-26.30	-24.44	0.00	-1,143.85	0.00	1,143.85	2,424.49	1,212.24	3,334.85	1,669.90	31.36	-3.29	0.374
93.00	-26.11	-24.32	0.00	-1,130.57	0.00	1,130.57	2,418.22	1,209.11	3,314.29	1,659.61	31.73	-3.31	0.371
94.00	-25.76	-24.16	0.00	-1,106.24	0.00	1,106.24	2,406.65	1,203.32	3,276.56	1,640.72	32.43	-3.35	0.366
95.00	-25.42	-24.00	0.00	-1,082.08	0.00	1,082.08	2,395.02	1,197.51	3,238.97	1,621.89	33.14	-3.39	0.361
96.00	-24.53	-23.24	0.00	-1,058.09	0.00	1,058.09	2,383.33	1,191.67	3,201.50	1,603.13	33.85	-3.42	0.355
97.00	-24.19	-23.07	0.00	-1,034.85	0.00	1,034.85	2,371.59	1,185.79	3,164.18	1,584.44	34.57	-3.46	0.350
98.00	-23.85	-22.91	0.00	-1,011.78	0.00	1,011.78	2,359.79	1,179.89	3,126.99	1,565.82	35.30	-3.49	0.345
99.00	-23.51	-22.74	0.00	-988.87	0.00	988.87	2,347.93	1,173.97	3,089.94	1,547.27	36.03	-3.53	0.340
100.00	-23.18	-22.58	0.00	-966.13	0.00	966.13	2,336.02	1,168.01	3,053.03	1,528.79	36.78	-3.56	0.334
101.00	-22.84	-22.42	0.00	-943.55	0.00	943.55	2,324.05	1,162.02	3,016.27	1,510.38	37.53	-3.60	0.329
102.00	-22.51	-22.25	0.00	-921.13	0.00	921.13	2,312.02	1,156.01	2,979.65	1,492.04	38.28	-3.63	0.324
103.00	-22.18	-22.10	0.00	-898.88	0.00	898.88	2,299.80	1,149.90	2,943.01	1,473.69	39.05	-3.67	0.318

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60
Wind Importance Factor : 1.15

103.75	-21.93	-22.01	0.00	-882.30	0.00	882.30	2,287.68	1,143.84	2,911.90	1,458.11	39.63	-3.69	0.315
103.75	-21.93	-22.01	0.00	-882.30	0.00	882.30	2,287.68	1,143.84	2,911.90	1,458.11	39.63	-3.69	0.615
104.00	-21.86	-21.93	0.00	-876.80	0.00	876.80	2,283.63	1,141.82	2,901.57	1,452.94	39.82	-3.70	0.613
105.00	-21.53	-21.36	0.00	-854.87	0.00	854.87	2,267.46	1,133.73	2,860.42	1,432.33	40.60	-3.77	0.607
106.00	-21.27	-21.21	0.00	-833.51	0.00	833.51	2,251.29	1,125.65	2,819.56	1,411.88	41.40	-3.83	0.600
107.00	-21.02	-21.07	0.00	-812.30	0.00	812.30	2,235.12	1,117.56	2,779.00	1,391.56	42.21	-3.90	0.593
108.00	-20.77	-20.92	0.00	-791.23	0.00	791.23	2,218.95	1,109.48	2,738.73	1,371.40	43.03	-3.96	0.587
109.00	-20.52	-20.78	0.00	-770.31	0.00	770.31	2,202.78	1,101.39	2,698.75	1,351.38	43.87	-4.03	0.580
110.00	-20.27	-20.63	0.00	-749.53	0.00	749.53	2,186.61	1,093.30	2,659.07	1,331.51	44.72	-4.09	0.573
111.00	-20.02	-20.48	0.00	-728.91	0.00	728.91	2,170.44	1,085.22	2,619.69	1,311.79	45.58	-4.16	0.565
112.00	-17.92	-18.28	0.00	-708.42	0.00	708.42	2,154.27	1,077.13	2,580.59	1,292.21	46.46	-4.22	0.557
113.00	-17.71	-18.19	0.00	-690.14	0.00	690.14	2,138.10	1,069.05	2,541.79	1,272.79	47.35	-4.28	0.551
114.00	-17.52	-18.04	0.00	-671.95	0.00	671.95	2,121.93	1,060.96	2,503.29	1,253.50	48.25	-4.35	0.545
115.00	-17.34	-17.89	0.00	-653.91	0.00	653.91	2,105.76	1,052.88	2,465.08	1,234.37	49.17	-4.41	0.538
116.00	-17.17	-17.75	0.00	-636.02	0.00	636.02	2,089.59	1,044.79	2,427.16	1,215.38	50.10	-4.47	0.532
117.00	-16.99	-17.60	0.00	-618.27	0.00	618.27	2,073.42	1,036.71	2,389.54	1,196.54	51.04	-4.54	0.525
118.00	-16.81	-17.46	0.00	-600.67	0.00	600.67	2,057.25	1,028.62	2,352.21	1,177.85	52.00	-4.60	0.518
119.00	-16.64	-17.31	0.00	-583.21	0.00	583.21	2,041.07	1,020.54	2,315.17	1,159.31	52.97	-4.66	0.512
120.00	-16.46	-17.17	0.00	-565.90	0.00	565.90	2,024.90	1,012.45	2,278.43	1,140.91	53.95	-4.72	0.504
121.00	-16.29	-17.02	0.00	-548.73	0.00	548.73	2,008.73	1,004.37	2,241.98	1,122.66	54.94	-4.78	0.497
122.00	-16.12	-16.88	0.00	-531.71	0.00	531.71	1,992.56	996.28	2,205.83	1,104.55	55.95	-4.84	0.490
123.00	-15.95	-16.73	0.00	-514.83	0.00	514.83	1,976.39	988.20	2,169.97	1,086.60	56.97	-4.90	0.482
124.00	-15.78	-16.59	0.00	-498.10	0.00	498.10	1,960.22	980.11	2,134.40	1,068.79	58.00	-4.96	0.474
125.00	-13.24	-14.30	0.00	-481.51	0.00	481.51	1,944.05	972.03	2,099.13	1,051.12	59.05	-5.02	0.465
126.00	-13.08	-14.23	0.00	-467.21	0.00	467.21	1,927.88	963.94	2,064.15	1,033.61	60.10	-5.08	0.459
127.00	-12.92	-14.16	0.00	-452.98	0.00	452.98	1,911.71	955.86	2,029.46	1,016.24	61.17	-5.14	0.453
128.00	-12.76	-14.09	0.00	-438.82	0.00	438.82	1,895.54	947.77	1,995.07	999.02	62.25	-5.20	0.446
129.00	-12.60	-14.02	0.00	-424.73	0.00	424.73	1,879.37	939.68	1,960.98	981.95	63.35	-5.25	0.439
130.00	-12.44	-13.95	0.00	-410.71	0.00	410.71	1,863.20	931.60	1,927.17	965.02	64.45	-5.31	0.432
131.00	-12.28	-13.88	0.00	-396.76	0.00	396.76	1,847.03	923.51	1,893.66	948.24	65.57	-5.37	0.425
132.00	-12.13	-13.83	0.00	-382.88	0.00	382.88	1,830.86	915.43	1,860.45	931.61	66.70	-5.42	0.418
132.12	-12.11	-13.80	0.00	-381.23	0.00	381.23	1,828.92	914.46	1,856.49	929.63	66.83	-5.43	0.417
133.00	-11.91	-13.73	0.00	-369.08	0.00	369.08	1,814.69	907.34	1,827.53	915.12	67.84	-5.48	0.410
134.00	-11.70	-13.65	0.00	-355.35	0.00	355.35	1,798.52	899.26	1,794.90	898.78	68.99	-5.53	0.402
135.00	-8.35	-10.49	0.00	-341.69	0.00	341.69	1,782.35	891.17	1,762.57	882.59	70.15	-5.59	0.392
135.87	-8.17	-10.44	0.00	-332.57	0.00	332.57	999.39	499.70	1,006.16	503.83	71.17	-5.64	0.669
136.00	-8.15	-10.41	0.00	-331.21	0.00	331.21	998.64	499.32	1,004.22	502.86	71.33	-5.64	0.667
137.00	-8.04	-10.34	0.00	-320.81	0.00	320.81	992.83	496.42	989.37	495.42	72.52	-5.73	0.656
138.00	-7.93	-10.27	0.00	-310.47	0.00	310.47	986.97	493.49	974.56	488.00	73.72	-5.81	0.645
139.00	-7.82	-10.21	0.00	-300.19	0.00	300.19	981.05	490.53	959.80	480.61	74.95	-5.89	0.633
140.00	-7.04	-8.87	0.00	-283.88	0.00	283.88	975.08	487.54	945.09	473.25	76.19	-5.98	0.607
141.00	-6.94	-8.80	0.00	-275.01	0.00	275.01	969.05	484.52	930.44	465.91	77.45	-6.06	0.598
142.00	-6.84	-8.74	0.00	-266.21	0.00	266.21	962.96	481.48	915.84	458.60	78.72	-6.14	0.588
143.00	-6.74	-8.67	0.00	-257.47	0.00	257.47	956.81	478.41	901.30	451.32	80.02	-6.22	0.578
144.00	-6.65	-8.60	0.00	-248.80	0.00	248.80	950.61	475.30	886.82	444.07	81.32	-6.30	0.568
145.00	-6.55	-8.54	0.00	-240.20	0.00	240.20	944.35	472.17	872.40	436.85	82.65	-6.38	0.557
146.00	-6.45	-8.47	0.00	-231.66	0.00	231.66	938.03	469.01	858.03	429.66	83.99	-6.45	0.546
147.00	-6.36	-8.40	0.00	-223.20	0.00	223.20	931.66	465.83	843.74	422.50	85.35	-6.53	0.535
148.00	-6.26	-8.33	0.00	-214.80	0.00	214.80	925.22	462.61	829.51	415.37	86.72	-6.61	0.524
149.00	-6.17	-8.27	0.00	-206.46	0.00	206.46	918.73	459.37	815.34	408.28	88.11	-6.69	0.513
150.00	-5.91	-7.98	0.00	-198.20	0.00	198.20	912.19	456.09	801.24	401.22	89.52	-6.76	0.501
151.00	-5.82	-7.91	0.00	-190.22	0.00	190.22	905.59	452.79	787.21	394.19	90.94	-6.84	0.489
152.00	-5.73	-7.84	0.00	-182.32	0.00	182.32	898.93	449.46	773.25	387.20	92.38	-6.91	0.478
153.00	-5.64	-7.77	0.00	-174.48	0.00	174.48	892.21	446.10	759.37	380.25	93.83	-6.98	0.465
154.00	-5.55	-7.71	0.00	-166.70	0.00	166.70	885.44	442.72	745.56	373.33	95.30	-7.06	0.453
155.00	-5.47	-7.64	0.00	-159.00	0.00	159.00	878.60	439.30	731.82	366.45	96.78	-7.13	0.440
156.00	-5.38	-7.57	0.00	-151.36	0.00	151.36	871.72	435.86	718.16	359.61	98.27	-7.20	0.427

Load Case: 1.2D + 1.6W 90 mph with No Ice 34 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60
Wind Importance Factor : 1.15

157.00	-5.30	-7.50	0.00	-143.79	0.00	143.79	864.77	432.39	704.58	352.81	99.79	-7.27	0.414
158.00	-5.21	-7.44	0.00	-136.29	0.00	136.29	857.77	428.88	691.08	346.05	101.31	-7.34	0.400
159.00	-5.13	-7.37	0.00	-128.85	0.00	128.85	850.71	425.35	677.66	339.34	102.85	-7.40	0.386
160.00	-5.04	-7.29	0.00	-121.48	0.00	121.48	843.59	421.80	664.33	332.66	104.40	-7.47	0.371
161.00	-4.97	-7.18	0.00	-114.19	0.00	114.19	836.42	418.21	651.08	326.02	105.97	-7.53	0.356
162.00	-4.89	-7.07	0.00	-107.01	0.00	107.01	829.19	414.59	637.92	319.43	107.55	-7.59	0.341
163.00	-4.82	-6.96	0.00	-99.94	0.00	99.94	819.85	409.92	623.28	312.10	109.14	-7.65	0.326
164.00	-4.74	-6.86	0.00	-92.98	0.00	92.98	810.15	405.07	608.54	304.72	110.75	-7.71	0.311
165.00	-4.67	-6.75	0.00	-86.12	0.00	86.12	800.44	400.22	593.98	297.43	112.36	-7.76	0.296
166.00	-4.60	-6.64	0.00	-79.38	0.00	79.38	790.74	395.37	579.60	290.23	113.99	-7.81	0.280
167.00	-3.23	-4.73	0.00	-72.73	0.00	72.73	781.04	390.52	565.39	283.11	115.63	-7.86	0.261
168.00	-3.17	-4.68	0.00	-68.00	0.00	68.00	771.34	385.67	551.35	276.09	117.27	-7.91	0.251
169.00	-3.10	-4.63	0.00	-63.32	0.00	63.32	761.63	380.82	537.50	269.15	118.93	-7.96	0.239
170.00	-3.04	-4.58	0.00	-58.68	0.00	58.68	751.93	375.97	523.82	262.30	120.60	-8.01	0.228
171.00	-2.98	-4.53	0.00	-54.10	0.00	54.10	742.23	371.11	510.32	255.54	122.27	-8.05	0.216
172.00	-2.92	-4.49	0.00	-49.57	0.00	49.57	732.53	366.26	496.99	248.86	123.96	-8.09	0.203
173.00	-2.86	-4.44	0.00	-45.08	0.00	45.08	722.82	361.41	483.84	242.28	125.65	-8.13	0.190
174.00	-2.80	-4.39	0.00	-40.64	0.00	40.64	713.12	356.56	470.86	235.78	127.35	-8.17	0.176
175.00	-2.74	-4.34	0.00	-36.26	0.00	36.26	703.42	351.71	458.07	229.37	129.06	-8.20	0.162
176.00	-2.68	-4.29	0.00	-31.91	0.00	31.91	693.72	346.86	445.44	223.05	130.78	-8.23	0.147
177.00	-2.62	-4.25	0.00	-27.62	0.00	27.62	684.02	342.01	433.00	216.82	132.50	-8.26	0.131
178.00	-2.57	-4.20	0.00	-23.37	0.00	23.37	674.31	337.16	420.73	210.68	134.23	-8.29	0.115
179.00	-2.51	-4.15	0.00	-19.17	0.00	19.17	664.61	332.31	408.64	204.62	135.96	-8.31	0.098
180.00	0.00	-3.75	0.00	-15.02	0.00	15.02	654.91	327.45	396.72	198.65	137.70	-8.33	0.076

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:31:47 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W 90 mph with No Ice (Reduced DL) 34 Iterations

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

Wind Importance Factor : 1.15

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		40.4	0.0					0.0	0.0	40.4	0.0	0.0	0.0
1.00		80.6	222.0					0.0	153.6	80.6	375.6	0.0	0.0
2.00		80.3	221.1					0.0	153.6	80.3	374.6	0.0	0.0
3.00		80.0	220.1					0.0	153.6	80.0	373.7	0.0	0.0
4.00		79.6	219.2					0.0	153.6	79.6	372.8	0.0	0.0
5.00		79.3	218.3					0.0	153.6	79.3	371.8	0.0	0.0
6.00		79.0	217.3					0.0	153.6	79.0	370.9	0.0	0.0
7.00		78.6	216.4					0.0	153.6	78.6	370.0	0.0	0.0
8.00		78.3	215.5					0.0	153.6	78.3	369.0	0.0	0.0
9.00		77.9	214.5					0.0	153.6	77.9	368.1	0.0	0.0
10.00		77.6	213.6					0.0	153.6	77.6	367.2	0.0	0.0
11.00		77.3	212.7					0.0	153.6	77.3	366.2	0.0	0.0
12.00		76.9	211.7					0.0	153.6	76.9	365.3	0.0	0.0
13.00		76.6	210.8					0.0	153.6	76.6	364.4	0.0	0.0
14.00		76.3	209.9					0.0	153.6	76.3	363.4	0.0	0.0
15.00		75.9	208.9					0.0	153.6	75.9	362.5	0.0	0.0
16.00		75.6	208.0					0.0	153.6	75.6	361.6	0.0	0.0
17.00		75.2	207.1					0.0	153.6	75.2	360.6	0.0	0.0
18.00		74.9	206.1					0.0	153.6	74.9	359.7	0.0	0.0
19.00		74.6	205.2					0.0	153.6	74.6	358.8	0.0	0.0
20.00		74.2	204.3					0.0	153.6	74.2	357.8	0.0	0.0
21.00		73.9	203.3					0.0	153.6	73.9	356.9	0.0	0.0
22.00		73.6	202.4					0.0	153.6	73.6	356.0	0.0	0.0
23.00		73.2	201.5					0.0	153.6	73.2	355.0	0.0	0.0
24.00		72.9	200.5					0.0	153.6	72.9	354.1	0.0	0.0
25.00		72.6	199.6					0.0	153.6	72.6	353.2	0.0	0.0
26.00		72.2	198.7					0.0	153.6	72.2	352.2	0.0	0.0
27.00		71.9	197.7					0.0	153.6	71.9	351.3	0.0	0.0
28.00		71.5	196.8					0.0	153.6	71.5	350.4	0.0	0.0
29.00		71.2	195.9					0.0	153.6	71.2	349.4	0.0	0.0
30.00	Appertunance(s)	71.1	194.9	27.9	0.0	0.0	9.0	0.0	153.6	99.0	357.5	0.0	0.0
31.00		71.3	194.0					0.0	153.3	71.3	347.3	0.0	0.0
32.00		71.6	193.1					0.0	153.3	71.6	346.3	0.0	0.0
33.00		71.8	192.1					0.0	153.3	71.8	345.4	0.0	0.0
34.00		72.1	191.2					0.0	153.3	72.1	344.5	0.0	0.0
35.00		72.4	190.3					0.0	153.3	72.4	343.5	0.0	0.0
36.00		72.6	189.3					0.0	153.3	72.6	342.6	0.0	0.0
37.00		72.8	188.4					0.0	153.3	72.8	341.7	0.0	0.0
38.00		73.0	187.5					0.0	153.3	73.0	340.7	0.0	0.0
39.00		73.2	186.5					0.0	153.3	73.2	339.8	0.0	0.0
40.00		73.3	185.6					0.0	153.3	73.3	338.9	0.0	0.0
41.00		73.5	184.7					0.0	153.3	73.5	337.9	0.0	0.0
42.00		72.0	183.7					0.0	153.3	72.0	337.0	0.0	0.0
42.96	Bot - Section 2	36.9	174.9					0.0	146.6	36.9	321.5	0.0	0.0
43.00		39.2	14.8					0.0	6.7	39.2	21.5	0.0	0.0
44.00		75.2	340.7					0.0	153.3	75.2	494.0	0.0	0.0
45.00		75.3	339.0					0.0	153.3	75.3	492.3	0.0	0.0
46.00		75.3	337.2					0.0	153.3	75.3	490.5	0.0	0.0

Load Case: 0.9D + 1.6W 90 mph with No Ice (Reduced DL) 34 Iterations

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

Wind Importance Factor : 1.15

47.00		75.4	335.5					0.0	153.3	75.4	488.8	0.0	0.0
48.00		75.5	333.8					0.0	153.3	75.5	487.1	0.0	0.0
49.00		39.3	332.0					0.0	153.3	39.3	485.3	0.0	0.0
49.04	Top - Section 1	37.8	13.2					0.0	6.1	37.8	19.3	0.0	0.0
50.00		74.1	147.9					0.0	147.2	74.1	295.0	0.0	0.0
51.00		75.6	153.2					0.0	153.3	75.6	306.5	0.0	0.0
52.00		75.7	152.4					0.0	153.3	75.7	305.7	0.0	0.0
53.00		75.7	151.6					0.0	153.3	75.7	304.9	0.0	0.0
54.00		75.7	150.8					0.0	153.3	75.7	304.1	0.0	0.0
55.00		75.7	150.0					0.0	153.3	75.7	303.3	0.0	0.0
56.00		75.7	149.2					0.0	153.3	75.7	302.5	0.0	0.0
57.00		75.7	148.4					0.0	153.3	75.7	301.7	0.0	0.0
58.00		75.6	147.6					0.0	153.3	75.6	300.9	0.0	0.0
59.00		75.6	146.8					0.0	153.3	75.6	300.1	0.0	0.0
60.00		75.5	146.0					0.0	153.3	75.5	299.3	0.0	0.0
61.00		75.5	145.2					0.0	153.3	75.5	298.5	0.0	0.0
62.00		75.4	144.4					0.0	153.3	75.4	297.7	0.0	0.0
63.00		75.3	143.6					0.0	153.3	75.3	296.9	0.0	0.0
64.00		107.1	142.8					0.0	153.3	107.1	296.1	0.0	0.0
65.00		138.8	142.0					26.5	153.3	165.3	295.3	0.0	0.0
66.00		138.6	141.2					26.5	153.3	165.2	294.5	0.0	0.0
67.00		138.4	140.4					26.6	153.3	165.1	293.7	0.0	0.0
68.00		138.2	139.6					26.7	153.3	164.9	292.9	0.0	0.0
69.00		138.0	138.8					26.8	153.3	164.8	292.1	0.0	0.0
70.00		137.8	138.0					26.9	153.3	164.7	291.3	0.0	0.0
71.00		137.6	137.2					26.9	153.3	164.5	290.5	0.0	0.0
72.00		137.3	136.4					27.0	153.3	164.3	289.7	0.0	0.0
73.00		137.1	135.7					27.1	153.3	164.2	288.9	0.0	0.0
74.00		136.8	134.9					27.2	153.3	164.0	288.1	0.0	0.0
75.00		136.5	134.1					27.3	153.3	163.8	287.3	0.0	0.0
76.00		136.2	133.3					27.3	153.3	163.5	286.5	0.0	0.0
77.00		135.9	132.5					27.4	153.3	163.3	285.7	0.0	0.0
78.00		135.6	131.7					27.5	153.3	163.1	284.9	0.0	0.0
79.00	Appertunance(s)	135.3	130.9	3.3	0.0	0.0	0.5	27.6	153.3	166.1	284.7	0.0	0.0
80.00		134.9	130.1					27.6	153.1	162.6	283.2	0.0	0.0
81.00		134.6	129.3					27.7	153.1	162.3	282.4	0.0	0.0
82.00		134.2	128.5					27.8	153.1	162.0	281.6	0.0	0.0
83.00		133.9	127.7					27.8	153.1	161.7	280.8	0.0	0.0
84.00		133.5	126.9					27.9	153.1	161.4	280.0	0.0	0.0
85.00		133.1	126.1					28.0	153.1	161.1	279.2	0.0	0.0
86.00		132.7	125.3					28.0	153.1	160.7	278.4	0.0	0.0
87.00		101.9	124.5					28.1	153.1	130.0	277.6	0.0	0.0
87.54	Bot - Section 3	66.6	66.9					15.2	82.7	81.8	149.5	0.0	0.0
88.00		98.0	105.1					13.0	70.5	110.9	175.5	0.0	0.0
89.00		133.9	227.3					28.2	153.1	162.1	380.5	0.0	0.0
90.00		133.5	225.9					28.3	153.1	161.8	379.0	0.0	0.0
91.00		133.0	224.4					28.4	153.1	161.4	377.5	0.0	0.0
92.00		96.6	222.9					28.4	153.1	125.1	376.1	0.0	0.0
92.46	Top - Section 2	66.2	101.3					13.0	69.9	79.2	171.2	0.0	0.0
93.00		101.9	55.2					15.5	83.2	117.4	138.5	0.0	0.0
94.00		131.7	101.1					28.6	153.1	160.2	254.3	0.0	0.0
95.00		131.2	100.5					28.6	153.1	159.8	253.6	0.0	0.0
96.00	Appertunance(s)	130.7	99.8	565.1	0.0	0.0	437.9	28.7	153.1	724.6	690.9	0.0	0.0
97.00		130.2	99.1					28.8	152.4	159.0	251.5	0.0	0.0
98.00		129.8	98.5					28.8	152.4	158.6	250.9	0.0	0.0
99.00		129.3	97.8					28.9	152.4	158.1	250.2	0.0	0.0
100.00		128.8	97.1					28.9	152.4	157.7	249.5	0.0	0.0

Load Case: 0.9D + 1.6W 90 mph with No Ice (Reduced DL) 34 Iterations

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

Wind Importance Factor : 1.15

101.00		128.2	96.5					29.0	152.4	157.2	248.9	0.0	0.0
102.00		127.7	95.8					29.1	152.4	156.8	248.2	0.0	0.0
103.00		111.3	95.1					29.1	152.4	140.5	247.5	0.0	0.0
103.75	Reinf. Top	63.5	70.9					21.9	114.3	85.3	185.2	0.0	0.0
104.00		79.0	23.6					7.3	23.1	86.3	46.6	0.0	0.0
105.00	Appertunance(s)	126.1	93.8	420.6	0.0	0.0	71.3	29.2	92.3	575.9	257.4	0.0	0.0
106.00		125.6	93.1					29.3	87.9	154.9	181.0	0.0	0.0
107.00		125.0	92.5					29.4	87.9	154.4	180.3	0.0	0.0
108.00		124.4	91.8					29.4	87.9	153.8	179.7	0.0	0.0
109.00		123.9	91.1					29.5	87.9	153.3	179.0	0.0	0.0
110.00		123.3	90.5					29.5	87.9	152.8	178.3	0.0	0.0
111.00		122.7	89.8					29.6	87.9	152.3	177.7	0.0	0.0
112.00	Appertunance(s)	94.2	89.1	1,926.9	0.0	0.0	1,501.2	29.6	87.9	2,050.7	1,678.2	0.0	0.0
113.00		93.6	88.5					0.0	61.7	93.6	150.2	0.0	0.0
114.00		120.9	87.8					32.1	42.4	153.0	130.2	0.0	0.0
115.00		120.3	87.1					32.2	42.4	152.4	129.5	0.0	0.0
116.00		119.7	86.5					32.2	42.4	151.9	128.8	0.0	0.0
117.00		119.0	85.8					32.2	42.4	151.3	128.2	0.0	0.0
118.00		118.4	85.1					32.3	42.4	150.7	127.5	0.0	0.0
119.00		117.8	84.5					32.3	42.4	150.1	126.8	0.0	0.0
120.00		117.1	83.8					32.4	42.4	149.5	126.2	0.0	0.0
121.00		116.5	83.1					32.4	42.4	148.9	125.5	0.0	0.0
122.00		115.8	82.5					32.4	42.4	148.3	124.8	0.0	0.0
123.00		115.2	81.8					32.5	42.4	147.6	124.2	0.0	0.0
124.00		114.5	81.1					32.5	42.4	147.0	123.5	0.0	0.0
125.00	Appertunance(s)	87.8	80.5	1,948.6	0.0	0.0	1,913.0	32.5	42.4	2,069.0	2,035.9	0.0	0.0
126.00		61.3	79.8					0.0	36.8	61.3	116.6	0.0	0.0
127.00		60.9	79.1					0.0	36.8	60.9	115.9	0.0	0.0
128.00		60.5	78.5					0.0	36.8	60.5	115.2	0.0	0.0
129.00		60.2	77.8					0.0	36.8	60.2	114.6	0.0	0.0
130.00		59.8	77.1					0.0	36.8	59.8	113.9	0.0	0.0
131.00		59.4	76.5					0.0	36.8	59.4	113.2	0.0	0.0
132.00		33.1	75.8					0.0	36.8	33.1	112.6	0.0	0.0
132.12	Bot - Section 4	29.8	9.0					0.0	4.4	29.8	13.4	0.0	0.0
133.00		55.9	106.6					0.0	32.4	55.9	138.9	0.0	0.0
134.00		59.1	120.1					0.0	36.8	59.1	156.8	0.0	0.0
135.00	Appertunance(s)	54.9	119.0	2,769.0	0.0	0.0	2,571.4	0.0	36.8	2,824.0	2,727.1	0.0	0.0
135.87	Top - Section 3	29.3	102.6					0.0	29.1	29.3	131.7	0.0	0.0
136.00		32.9	5.8					0.0	4.4	32.9	10.2	0.0	0.0
137.00		57.9	44.4					0.0	33.4	57.9	77.8	0.0	0.0
138.00		57.5	44.0					0.0	33.4	57.5	77.4	0.0	0.0
139.00		57.1	43.6					0.0	33.4	57.1	77.0	0.0	0.0
140.00	Appertunance(s)	56.7	43.2	1,191.8	0.0	6,104.3	600.3	0.0	33.4	1,248.5	676.9	0.0	0.0
141.00		56.3	42.8					0.0	28.4	56.3	71.2	0.0	0.0
142.00		55.9	42.4					0.0	28.4	55.9	70.8	0.0	0.0
143.00		55.5	42.0					0.0	28.4	55.5	70.4	0.0	0.0
144.00		55.1	41.6					0.0	28.4	55.1	70.0	0.0	0.0
145.00		54.7	41.2					0.0	28.4	54.7	69.6	0.0	0.0
146.00		54.2	40.8					0.0	28.4	54.2	69.2	0.0	0.0
147.00		53.8	40.4					0.0	28.4	53.8	68.8	0.0	0.0
148.00		53.4	40.0					0.0	28.4	53.4	68.4	0.0	0.0
149.00		53.0	39.6					0.0	28.4	53.0	68.0	0.0	0.0
150.00	Appertunance(s)	52.5	39.2	202.6	0.0	0.0	142.5	0.0	28.4	255.1	210.1	0.0	0.0
151.00		52.1	38.8					0.0	27.7	52.1	66.5	0.0	0.0
152.00		51.6	38.4					0.0	27.7	51.6	66.1	0.0	0.0
153.00		51.2	38.0					0.0	27.7	51.2	65.7	0.0	0.0
154.00		50.8	37.6					0.0	27.7	50.8	65.3	0.0	0.0

Load Case: 0.9D + 1.6W 90 mph with No Ice (Reduced DL) 34 Iterations

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

Wind Importance Factor : 1.15

155.00		50.3	37.2					0.0	27.7	50.3	64.9	0.0	0.0
156.00		49.9	36.8					0.0	27.7	49.9	64.5	0.0	0.0
157.00		49.4	36.4					0.0	27.7	49.4	64.1	0.0	0.0
158.00		49.0	36.0					0.0	27.7	49.0	63.7	0.0	0.0
159.00		48.5	35.6					0.0	27.7	48.5	63.3	0.0	0.0
160.00		68.3	35.2					0.0	27.7	68.3	62.9	0.0	0.0
161.00		87.9	34.8					16.9	27.7	104.7	62.5	0.0	0.0
162.00		87.0	34.4					16.9	27.7	103.9	62.1	0.0	0.0
163.00		86.2	34.0					16.9	27.7	103.1	61.7	0.0	0.0
164.00		85.3	33.6					16.9	27.7	102.2	61.3	0.0	0.0
165.00		84.4	33.2					16.9	27.7	101.4	60.9	0.0	0.0
166.00		83.6	32.8					16.9	27.7	100.5	60.5	0.0	0.0
167.00	Appertunance(s)	63.8	32.4	1,626.6	0.0	0.0	1,148.8	17.0	27.7	1,707.4	1,208.9	0.0	0.0
168.00		44.3	32.0					0.0	17.9	44.3	49.9	0.0	0.0
169.00		43.8	31.6					0.0	17.9	43.8	49.5	0.0	0.0
170.00		43.4	31.2					0.0	17.9	43.4	49.1	0.0	0.0
171.00		42.9	30.8					0.0	17.9	42.9	48.7	0.0	0.0
172.00		42.4	30.4					0.0	17.9	42.4	48.3	0.0	0.0
173.00		41.9	30.0					0.0	17.9	41.9	47.9	0.0	0.0
174.00		41.4	29.6					0.0	17.9	41.4	47.5	0.0	0.0
175.00		40.9	29.2					0.0	17.9	40.9	47.1	0.0	0.0
176.00		40.4	28.8					0.0	17.9	40.4	46.7	0.0	0.0
177.00		39.9	28.4					0.0	17.9	39.9	46.3	0.0	0.0
178.00		39.5	28.0					0.0	17.9	39.5	45.9	0.0	0.0
179.00		39.0	27.6					0.0	17.9	39.0	45.5	0.0	0.0
180.00	Appertunance(s)	19.4	27.2	3,727.0	0.0	15,021.1	2,269.2	0.0	17.9	3,746.4	2,314.3	0.0	0.0
								Totals:		31,983.1	52,134.6	0.00	0.00

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:32:06 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W 90 mph with No Ice (Reduced DL) 34 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.15

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	-52.12	-31.95	0.00	-3,769.71	0.00	3,769.71	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.513
1.00	-51.73	-31.90	0.00	-3,737.75	0.00	3,737.75	5,115.23	2,557.61	10,943.3	5,479.82	0.00	-0.03	0.512
2.00	-51.34	-31.85	0.00	-3,705.85	0.00	3,705.85	5,100.42	2,550.21	10,865.3	5,440.75	0.01	-0.06	0.510
3.00	-50.95	-31.80	0.00	-3,674.00	0.00	3,674.00	5,085.56	2,542.78	10,787.4	5,401.75	0.03	-0.09	0.509
4.00	-50.56	-31.75	0.00	-3,642.21	0.00	3,642.21	5,070.64	2,535.32	10,709.7	5,362.83	0.05	-0.13	0.507
5.00	-50.17	-31.69	0.00	-3,610.46	0.00	3,610.46	5,055.67	2,527.83	10,632.1	5,323.99	0.08	-0.16	0.506
6.00	-49.78	-31.64	0.00	-3,578.77	0.00	3,578.77	5,040.63	2,520.32	10,554.7	5,285.22	0.12	-0.19	0.505
7.00	-49.39	-31.59	0.00	-3,547.13	0.00	3,547.13	5,025.54	2,512.77	10,477.4	5,246.53	0.16	-0.22	0.503
8.00	-49.01	-31.54	0.00	-3,515.54	0.00	3,515.54	5,010.40	2,505.20	10,400.3	5,207.92	0.21	-0.25	0.501
9.00	-48.62	-31.48	0.00	-3,484.01	0.00	3,484.01	4,995.19	2,497.60	10,323.4	5,169.39	0.27	-0.29	0.500
10.00	-48.24	-31.43	0.00	-3,452.52	0.00	3,452.52	4,979.93	2,489.97	10,246.6	5,130.93	0.34	-0.32	0.498
11.00	-47.85	-31.38	0.00	-3,421.09	0.00	3,421.09	4,964.61	2,482.31	10,170.0	5,092.56	0.41	-0.35	0.497
12.00	-47.47	-31.33	0.00	-3,389.71	0.00	3,389.71	4,949.24	2,474.62	10,093.5	5,054.27	0.48	-0.38	0.495
13.00	-47.09	-31.27	0.00	-3,358.39	0.00	3,358.39	4,933.81	2,466.90	10,017.2	5,016.06	0.57	-0.42	0.494
14.00	-46.71	-31.22	0.00	-3,327.12	0.00	3,327.12	4,918.32	2,459.16	9,941.08	4,977.93	0.66	-0.45	0.492
15.00	-46.33	-31.17	0.00	-3,295.90	0.00	3,295.90	4,902.77	2,451.39	9,865.10	4,939.88	0.76	-0.48	0.490
16.00	-45.95	-31.12	0.00	-3,264.73	0.00	3,264.73	4,887.17	2,443.58	9,789.30	4,901.92	0.86	-0.51	0.489
17.00	-45.57	-31.06	0.00	-3,233.61	0.00	3,233.61	4,871.51	2,435.75	9,713.66	4,864.05	0.97	-0.55	0.487
18.00	-45.20	-31.01	0.00	-3,202.55	0.00	3,202.55	4,855.79	2,427.89	9,638.20	4,826.26	1.09	-0.58	0.485
19.00	-44.82	-30.96	0.00	-3,171.54	0.00	3,171.54	4,840.02	2,420.01	9,562.90	4,788.56	1.21	-0.61	0.484
20.00	-44.45	-30.91	0.00	-3,140.58	0.00	3,140.58	4,824.18	2,412.09	9,487.79	4,750.94	1.35	-0.64	0.482
21.00	-44.07	-30.85	0.00	-3,109.67	0.00	3,109.67	4,808.29	2,404.15	9,412.84	4,713.42	1.49	-0.68	0.480
22.00	-43.70	-30.80	0.00	-3,078.82	0.00	3,078.82	4,792.35	2,396.17	9,338.08	4,675.98	1.63	-0.71	0.478
23.00	-43.33	-30.75	0.00	-3,048.02	0.00	3,048.02	4,776.35	2,388.17	9,263.49	4,638.63	1.78	-0.74	0.477
24.00	-42.96	-30.70	0.00	-3,017.27	0.00	3,017.27	4,760.29	2,380.14	9,189.09	4,601.37	1.94	-0.78	0.475
25.00	-42.59	-30.64	0.00	-2,986.58	0.00	2,986.58	4,744.17	2,372.08	9,114.87	4,564.21	2.11	-0.81	0.473
26.00	-42.22	-30.59	0.00	-2,955.93	0.00	2,955.93	4,728.00	2,364.00	9,040.83	4,527.13	2.28	-0.84	0.471
27.00	-41.85	-30.54	0.00	-2,925.34	0.00	2,925.34	4,711.76	2,355.88	8,966.98	4,490.15	2.46	-0.88	0.469
28.00	-41.48	-30.49	0.00	-2,894.81	0.00	2,894.81	4,695.48	2,347.74	8,893.31	4,453.26	2.65	-0.91	0.467
29.00	-41.12	-30.43	0.00	-2,864.32	0.00	2,864.32	4,679.13	2,339.57	8,819.83	4,416.47	2.85	-0.94	0.466
30.00	-40.74	-30.35	0.00	-2,833.89	0.00	2,833.89	4,662.73	2,331.36	8,746.54	4,379.77	3.05	-0.98	0.464
31.00	-40.38	-30.30	0.00	-2,803.54	0.00	2,803.54	4,646.27	2,323.14	8,673.45	4,343.17	3.26	-1.01	0.462
32.00	-40.02	-30.24	0.00	-2,773.24	0.00	2,773.24	4,629.75	2,314.88	8,600.55	4,306.67	3.47	-1.05	0.460
33.00	-39.65	-30.19	0.00	-2,743.00	0.00	2,743.00	4,613.18	2,306.59	8,527.84	4,270.26	3.70	-1.08	0.458
34.00	-39.29	-30.13	0.00	-2,712.81	0.00	2,712.81	4,596.55	2,298.27	8,455.33	4,233.95	3.93	-1.11	0.456
35.00	-38.93	-30.08	0.00	-2,682.67	0.00	2,682.67	4,579.86	2,289.93	8,383.01	4,197.74	4.16	-1.15	0.454
36.00	-38.57	-30.02	0.00	-2,652.60	0.00	2,652.60	4,563.12	2,281.56	8,310.90	4,161.63	4.41	-1.18	0.452
37.00	-38.22	-29.96	0.00	-2,622.58	0.00	2,622.58	4,546.32	2,273.16	8,238.99	4,125.62	4.66	-1.22	0.450
38.00	-37.86	-29.91	0.00	-2,592.61	0.00	2,592.61	4,529.46	2,264.73	8,167.27	4,089.71	4.92	-1.25	0.447
39.00	-37.50	-29.85	0.00	-2,562.71	0.00	2,562.71	4,512.54	2,256.27	8,095.77	4,053.90	5.18	-1.28	0.445
40.00	-37.15	-29.79	0.00	-2,532.86	0.00	2,532.86	4,491.22	2,245.61	8,016.71	4,014.31	5.46	-1.32	0.444
41.00	-36.79	-29.73	0.00	-2,503.07	0.00	2,503.07	4,468.58	2,234.29	7,935.69	3,973.74	5.74	-1.35	0.442
42.00	-36.44	-29.67	0.00	-2,473.34	0.00	2,473.34	4,445.95	2,222.97	7,855.09	3,933.38	6.02	-1.39	0.440
42.96	-36.11	-29.64	0.00	-2,444.96	0.00	2,444.96	4,424.29	2,212.15	7,778.37	3,894.97	6.31	-1.42	0.439
43.00	-36.08	-29.61	0.00	-2,443.67	0.00	2,443.67	4,423.31	2,211.65	7,774.90	3,893.23	6.32	-1.42	0.435
44.00	-35.57	-29.54	0.00	-2,414.06	0.00	2,414.06	4,400.67	2,200.33	7,695.11	3,853.28	6.62	-1.46	0.433
45.00	-35.07	-29.48	0.00	-2,384.52	0.00	2,384.52	4,378.03	2,189.01	7,615.75	3,813.53	6.93	-1.49	0.431
46.00	-34.56	-29.41	0.00	-2,355.05	0.00	2,355.05	4,355.39	2,177.70	7,536.79	3,773.99	7.25	-1.52	0.429
47.00	-34.06	-29.34	0.00	-2,325.64	0.00	2,325.64	4,332.75	2,166.38	7,458.24	3,734.66	7.57	-1.56	0.427
48.00	-33.55	-29.27	0.00	-2,296.30	0.00	2,296.30	4,310.11	2,155.06	7,380.10	3,695.54	7.90	-1.59	0.425
49.00	-33.06	-29.23	0.00	-2,267.03	0.00	2,267.03	4,287.47	2,143.74	7,302.38	3,656.62	8.24	-1.63	0.423

Load Case: 0.9D + 1.6W — 90 mph with No Ice (Reduced DL) — 34 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.15

49.04	-33.03	-29.20	0.00	-2,265.86	0.00	2,265.86	3,622.99	1,811.50	6,300.42	3,154.89	8.25	-1.63	0.475
50.00	-32.72	-29.14	0.00	-2,237.83	0.00	2,237.83	3,610.23	1,805.12	6,246.74	3,128.01	8.58	-1.66	0.472
51.00	-32.40	-29.07	0.00	-2,208.69	0.00	2,208.69	3,596.89	1,798.44	6,190.96	3,100.08	8.93	-1.70	0.469
52.00	-32.08	-29.01	0.00	-2,179.62	0.00	2,179.62	3,583.49	1,791.74	6,135.33	3,072.23	9.29	-1.73	0.466
53.00	-31.76	-28.94	0.00	-2,150.61	0.00	2,150.61	3,570.03	1,785.02	6,079.85	3,044.45	9.66	-1.77	0.463
54.00	-31.44	-28.88	0.00	-2,121.67	0.00	2,121.67	3,556.52	1,778.26	6,024.52	3,016.74	10.04	-1.81	0.460
55.00	-31.12	-28.81	0.00	-2,092.79	0.00	2,092.79	3,542.95	1,771.47	5,969.33	2,989.10	10.42	-1.84	0.457
56.00	-30.80	-28.75	0.00	-2,063.98	0.00	2,063.98	3,529.32	1,764.66	5,914.30	2,961.55	10.81	-1.88	0.453
57.00	-30.48	-28.68	0.00	-2,035.23	0.00	2,035.23	3,515.63	1,757.82	5,859.42	2,934.06	11.21	-1.92	0.450
58.00	-30.17	-28.62	0.00	-2,006.55	0.00	2,006.55	3,501.89	1,750.94	5,804.69	2,906.66	11.61	-1.95	0.447
59.00	-29.85	-28.55	0.00	-1,977.93	0.00	1,977.93	3,488.09	1,744.04	5,750.12	2,879.33	12.03	-1.99	0.443
60.00	-29.54	-28.48	0.00	-1,949.39	0.00	1,949.39	3,474.23	1,737.12	5,695.71	2,852.09	12.45	-2.03	0.440
61.00	-29.22	-28.41	0.00	-1,920.90	0.00	1,920.90	3,460.32	1,730.16	5,641.45	2,824.92	12.87	-2.06	0.437
62.00	-28.91	-28.35	0.00	-1,892.49	0.00	1,892.49	3,446.35	1,723.17	5,587.36	2,797.83	13.31	-2.10	0.433
63.00	-28.60	-28.28	0.00	-1,864.15	0.00	1,864.15	3,432.32	1,716.16	5,533.43	2,770.83	13.75	-2.14	0.430
64.00	-28.29	-28.18	0.00	-1,835.87	0.00	1,835.87	3,418.23	1,709.12	5,479.66	2,743.90	14.21	-2.17	0.426
65.00	-27.98	-28.02	0.00	-1,807.69	0.00	1,807.69	3,404.09	1,702.05	5,426.05	2,717.06	14.67	-2.21	0.423
66.00	-27.68	-27.86	0.00	-1,779.67	0.00	1,779.67	3,389.89	1,694.95	5,372.62	2,690.30	15.13	-2.24	0.419
67.00	-27.37	-27.70	0.00	-1,751.81	0.00	1,751.81	3,375.64	1,687.82	5,319.35	2,663.63	15.61	-2.28	0.416
68.00	-27.07	-27.54	0.00	-1,724.11	0.00	1,724.11	3,361.32	1,680.66	5,266.25	2,637.04	16.09	-2.32	0.412
69.00	-26.77	-27.38	0.00	-1,696.57	0.00	1,696.57	3,346.95	1,673.48	5,213.32	2,610.53	16.58	-2.35	0.408
70.00	-26.46	-27.22	0.00	-1,669.19	0.00	1,669.19	3,332.53	1,666.26	5,160.56	2,584.12	17.07	-2.39	0.405
71.00	-26.16	-27.06	0.00	-1,641.97	0.00	1,641.97	3,318.04	1,659.02	5,107.98	2,557.79	17.58	-2.42	0.401
72.00	-25.87	-26.90	0.00	-1,614.91	0.00	1,614.91	3,300.52	1,650.26	5,051.01	2,529.26	18.09	-2.46	0.398
73.00	-25.57	-26.74	0.00	-1,588.01	0.00	1,588.01	3,281.11	1,640.56	4,991.50	2,499.46	18.61	-2.50	0.395
74.00	-25.27	-26.58	0.00	-1,561.27	0.00	1,561.27	3,261.71	1,630.85	4,932.34	2,469.84	19.14	-2.53	0.391
75.00	-24.97	-26.42	0.00	-1,534.69	0.00	1,534.69	3,242.30	1,621.15	4,873.54	2,440.39	19.67	-2.57	0.388
76.00	-24.68	-26.26	0.00	-1,508.28	0.00	1,508.28	3,222.90	1,611.45	4,815.08	2,411.12	20.21	-2.60	0.385
77.00	-24.38	-26.10	0.00	-1,482.02	0.00	1,482.02	3,203.49	1,601.75	4,756.98	2,382.03	20.76	-2.64	0.382
78.00	-24.09	-25.94	0.00	-1,455.92	0.00	1,455.92	3,184.09	1,592.04	4,699.23	2,353.11	21.32	-2.67	0.378
79.00	-23.80	-25.77	0.00	-1,429.99	0.00	1,429.99	3,164.68	1,582.34	4,641.84	2,324.37	21.88	-2.71	0.375
80.00	-23.51	-25.61	0.00	-1,404.22	0.00	1,404.22	3,145.28	1,572.64	4,584.79	2,295.80	22.45	-2.74	0.372
81.00	-23.22	-25.45	0.00	-1,378.61	0.00	1,378.61	3,125.87	1,562.94	4,528.10	2,267.42	23.03	-2.78	0.368
82.00	-22.93	-25.29	0.00	-1,353.16	0.00	1,353.16	3,106.47	1,553.24	4,471.77	2,239.21	23.62	-2.81	0.365
83.00	-22.64	-25.12	0.00	-1,327.88	0.00	1,327.88	3,087.07	1,543.53	4,415.78	2,211.17	24.21	-2.85	0.361
84.00	-22.36	-24.96	0.00	-1,302.75	0.00	1,302.75	3,067.66	1,533.83	4,360.15	2,183.32	24.81	-2.88	0.358
85.00	-22.07	-24.80	0.00	-1,277.79	0.00	1,277.79	3,048.26	1,524.13	4,304.87	2,155.63	25.42	-2.92	0.354
86.00	-21.79	-24.64	0.00	-1,252.99	0.00	1,252.99	3,028.85	1,514.43	4,249.94	2,128.13	26.03	-2.95	0.351
87.00	-21.50	-24.50	0.00	-1,228.35	0.00	1,228.35	3,009.45	1,504.72	4,195.37	2,100.80	26.66	-2.99	0.347
87.54	-21.35	-24.42	0.00	-1,215.12	0.00	1,215.12	2,998.97	1,499.48	4,166.05	2,086.12	26.99	-3.00	0.345
88.00	-21.17	-24.31	0.00	-1,203.89	0.00	1,203.89	2,990.04	1,495.02	4,141.15	2,073.65	27.28	-3.02	0.339
89.00	-20.79	-24.14	0.00	-1,179.58	0.00	1,179.58	2,970.64	1,485.32	4,087.28	2,046.68	27.92	-3.05	0.335
90.00	-20.40	-23.97	0.00	-1,155.44	0.00	1,155.44	2,951.23	1,475.62	4,033.76	2,019.88	28.56	-3.09	0.331
91.00	-20.02	-23.80	0.00	-1,131.46	0.00	1,131.46	2,931.83	1,465.91	3,980.60	1,993.26	29.21	-3.12	0.328
92.00	-19.64	-23.66	0.00	-1,107.66	0.00	1,107.66	2,912.42	1,456.21	3,927.79	1,966.81	29.87	-3.15	0.324
92.46	-19.47	-23.58	0.00	-1,096.86	0.00	1,096.86	2,424.49	1,212.24	3,334.85	1,669.90	30.17	-3.17	0.357
93.00	-19.33	-23.46	0.00	-1,084.05	0.00	1,084.05	2,418.22	1,209.11	3,314.29	1,659.61	30.54	-3.19	0.354
94.00	-19.07	-23.30	0.00	-1,060.58	0.00	1,060.58	2,406.65	1,203.32	3,276.56	1,640.72	31.21	-3.22	0.349
95.00	-18.81	-23.14	0.00	-1,037.28	0.00	1,037.28	2,395.02	1,197.51	3,238.97	1,621.89	31.89	-3.26	0.344
96.00	-18.15	-22.39	0.00	-1,014.14	0.00	1,014.14	2,383.33	1,191.67	3,201.50	1,603.13	32.57	-3.29	0.339
97.00	-17.89	-22.23	0.00	-991.75	0.00	991.75	2,371.59	1,185.79	3,164.18	1,584.44	33.26	-3.33	0.334
98.00	-17.64	-22.06	0.00	-969.53	0.00	969.53	2,359.79	1,179.89	3,126.99	1,565.82	33.96	-3.36	0.329
99.00	-17.38	-21.90	0.00	-947.47	0.00	947.47	2,347.93	1,173.97	3,089.94	1,547.27	34.67	-3.39	0.324
100.00	-17.13	-21.74	0.00	-925.57	0.00	925.57	2,336.02	1,168.01	3,053.03	1,528.79	35.39	-3.43	0.319
101.00	-16.88	-21.58	0.00	-903.83	0.00	903.83	2,324.05	1,162.02	3,016.27	1,510.38	36.11	-3.46	0.314
102.00	-16.63	-21.41	0.00	-882.25	0.00	882.25	2,312.02	1,156.01	2,979.65	1,492.04	36.84	-3.49	0.309
103.00	-16.38	-21.27	0.00	-860.84	0.00	860.84	2,299.80	1,149.90	2,943.01	1,473.69	37.57	-3.53	0.304

Load Case: 0.9D + 1.6W — 90 mph with No Ice (Reduced DL) — 34 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.15

103.75	-16.19	-21.17	0.00	-844.89	0.00	844.89	2,287.68	1,143.84	2,911.90	1,458.11	38.13	-3.55	0.300
103.75	-16.19	-21.17	0.00	-844.89	0.00	844.89	2,287.68	1,143.84	2,911.90	1,458.11	38.13	-3.55	0.587
104.00	-16.14	-21.10	0.00	-839.60	0.00	839.60	2,283.63	1,141.82	2,901.57	1,452.94	38.31	-3.56	0.585
105.00	-15.90	-20.52	0.00	-818.50	0.00	818.50	2,267.46	1,133.73	2,860.42	1,432.33	39.06	-3.62	0.579
106.00	-15.70	-20.37	0.00	-797.98	0.00	797.98	2,251.29	1,125.65	2,819.56	1,411.88	39.83	-3.68	0.572
107.00	-15.51	-20.22	0.00	-777.60	0.00	777.60	2,235.12	1,117.56	2,779.00	1,391.56	40.61	-3.75	0.566
108.00	-15.32	-20.08	0.00	-757.38	0.00	757.38	2,218.95	1,109.48	2,738.73	1,371.40	41.40	-3.81	0.560
109.00	-15.13	-19.93	0.00	-737.30	0.00	737.30	2,202.78	1,101.39	2,698.75	1,351.38	42.20	-3.87	0.553
110.00	-14.94	-19.78	0.00	-717.38	0.00	717.38	2,186.61	1,093.30	2,659.07	1,331.51	43.02	-3.93	0.546
111.00	-14.75	-19.63	0.00	-697.60	0.00	697.60	2,170.44	1,085.22	2,619.69	1,311.79	43.85	-3.99	0.539
112.00	-13.21	-17.48	0.00	-677.97	0.00	677.97	2,154.27	1,077.13	2,580.59	1,292.21	44.69	-4.06	0.531
113.00	-13.04	-17.39	0.00	-660.49	0.00	660.49	2,138.10	1,069.05	2,541.79	1,272.79	45.55	-4.12	0.525
114.00	-12.91	-17.24	0.00	-643.10	0.00	643.10	2,121.93	1,060.96	2,503.29	1,253.50	46.42	-4.18	0.519
115.00	-12.77	-17.09	0.00	-625.85	0.00	625.85	2,105.76	1,052.88	2,465.08	1,234.37	47.30	-4.24	0.513
116.00	-12.64	-16.95	0.00	-608.76	0.00	608.76	2,089.59	1,044.79	2,427.16	1,215.38	48.19	-4.30	0.507
117.00	-12.50	-16.80	0.00	-591.81	0.00	591.81	2,073.42	1,036.71	2,389.54	1,196.54	49.10	-4.36	0.501
118.00	-12.37	-16.65	0.00	-575.02	0.00	575.02	2,057.25	1,028.62	2,352.21	1,177.85	50.02	-4.42	0.494
119.00	-12.24	-16.51	0.00	-558.36	0.00	558.36	2,041.07	1,020.54	2,315.17	1,159.31	50.95	-4.48	0.488
120.00	-12.11	-16.36	0.00	-541.86	0.00	541.86	2,024.90	1,012.45	2,278.43	1,140.91	51.89	-4.53	0.481
121.00	-11.98	-16.21	0.00	-525.50	0.00	525.50	2,008.73	1,004.37	2,241.98	1,122.66	52.85	-4.59	0.474
122.00	-11.85	-16.07	0.00	-509.29	0.00	509.29	1,992.56	996.28	2,205.83	1,104.55	53.81	-4.65	0.467
123.00	-11.72	-15.92	0.00	-493.22	0.00	493.22	1,976.39	988.20	2,169.97	1,086.60	54.79	-4.71	0.460
124.00	-11.60	-15.78	0.00	-477.30	0.00	477.30	1,960.22	980.11	2,134.40	1,068.79	55.78	-4.77	0.453
125.00	-9.73	-13.55	0.00	-461.53	0.00	461.53	1,944.05	972.03	2,099.13	1,051.12	56.79	-4.82	0.444
126.00	-9.60	-13.49	0.00	-447.97	0.00	447.97	1,927.88	963.94	2,064.15	1,033.61	57.80	-4.88	0.439
127.00	-9.48	-13.43	0.00	-434.48	0.00	434.48	1,911.71	955.86	2,029.46	1,016.24	58.83	-4.93	0.433
128.00	-9.36	-13.37	0.00	-421.05	0.00	421.05	1,895.54	947.77	1,995.07	999.02	59.87	-4.99	0.427
129.00	-9.23	-13.31	0.00	-407.68	0.00	407.68	1,879.37	939.68	1,960.98	981.95	60.92	-5.05	0.420
130.00	-9.11	-13.25	0.00	-394.37	0.00	394.37	1,863.20	931.60	1,927.17	965.02	61.98	-5.10	0.414
131.00	-8.99	-13.19	0.00	-381.13	0.00	381.13	1,847.03	923.51	1,893.66	948.24	63.05	-5.15	0.407
132.00	-8.88	-13.15	0.00	-367.94	0.00	367.94	1,830.86	915.43	1,860.45	931.61	64.14	-5.21	0.400
132.12	-8.86	-13.12	0.00	-366.36	0.00	366.36	1,828.92	914.46	1,856.49	929.63	64.27	-5.22	0.399
133.00	-8.72	-13.06	0.00	-354.81	0.00	354.81	1,814.69	907.34	1,827.53	915.12	65.23	-5.26	0.393
134.00	-8.55	-13.00	0.00	-341.75	0.00	341.75	1,798.52	899.26	1,794.90	898.78	66.34	-5.32	0.385
135.00	-6.09	-9.93	0.00	-328.76	0.00	328.76	1,782.35	891.17	1,762.57	882.59	67.46	-5.37	0.376
135.87	-5.96	-9.90	0.00	-320.12	0.00	320.12	999.39	499.70	1,006.16	503.83	68.44	-5.41	0.642
136.00	-5.95	-9.87	0.00	-318.83	0.00	318.83	998.64	499.32	1,004.22	502.86	68.59	-5.42	0.640
137.00	-5.86	-9.81	0.00	-308.96	0.00	308.96	992.83	496.42	989.37	495.42	69.73	-5.50	0.630
138.00	-5.77	-9.75	0.00	-299.15	0.00	299.15	986.97	493.49	974.56	488.00	70.89	-5.58	0.619
139.00	-5.69	-9.70	0.00	-289.40	0.00	289.40	981.05	490.53	959.80	480.61	72.06	-5.66	0.608
140.00	-5.13	-8.39	0.00	-273.60	0.00	273.60	975.08	487.54	945.09	473.25	73.26	-5.74	0.584
141.00	-5.05	-8.34	0.00	-265.20	0.00	265.20	969.05	484.52	930.44	465.91	74.47	-5.82	0.575
142.00	-4.98	-8.28	0.00	-256.86	0.00	256.86	962.96	481.48	915.84	458.60	75.69	-5.90	0.566
143.00	-4.90	-8.23	0.00	-248.58	0.00	248.58	956.81	478.41	901.30	451.32	76.93	-5.97	0.556
144.00	-4.83	-8.17	0.00	-240.35	0.00	240.35	950.61	475.30	886.82	444.07	78.19	-6.05	0.547
145.00	-4.75	-8.12	0.00	-232.18	0.00	232.18	944.35	472.17	872.40	436.85	79.46	-6.13	0.537
146.00	-4.68	-8.06	0.00	-224.07	0.00	224.07	938.03	469.01	858.03	429.66	80.75	-6.20	0.527
147.00	-4.61	-8.01	0.00	-216.01	0.00	216.01	931.66	465.83	843.74	422.50	82.06	-6.28	0.517
148.00	-4.53	-7.95	0.00	-208.00	0.00	208.00	925.22	462.61	829.51	415.37	83.38	-6.35	0.506
149.00	-4.46	-7.90	0.00	-200.05	0.00	200.05	918.73	459.37	815.34	408.28	84.71	-6.43	0.495
150.00	-4.27	-7.62	0.00	-192.15	0.00	192.15	912.19	456.09	801.24	401.22	86.07	-6.50	0.484
151.00	-4.20	-7.57	0.00	-184.53	0.00	184.53	905.59	452.79	787.21	394.19	87.43	-6.57	0.473
152.00	-4.13	-7.52	0.00	-176.96	0.00	176.96	898.93	449.46	773.25	387.20	88.81	-6.65	0.462
153.00	-4.06	-7.46	0.00	-169.44	0.00	169.44	892.21	446.10	759.37	380.25	90.21	-6.72	0.450
154.00	-4.00	-7.41	0.00	-161.98	0.00	161.98	885.44	442.72	745.56	373.33	91.62	-6.79	0.439
155.00	-3.93	-7.36	0.00	-154.57	0.00	154.57	878.60	439.30	731.82	366.45	93.05	-6.86	0.427
156.00	-3.86	-7.31	0.00	-147.21	0.00	147.21	871.72	435.86	718.16	359.61	94.49	-6.92	0.414

Load Case: 0.9D + 1.6W 90 mph with No Ice (Reduced DL) 34 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.15

157.00	-3.80	-7.25	0.00	-139.91	0.00	139.91	864.77	432.39	704.58	352.81	95.94	-6.99	0.401
158.00	-3.73	-7.20	0.00	-132.65	0.00	132.65	857.77	428.88	691.08	346.05	97.41	-7.06	0.388
159.00	-3.67	-7.15	0.00	-125.45	0.00	125.45	850.71	425.35	677.66	339.34	98.89	-7.12	0.374
160.00	-3.60	-7.08	0.00	-118.30	0.00	118.30	843.59	421.80	664.33	332.66	100.39	-7.18	0.360
161.00	-3.55	-6.97	0.00	-111.23	0.00	111.23	836.42	418.21	651.08	326.02	101.89	-7.25	0.346
162.00	-3.49	-6.86	0.00	-104.26	0.00	104.26	829.19	414.59	637.92	319.43	103.41	-7.31	0.331
163.00	-3.44	-6.76	0.00	-97.40	0.00	97.40	819.85	409.92	623.28	312.10	104.95	-7.36	0.317
164.00	-3.38	-6.65	0.00	-90.64	0.00	90.64	810.15	405.07	608.54	304.72	106.49	-7.42	0.302
165.00	-3.33	-6.54	0.00	-83.99	0.00	83.99	800.44	400.22	593.98	297.43	108.05	-7.47	0.287
166.00	-3.28	-6.44	0.00	-77.45	0.00	77.45	790.74	395.37	579.60	290.23	109.61	-7.52	0.271
167.00	-2.30	-4.59	0.00	-71.01	0.00	71.01	781.04	390.52	565.39	283.11	111.19	-7.57	0.254
168.00	-2.25	-4.54	0.00	-66.42	0.00	66.42	771.34	385.67	551.35	276.09	112.78	-7.62	0.244
169.00	-2.21	-4.49	0.00	-61.88	0.00	61.88	761.63	380.82	537.50	269.15	114.37	-7.67	0.233
170.00	-2.16	-4.45	0.00	-57.38	0.00	57.38	751.93	375.97	523.82	262.30	115.98	-7.71	0.222
171.00	-2.11	-4.40	0.00	-52.94	0.00	52.94	742.23	371.11	510.32	255.54	117.59	-7.75	0.210
172.00	-2.07	-4.35	0.00	-48.54	0.00	48.54	732.53	366.26	496.99	248.86	119.22	-7.79	0.198
173.00	-2.02	-4.30	0.00	-44.19	0.00	44.19	722.82	361.41	483.84	242.28	120.85	-7.83	0.185
174.00	-1.98	-4.26	0.00	-39.89	0.00	39.89	713.12	356.56	470.86	235.78	122.49	-7.87	0.172
175.00	-1.94	-4.21	0.00	-35.63	0.00	35.63	703.42	351.71	458.07	229.37	124.14	-7.90	0.158
176.00	-1.89	-4.17	0.00	-31.42	0.00	31.42	693.72	346.86	445.44	223.05	125.79	-7.93	0.144
177.00	-1.85	-4.12	0.00	-27.25	0.00	27.25	684.02	342.01	433.00	216.82	127.45	-7.96	0.129
178.00	-1.81	-4.08	0.00	-23.13	0.00	23.13	674.31	337.16	420.73	210.68	129.11	-7.99	0.113
179.00	-1.77	-4.03	0.00	-19.05	0.00	19.05	664.61	332.31	408.64	204.62	130.79	-8.01	0.096
180.00	0.00	-3.75	0.00	-15.02	0.00	15.02	654.91	327.45	396.72	198.65	132.46	-8.03	0.076

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:32:07 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph with 1.00 in Radial Ice 34 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 : 1.25

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		8.5	0.0					0.0	0.0	8.5	0.0	0.0	0.0
1.00		17.0	407.6					0.0	339.9	17.0	747.5	0.0	0.0
2.00		17.0	419.2					0.0	356.1	17.0	775.4	0.0	0.0
3.00		17.0	424.2					0.0	364.5	17.0	788.7	0.0	0.0
4.00		17.0	427.0					0.0	370.4	17.0	797.4	0.0	0.0
5.00		17.0	428.8					0.0	374.9	17.0	803.7	0.0	0.0
6.00		16.9	429.9					0.0	378.6	16.9	808.5	0.0	0.0
7.00		16.9	430.5					0.0	381.8	16.9	812.3	0.0	0.0
8.00		16.8	430.8					0.0	384.6	16.8	815.4	0.0	0.0
9.00		16.8	430.8					0.0	387.1	16.8	817.9	0.0	0.0
10.00		16.7	430.7					0.0	389.3	16.7	820.0	0.0	0.0
11.00		16.7	430.3					0.0	391.3	16.7	821.7	0.0	0.0
12.00		16.6	429.9					0.0	393.2	16.6	823.1	0.0	0.0
13.00		16.5	429.3					0.0	395.0	16.5	824.3	0.0	0.0
14.00		16.5	428.6					0.0	396.6	16.5	825.2	0.0	0.0
15.00		16.4	427.9					0.0	398.1	16.4	826.0	0.0	0.0
16.00		16.4	427.0					0.0	399.6	16.4	826.6	0.0	0.0
17.00		16.3	426.1					0.0	400.9	16.3	827.0	0.0	0.0
18.00		16.3	425.1					0.0	402.2	16.3	827.4	0.0	0.0
19.00		16.2	424.1					0.0	403.4	16.2	827.6	0.0	0.0
20.00		16.1	423.1					0.0	404.6	16.1	827.7	0.0	0.0
21.00		16.1	421.9					0.0	405.7	16.1	827.7	0.0	0.0
22.00		16.0	420.8					0.0	406.8	16.0	827.6	0.0	0.0
23.00		16.0	419.6					0.0	407.8	16.0	827.5	0.0	0.0
24.00		15.9	418.4					0.0	408.8	15.9	827.2	0.0	0.0
25.00		15.8	417.1					0.0	409.8	15.8	826.9	0.0	0.0
26.00		15.8	415.9					0.0	410.7	15.8	826.6	0.0	0.0
27.00		15.7	414.6					0.0	411.6	15.7	826.2	0.0	0.0
28.00		15.7	413.2					0.0	412.5	15.7	825.7	0.0	0.0
29.00		15.6	411.9					0.0	413.3	15.6	825.2	0.0	0.0
30.00	Appertunance(s)	15.6	410.5	4.6	0.0	0.0	74.8	0.0	414.1	20.1	899.4	0.0	0.0
31.00		15.6	409.1					0.0	404.8	15.6	813.9	0.0	0.0
32.00		15.7	407.7					0.0	405.5	15.7	813.2	0.0	0.0
33.00		15.8	406.2					0.0	406.2	15.8	812.5	0.0	0.0
34.00		15.9	404.8					0.0	406.9	15.9	811.7	0.0	0.0
35.00		15.9	403.3					0.0	407.6	15.9	810.9	0.0	0.0
36.00		16.0	401.8					0.0	408.2	16.0	810.0	0.0	0.0
37.00		16.0	400.3					0.0	408.8	16.0	809.2	0.0	0.0
38.00		16.1	398.8					0.0	409.4	16.1	808.2	0.0	0.0
39.00		16.1	397.3					0.0	410.0	16.1	807.3	0.0	0.0
40.00		16.2	395.7					0.0	410.6	16.2	806.4	0.0	0.0
41.00		16.2	394.2					0.0	411.2	16.2	805.4	0.0	0.0
42.00		15.9	392.6					0.0	411.8	15.9	804.4	0.0	0.0
42.96	Bot - Section 2	8.2	374.1					0.0	394.4	8.2	768.5	0.0	0.0
43.00		8.7	26.3					0.0	17.9	8.7	44.2	0.0	0.0
44.00		16.6	603.7					0.0	412.8	16.6	1,016.5	0.0	0.0
45.00		16.7	601.0					0.0	413.4	16.7	1,014.4	0.0	0.0
46.00		16.7	598.3					0.0	413.9	16.7	1,012.2	0.0	0.0

Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph with 1.00 in Radial Ice 34 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 : 1.25
Wind Load Factor : 1.00

47.00		16.7	595.6					0.0	414.4	16.7	1,010.0	0.0	0.0
48.00		16.7	593.0					0.0	414.9	16.7	1,007.8	0.0	0.0
49.00		8.7	590.3					0.0	415.4	8.7	1,005.6	0.0	0.0
49.04	Top - Section 1	8.4	23.5					0.0	16.6	8.4	40.1	0.0	0.0
50.00		16.5	338.4					0.0	399.3	16.5	737.7	0.0	0.0
51.00		16.8	351.1					0.0	416.3	16.8	767.4	0.0	0.0
52.00		16.8	349.6					0.0	416.8	16.8	766.4	0.0	0.0
53.00		16.8	348.1					0.0	417.2	16.8	765.3	0.0	0.0
54.00		16.9	346.6					0.0	417.7	16.9	764.3	0.0	0.0
55.00		16.9	345.1					0.0	418.1	16.9	763.2	0.0	0.0
56.00		16.9	343.6					0.0	418.6	16.9	762.1	0.0	0.0
57.00		16.9	342.1					0.0	419.0	16.9	761.1	0.0	0.0
58.00		16.9	340.5					0.0	419.4	16.9	759.9	0.0	0.0
59.00		16.9	339.0					0.0	419.8	16.9	758.8	0.0	0.0
60.00		16.9	337.5					0.0	420.2	16.9	757.7	0.0	0.0
61.00		16.9	335.9					0.0	420.6	16.9	756.6	0.0	0.0
62.00		16.9	334.4					0.0	421.0	16.9	755.4	0.0	0.0
63.00		16.9	332.8					0.0	421.4	16.9	754.2	0.0	0.0
64.00		16.9	331.2					0.0	421.8	16.9	753.1	0.0	0.0
65.00		16.9	329.7					7.0	422.2	23.9	751.9	0.0	0.0
66.00		16.9	328.1					7.0	422.6	23.9	750.7	0.0	0.0
67.00		16.9	326.5					7.0	422.9	23.9	749.5	0.0	0.0
68.00		16.9	324.9					7.1	423.3	24.0	748.3	0.0	0.0
69.00		16.9	323.4					7.1	423.7	24.0	747.0	0.0	0.0
70.00		16.9	321.8					7.2	424.0	24.0	745.8	0.0	0.0
71.00		16.8	320.2					7.2	424.4	24.0	744.5	0.0	0.0
72.00		16.8	318.6					7.2	424.7	24.1	743.3	0.0	0.0
73.00		16.8	317.0					7.3	425.1	24.1	742.0	0.0	0.0
74.00		16.8	315.3					7.3	425.4	24.1	740.8	0.0	0.0
75.00		16.8	313.7					7.3	425.8	24.1	739.5	0.0	0.0
76.00		16.7	312.1					7.4	426.1	24.1	738.2	0.0	0.0
77.00		16.7	310.5					7.4	426.4	24.1	736.9	0.0	0.0
78.00		16.7	308.8					7.4	426.7	24.1	735.6	0.0	0.0
79.00	Appertunance(s)	16.7	307.2	2.0	0.0	0.0	24.4	7.5	427.1	26.1	758.7	0.0	0.0
80.00		16.7	305.6					7.5	427.2	24.1	732.8	0.0	0.0
81.00		16.6	303.9					7.5	427.5	24.2	731.4	0.0	0.0
82.00		16.6	302.3					7.6	427.8	24.2	730.1	0.0	0.0
83.00		16.6	300.6					7.6	428.1	24.2	728.8	0.0	0.0
84.00		16.5	299.0					7.6	428.4	24.2	727.4	0.0	0.0
85.00		16.5	297.3					7.7	428.7	24.2	726.1	0.0	0.0
86.00		16.5	295.7					7.7	429.0	24.2	724.7	0.0	0.0
87.00		12.7	294.0					7.7	429.3	20.4	723.3	0.0	0.0
87.54	Bot - Section 3	8.3	158.1					4.2	231.9	12.5	390.1	0.0	0.0
88.00		12.2	199.8					3.6	197.7	15.7	397.5	0.0	0.0
89.00		16.6	432.1					7.8	429.9	24.4	862.0	0.0	0.0
90.00		16.6	429.6					7.8	430.2	24.4	859.8	0.0	0.0
91.00		16.6	427.0					7.8	430.5	24.4	857.5	0.0	0.0
92.00		12.0	424.4					7.9	430.8	19.9	855.2	0.0	0.0
92.46	Top - Section 2	8.3	193.0					3.6	196.8	11.9	389.8	0.0	0.0
93.00		12.7	142.5					4.3	234.3	17.0	376.7	0.0	0.0
94.00		16.4	260.8					7.9	431.3	24.4	692.1	0.0	0.0
95.00		16.4	259.3					8.0	431.6	24.4	690.9	0.0	0.0
96.00	Appertunance(s)	16.4	257.8	111.2	0.0	0.0	975.4	8.0	431.9	135.6	1,665.1	0.0	0.0
97.00		16.3	256.3					8.0	431.2	24.3	687.4	0.0	0.0
98.00		16.3	254.8					8.0	431.4	24.3	686.2	0.0	0.0
99.00		16.2	253.3					8.1	431.7	24.3	684.9	0.0	0.0
100.00		16.2	251.7					8.1	431.9	24.3	683.7	0.0	0.0

Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph with 1.00 in Radial Ice 34 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 : 1.25
Wind Load Factor : 1.00

101.00		16.1	250.2					8.1	432.2	24.3	682.4	0.0	0.0
102.00		16.1	248.7					8.2	432.5	24.2	681.1	0.0	0.0
103.00		14.0	247.1					8.2	432.7	22.2	679.9	0.0	0.0
103.75	Reinf. Top	8.0	184.4					6.2	324.7	14.2	509.1	0.0	0.0
104.00		10.0	61.3					2.1	88.2	12.0	149.6	0.0	0.0
105.00	Appertunance(s)	15.9	244.1	63.2	0.0	0.0	767.8	8.2	353.1	87.4	1,365.0	0.0	0.0
106.00		15.9	242.5					8.3	309.9	24.2	552.4	0.0	0.0
107.00		15.8	241.0					8.3	310.1	24.1	551.1	0.0	0.0
108.00		15.8	239.5					8.3	310.3	24.1	549.7	0.0	0.0
109.00		15.7	237.9					8.3	310.5	24.1	548.4	0.0	0.0
110.00		15.7	236.4					8.4	310.7	24.1	547.0	0.0	0.0
111.00		15.6	234.8					8.4	310.9	24.0	545.7	0.0	0.0
112.00	Appertunance(s)	15.6	233.3	371.6	0.0	0.0	5,340.0	8.4	311.1	395.6	5,884.3	0.0	0.0
113.00		15.5	231.7					0.0	204.7	15.5	436.4	0.0	0.0
114.00		15.5	230.1					8.4	160.3	23.9	390.5	0.0	0.0
115.00		15.4	228.6					8.5	160.4	23.9	389.0	0.0	0.0
116.00		15.3	227.0					8.5	160.5	23.8	387.6	0.0	0.0
117.00		15.3	225.5					8.5	160.6	23.8	386.1	0.0	0.0
118.00		15.2	223.9					8.5	160.7	23.8	384.6	0.0	0.0
119.00		15.2	222.3					8.6	160.8	23.7	383.2	0.0	0.0
120.00		15.1	220.8					8.6	160.9	23.7	381.7	0.0	0.0
121.00		15.0	219.2					8.6	161.0	23.7	380.2	0.0	0.0
122.00		15.0	217.6					8.6	161.1	23.6	378.7	0.0	0.0
123.00		14.9	216.0					8.7	161.2	23.6	377.3	0.0	0.0
124.00		14.9	214.5					8.7	161.3	23.5	375.8	0.0	0.0
125.00	Appertunance(s)	14.8	212.9	373.4	0.0	0.0	6,261.7	8.7	161.4	396.9	6,636.0	0.0	0.0
126.00		14.7	211.3					0.0	115.7	14.7	327.0	0.0	0.0
127.00		14.7	209.7					0.0	115.8	14.7	325.5	0.0	0.0
128.00		14.6	208.1					0.0	115.8	14.6	324.0	0.0	0.0
129.00		14.5	206.5					0.0	115.9	14.5	322.4	0.0	0.0
130.00		14.5	204.9					0.0	115.9	14.5	320.9	0.0	0.0
131.00		14.4	203.4					0.0	116.0	14.4	319.4	0.0	0.0
132.00		8.0	201.8					0.0	116.1	8.0	317.8	0.0	0.0
132.12	Bot - Section 4	7.2	24.1					0.0	13.9	7.2	38.0	0.0	0.0
133.00		13.6	231.3					0.0	102.2	13.6	333.5	0.0	0.0
134.00		14.4	260.7					0.0	116.2	14.4	376.9	0.0	0.0
135.00	Appertunance(s)	13.4	258.6	473.9	0.0	0.0	8,684.3	0.0	116.2	487.3	9,059.1	0.0	0.0
135.87	Top - Section 3	7.1	223.2					0.0	97.3	7.1	320.5	0.0	0.0
136.00		8.0	20.7					0.0	14.6	8.0	35.2	0.0	0.0
137.00		14.2	157.7					0.0	111.9	14.2	269.6	0.0	0.0
138.00		14.1	156.4					0.0	111.9	14.1	268.4	0.0	0.0
139.00		14.0	155.2					0.0	112.0	14.0	267.2	0.0	0.0
140.00	Appertunance(s)	13.9	153.9	306.6	0.0	1,829.8	2,908.8	0.0	112.1	320.5	3,174.8	0.0	0.0
141.00		13.9	152.7					0.0	105.4	13.9	258.1	0.0	0.0
142.00		13.8	151.4					0.0	105.5	13.8	256.9	0.0	0.0
143.00		13.7	150.2					0.0	105.5	13.7	255.7	0.0	0.0
144.00		13.6	148.9					0.0	105.6	13.6	254.5	0.0	0.0
145.00		13.6	147.7					0.0	105.6	13.6	253.3	0.0	0.0
146.00		13.5	146.4					0.0	105.7	13.5	252.1	0.0	0.0
147.00		13.4	145.1					0.0	105.7	13.4	250.9	0.0	0.0
148.00		13.3	143.9					0.0	105.8	13.3	249.7	0.0	0.0
149.00		13.3	142.6					0.0	105.8	13.3	248.5	0.0	0.0
150.00	Appertunance(s)	13.2	141.4	65.0	0.0	0.0	333.0	0.0	105.9	78.2	580.2	0.0	0.0
151.00		13.1	140.1					0.0	105.0	13.1	245.0	0.0	0.0
152.00		13.0	138.8					0.0	105.0	13.0	243.8	0.0	0.0
153.00		12.9	137.5					0.0	105.1	12.9	242.6	0.0	0.0
154.00		12.9	136.3					0.0	105.1	12.9	241.4	0.0	0.0

Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph with 1.00 in Radial Ice 34 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 : 1.25
Wind Load Factor : 1.00

155.00		12.8	135.0					0.0	105.2	12.8	240.2	0.0	0.0
156.00		12.7	133.7					0.0	105.2	12.7	238.9	0.0	0.0
157.00		12.6	132.5					0.0	105.3	12.6	237.7	0.0	0.0
158.00		12.5	131.2					0.0	105.3	12.5	236.5	0.0	0.0
159.00		12.4	129.9					0.0	105.3	12.4	235.2	0.0	0.0
160.00		12.4	128.6					0.0	105.4	12.4	234.0	0.0	0.0
161.00		12.3	127.3					4.8	105.4	17.0	232.8	0.0	0.0
162.00		12.2	126.1					4.8	105.5	17.0	231.5	0.0	0.0
163.00		12.1	124.8					4.8	105.5	16.9	230.3	0.0	0.0
164.00		12.0	123.5					4.8	105.6	16.8	229.1	0.0	0.0
165.00		11.9	122.2					4.8	105.6	16.7	227.8	0.0	0.0
166.00		11.8	120.9					4.8	105.7	16.6	226.6	0.0	0.0
167.00	Appertunance(s)	11.8	119.6	312.2	0.0	0.0	4,456.0	4.8	105.7	328.8	4,681.4	0.0	0.0
168.00		11.7	118.3					0.0	23.9	11.7	142.2	0.0	0.0
169.00		11.6	117.0					0.0	23.9	11.6	141.0	0.0	0.0
170.00		11.5	115.7					0.0	23.9	11.5	139.7	0.0	0.0
171.00		11.4	114.5					0.0	23.9	11.4	138.4	0.0	0.0
172.00		11.3	113.2					0.0	23.9	11.3	137.1	0.0	0.0
173.00		11.2	111.9					0.0	23.9	11.2	135.8	0.0	0.0
174.00		11.1	110.6					0.0	23.9	11.1	134.5	0.0	0.0
175.00		11.0	109.3					0.0	23.9	11.0	133.2	0.0	0.0
176.00		11.0	108.0					0.0	23.9	11.0	131.9	0.0	0.0
177.00		10.9	106.7					0.0	23.9	10.9	130.6	0.0	0.0
178.00		10.8	105.4					0.0	23.9	10.8	129.3	0.0	0.0
179.00		10.7	104.1					0.0	23.9	10.7	128.0	0.0	0.0
180.00	Appertunance(s)	5.3	102.8	677.6	0.0	2,741.8	9,451.6	0.0	23.9	682.9	9,578.3	0.0	0.0
									Totals:	6,017.66	143,822.	0.00	0.00

Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph with 1.00 in Radial Ice 34 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 : 1.25
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	-143.82	-6.02	0.00	-793.01	0.00	793.01	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.128
1.00	-143.07	-6.02	0.00	-787.00	0.00	787.00	5,115.23	2,557.61	10,943.3	5,479.82	0.00	-0.01	0.128
2.00	-142.30	-6.02	0.00	-780.98	0.00	780.98	5,100.42	2,550.21	10,865.3	5,440.75	0.00	-0.01	0.128
3.00	-141.51	-6.01	0.00	-774.97	0.00	774.97	5,085.56	2,542.78	10,787.4	5,401.75	0.01	-0.02	0.128
4.00	-140.71	-6.01	0.00	-768.95	0.00	768.95	5,070.64	2,535.32	10,709.7	5,362.83	0.01	-0.03	0.127
5.00	-139.91	-6.01	0.00	-762.94	0.00	762.94	5,055.67	2,527.83	10,632.1	5,323.99	0.02	-0.03	0.127
6.00	-139.10	-6.01	0.00	-756.93	0.00	756.93	5,040.63	2,520.32	10,554.7	5,285.22	0.03	-0.04	0.127
7.00	-138.28	-6.01	0.00	-750.92	0.00	750.92	5,025.54	2,512.77	10,477.4	5,246.53	0.03	-0.05	0.126
8.00	-137.47	-6.01	0.00	-744.91	0.00	744.91	5,010.40	2,505.20	10,400.3	5,207.92	0.05	-0.05	0.126
9.00	-136.65	-6.01	0.00	-738.90	0.00	738.90	4,995.19	2,497.60	10,323.4	5,169.39	0.06	-0.06	0.126
10.00	-135.83	-6.01	0.00	-732.89	0.00	732.89	4,979.93	2,489.97	10,246.6	5,130.93	0.07	-0.07	0.125
11.00	-135.01	-6.00	0.00	-726.89	0.00	726.89	4,964.61	2,482.31	10,170.0	5,092.56	0.09	-0.07	0.125
12.00	-134.18	-6.00	0.00	-720.88	0.00	720.88	4,949.24	2,474.62	10,093.5	5,054.27	0.10	-0.08	0.125
13.00	-133.36	-6.00	0.00	-714.88	0.00	714.88	4,933.81	2,466.90	10,017.2	5,016.06	0.12	-0.09	0.124
14.00	-132.53	-6.00	0.00	-708.88	0.00	708.88	4,918.32	2,459.16	9,941.08	4,977.93	0.14	-0.09	0.124
15.00	-131.70	-6.00	0.00	-702.88	0.00	702.88	4,902.77	2,451.39	9,865.10	4,939.88	0.16	-0.10	0.124
16.00	-130.88	-6.00	0.00	-696.88	0.00	696.88	4,887.17	2,443.58	9,789.30	4,901.92	0.18	-0.11	0.123
17.00	-130.05	-5.99	0.00	-690.88	0.00	690.88	4,871.51	2,435.75	9,713.66	4,864.05	0.21	-0.12	0.123
18.00	-129.22	-5.99	0.00	-684.89	0.00	684.89	4,855.79	2,427.89	9,638.20	4,826.26	0.23	-0.12	0.123
19.00	-128.39	-5.99	0.00	-678.90	0.00	678.90	4,840.02	2,420.01	9,562.90	4,788.56	0.26	-0.13	0.122
20.00	-127.56	-5.99	0.00	-672.91	0.00	672.91	4,824.18	2,412.09	9,487.79	4,750.94	0.28	-0.14	0.122
21.00	-126.74	-5.99	0.00	-666.92	0.00	666.92	4,808.29	2,404.15	9,412.84	4,713.42	0.31	-0.14	0.122
22.00	-125.91	-5.98	0.00	-660.94	0.00	660.94	4,792.35	2,396.17	9,338.08	4,675.98	0.35	-0.15	0.121
23.00	-125.08	-5.98	0.00	-654.96	0.00	654.96	4,776.35	2,388.17	9,263.49	4,638.63	0.38	-0.16	0.121
24.00	-124.25	-5.98	0.00	-648.98	0.00	648.98	4,760.29	2,380.14	9,189.09	4,601.37	0.41	-0.17	0.121
25.00	-123.42	-5.97	0.00	-643.00	0.00	643.00	4,744.17	2,372.08	9,114.87	4,564.21	0.45	-0.17	0.120
26.00	-122.60	-5.97	0.00	-637.02	0.00	637.02	4,728.00	2,364.00	9,040.83	4,527.13	0.48	-0.18	0.120
27.00	-121.77	-5.97	0.00	-631.05	0.00	631.05	4,711.76	2,355.88	8,966.98	4,490.15	0.52	-0.19	0.120
28.00	-120.94	-5.97	0.00	-625.09	0.00	625.09	4,695.48	2,347.74	8,893.31	4,453.26	0.56	-0.19	0.119
29.00	-120.12	-5.96	0.00	-619.12	0.00	619.12	4,679.13	2,339.57	8,819.83	4,416.47	0.60	-0.20	0.119
30.00	-119.22	-5.95	0.00	-613.16	0.00	613.16	4,662.73	2,331.36	8,746.54	4,379.77	0.65	-0.21	0.118
31.00	-118.40	-5.95	0.00	-607.20	0.00	607.20	4,646.27	2,323.14	8,673.45	4,343.17	0.69	-0.22	0.118
32.00	-117.59	-5.95	0.00	-601.25	0.00	601.25	4,629.75	2,314.88	8,600.55	4,306.67	0.74	-0.22	0.118
33.00	-116.78	-5.94	0.00	-595.31	0.00	595.31	4,613.18	2,306.59	8,527.84	4,270.26	0.79	-0.23	0.117
34.00	-115.96	-5.94	0.00	-589.37	0.00	589.37	4,596.55	2,298.27	8,455.33	4,233.95	0.83	-0.24	0.117
35.00	-115.15	-5.93	0.00	-583.43	0.00	583.43	4,579.86	2,289.93	8,383.01	4,197.74	0.89	-0.25	0.116
36.00	-114.34	-5.93	0.00	-577.49	0.00	577.49	4,563.12	2,281.56	8,310.90	4,161.63	0.94	-0.25	0.116
37.00	-113.53	-5.92	0.00	-571.56	0.00	571.56	4,546.32	2,273.16	8,238.99	4,125.62	0.99	-0.26	0.115
38.00	-112.72	-5.92	0.00	-565.64	0.00	565.64	4,529.46	2,264.73	8,167.27	4,089.71	1.05	-0.27	0.115
39.00	-111.91	-5.91	0.00	-559.72	0.00	559.72	4,512.54	2,256.27	8,095.77	4,053.90	1.10	-0.28	0.115
40.00	-111.11	-5.91	0.00	-553.81	0.00	553.81	4,491.22	2,245.61	8,016.71	4,014.31	1.16	-0.28	0.114
41.00	-110.30	-5.90	0.00	-547.90	0.00	547.90	4,468.58	2,234.29	7,935.69	3,973.74	1.22	-0.29	0.114
42.00	-109.50	-5.90	0.00	-542.00	0.00	542.00	4,445.95	2,222.97	7,855.09	3,933.38	1.28	-0.30	0.114
42.96	-108.73	-5.89	0.00	-536.36	0.00	536.36	4,424.29	2,212.15	7,778.37	3,894.97	1.34	-0.30	0.113
43.00	-108.68	-5.89	0.00	-536.10	0.00	536.10	4,423.31	2,211.65	7,774.90	3,893.23	1.35	-0.31	0.112
44.00	-107.67	-5.88	0.00	-530.21	0.00	530.21	4,400.67	2,200.33	7,695.11	3,853.28	1.41	-0.31	0.112
45.00	-106.65	-5.87	0.00	-524.33	0.00	524.33	4,378.03	2,189.01	7,615.75	3,813.53	1.48	-0.32	0.112
46.00	-105.64	-5.87	0.00	-518.46	0.00	518.46	4,355.39	2,177.70	7,536.79	3,773.99	1.55	-0.33	0.111
47.00	-104.63	-5.86	0.00	-512.59	0.00	512.59	4,332.75	2,166.38	7,458.24	3,734.66	1.62	-0.34	0.111
48.00	-103.62	-5.85	0.00	-506.74	0.00	506.74	4,310.11	2,155.06	7,380.10	3,695.54	1.69	-0.34	0.111
49.00	-102.61	-5.84	0.00	-500.89	0.00	500.89	4,287.47	2,143.74	7,302.38	3,656.62	1.76	-0.35	0.110

Site Number:	302506				Code:	ANSI/TIA-222-G							
Site Name:	Winchester CT 3, CT				Engineering Number:	OAA714359_C3_01					10/24/2017 12:32:26 PM		
Customer:	AT&T MOBILITY												

Load Case: 1.2D + 1.0Di + 1.0Wi — 40 mph with 1.00 in Radial Ice — 34 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 : 1.25

Wind Load Factor : 1.00

49.04	-102.57	-5.84	0.00	-500.66	0.00	500.66	3,622.99	1,811.50	6,300.42	3,154.89	1.76	-0.35	0.124
50.00	-101.83	-5.83	0.00	-495.05	0.00	495.05	3,610.23	1,805.12	6,246.74	3,128.01	1.83	-0.36	0.123
51.00	-101.07	-5.82	0.00	-489.22	0.00	489.22	3,596.89	1,798.44	6,190.96	3,100.08	1.91	-0.37	0.123
52.00	-100.30	-5.82	0.00	-483.40	0.00	483.40	3,583.49	1,791.74	6,135.33	3,072.23	1.99	-0.37	0.122
53.00	-99.53	-5.81	0.00	-477.58	0.00	477.58	3,570.03	1,785.02	6,079.85	3,044.45	2.07	-0.38	0.121
54.00	-98.77	-5.80	0.00	-471.78	0.00	471.78	3,556.52	1,778.26	6,024.52	3,016.74	2.15	-0.39	0.121
55.00	-98.00	-5.79	0.00	-465.98	0.00	465.98	3,542.95	1,771.47	5,969.33	2,989.10	2.23	-0.40	0.120
56.00	-97.24	-5.78	0.00	-460.19	0.00	460.19	3,529.32	1,764.66	5,914.30	2,961.55	2.31	-0.41	0.119
57.00	-96.48	-5.77	0.00	-454.40	0.00	454.40	3,515.63	1,757.82	5,859.42	2,934.06	2.40	-0.41	0.119
58.00	-95.72	-5.77	0.00	-448.63	0.00	448.63	3,501.89	1,750.94	5,804.69	2,906.66	2.49	-0.42	0.118
59.00	-94.96	-5.76	0.00	-442.86	0.00	442.86	3,488.09	1,744.04	5,750.12	2,879.33	2.58	-0.43	0.117
60.00	-94.20	-5.75	0.00	-437.11	0.00	437.11	3,474.23	1,737.12	5,695.71	2,852.09	2.67	-0.44	0.116
61.00	-93.44	-5.74	0.00	-431.36	0.00	431.36	3,460.32	1,730.16	5,641.45	2,824.92	2.76	-0.45	0.116
62.00	-92.69	-5.73	0.00	-425.62	0.00	425.62	3,446.35	1,723.17	5,587.36	2,797.83	2.86	-0.46	0.115
63.00	-91.93	-5.72	0.00	-419.90	0.00	419.90	3,432.32	1,716.16	5,533.43	2,770.83	2.95	-0.46	0.114
64.00	-91.18	-5.71	0.00	-414.18	0.00	414.18	3,418.23	1,709.12	5,479.66	2,743.90	3.05	-0.47	0.114
65.00	-90.43	-5.69	0.00	-408.47	0.00	408.47	3,404.09	1,702.05	5,426.05	2,717.06	3.15	-0.48	0.113
66.00	-89.68	-5.67	0.00	-402.78	0.00	402.78	3,389.89	1,694.95	5,372.62	2,690.30	3.25	-0.49	0.112
67.00	-88.93	-5.66	0.00	-397.11	0.00	397.11	3,375.64	1,687.82	5,319.35	2,663.63	3.36	-0.50	0.111
68.00	-88.18	-5.64	0.00	-391.45	0.00	391.45	3,361.32	1,680.66	5,266.25	2,637.04	3.46	-0.50	0.111
69.00	-87.43	-5.62	0.00	-385.81	0.00	385.81	3,346.95	1,673.48	5,213.32	2,610.53	3.57	-0.51	0.110
70.00	-86.68	-5.60	0.00	-380.19	0.00	380.19	3,332.53	1,666.26	5,160.56	2,584.12	3.68	-0.52	0.109
71.00	-85.94	-5.58	0.00	-374.59	0.00	374.59	3,318.04	1,659.02	5,107.98	2,557.79	3.79	-0.53	0.108
72.00	-85.19	-5.56	0.00	-369.01	0.00	369.01	3,300.52	1,650.26	5,051.01	2,529.26	3.90	-0.54	0.107
73.00	-84.45	-5.55	0.00	-363.44	0.00	363.44	3,281.11	1,640.56	4,991.50	2,499.46	4.01	-0.55	0.107
74.00	-83.71	-5.53	0.00	-357.90	0.00	357.90	3,261.71	1,630.85	4,932.34	2,469.84	4.13	-0.55	0.106
75.00	-82.97	-5.51	0.00	-352.37	0.00	352.37	3,242.30	1,621.15	4,873.54	2,440.39	4.24	-0.56	0.106
76.00	-82.23	-5.49	0.00	-346.87	0.00	346.87	3,222.90	1,611.45	4,815.08	2,411.12	4.36	-0.57	0.105
77.00	-81.49	-5.47	0.00	-341.38	0.00	341.38	3,203.49	1,601.75	4,756.98	2,382.03	4.48	-0.58	0.104
78.00	-80.76	-5.45	0.00	-335.91	0.00	335.91	3,184.09	1,592.04	4,699.23	2,353.11	4.60	-0.59	0.103
79.00	-80.00	-5.42	0.00	-330.47	0.00	330.47	3,164.68	1,582.34	4,641.84	2,324.37	4.73	-0.59	0.103
80.00	-79.27	-5.40	0.00	-325.04	0.00	325.04	3,145.28	1,572.64	4,584.79	2,295.80	4.85	-0.60	0.102
81.00	-78.53	-5.38	0.00	-319.64	0.00	319.64	3,125.87	1,562.94	4,528.10	2,267.42	4.98	-0.61	0.101
82.00	-77.80	-5.36	0.00	-314.26	0.00	314.26	3,106.47	1,553.24	4,471.77	2,239.21	5.11	-0.62	0.101
83.00	-77.07	-5.34	0.00	-308.90	0.00	308.90	3,087.07	1,543.53	4,415.78	2,211.17	5.24	-0.63	0.100
84.00	-76.35	-5.32	0.00	-303.56	0.00	303.56	3,067.66	1,533.83	4,360.15	2,183.32	5.37	-0.64	0.099
85.00	-75.62	-5.30	0.00	-298.24	0.00	298.24	3,048.26	1,524.13	4,304.87	2,155.63	5.51	-0.64	0.098
86.00	-74.89	-5.28	0.00	-292.94	0.00	292.94	3,028.85	1,514.43	4,249.94	2,128.13	5.64	-0.65	0.097
87.00	-74.17	-5.26	0.00	-287.66	0.00	287.66	3,009.45	1,504.72	4,195.37	2,100.80	5.78	-0.66	0.097
87.54	-73.78	-5.24	0.00	-284.83	0.00	284.83	2,998.97	1,499.48	4,166.05	2,086.12	5.85	-0.66	0.096
88.00	-73.38	-5.23	0.00	-282.41	0.00	282.41	2,990.04	1,495.02	4,141.15	2,073.65	5.92	-0.67	0.095
89.00	-72.52	-5.21	0.00	-277.18	0.00	277.18	2,970.64	1,485.32	4,087.28	2,046.68	6.06	-0.68	0.094
90.00	-71.66	-5.18	0.00	-271.98	0.00	271.98	2,951.23	1,475.62	4,033.76	2,019.88	6.20	-0.68	0.093
91.00	-70.80	-5.16	0.00	-266.80	0.00	266.80	2,931.83	1,465.91	3,980.60	1,993.26	6.35	-0.69	0.092
92.00	-69.95	-5.13	0.00	-261.64	0.00	261.64	2,912.42	1,456.21	3,927.79	1,966.81	6.49	-0.70	0.091
92.46	-69.56	-5.12	0.00	-259.30	0.00	259.30	2,424.49	1,212.24	3,334.85	1,669.90	6.56	-0.70	0.101
93.00	-69.18	-5.11	0.00	-256.52	0.00	256.52	2,418.22	1,209.11	3,314.29	1,659.61	6.64	-0.71	0.101
94.00	-68.49	-5.08	0.00	-251.41	0.00	251.41	2,406.65	1,203.32	3,276.56	1,640.72	6.79	-0.71	0.099
95.00	-67.80	-5.06	0.00	-246.33	0.00	246.33	2,395.02	1,197.51	3,238.97	1,621.89	6.94	-0.72	0.098
96.00	-66.13	-4.91	0.00	-241.27	0.00	241.27	2,383.33	1,191.67	3,201.50	1,603.13	7.09	-0.73	0.097
97.00	-65.44	-4.89	0.00	-236.35	0.00	236.35	2,371.59	1,185.79	3,164.18	1,584.44	7.24	-0.74	0.096
98.00	-64.76	-4.87	0.00	-231.46	0.00	231.46	2,359.79	1,179.89	3,126.99	1,565.82	7.40	-0.75	0.094
99.00	-64.07	-4.84	0.00	-226.60	0.00	226.60	2,347.93	1,173.97	3,089.94	1,547.27	7.56	-0.76	0.093
100.00	-63.39	-4.82	0.00	-221.76	0.00	221.76	2,336.02	1,168.01	3,053.03	1,528.79	7.72	-0.76	0.092
101.00	-62.71	-4.79	0.00	-216.94	0.00	216.94	2,324.05	1,162.02	3,016.27	1,510.38	7.88	-0.77	0.091
102.00	-62.02	-4.77	0.00	-212.15	0.00	212.15	2,312.02	1,156.01	2,979.65	1,492.04	8.04	-0.78	0.090
103.00	-61.34	-4.74	0.00	-207.38	0.00	207.38	2,299.80	1,149.90	2,943.01	1,473.69	8.20	-0.79	0.088

Site Number:	302506			Code:	ANSI/TIA-222-G								
Site Name:	Winchester CT 3, CT			Engineering Number:	OAA714359_C3_01					10/24/2017 12:32:26 PM			
Customer:	AT&T MOBILITY												

Load Case: 1.2D + 1.0Di + 1.0Wi — 40 mph with 1.00 in Radial Ice — 34 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 : 1.25

Wind Load Factor : 1.00

103.75	-60.83	-4.73	0.00	-203.83	0.00	203.83	2,287.68	1,143.84	2,911.90	1,458.11	8.33	-0.79	0.088
103.75	-60.83	-4.73	0.00	-203.83	0.00	203.83	2,287.68	1,143.84	2,911.90	1,458.11	8.33	-0.79	0.166
104.00	-60.68	-4.72	0.00	-202.65	0.00	202.65	2,283.63	1,141.82	2,901.57	1,452.94	8.37	-0.80	0.166
105.00	-59.32	-4.63	0.00	-197.93	0.00	197.93	2,267.46	1,133.73	2,860.42	1,432.33	8.54	-0.81	0.164
106.00	-58.77	-4.61	0.00	-193.30	0.00	193.30	2,251.29	1,125.65	2,819.56	1,411.88	8.71	-0.83	0.163
107.00	-58.21	-4.60	0.00	-188.68	0.00	188.68	2,235.12	1,117.56	2,779.00	1,391.56	8.89	-0.84	0.162
108.00	-57.66	-4.58	0.00	-184.09	0.00	184.09	2,218.95	1,109.48	2,738.73	1,371.40	9.06	-0.86	0.160
109.00	-57.12	-4.56	0.00	-179.51	0.00	179.51	2,202.78	1,101.39	2,698.75	1,351.38	9.24	-0.87	0.159
110.00	-56.57	-4.55	0.00	-174.94	0.00	174.94	2,186.61	1,093.30	2,659.07	1,331.51	9.43	-0.89	0.157
111.00	-56.02	-4.53	0.00	-170.40	0.00	170.40	2,170.44	1,085.22	2,619.69	1,311.79	9.62	-0.90	0.156
112.00	-50.14	-4.05	0.00	-165.87	0.00	165.87	2,154.27	1,077.13	2,580.59	1,292.21	9.81	-0.92	0.152
113.00	-49.71	-4.04	0.00	-161.82	0.00	161.82	2,138.10	1,069.05	2,541.79	1,272.79	10.00	-0.93	0.150
114.00	-49.31	-4.02	0.00	-157.78	0.00	157.78	2,121.93	1,060.96	2,503.29	1,253.50	10.20	-0.95	0.149
115.00	-48.92	-4.01	0.00	-153.76	0.00	153.76	2,105.76	1,052.88	2,465.08	1,234.37	10.40	-0.96	0.148
116.00	-48.54	-3.99	0.00	-149.75	0.00	149.75	2,089.59	1,044.79	2,427.16	1,215.38	10.60	-0.98	0.146
117.00	-48.15	-3.97	0.00	-145.76	0.00	145.76	2,073.42	1,036.71	2,389.54	1,196.54	10.80	-0.99	0.145
118.00	-47.77	-3.95	0.00	-141.79	0.00	141.79	2,057.25	1,028.62	2,352.21	1,177.85	11.01	-1.00	0.144
119.00	-47.38	-3.93	0.00	-137.84	0.00	137.84	2,041.07	1,020.54	2,315.17	1,159.31	11.23	-1.02	0.142
120.00	-47.00	-3.92	0.00	-133.91	0.00	133.91	2,024.90	1,012.45	2,278.43	1,140.91	11.44	-1.03	0.141
121.00	-46.62	-3.90	0.00	-129.99	0.00	129.99	2,008.73	1,004.37	2,241.98	1,122.66	11.66	-1.05	0.139
122.00	-46.24	-3.88	0.00	-126.09	0.00	126.09	1,992.56	996.28	2,205.83	1,104.55	11.88	-1.06	0.137
123.00	-45.86	-3.86	0.00	-122.22	0.00	122.22	1,976.39	988.20	2,169.97	1,086.60	12.10	-1.08	0.136
124.00	-45.49	-3.84	0.00	-118.36	0.00	118.36	1,960.22	980.11	2,134.40	1,068.79	12.33	-1.09	0.134
125.00	-38.86	-3.32	0.00	-114.52	0.00	114.52	1,944.05	972.03	2,099.13	1,051.12	12.56	-1.11	0.129
126.00	-38.53	-3.31	0.00	-111.20	0.00	111.20	1,927.88	963.94	2,064.15	1,033.61	12.79	-1.12	0.128
127.00	-38.20	-3.30	0.00	-107.89	0.00	107.89	1,911.71	955.86	2,029.46	1,016.24	13.03	-1.13	0.126
128.00	-37.88	-3.29	0.00	-104.59	0.00	104.59	1,895.54	947.77	1,995.07	999.02	13.27	-1.15	0.125
129.00	-37.56	-3.28	0.00	-101.30	0.00	101.30	1,879.37	939.68	1,960.98	981.95	13.51	-1.16	0.123
130.00	-37.24	-3.26	0.00	-98.02	0.00	98.02	1,863.20	931.60	1,927.17	965.02	13.76	-1.17	0.122
131.00	-36.92	-3.25	0.00	-94.76	0.00	94.76	1,847.03	923.51	1,893.66	948.24	14.00	-1.19	0.120
132.00	-36.60	-3.24	0.00	-91.51	0.00	91.51	1,830.86	915.43	1,860.45	931.61	14.25	-1.20	0.118
132.12	-36.56	-3.24	0.00	-91.12	0.00	91.12	1,828.92	914.46	1,856.49	929.63	14.28	-1.20	0.118
133.00	-36.23	-3.23	0.00	-88.27	0.00	88.27	1,814.69	907.34	1,827.53	915.12	14.51	-1.21	0.116
134.00	-35.85	-3.21	0.00	-85.04	0.00	85.04	1,798.52	899.26	1,794.90	898.78	14.76	-1.23	0.115
135.00	-26.80	-2.53	0.00	-81.83	0.00	81.83	1,782.35	891.17	1,762.57	882.59	15.02	-1.24	0.108
135.87	-26.48	-2.52	0.00	-79.63	0.00	79.63	999.39	499.70	1,006.16	503.83	15.25	-1.25	0.185
136.00	-26.45	-2.52	0.00	-79.30	0.00	79.30	998.64	499.32	1,004.22	502.86	15.28	-1.25	0.184
137.00	-26.18	-2.51	0.00	-76.78	0.00	76.78	992.83	496.42	989.37	495.42	15.55	-1.27	0.181
138.00	-25.91	-2.50	0.00	-74.27	0.00	74.27	986.97	493.49	974.56	488.00	15.82	-1.29	0.178
139.00	-25.64	-2.49	0.00	-71.77	0.00	71.77	981.05	490.53	959.80	480.61	16.09	-1.31	0.175
140.00	-22.47	-2.10	0.00	-67.45	0.00	67.45	975.08	487.54	945.09	473.25	16.37	-1.33	0.166
141.00	-22.21	-2.09	0.00	-65.35	0.00	65.35	969.05	484.52	930.44	465.91	16.65	-1.35	0.163
142.00	-21.96	-2.08	0.00	-63.26	0.00	63.26	962.96	481.48	915.84	458.60	16.93	-1.37	0.161
143.00	-21.70	-2.06	0.00	-61.19	0.00	61.19	956.81	478.41	901.30	451.32	17.22	-1.39	0.158
144.00	-21.45	-2.05	0.00	-59.13	0.00	59.13	950.61	475.30	886.82	444.07	17.52	-1.41	0.156
145.00	-21.19	-2.04	0.00	-57.08	0.00	57.08	944.35	472.17	872.40	436.85	17.81	-1.43	0.153
146.00	-20.94	-2.02	0.00	-55.04	0.00	55.04	938.03	469.01	858.03	429.66	18.11	-1.45	0.150
147.00	-20.69	-2.01	0.00	-53.01	0.00	53.01	931.66	465.83	843.74	422.50	18.42	-1.47	0.148
148.00	-20.44	-2.00	0.00	-51.00	0.00	51.00	925.22	462.61	829.51	415.37	18.73	-1.48	0.145
149.00	-20.19	-1.98	0.00	-49.01	0.00	49.01	918.73	459.37	815.34	408.28	19.04	-1.50	0.142
150.00	-19.61	-1.90	0.00	-47.02	0.00	47.02	912.19	456.09	801.24	401.22	19.36	-1.52	0.139
151.00	-19.37	-1.88	0.00	-45.12	0.00	45.12	905.59	452.79	787.21	394.19	19.68	-1.54	0.136
152.00	-19.12	-1.87	0.00	-43.24	0.00	43.24	898.93	449.46	773.25	387.20	20.00	-1.56	0.133
153.00	-18.88	-1.86	0.00	-41.37	0.00	41.37	892.21	446.10	759.37	380.25	20.33	-1.57	0.130
154.00	-18.64	-1.84	0.00	-39.51	0.00	39.51	885.44	442.72	745.56	373.33	20.66	-1.59	0.127
155.00	-18.40	-1.83	0.00	-37.67	0.00	37.67	878.60	439.30	731.82	366.45	21.00	-1.61	0.124
156.00	-18.16	-1.81	0.00	-35.84	0.00	35.84	871.72	435.86	718.16	359.61	21.33	-1.62	0.121

Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph with 1.00 in Radial Ice 34 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 : 1.25
Wind Load Factor : 1.00

157.00	-17.92	-1.80	0.00	-34.03	0.00	34.03	864.77	432.39	704.58	352.81	21.68	-1.64	0.117
158.00	-17.68	-1.79	0.00	-32.23	0.00	32.23	857.77	428.88	691.08	346.05	22.02	-1.66	0.114
159.00	-17.45	-1.77	0.00	-30.45	0.00	30.45	850.71	425.35	677.66	339.34	22.37	-1.67	0.110
160.00	-17.21	-1.76	0.00	-28.67	0.00	28.67	843.59	421.80	664.33	332.66	22.72	-1.69	0.107
161.00	-16.98	-1.74	0.00	-26.92	0.00	26.92	836.42	418.21	651.08	326.02	23.08	-1.70	0.103
162.00	-16.75	-1.72	0.00	-25.18	0.00	25.18	829.19	414.59	637.92	319.43	23.43	-1.72	0.099
163.00	-16.52	-1.70	0.00	-23.47	0.00	23.47	819.85	409.92	623.28	312.10	23.80	-1.73	0.095
164.00	-16.29	-1.68	0.00	-21.77	0.00	21.77	810.15	405.07	608.54	304.72	24.16	-1.74	0.092
165.00	-16.06	-1.66	0.00	-20.09	0.00	20.09	800.44	400.22	593.98	297.43	24.53	-1.76	0.088
166.00	-15.84	-1.64	0.00	-18.43	0.00	18.43	790.74	395.37	579.60	290.23	24.89	-1.77	0.084
167.00	-11.17	-1.17	0.00	-16.80	0.00	16.80	781.04	390.52	565.39	283.11	25.27	-1.78	0.074
168.00	-11.03	-1.15	0.00	-15.63	0.00	15.63	771.34	385.67	551.35	276.09	25.64	-1.79	0.071
169.00	-10.89	-1.14	0.00	-14.48	0.00	14.48	761.63	380.82	537.50	269.15	26.02	-1.80	0.068
170.00	-10.75	-1.12	0.00	-13.34	0.00	13.34	751.93	375.97	523.82	262.30	26.40	-1.81	0.065
171.00	-10.61	-1.11	0.00	-12.22	0.00	12.22	742.23	371.11	510.32	255.54	26.78	-1.82	0.062
172.00	-10.47	-1.10	0.00	-11.11	0.00	11.11	732.53	366.26	496.99	248.86	27.16	-1.83	0.059
173.00	-10.34	-1.08	0.00	-10.02	0.00	10.02	722.82	361.41	483.84	242.28	27.54	-1.84	0.056
174.00	-10.20	-1.07	0.00	-8.93	0.00	8.93	713.12	356.56	470.86	235.78	27.93	-1.85	0.052
175.00	-10.07	-1.05	0.00	-7.87	0.00	7.87	703.42	351.71	458.07	229.37	28.32	-1.86	0.049
176.00	-9.94	-1.04	0.00	-6.81	0.00	6.81	693.72	346.86	445.44	223.05	28.71	-1.86	0.045
177.00	-9.81	-1.03	0.00	-5.77	0.00	5.77	684.02	342.01	433.00	216.82	29.10	-1.87	0.041
178.00	-9.68	-1.01	0.00	-4.75	0.00	4.75	674.31	337.16	420.73	210.68	29.49	-1.87	0.037
179.00	-9.55	-1.00	0.00	-3.74	0.00	3.74	664.61	332.31	408.64	204.62	29.88	-1.88	0.033
180.00	0.00	-0.68	0.00	-2.74	0.00	2.74	654.91	327.45	396.72	198.65	30.28	-1.88	0.014

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:32:27 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.15

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		11.2	0.0					0.0	0.0	11.2	0.0	0.0	0.0
1.00		22.4	246.7					0.0	170.6	22.4	417.3	0.0	0.0
2.00		22.3	245.6					0.0	170.6	22.3	416.3	0.0	0.0
3.00		22.2	244.6					0.0	170.6	22.2	415.2	0.0	0.0
4.00		22.1	243.5					0.0	170.6	22.1	414.2	0.0	0.0
5.00		22.0	242.5					0.0	170.6	22.0	413.1	0.0	0.0
6.00		21.9	241.5					0.0	170.6	21.9	412.1	0.0	0.0
7.00		21.8	240.4					0.0	170.6	21.8	411.1	0.0	0.0
8.00		21.7	239.4					0.0	170.6	21.7	410.0	0.0	0.0
9.00		21.7	238.4					0.0	170.6	21.7	409.0	0.0	0.0
10.00		21.6	237.3					0.0	170.6	21.6	408.0	0.0	0.0
11.00		21.5	236.3					0.0	170.6	21.5	406.9	0.0	0.0
12.00		21.4	235.3					0.0	170.6	21.4	405.9	0.0	0.0
13.00		21.3	234.2					0.0	170.6	21.3	404.9	0.0	0.0
14.00		21.2	233.2					0.0	170.6	21.2	403.8	0.0	0.0
15.00		21.1	232.1					0.0	170.6	21.1	402.8	0.0	0.0
16.00		21.0	231.1					0.0	170.6	21.0	401.7	0.0	0.0
17.00		20.9	230.1					0.0	170.6	20.9	400.7	0.0	0.0
18.00		20.8	229.0					0.0	170.6	20.8	399.7	0.0	0.0
19.00		20.7	228.0					0.0	170.6	20.7	398.6	0.0	0.0
20.00		20.6	227.0					0.0	170.6	20.6	397.6	0.0	0.0
21.00		20.5	225.9					0.0	170.6	20.5	396.6	0.0	0.0
22.00		20.4	224.9					0.0	170.6	20.4	395.5	0.0	0.0
23.00		20.3	223.8					0.0	170.6	20.3	394.5	0.0	0.0
24.00		20.2	222.8					0.0	170.6	20.2	393.4	0.0	0.0
25.00		20.2	221.8					0.0	170.6	20.2	392.4	0.0	0.0
26.00		20.1	220.7					0.0	170.6	20.1	391.4	0.0	0.0
27.00		20.0	219.7					0.0	170.6	20.0	390.3	0.0	0.0
28.00		19.9	218.7					0.0	170.6	19.9	389.3	0.0	0.0
29.00		19.8	217.6					0.0	170.6	19.8	388.3	0.0	0.0
30.00	Appertunance(s)	19.7	216.6	7.8	0.0	0.0	10.0	0.0	170.6	27.5	397.2	0.0	0.0
31.00		19.8	215.6					0.0	170.3	19.8	385.9	0.0	0.0
32.00		19.9	214.5					0.0	170.3	19.9	384.8	0.0	0.0
33.00		20.0	213.5					0.0	170.3	20.0	383.8	0.0	0.0
34.00		20.0	212.4					0.0	170.3	20.0	382.7	0.0	0.0
35.00		20.1	211.4					0.0	170.3	20.1	381.7	0.0	0.0
36.00		20.2	210.4					0.0	170.3	20.2	380.7	0.0	0.0
37.00		20.2	209.3					0.0	170.3	20.2	379.6	0.0	0.0
38.00		20.3	208.3					0.0	170.3	20.3	378.6	0.0	0.0
39.00		20.3	207.3					0.0	170.3	20.3	377.6	0.0	0.0
40.00		20.4	206.2					0.0	170.3	20.4	376.5	0.0	0.0
41.00		20.4	205.2					0.0	170.3	20.4	375.5	0.0	0.0
42.00		20.0	204.1					0.0	170.3	20.0	374.5	0.0	0.0
42.96	Bot - Section 2	10.2	194.3					0.0	162.9	10.2	357.2	0.0	0.0
43.00		10.9	16.5					0.0	7.4	10.9	23.9	0.0	0.0
44.00		20.9	378.6					0.0	170.3	20.9	548.9	0.0	0.0
45.00		20.9	376.6					0.0	170.3	20.9	546.9	0.0	0.0
46.00		20.9	374.7					0.0	170.3	20.9	545.0	0.0	0.0

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

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

Wind Importance Factor : 1.15

47.00		21.0	372.8					0.0	170.3	21.0	543.1	0.0	0.0
48.00		21.0	370.9					0.0	170.3	21.0	541.2	0.0	0.0
49.00		10.9	368.9					0.0	170.3	10.9	539.2	0.0	0.0
49.04	Top - Section 1	10.5	14.7					0.0	6.8	10.5	21.5	0.0	0.0
50.00		20.6	164.3					0.0	163.5	20.6	327.8	0.0	0.0
51.00		21.0	170.3					0.0	170.3	21.0	340.6	0.0	0.0
52.00		21.0	169.4					0.0	170.3	21.0	339.7	0.0	0.0
53.00		21.0	168.5					0.0	170.3	21.0	338.8	0.0	0.0
54.00		21.0	167.6					0.0	170.3	21.0	337.9	0.0	0.0
55.00		21.0	166.7					0.0	170.3	21.0	337.0	0.0	0.0
56.00		21.0	165.8					0.0	170.3	21.0	336.1	0.0	0.0
57.00		21.0	164.9					0.0	170.3	21.0	335.2	0.0	0.0
58.00		21.0	164.1					0.0	170.3	21.0	334.4	0.0	0.0
59.00		21.0	163.2					0.0	170.3	21.0	333.5	0.0	0.0
60.00		21.0	162.3					0.0	170.3	21.0	332.6	0.0	0.0
61.00		21.0	161.4					0.0	170.3	21.0	331.7	0.0	0.0
62.00		21.0	160.5					0.0	170.3	21.0	330.8	0.0	0.0
63.00		20.9	159.6					0.0	170.3	20.9	329.9	0.0	0.0
64.00		29.7	158.7					0.0	170.3	29.7	329.0	0.0	0.0
65.00		38.6	157.8					7.7	170.3	46.3	328.1	0.0	0.0
66.00		38.5	156.9					7.8	170.3	46.3	327.2	0.0	0.0
67.00		38.5	156.1					7.8	170.3	46.2	326.4	0.0	0.0
68.00		38.4	155.2					7.8	170.3	46.2	325.5	0.0	0.0
69.00		38.3	154.3					7.9	170.3	46.2	324.6	0.0	0.0
70.00		38.3	153.4					7.9	170.3	46.2	323.7	0.0	0.0
71.00		38.2	152.5					7.9	170.3	46.1	322.8	0.0	0.0
72.00		38.1	151.6					8.0	170.3	46.1	321.9	0.0	0.0
73.00		38.1	150.7					8.0	170.3	46.1	321.0	0.0	0.0
74.00		38.0	149.8					8.0	170.3	46.0	320.1	0.0	0.0
75.00		37.9	148.9					8.0	170.3	46.0	319.2	0.0	0.0
76.00		37.8	148.1					8.1	170.3	45.9	318.4	0.0	0.0
77.00		37.8	147.2					8.1	170.3	45.9	317.5	0.0	0.0
78.00		37.7	146.3					8.1	170.3	45.8	316.6	0.0	0.0
79.00	Appertunance(s)	37.6	145.4	0.9	0.0	0.0	0.6	8.2	170.3	46.7	316.3	0.0	0.0
80.00		37.5	144.5					8.2	170.2	45.7	314.7	0.0	0.0
81.00		37.4	143.6					8.2	170.2	45.6	313.8	0.0	0.0
82.00		37.3	142.7					8.3	170.2	45.5	312.9	0.0	0.0
83.00		37.2	141.8					8.3	170.2	45.5	312.0	0.0	0.0
84.00		37.1	140.9					8.3	170.2	45.4	311.1	0.0	0.0
85.00		37.0	140.1					8.3	170.2	45.3	310.2	0.0	0.0
86.00		36.9	139.2					8.4	170.2	45.2	309.3	0.0	0.0
87.00		28.3	138.3					8.4	170.2	36.7	308.4	0.0	0.0
87.54	Bot - Section 3	18.5	74.3					4.5	91.9	23.0	166.2	0.0	0.0
88.00		27.2	116.8					3.9	78.3	31.1	195.0	0.0	0.0
89.00		37.2	252.6					8.5	170.2	45.6	422.7	0.0	0.0
90.00		37.1	250.9					8.5	170.2	45.6	421.1	0.0	0.0
91.00		37.0	249.3					8.5	170.2	45.5	419.5	0.0	0.0
92.00		26.8	247.7					8.5	170.2	35.4	417.8	0.0	0.0
92.46	Top - Section 2	18.4	112.5					3.9	77.7	22.3	190.2	0.0	0.0
93.00		28.3	61.4					4.7	92.5	33.0	153.8	0.0	0.0
94.00		36.6	112.4					8.6	170.2	45.2	282.5	0.0	0.0
95.00		36.4	111.6					8.6	170.2	45.1	281.8	0.0	0.0
96.00	Appertunance(s)	36.3	110.9	157.0	0.0	0.0	486.6	8.6	170.2	201.9	767.6	0.0	0.0
97.00		36.2	110.1					8.7	169.3	44.8	279.5	0.0	0.0
98.00		36.0	109.4					8.7	169.3	44.7	278.8	0.0	0.0
99.00		35.9	108.7					8.7	169.3	44.6	278.0	0.0	0.0
100.00		35.8	107.9					8.7	169.3	44.5	277.3	0.0	0.0

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

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

Wind Importance Factor : 1.15

101.00		35.6	107.2					8.8	169.3	44.4	276.5	0.0	0.0
102.00		35.5	106.4					8.8	169.3	44.3	275.8	0.0	0.0
103.00		30.9	105.7					8.8	169.3	39.7	275.0	0.0	0.0
103.75	Reinf. Top	17.6	78.8					6.6	127.0	24.3	205.8	0.0	0.0
104.00		22.0	26.2					2.2	25.6	24.2	51.8	0.0	0.0
105.00	Appertunance(s)	35.0	104.2	116.8	0.0	0.0	79.2	8.9	102.5	160.7	286.0	0.0	0.0
106.00		34.9	103.5					8.9	97.6	43.8	201.1	0.0	0.0
107.00		34.7	102.7					8.9	97.6	43.6	200.4	0.0	0.0
108.00		34.6	102.0					8.9	97.6	43.5	199.6	0.0	0.0
109.00		34.4	101.3					9.0	97.6	43.4	198.9	0.0	0.0
110.00		34.2	100.5					9.0	97.6	43.2	198.1	0.0	0.0
111.00		34.1	99.8					9.0	97.6	43.1	197.4	0.0	0.0
112.00	Appertunance(s)	26.2	99.0	535.2	0.0	0.0	1,668.0	9.0	97.6	570.4	1,864.7	0.0	0.0
113.00		26.0	98.3					0.0	68.6	26.0	166.9	0.0	0.0
114.00		33.6	97.6					9.0	47.1	42.6	144.6	0.0	0.0
115.00		33.4	96.8					9.0	47.1	42.4	143.9	0.0	0.0
116.00		33.2	96.1					9.0	47.1	42.3	143.1	0.0	0.0
117.00		33.1	95.3					9.1	47.1	42.1	142.4	0.0	0.0
118.00		32.9	94.6					9.1	47.1	42.0	141.7	0.0	0.0
119.00		32.7	93.9					9.1	47.1	41.8	140.9	0.0	0.0
120.00		32.5	93.1					9.1	47.1	41.7	140.2	0.0	0.0
121.00		32.4	92.4					9.1	47.1	41.5	139.4	0.0	0.0
122.00		32.2	91.6					9.2	47.1	41.3	138.7	0.0	0.0
123.00		32.0	90.9					9.2	47.1	41.2	138.0	0.0	0.0
124.00		31.8	90.2					9.2	47.1	41.0	137.2	0.0	0.0
125.00	Appertunance(s)	24.4	89.4	541.3	0.0	0.0	2,125.6	9.2	47.1	574.9	2,262.1	0.0	0.0
126.00		17.0	88.7					0.0	40.8	17.0	129.5	0.0	0.0
127.00		16.9	87.9					0.0	40.8	16.9	128.8	0.0	0.0
128.00		16.8	87.2					0.0	40.8	16.8	128.0	0.0	0.0
129.00		16.7	86.4					0.0	40.8	16.7	127.3	0.0	0.0
130.00		16.6	85.7					0.0	40.8	16.6	126.6	0.0	0.0
131.00		16.5	85.0					0.0	40.8	16.5	125.8	0.0	0.0
132.00		9.2	84.2					0.0	40.8	9.2	125.1	0.0	0.0
132.12	Bot - Section 4	8.3	10.0					0.0	4.9	8.3	14.9	0.0	0.0
133.00		15.5	118.4					0.0	36.0	15.5	154.4	0.0	0.0
134.00		16.4	133.4					0.0	40.8	16.4	174.2	0.0	0.0
135.00	Appertunance(s)	15.3	132.2	769.2	0.0	0.0	2,857.1	0.0	40.8	784.4	3,030.2	0.0	0.0
135.87	Top - Section 3	8.1	114.0					0.0	32.3	8.1	146.3	0.0	0.0
136.00		9.1	6.5					0.0	4.8	9.1	11.3	0.0	0.0
137.00		16.1	49.3					0.0	37.1	16.1	86.5	0.0	0.0
138.00		16.0	48.9					0.0	37.1	16.0	86.0	0.0	0.0
139.00		15.9	48.4					0.0	37.1	15.9	85.6	0.0	0.0
140.00	Appertunance(s)	15.8	48.0	331.0	0.0	1,695.6	667.0	0.0	37.1	346.8	752.1	0.0	0.0
141.00		15.6	47.5					0.0	31.6	15.6	79.1	0.0	0.0
142.00		15.5	47.1					0.0	31.6	15.5	78.7	0.0	0.0
143.00		15.4	46.7					0.0	31.6	15.4	78.2	0.0	0.0
144.00		15.3	46.2					0.0	31.6	15.3	77.8	0.0	0.0
145.00		15.2	45.8					0.0	31.6	15.2	77.4	0.0	0.0
146.00		15.1	45.3					0.0	31.6	15.1	76.9	0.0	0.0
147.00		14.9	44.9					0.0	31.6	14.9	76.5	0.0	0.0
148.00		14.8	44.4					0.0	31.6	14.8	76.0	0.0	0.0
149.00		14.7	44.0					0.0	31.6	14.7	75.6	0.0	0.0
150.00	Appertunance(s)	14.6	43.5	56.3	0.0	0.0	158.3	0.0	31.6	70.9	233.4	0.0	0.0
151.00		14.5	43.1					0.0	30.8	14.5	73.9	0.0	0.0
152.00		14.3	42.7					0.0	30.8	14.3	73.4	0.0	0.0
153.00		14.2	42.2					0.0	30.8	14.2	73.0	0.0	0.0
154.00		14.1	41.8					0.0	30.8	14.1	72.5	0.0	0.0

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

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

Wind Importance Factor : 1.15

155.00		14.0	41.3					0.0	30.8	14.0	72.1	0.0	0.0
156.00		13.9	40.9					0.0	30.8	13.9	71.7	0.0	0.0
157.00		13.7	40.4					0.0	30.8	13.7	71.2	0.0	0.0
158.00		13.6	40.0					0.0	30.8	13.6	70.8	0.0	0.0
159.00		13.5	39.5					0.0	30.8	13.5	70.3	0.0	0.0
160.00		19.0	39.1					0.0	30.8	19.0	69.9	0.0	0.0
161.00		24.4	38.7					5.0	30.8	29.4	69.4	0.0	0.0
162.00		24.2	38.2					5.0	30.8	29.1	69.0	0.0	0.0
163.00		23.9	37.8					5.0	30.8	28.9	68.5	0.0	0.0
164.00		23.7	37.3					5.0	30.8	28.7	68.1	0.0	0.0
165.00		23.5	36.9					5.0	30.8	28.5	67.7	0.0	0.0
166.00		23.2	36.4					5.0	30.8	28.2	67.2	0.0	0.0
167.00	Appertunance(s)	17.7	36.0	451.8	0.0	0.0	1,276.5	5.0	30.8	474.6	1,343.3	0.0	0.0
168.00		12.3	35.6					0.0	19.9	12.3	55.5	0.0	0.0
169.00		12.2	35.1					0.0	19.9	12.2	55.0	0.0	0.0
170.00		12.0	34.7					0.0	19.9	12.0	54.6	0.0	0.0
171.00		11.9	34.2					0.0	19.9	11.9	54.1	0.0	0.0
172.00		11.8	33.8					0.0	19.9	11.8	53.7	0.0	0.0
173.00		11.6	33.3					0.0	19.9	11.6	53.3	0.0	0.0
174.00		11.5	32.9					0.0	19.9	11.5	52.8	0.0	0.0
175.00		11.4	32.4					0.0	19.9	11.4	52.4	0.0	0.0
176.00		11.2	32.0					0.0	19.9	11.2	51.9	0.0	0.0
177.00		11.1	31.6					0.0	19.9	11.1	51.5	0.0	0.0
178.00		11.0	31.1					0.0	19.9	11.0	51.0	0.0	0.0
179.00		10.8	30.7					0.0	19.9	10.8	50.6	0.0	0.0
180.00	Appertunance(s)	5.4	30.2	1,035.3	0.0	4,172.5	2,521.3	0.0	19.9	1,040.7	2,571.4	0.0	0.0
								Totals:		8,916.55	57,927.3	0.00	0.00

Site Number: 302506 Code: ANSI/TIA-222-G

Site Name: Winchester CT 3, CT Engineering Number: OAA714359_C3_01 10/24/2017 12:32:45 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.15

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	-57.93	-8.91	0.00	-1,056.35	0.00	1,056.35	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.150
1.00	-57.51	-8.89	0.00	-1,047.45	0.00	1,047.45	5,115.23	2,557.61	10,943.3	5,479.82	0.00	-0.01	0.150
2.00	-57.09	-8.88	0.00	-1,038.55	0.00	1,038.55	5,100.42	2,550.21	10,865.3	5,440.75	0.00	-0.02	0.150
3.00	-56.67	-8.87	0.00	-1,029.67	0.00	1,029.67	5,085.56	2,542.78	10,787.4	5,401.75	0.01	-0.03	0.149
4.00	-56.26	-8.85	0.00	-1,020.81	0.00	1,020.81	5,070.64	2,535.32	10,709.7	5,362.83	0.02	-0.04	0.149
5.00	-55.84	-8.84	0.00	-1,011.95	0.00	1,011.95	5,055.67	2,527.83	10,632.1	5,323.99	0.02	-0.04	0.148
6.00	-55.43	-8.83	0.00	-1,003.11	0.00	1,003.11	5,040.63	2,520.32	10,554.7	5,285.22	0.03	-0.05	0.148
7.00	-55.02	-8.81	0.00	-994.29	0.00	994.29	5,025.54	2,512.77	10,477.4	5,246.53	0.05	-0.06	0.147
8.00	-54.61	-8.80	0.00	-985.48	0.00	985.48	5,010.40	2,505.20	10,400.3	5,207.92	0.06	-0.07	0.147
9.00	-54.20	-8.79	0.00	-976.68	0.00	976.68	4,995.19	2,497.60	10,323.4	5,169.39	0.08	-0.08	0.146
10.00	-53.79	-8.77	0.00	-967.89	0.00	967.89	4,979.93	2,489.97	10,246.6	5,130.93	0.09	-0.09	0.146
11.00	-53.38	-8.76	0.00	-959.12	0.00	959.12	4,964.61	2,482.31	10,170.0	5,092.56	0.11	-0.10	0.146
12.00	-52.97	-8.74	0.00	-950.36	0.00	950.36	4,949.24	2,474.62	10,093.5	5,054.27	0.14	-0.11	0.145
13.00	-52.56	-8.73	0.00	-941.62	0.00	941.62	4,933.81	2,466.90	10,017.2	5,016.06	0.16	-0.12	0.145
14.00	-52.16	-8.72	0.00	-932.89	0.00	932.89	4,918.32	2,459.16	9,941.08	4,977.93	0.18	-0.13	0.144
15.00	-51.76	-8.70	0.00	-924.17	0.00	924.17	4,902.77	2,451.39	9,865.10	4,939.88	0.21	-0.13	0.144
16.00	-51.35	-8.69	0.00	-915.47	0.00	915.47	4,887.17	2,443.58	9,789.30	4,901.92	0.24	-0.14	0.143
17.00	-50.95	-8.68	0.00	-906.78	0.00	906.78	4,871.51	2,435.75	9,713.66	4,864.05	0.27	-0.15	0.143
18.00	-50.55	-8.66	0.00	-898.11	0.00	898.11	4,855.79	2,427.89	9,638.20	4,826.26	0.31	-0.16	0.142
19.00	-50.15	-8.65	0.00	-889.44	0.00	889.44	4,840.02	2,420.01	9,562.90	4,788.56	0.34	-0.17	0.142
20.00	-49.75	-8.63	0.00	-880.80	0.00	880.80	4,824.18	2,412.09	9,487.79	4,750.94	0.38	-0.18	0.141
21.00	-49.35	-8.62	0.00	-872.16	0.00	872.16	4,808.29	2,404.15	9,412.84	4,713.42	0.42	-0.19	0.141
22.00	-48.96	-8.61	0.00	-863.54	0.00	863.54	4,792.35	2,396.17	9,338.08	4,675.98	0.46	-0.20	0.140
23.00	-48.56	-8.59	0.00	-854.94	0.00	854.94	4,776.35	2,388.17	9,263.49	4,638.63	0.50	-0.21	0.140
24.00	-48.17	-8.58	0.00	-846.35	0.00	846.35	4,760.29	2,380.14	9,189.09	4,601.37	0.54	-0.22	0.139
25.00	-47.77	-8.56	0.00	-837.77	0.00	837.77	4,744.17	2,372.08	9,114.87	4,564.21	0.59	-0.23	0.138
26.00	-47.38	-8.55	0.00	-829.20	0.00	829.20	4,728.00	2,364.00	9,040.83	4,527.13	0.64	-0.24	0.138
27.00	-46.99	-8.54	0.00	-820.65	0.00	820.65	4,711.76	2,355.88	8,966.98	4,490.15	0.69	-0.25	0.137
28.00	-46.60	-8.52	0.00	-812.12	0.00	812.12	4,695.48	2,347.74	8,893.31	4,453.26	0.74	-0.26	0.137
29.00	-46.21	-8.51	0.00	-803.59	0.00	803.59	4,679.13	2,339.57	8,819.83	4,416.47	0.80	-0.26	0.136
30.00	-45.81	-8.49	0.00	-795.08	0.00	795.08	4,662.73	2,331.36	8,746.54	4,379.77	0.85	-0.27	0.136
31.00	-45.42	-8.47	0.00	-786.60	0.00	786.60	4,646.27	2,323.14	8,673.45	4,343.17	0.91	-0.28	0.135
32.00	-45.04	-8.46	0.00	-778.12	0.00	778.12	4,629.75	2,314.88	8,600.55	4,306.67	0.97	-0.29	0.135
33.00	-44.65	-8.44	0.00	-769.66	0.00	769.66	4,613.18	2,306.59	8,527.84	4,270.26	1.04	-0.30	0.134
34.00	-44.27	-8.43	0.00	-761.22	0.00	761.22	4,596.55	2,298.27	8,455.33	4,233.95	1.10	-0.31	0.133
35.00	-43.88	-8.41	0.00	-752.79	0.00	752.79	4,579.86	2,289.93	8,383.01	4,197.74	1.17	-0.32	0.133
36.00	-43.50	-8.40	0.00	-744.38	0.00	744.38	4,563.12	2,281.56	8,310.90	4,161.63	1.24	-0.33	0.132
37.00	-43.12	-8.38	0.00	-735.98	0.00	735.98	4,546.32	2,273.16	8,238.99	4,125.62	1.31	-0.34	0.132
38.00	-42.74	-8.37	0.00	-727.59	0.00	727.59	4,529.46	2,264.73	8,167.27	4,089.71	1.38	-0.35	0.131
39.00	-42.36	-8.35	0.00	-719.22	0.00	719.22	4,512.54	2,256.27	8,095.77	4,053.90	1.45	-0.36	0.130
40.00	-41.98	-8.34	0.00	-710.87	0.00	710.87	4,491.22	2,245.61	8,016.71	4,014.31	1.53	-0.37	0.130
41.00	-41.61	-8.32	0.00	-702.53	0.00	702.53	4,468.58	2,234.29	7,935.69	3,973.74	1.61	-0.38	0.129
42.00	-41.23	-8.31	0.00	-694.21	0.00	694.21	4,445.95	2,222.97	7,855.09	3,933.38	1.69	-0.39	0.129
42.96	-40.87	-8.30	0.00	-686.27	0.00	686.27	4,424.29	2,212.15	7,778.37	3,894.97	1.77	-0.40	0.128
43.00	-40.85	-8.29	0.00	-685.91	0.00	685.91	4,423.31	2,211.65	7,774.90	3,893.23	1.77	-0.40	0.127
44.00	-40.30	-8.27	0.00	-677.62	0.00	677.62	4,400.67	2,200.33	7,695.11	3,853.28	1.86	-0.41	0.127
45.00	-39.75	-8.25	0.00	-669.35	0.00	669.35	4,378.03	2,189.01	7,615.75	3,813.53	1.94	-0.42	0.126
46.00	-39.20	-8.23	0.00	-661.09	0.00	661.09	4,355.39	2,177.70	7,536.79	3,773.99	2.03	-0.43	0.126
47.00	-38.66	-8.22	0.00	-652.86	0.00	652.86	4,332.75	2,166.38	7,458.24	3,734.66	2.12	-0.44	0.125
48.00	-38.12	-8.20	0.00	-644.64	0.00	644.64	4,310.11	2,155.06	7,380.10	3,695.54	2.22	-0.45	0.124
49.00	-37.58	-8.19	0.00	-636.45	0.00	636.45	4,287.47	2,143.74	7,302.38	3,656.62	2.31	-0.46	0.124

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

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

Wind Importance Factor : 1.15

49.04	-37.56	-8.18	0.00	-636.12	0.00	636.12	3,622.99	1,811.50	6,300.42	3,154.89	2.31	-0.46	0.139
50.00	-37.23	-8.16	0.00	-628.27	0.00	628.27	3,610.23	1,805.12	6,246.74	3,128.01	2.41	-0.47	0.138
51.00	-36.89	-8.14	0.00	-620.11	0.00	620.11	3,596.89	1,798.44	6,190.96	3,100.08	2.51	-0.48	0.137
52.00	-36.54	-8.13	0.00	-611.96	0.00	611.96	3,583.49	1,791.74	6,135.33	3,072.23	2.61	-0.49	0.136
53.00	-36.20	-8.11	0.00	-603.84	0.00	603.84	3,570.03	1,785.02	6,079.85	3,044.45	2.71	-0.50	0.135
54.00	-35.87	-8.09	0.00	-595.73	0.00	595.73	3,556.52	1,778.26	6,024.52	3,016.74	2.81	-0.51	0.134
55.00	-35.53	-8.07	0.00	-587.64	0.00	587.64	3,542.95	1,771.47	5,969.33	2,989.10	2.92	-0.52	0.134
56.00	-35.19	-8.06	0.00	-579.56	0.00	579.56	3,529.32	1,764.66	5,914.30	2,961.55	3.03	-0.53	0.133
57.00	-34.85	-8.04	0.00	-571.51	0.00	571.51	3,515.63	1,757.82	5,859.42	2,934.06	3.14	-0.54	0.132
58.00	-34.52	-8.02	0.00	-563.47	0.00	563.47	3,501.89	1,750.94	5,804.69	2,906.66	3.26	-0.55	0.131
59.00	-34.18	-8.00	0.00	-555.45	0.00	555.45	3,488.09	1,744.04	5,750.12	2,879.33	3.37	-0.56	0.130
60.00	-33.85	-7.98	0.00	-547.45	0.00	547.45	3,474.23	1,737.12	5,695.71	2,852.09	3.49	-0.57	0.129
61.00	-33.52	-7.97	0.00	-539.46	0.00	539.46	3,460.32	1,730.16	5,641.45	2,824.92	3.61	-0.58	0.128
62.00	-33.18	-7.95	0.00	-531.50	0.00	531.50	3,446.35	1,723.17	5,587.36	2,797.83	3.73	-0.59	0.127
63.00	-32.85	-7.93	0.00	-523.55	0.00	523.55	3,432.32	1,716.16	5,533.43	2,770.83	3.86	-0.60	0.126
64.00	-32.52	-7.90	0.00	-515.62	0.00	515.62	3,418.23	1,709.12	5,479.66	2,743.90	3.98	-0.61	0.125
65.00	-32.19	-7.86	0.00	-507.72	0.00	507.72	3,404.09	1,702.05	5,426.05	2,717.06	4.11	-0.62	0.124
66.00	-31.87	-7.81	0.00	-499.87	0.00	499.87	3,389.89	1,694.95	5,372.62	2,690.30	4.24	-0.63	0.123
67.00	-31.54	-7.77	0.00	-492.05	0.00	492.05	3,375.64	1,687.82	5,319.35	2,663.63	4.38	-0.64	0.122
68.00	-31.21	-7.72	0.00	-484.28	0.00	484.28	3,361.32	1,680.66	5,266.25	2,637.04	4.51	-0.65	0.121
69.00	-30.89	-7.68	0.00	-476.56	0.00	476.56	3,346.95	1,673.48	5,213.32	2,610.53	4.65	-0.66	0.120
70.00	-30.56	-7.64	0.00	-468.88	0.00	468.88	3,332.53	1,666.26	5,160.56	2,584.12	4.79	-0.67	0.118
71.00	-30.24	-7.59	0.00	-461.24	0.00	461.24	3,318.04	1,659.02	5,107.98	2,557.79	4.93	-0.68	0.117
72.00	-29.92	-7.55	0.00	-453.65	0.00	453.65	3,300.52	1,650.26	5,051.01	2,529.26	5.07	-0.69	0.116
73.00	-29.59	-7.50	0.00	-446.11	0.00	446.11	3,281.11	1,640.56	4,991.50	2,499.46	5.22	-0.70	0.116
74.00	-29.27	-7.46	0.00	-438.61	0.00	438.61	3,261.71	1,630.85	4,932.34	2,469.84	5.37	-0.71	0.115
75.00	-28.95	-7.41	0.00	-431.15	0.00	431.15	3,242.30	1,621.15	4,873.54	2,440.39	5.52	-0.72	0.114
76.00	-28.63	-7.37	0.00	-423.74	0.00	423.74	3,222.90	1,611.45	4,815.08	2,411.12	5.67	-0.73	0.113
77.00	-28.32	-7.32	0.00	-416.37	0.00	416.37	3,203.49	1,601.75	4,756.98	2,382.03	5.82	-0.74	0.112
78.00	-28.00	-7.28	0.00	-409.05	0.00	409.05	3,184.09	1,592.04	4,699.23	2,353.11	5.98	-0.75	0.111
79.00	-27.68	-7.23	0.00	-401.78	0.00	401.78	3,164.68	1,582.34	4,641.84	2,324.37	6.14	-0.76	0.110
80.00	-27.37	-7.19	0.00	-394.54	0.00	394.54	3,145.28	1,572.64	4,584.79	2,295.80	6.30	-0.77	0.109
81.00	-27.05	-7.14	0.00	-387.36	0.00	387.36	3,125.87	1,562.94	4,528.10	2,267.42	6.46	-0.78	0.108
82.00	-26.74	-7.09	0.00	-380.22	0.00	380.22	3,106.47	1,553.24	4,471.77	2,239.21	6.63	-0.79	0.107
83.00	-26.43	-7.05	0.00	-373.13	0.00	373.13	3,087.07	1,543.53	4,415.78	2,211.17	6.79	-0.80	0.106
84.00	-26.12	-7.00	0.00	-366.08	0.00	366.08	3,067.66	1,533.83	4,360.15	2,183.32	6.96	-0.81	0.105
85.00	-25.80	-6.96	0.00	-359.07	0.00	359.07	3,048.26	1,524.13	4,304.87	2,155.63	7.13	-0.82	0.104
86.00	-25.49	-6.91	0.00	-352.11	0.00	352.11	3,028.85	1,514.43	4,249.94	2,128.13	7.30	-0.83	0.103
87.00	-25.19	-6.88	0.00	-345.20	0.00	345.20	3,009.45	1,504.72	4,195.37	2,100.80	7.48	-0.84	0.102
87.54	-25.02	-6.85	0.00	-341.49	0.00	341.49	2,998.97	1,499.48	4,166.05	2,086.12	7.57	-0.84	0.101
88.00	-24.82	-6.82	0.00	-338.33	0.00	338.33	2,990.04	1,495.02	4,141.15	2,073.65	7.66	-0.85	0.099
89.00	-24.40	-6.77	0.00	-331.51	0.00	331.51	2,970.64	1,485.32	4,087.28	2,046.68	7.83	-0.86	0.098
90.00	-23.98	-6.73	0.00	-324.74	0.00	324.74	2,951.23	1,475.62	4,033.76	2,019.88	8.02	-0.87	0.097
91.00	-23.56	-6.68	0.00	-318.02	0.00	318.02	2,931.83	1,465.91	3,980.60	1,993.26	8.20	-0.88	0.096
92.00	-23.14	-6.64	0.00	-311.34	0.00	311.34	2,912.42	1,456.21	3,927.79	1,966.81	8.38	-0.89	0.095
92.46	-22.95	-6.61	0.00	-308.31	0.00	308.31	2,424.49	1,212.24	3,334.85	1,669.90	8.47	-0.89	0.105
93.00	-22.80	-6.58	0.00	-304.71	0.00	304.71	2,418.22	1,209.11	3,314.29	1,659.61	8.57	-0.89	0.104
94.00	-22.51	-6.54	0.00	-298.13	0.00	298.13	2,406.65	1,203.32	3,276.56	1,640.72	8.76	-0.90	0.103
95.00	-22.23	-6.49	0.00	-291.59	0.00	291.59	2,395.02	1,197.51	3,238.97	1,621.89	8.95	-0.91	0.101
96.00	-21.47	-6.28	0.00	-285.10	0.00	285.10	2,383.33	1,191.67	3,201.50	1,603.13	9.14	-0.92	0.099
97.00	-21.19	-6.23	0.00	-278.82	0.00	278.82	2,371.59	1,185.79	3,164.18	1,584.44	9.34	-0.93	0.098
98.00	-20.91	-6.19	0.00	-272.59	0.00	272.59	2,359.79	1,179.89	3,126.99	1,565.82	9.53	-0.94	0.097
99.00	-20.63	-6.14	0.00	-266.40	0.00	266.40	2,347.93	1,173.97	3,089.94	1,547.27	9.73	-0.95	0.095
100.00	-20.35	-6.10	0.00	-260.26	0.00	260.26	2,336.02	1,168.01	3,053.03	1,528.79	9.93	-0.96	0.094
101.00	-20.08	-6.05	0.00	-254.16	0.00	254.16	2,324.05	1,162.02	3,016.27	1,510.38	10.13	-0.97	0.092
102.00	-19.80	-6.01	0.00	-248.11	0.00	248.11	2,312.02	1,156.01	2,979.65	1,492.04	10.34	-0.98	0.091
103.00	-19.52	-5.96	0.00	-242.10	0.00	242.10	2,299.80	1,149.90	2,943.01	1,473.69	10.55	-0.99	0.089

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

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

Wind Importance Factor : 1.15

103.75	-19.32	-5.94	0.00	-237.63	0.00	237.63	2,287.68	1,143.84	2,911.90	1,458.11	10.70	-1.00	0.088
103.75	-19.32	-5.94	0.00	-237.63	0.00	237.63	2,287.68	1,143.84	2,911.90	1,458.11	10.70	-1.00	0.171
104.00	-19.27	-5.92	0.00	-236.14	0.00	236.14	2,283.63	1,141.82	2,901.57	1,452.94	10.75	-1.00	0.171
105.00	-18.98	-5.76	0.00	-230.23	0.00	230.23	2,267.46	1,133.73	2,860.42	1,432.33	10.96	-1.02	0.169
106.00	-18.78	-5.71	0.00	-224.47	0.00	224.47	2,251.29	1,125.65	2,819.56	1,411.88	11.18	-1.03	0.167
107.00	-18.58	-5.67	0.00	-218.76	0.00	218.76	2,235.12	1,117.56	2,779.00	1,391.56	11.40	-1.05	0.166
108.00	-18.38	-5.63	0.00	-213.09	0.00	213.09	2,218.95	1,109.48	2,738.73	1,371.40	11.62	-1.07	0.164
109.00	-18.18	-5.59	0.00	-207.45	0.00	207.45	2,202.78	1,101.39	2,698.75	1,351.38	11.85	-1.09	0.162
110.00	-17.98	-5.55	0.00	-201.86	0.00	201.86	2,186.61	1,093.30	2,659.07	1,331.51	12.08	-1.10	0.160
111.00	-17.78	-5.51	0.00	-196.32	0.00	196.32	2,170.44	1,085.22	2,619.69	1,311.79	12.31	-1.12	0.158
112.00	-15.93	-4.90	0.00	-190.81	0.00	190.81	2,154.27	1,077.13	2,580.59	1,292.21	12.55	-1.14	0.155
113.00	-15.76	-4.88	0.00	-185.90	0.00	185.90	2,138.10	1,069.05	2,541.79	1,272.79	12.79	-1.16	0.153
114.00	-15.61	-4.84	0.00	-181.03	0.00	181.03	2,121.93	1,060.96	2,503.29	1,253.50	13.03	-1.17	0.152
115.00	-15.47	-4.80	0.00	-176.19	0.00	176.19	2,105.76	1,052.88	2,465.08	1,234.37	13.28	-1.19	0.150
116.00	-15.33	-4.76	0.00	-171.39	0.00	171.39	2,089.59	1,044.79	2,427.16	1,215.38	13.53	-1.21	0.148
117.00	-15.18	-4.72	0.00	-166.63	0.00	166.63	2,073.42	1,036.71	2,389.54	1,196.54	13.78	-1.22	0.147
118.00	-15.04	-4.68	0.00	-161.91	0.00	161.91	2,057.25	1,028.62	2,352.21	1,177.85	14.04	-1.24	0.145
119.00	-14.90	-4.64	0.00	-157.24	0.00	157.24	2,041.07	1,020.54	2,315.17	1,159.31	14.30	-1.26	0.143
120.00	-14.76	-4.60	0.00	-152.60	0.00	152.60	2,024.90	1,012.45	2,278.43	1,140.91	14.57	-1.27	0.141
121.00	-14.62	-4.55	0.00	-148.01	0.00	148.01	2,008.73	1,004.37	2,241.98	1,122.66	14.84	-1.29	0.139
122.00	-14.48	-4.51	0.00	-143.45	0.00	143.45	1,992.56	996.28	2,205.83	1,104.55	15.11	-1.31	0.137
123.00	-14.34	-4.47	0.00	-138.94	0.00	138.94	1,976.39	988.20	2,169.97	1,086.60	15.39	-1.32	0.135
124.00	-14.20	-4.43	0.00	-134.46	0.00	134.46	1,960.22	980.11	2,134.40	1,068.79	15.66	-1.34	0.133
125.00	-11.95	-3.81	0.00	-130.03	0.00	130.03	1,944.05	972.03	2,099.13	1,051.12	15.95	-1.35	0.130
126.00	-11.82	-3.79	0.00	-126.22	0.00	126.22	1,927.88	963.94	2,064.15	1,033.61	16.23	-1.37	0.128
127.00	-11.70	-3.78	0.00	-122.43	0.00	122.43	1,911.71	955.86	2,029.46	1,016.24	16.52	-1.39	0.127
128.00	-11.57	-3.76	0.00	-118.65	0.00	118.65	1,895.54	947.77	1,995.07	999.02	16.81	-1.40	0.125
129.00	-11.44	-3.74	0.00	-114.89	0.00	114.89	1,879.37	939.68	1,960.98	981.95	17.11	-1.42	0.123
130.00	-11.31	-3.73	0.00	-111.15	0.00	111.15	1,863.20	931.60	1,927.17	965.02	17.41	-1.43	0.121
131.00	-11.19	-3.71	0.00	-107.43	0.00	107.43	1,847.03	923.51	1,893.66	948.24	17.71	-1.45	0.119
132.00	-11.06	-3.70	0.00	-103.72	0.00	103.72	1,830.86	915.43	1,860.45	931.61	18.01	-1.46	0.117
132.12	-11.04	-3.69	0.00	-103.28	0.00	103.28	1,828.92	914.46	1,856.49	929.63	18.05	-1.47	0.117
133.00	-10.89	-3.67	0.00	-100.03	0.00	100.03	1,814.69	907.34	1,827.53	915.12	18.32	-1.48	0.115
134.00	-10.72	-3.66	0.00	-96.35	0.00	96.35	1,798.52	899.26	1,794.90	898.78	18.63	-1.49	0.113
135.00	-7.71	-2.79	0.00	-92.70	0.00	92.70	1,782.35	891.17	1,762.57	882.59	18.95	-1.51	0.109
135.87	-7.56	-2.78	0.00	-90.27	0.00	90.27	999.39	499.70	1,006.16	503.83	19.22	-1.52	0.187
136.00	-7.55	-2.78	0.00	-89.90	0.00	89.90	998.64	499.32	1,004.22	502.86	19.27	-1.52	0.186
137.00	-7.46	-2.76	0.00	-87.13	0.00	87.13	992.83	496.42	989.37	495.42	19.59	-1.55	0.183
138.00	-7.37	-2.74	0.00	-84.37	0.00	84.37	986.97	493.49	974.56	488.00	19.91	-1.57	0.180
139.00	-7.29	-2.73	0.00	-81.62	0.00	81.62	981.05	490.53	959.80	480.61	20.24	-1.59	0.177
140.00	-6.54	-2.36	0.00	-77.20	0.00	77.20	975.08	487.54	945.09	473.25	20.58	-1.61	0.170
141.00	-6.47	-2.35	0.00	-74.83	0.00	74.83	969.05	484.52	930.44	465.91	20.92	-1.64	0.167
142.00	-6.39	-2.33	0.00	-72.48	0.00	72.48	962.96	481.48	915.84	458.60	21.27	-1.66	0.165
143.00	-6.31	-2.32	0.00	-70.15	0.00	70.15	956.81	478.41	901.30	451.32	21.62	-1.68	0.162
144.00	-6.23	-2.30	0.00	-67.83	0.00	67.83	950.61	475.30	886.82	444.07	21.97	-1.70	0.159
145.00	-6.15	-2.29	0.00	-65.53	0.00	65.53	944.35	472.17	872.40	436.85	22.33	-1.72	0.157
146.00	-6.07	-2.27	0.00	-63.24	0.00	63.24	938.03	469.01	858.03	429.66	22.69	-1.74	0.154
147.00	-6.00	-2.26	0.00	-60.97	0.00	60.97	931.66	465.83	843.74	422.50	23.06	-1.77	0.151
148.00	-5.92	-2.24	0.00	-58.71	0.00	58.71	925.22	462.61	829.51	415.37	23.43	-1.79	0.148
149.00	-5.85	-2.23	0.00	-56.47	0.00	56.47	918.73	459.37	815.34	408.28	23.81	-1.81	0.145
150.00	-5.61	-2.15	0.00	-54.24	0.00	54.24	912.19	456.09	801.24	401.22	24.19	-1.83	0.141
151.00	-5.54	-2.14	0.00	-52.09	0.00	52.09	905.59	452.79	787.21	394.19	24.57	-1.85	0.138
152.00	-5.47	-2.12	0.00	-49.95	0.00	49.95	898.93	449.46	773.25	387.20	24.96	-1.87	0.135
153.00	-5.39	-2.11	0.00	-47.83	0.00	47.83	892.21	446.10	759.37	380.25	25.36	-1.89	0.132
154.00	-5.32	-2.09	0.00	-45.72	0.00	45.72	885.44	442.72	745.56	373.33	25.75	-1.91	0.129
155.00	-5.25	-2.08	0.00	-43.63	0.00	43.63	878.60	439.30	731.82	366.45	26.16	-1.93	0.125
156.00	-5.18	-2.06	0.00	-41.55	0.00	41.55	871.72	435.86	718.16	359.61	26.56	-1.95	0.122

Load Case: 1.0D + 1.0W Serviceability 60 mph 33 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.00
Wind Load Factor : 1.00
Wind Importance Factor : 1.15

157.00	-5.10	-2.05	0.00	-39.49	0.00	39.49	864.77	432.39	704.58	352.81	26.97	-1.97	0.118
158.00	-5.03	-2.03	0.00	-37.44	0.00	37.44	857.77	428.88	691.08	346.05	27.39	-1.99	0.114
159.00	-4.96	-2.02	0.00	-35.40	0.00	35.40	850.71	425.35	677.66	339.34	27.80	-2.00	0.110
160.00	-4.89	-2.00	0.00	-33.38	0.00	33.38	843.59	421.80	664.33	332.66	28.23	-2.02	0.106
161.00	-4.82	-1.97	0.00	-31.38	0.00	31.38	836.42	418.21	651.08	326.02	28.65	-2.04	0.102
162.00	-4.76	-1.94	0.00	-29.41	0.00	29.41	829.19	414.59	637.92	319.43	29.08	-2.06	0.098
163.00	-4.69	-1.91	0.00	-27.47	0.00	27.47	819.85	409.92	623.28	312.10	29.51	-2.07	0.094
164.00	-4.62	-1.88	0.00	-25.56	0.00	25.56	810.15	405.07	608.54	304.72	29.95	-2.09	0.090
165.00	-4.55	-1.85	0.00	-23.68	0.00	23.68	800.44	400.22	593.98	297.43	30.39	-2.10	0.085
166.00	-4.49	-1.82	0.00	-21.83	0.00	21.83	790.74	395.37	579.60	290.23	30.83	-2.12	0.081
167.00	-3.16	-1.30	0.00	-20.01	0.00	20.01	781.04	390.52	565.39	283.11	31.27	-2.13	0.075
168.00	-3.11	-1.28	0.00	-18.71	0.00	18.71	771.34	385.67	551.35	276.09	31.72	-2.14	0.072
169.00	-3.05	-1.27	0.00	-17.43	0.00	17.43	761.63	380.82	537.50	269.15	32.17	-2.16	0.069
170.00	-3.00	-1.26	0.00	-16.16	0.00	16.16	751.93	375.97	523.82	262.30	32.62	-2.17	0.066
171.00	-2.94	-1.24	0.00	-14.90	0.00	14.90	742.23	371.11	510.32	255.54	33.08	-2.18	0.062
172.00	-2.89	-1.23	0.00	-13.66	0.00	13.66	732.53	366.26	496.99	248.86	33.54	-2.19	0.059
173.00	-2.84	-1.22	0.00	-12.43	0.00	12.43	722.82	361.41	483.84	242.28	34.00	-2.20	0.055
174.00	-2.78	-1.20	0.00	-11.21	0.00	11.21	713.12	356.56	470.86	235.78	34.46	-2.21	0.051
175.00	-2.73	-1.19	0.00	-10.00	0.00	10.00	703.42	351.71	458.07	229.37	34.93	-2.22	0.048
176.00	-2.68	-1.18	0.00	-8.81	0.00	8.81	693.72	346.86	445.44	223.05	35.39	-2.23	0.043
177.00	-2.63	-1.17	0.00	-7.63	0.00	7.63	684.02	342.01	433.00	216.82	35.86	-2.24	0.039
178.00	-2.58	-1.15	0.00	-6.47	0.00	6.47	674.31	337.16	420.73	210.68	36.33	-2.25	0.035
179.00	-2.53	-1.14	0.00	-5.31	0.00	5.31	664.61	332.31	408.64	204.62	36.80	-2.25	0.030
180.00	0.00	-1.04	0.00	-4.17	0.00	4.17	654.91	327.45	396.72	198.65	37.27	-2.26	0.021

Equivalent Lateral Forces Method Analysis

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

Spectral Response Acceleration for Short Period (S_s):	0.18	
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06	
Long-Period Transition Period (T_L):	6	
Importance Factor (I_E):	1.50	
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):	0.04	
Upper Limit C_s	0.04	
Lower Limit C_s	0.03	
Period based on Rayleigh Method (sec):	2.66	
Redundancy Factor (p):	1.30	
Seismic Force Distribution Exponent (k):	2.00	
Total Unfactored Dead Load:	57.93	k
Seismic Base Shear (E):	2.94	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)
187	179.50	50	1,616	0.003	9	62
186	178.50	51	1,612	0.003	9	63
185	177.50	51	1,608	0.003	9	63
184	176.50	51	1,604	0.003	9	64
183	175.50	52	1,599	0.003	9	64
182	174.50	52	1,595	0.003	9	65
181	173.50	53	1,590	0.003	9	65
180	172.50	53	1,585	0.003	9	66
179	171.50	54	1,579	0.003	9	66
178	170.50	54	1,574	0.003	9	67
177	169.50	55	1,568	0.003	9	68
176	168.50	55	1,563	0.003	9	68
175	167.50	55	1,557	0.003	9	69
174	166.50	67	1,851	0.004	11	83
173	165.50	67	1,841	0.004	11	83
172	164.50	68	1,831	0.004	10	84
171	163.50	68	1,820	0.004	10	84
170	162.50	69	1,810	0.004	10	85
169	161.50	69	1,799	0.003	10	85
168	160.50	69	1,788	0.003	10	86
167	159.50	70	1,778	0.003	10	86
166	158.50	70	1,767	0.003	10	87
165	157.50	71	1,755	0.003	10	88

164	156.50	71	1,744	0.003	10	88
163	155.50	72	1,733	0.003	10	89
162	154.50	72	1,721	0.003	10	89
161	153.50	73	1,709	0.003	10	90
160	152.50	73	1,697	0.003	10	90
159	151.50	73	1,685	0.003	10	91
158	150.50	74	1,673	0.003	10	91
157	149.50	75	1,679	0.003	10	93
156	148.50	76	1,667	0.003	10	94
155	147.50	76	1,654	0.003	9	94
154	146.50	76	1,641	0.003	9	95
153	145.50	77	1,628	0.003	9	95
152	144.50	77	1,615	0.003	9	96
151	143.50	78	1,602	0.003	9	96
150	142.50	78	1,589	0.003	9	97
149	141.50	79	1,576	0.003	9	97
148	140.50	79	1,562	0.003	9	98
147	139.50	85	1,657	0.003	9	105
146	138.50	86	1,642	0.003	9	106
145	137.50	86	1,626	0.003	9	106
144	136.50	86	1,611	0.003	9	107
143	135.93	11	209	0.000	1	14
142	135.43	146	2,684	0.005	15	181
141	134.50	173	3,131	0.006	18	214
140	133.50	174	3,106	0.006	18	216
139	132.56	154	2,712	0.005	16	191
138	132.06	15	260	0.001	1	18
137	131.50	125	2,163	0.004	12	155
136	130.50	126	2,143	0.004	12	156
135	129.50	127	2,122	0.004	12	157
134	128.50	127	2,102	0.004	12	158
133	127.50	128	2,081	0.004	12	158
132	126.50	129	2,061	0.004	12	159
131	125.50	130	2,040	0.004	12	160
130	124.50	136	2,115	0.004	12	169
129	123.50	137	2,093	0.004	12	170
128	122.50	138	2,070	0.004	12	171
127	121.50	139	2,047	0.004	12	172
126	120.50	139	2,025	0.004	12	173
125	119.50	140	2,002	0.004	11	174
124	118.50	141	1,979	0.004	11	174
123	117.50	142	1,956	0.004	11	175
122	116.50	142	1,933	0.004	11	176
121	115.50	143	1,910	0.004	11	177
120	114.50	144	1,886	0.004	11	178
119	113.50	145	1,863	0.004	11	179
118	112.50	167	2,112	0.004	12	207
117	111.50	197	2,445	0.005	14	243
116	110.50	197	2,410	0.005	14	244
115	109.50	198	2,376	0.005	14	245
114	108.50	199	2,341	0.005	13	246
113	107.50	200	2,307	0.004	13	247
112	106.50	200	2,273	0.004	13	248
111	105.50	201	2,238	0.004	13	249
110	104.50	207	2,258	0.004	13	256
109	103.88	52	559	0.001	3	64
108	103.38	206	2,199	0.004	13	255
107	102.50	275	2,890	0.006	17	340
106	101.50	276	2,841	0.006	16	341
105	100.50	277	2,793	0.005	16	342
104	99.50	277	2,745	0.005	16	343
103	98.50	278	2,697	0.005	15	344
102	97.50	279	2,650	0.005	15	345
101	96.50	279	2,603	0.005	15	346

100	95.50	281	2,563	0.005	15	348
99	94.50	282	2,516	0.005	14	349
98	93.50	283	2,470	0.005	14	350
97	92.73	154	1,323	0.003	8	190
96	92.23	190	1,618	0.003	9	235
95	91.50	418	3,498	0.007	20	517
94	90.50	419	3,436	0.007	20	519
93	89.50	421	3,373	0.007	19	521
92	88.50	423	3,311	0.006	19	523
91	87.77	195	1,503	0.003	9	241
90	87.27	166	1,265	0.002	7	206
89	86.50	308	2,308	0.004	13	382
88	85.50	309	2,261	0.004	13	383
87	84.50	310	2,215	0.004	13	384
86	83.50	311	2,169	0.004	12	385
85	82.50	312	2,123	0.004	12	386
84	81.50	313	2,078	0.004	12	387
83	80.50	314	2,033	0.004	12	388
82	79.50	315	1,989	0.004	11	389
81	78.50	316	1,945	0.004	11	391
80	77.50	317	1,901	0.004	11	392
79	76.50	317	1,858	0.004	11	393
78	75.50	318	1,815	0.004	10	394
77	74.50	319	1,772	0.003	10	395
76	73.50	320	1,729	0.003	10	396
75	72.50	321	1,687	0.003	10	397
74	71.50	322	1,646	0.003	9	398
73	70.50	323	1,604	0.003	9	400
72	69.50	324	1,564	0.003	9	401
71	68.50	325	1,523	0.003	9	402
70	67.50	325	1,483	0.003	8	403
69	66.50	326	1,443	0.003	8	404
68	65.50	327	1,404	0.003	8	405
67	64.50	328	1,365	0.003	8	406
66	63.50	329	1,327	0.003	8	407
65	62.50	330	1,289	0.003	7	408
64	61.50	331	1,251	0.002	7	409
63	60.50	332	1,214	0.002	7	411
62	59.50	333	1,177	0.002	7	412
61	58.50	333	1,141	0.002	7	413
60	57.50	334	1,105	0.002	6	414
59	56.50	335	1,070	0.002	6	415
58	55.50	336	1,035	0.002	6	416
57	54.50	337	1,001	0.002	6	417
56	53.50	338	967	0.002	6	418
55	52.50	339	934	0.002	5	419
54	51.50	340	901	0.002	5	420
53	50.50	341	869	0.002	5	422
52	49.52	328	804	0.002	5	406
51	49.02	21	52	0.000	0	27
50	48.50	539	1,268	0.002	7	667
49	47.50	541	1,221	0.002	7	670
48	46.50	543	1,174	0.002	7	672
47	45.50	545	1,128	0.002	6	675
46	44.50	547	1,083	0.002	6	677
45	43.50	549	1,039	0.002	6	679
44	42.98	24	44	0.000	0	30
43	42.48	357	645	0.001	4	442
42	41.50	374	645	0.001	4	463
41	40.50	375	616	0.001	4	465
40	39.50	377	587	0.001	3	466
39	38.50	378	560	0.001	3	467
38	37.50	379	532	0.001	3	469
37	36.50	380	506	0.001	3	470

36	35.50	381	480	0.001	3	471
35	34.50	382	454	0.001	3	472
34	33.50	383	430	0.001	2	474
33	32.50	384	405	0.001	2	475
32	31.50	385	382	0.001	2	476
31	30.50	386	359	0.001	2	478
30	29.50	387	337	0.001	2	479
29	28.50	388	315	0.001	2	481
28	27.50	389	294	0.001	2	482
27	26.50	390	274	0.001	2	483
26	25.50	391	254	0.000	1	484
25	24.50	392	236	0.000	1	486
24	23.50	393	217	0.000	1	487
23	22.50	394	200	0.000	1	488
22	21.50	396	183	0.000	1	490
21	20.50	397	167	0.000	1	491
20	19.50	398	151	0.000	1	492
19	18.50	399	136	0.000	1	493
18	17.50	400	122	0.000	1	495
17	16.50	401	109	0.000	1	496
16	15.50	402	97	0.000	1	497
15	14.50	403	85	0.000	0	499
14	13.50	404	74	0.000	0	500
13	12.50	405	63	0.000	0	501
12	11.50	406	54	0.000	0	502
11	10.50	407	45	0.000	0	504
10	9.50	408	37	0.000	0	505
9	8.50	409	30	0.000	0	506
8	7.50	410	23	0.000	0	508
7	6.50	411	17	0.000	0	509
6	5.50	412	12	0.000	0	510
5	4.50	413	8	0.000	0	511
4	3.50	414	5	0.000	0	513
3	2.50	415	3	0.000	0	514
2	1.50	416	1	0.000	0	515
1	0.50	417	0	0.000	0	517
Andrew ABT-DMDF-ADBH	180.00	1	36	0.000	0	1
Powerwave Allgon TT1	180.00	48	1,555	0.003	9	59
4' Omni	180.00	10	324	0.001	2	12
Powerwave Allgon LGP	180.00	42	1,371	0.003	8	52
Raycap DC6-48-60-18-	180.00	40	1,296	0.003	7	50
Ericsson RRUS 11 (Ba	180.00	150	4,860	0.009	28	186
Ericsson RRUS 32 (50	180.00	152	4,938	0.010	28	189
Ericsson RRUS-12 B2	180.00	174	5,638	0.011	32	215
Powerwave Allgon 777	180.00	105	3,402	0.007	19	130
KMW AM-X-CD-16-65-00	180.00	146	4,714	0.009	27	180
CCI HPA-65R-BUU-H6	180.00	153	4,957	0.010	28	189
Flat Low Profile Pla	180.00	1,500	48,600	0.094	278	1,857
Ericsson KRY 112 144	167.00	33	920	0.002	5	41
Ericsson AIR 21, 1.3	167.00	249	6,944	0.014	40	308
Ericsson AIR 21, 1.3	167.00	244	6,819	0.013	39	303
Round T-Arm	167.00	750	20,917	0.041	120	928
Sinclair SD210-SF2P4	150.00	8	187	0.000	1	10
Round Side Arm	150.00	150	3,375	0.007	19	186
Telewave ANT150D (5	140.00	5	98	0.000	1	6
Bird 432-83H-01-T	140.00	50	980	0.002	6	62
Sinclair SC432D-HF6L	140.00	34	666	0.001	4	42
Round Side Arm	140.00	450	8,820	0.017	50	557
Decibel DB809DK-XT	140.00	128	2,509	0.005	14	158
Alcatel-Lucent 800 M	135.00	185	3,379	0.007	19	229
Alcatel-Lucent 1900M	135.00	132	2,406	0.005	14	163
Alcatel-Lucent TD-RR	135.00	210	3,827	0.007	22	260
RFS APXVTM14-C-I20	135.00	159	2,892	0.006	17	196
RFS APXVSPP18-C-A20	135.00	171	3,116	0.006	18	212

Flat Platform w/ Han	135.00	2,000	36,450	0.071	209	2,476
RFS FD9R6004/2C-3L (	125.00	19	291	0.001	2	23
Nokia B5 RRH4x40-850	125.00	146	2,273	0.004	13	180
Alcatel-Lucent RRH2x	125.00	170	2,658	0.005	15	211
RFS DB-B1-6C-12AB-0Z	125.00	21	334	0.001	2	26
Alcatel-Lucent B66a	125.00	201	3,141	0.006	18	249
Antel LPA-80080/6CF	125.00	42	656	0.001	4	52
Antel LPA-80063/6CF	125.00	27	422	0.001	2	33
Round Low Profile Pl	125.00	1,500	23,438	0.046	134	1,857
Decibel DB844H90E-XY	112.00	168	2,107	0.004	12	208
Round Low Profile Pl	112.00	1,500	18,816	0.037	108	1,857
RFS APXV18-206517S-C	105.00	79	873	0.002	5	98
Andrew DB586	96.00	17	153	0.000	1	21
Bird 429-83H-01-T	96.00	20	184	0.000	1	25
Flat Side Arm	96.00	450	4,147	0.008	24	557
PCTEL GPS-TMG-HR-26N	79.00	1	4	0.000	0	1
GPS	30.00	10	9	0.000	0	12
		57,927	514,371	1.000	2,944	71,700

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)
187	179.50	50	1,616	0.003	9	43
186	178.50	51	1,612	0.003	9	44
185	177.50	51	1,608	0.003	9	44
184	176.50	51	1,604	0.003	9	44
183	175.50	52	1,599	0.003	9	45
182	174.50	52	1,595	0.003	9	45
181	173.50	53	1,590	0.003	9	46
180	172.50	53	1,585	0.003	9	46
179	171.50	54	1,579	0.003	9	46
178	170.50	54	1,574	0.003	9	47
177	169.50	55	1,568	0.003	9	47
176	168.50	55	1,563	0.003	9	47
175	167.50	55	1,557	0.003	9	48
174	166.50	67	1,851	0.004	11	58
173	165.50	67	1,841	0.004	11	58
172	164.50	68	1,831	0.004	10	58
171	163.50	68	1,820	0.004	10	59
170	162.50	69	1,810	0.004	10	59
169	161.50	69	1,799	0.003	10	59
168	160.50	69	1,788	0.003	10	60
167	159.50	70	1,778	0.003	10	60
166	158.50	70	1,767	0.003	10	61
165	157.50	71	1,755	0.003	10	61
164	156.50	71	1,744	0.003	10	61
163	155.50	72	1,733	0.003	10	62
162	154.50	72	1,721	0.003	10	62
161	153.50	73	1,709	0.003	10	63
160	152.50	73	1,697	0.003	10	63
159	151.50	73	1,685	0.003	10	63
158	150.50	74	1,673	0.003	10	64
157	149.50	75	1,679	0.003	10	65
156	148.50	76	1,667	0.003	10	65
155	147.50	76	1,654	0.003	9	66
154	146.50	76	1,641	0.003	9	66
153	145.50	77	1,628	0.003	9	66
152	144.50	77	1,615	0.003	9	67
151	143.50	78	1,602	0.003	9	67

150	142.50	78	1,589	0.003	9	67
149	141.50	79	1,576	0.003	9	68
148	140.50	79	1,562	0.003	9	68
147	139.50	85	1,657	0.003	9	73
146	138.50	86	1,642	0.003	9	74
145	137.50	86	1,626	0.003	9	74
144	136.50	86	1,611	0.003	9	75
143	135.93	11	209	0.000	1	10
142	135.43	146	2,684	0.005	15	126
141	134.50	173	3,131	0.006	18	149
140	133.50	174	3,106	0.006	18	150
139	132.56	154	2,712	0.005	16	133
138	132.06	15	260	0.001	1	13
137	131.50	125	2,163	0.004	12	108
136	130.50	126	2,143	0.004	12	108
135	129.50	127	2,122	0.004	12	109
134	128.50	127	2,102	0.004	12	110
133	127.50	128	2,081	0.004	12	110
132	126.50	129	2,061	0.004	12	111
131	125.50	130	2,040	0.004	12	112
130	124.50	136	2,115	0.004	12	118
129	123.50	137	2,093	0.004	12	118
128	122.50	138	2,070	0.004	12	119
127	121.50	139	2,047	0.004	12	120
126	120.50	139	2,025	0.004	12	120
125	119.50	140	2,002	0.004	11	121
124	118.50	141	1,979	0.004	11	122
123	117.50	142	1,956	0.004	11	122
122	116.50	142	1,933	0.004	11	123
121	115.50	143	1,910	0.004	11	123
120	114.50	144	1,886	0.004	11	124
119	113.50	145	1,863	0.004	11	125
118	112.50	167	2,112	0.004	12	144
117	111.50	197	2,445	0.005	14	170
116	110.50	197	2,410	0.005	14	170
115	109.50	198	2,376	0.005	14	171
114	108.50	199	2,341	0.005	13	171
113	107.50	200	2,307	0.004	13	172
112	106.50	200	2,273	0.004	13	173
111	105.50	201	2,238	0.004	13	173
110	104.50	207	2,258	0.004	13	178
109	103.88	52	559	0.001	3	45
108	103.38	206	2,199	0.004	13	177
107	102.50	275	2,890	0.006	17	237
106	101.50	276	2,841	0.006	16	238
105	100.50	277	2,793	0.005	16	238
104	99.50	277	2,745	0.005	16	239
103	98.50	278	2,697	0.005	15	240
102	97.50	279	2,650	0.005	15	240
101	96.50	279	2,603	0.005	15	241
100	95.50	281	2,563	0.005	15	242
99	94.50	282	2,516	0.005	14	243
98	93.50	283	2,470	0.005	14	244
97	92.73	154	1,323	0.003	8	133
96	92.23	190	1,618	0.003	9	164
95	91.50	418	3,498	0.007	20	360
94	90.50	419	3,436	0.007	20	362
93	89.50	421	3,373	0.007	19	363
92	88.50	423	3,311	0.006	19	364
91	87.77	195	1,503	0.003	9	168
90	87.27	166	1,265	0.002	7	143
89	86.50	308	2,308	0.004	13	266
88	85.50	309	2,261	0.004	13	267
87	84.50	310	2,215	0.004	13	267

86	83.50	311	2,169	0.004	12	268
85	82.50	312	2,123	0.004	12	269
84	81.50	313	2,078	0.004	12	270
83	80.50	314	2,033	0.004	12	271
82	79.50	315	1,989	0.004	11	271
81	78.50	316	1,945	0.004	11	272
80	77.50	317	1,901	0.004	11	273
79	76.50	317	1,858	0.004	11	274
78	75.50	318	1,815	0.004	10	275
77	74.50	319	1,772	0.003	10	275
76	73.50	320	1,729	0.003	10	276
75	72.50	321	1,687	0.003	10	277
74	71.50	322	1,646	0.003	9	278
73	70.50	323	1,604	0.003	9	278
72	69.50	324	1,564	0.003	9	279
71	68.50	325	1,523	0.003	9	280
70	67.50	325	1,483	0.003	8	281
69	66.50	326	1,443	0.003	8	281
68	65.50	327	1,404	0.003	8	282
67	64.50	328	1,365	0.003	8	283
66	63.50	329	1,327	0.003	8	284
65	62.50	330	1,289	0.003	7	284
64	61.50	331	1,251	0.002	7	285
63	60.50	332	1,214	0.002	7	286
62	59.50	333	1,177	0.002	7	287
61	58.50	333	1,141	0.002	7	288
60	57.50	334	1,105	0.002	6	288
59	56.50	335	1,070	0.002	6	289
58	55.50	336	1,035	0.002	6	290
57	54.50	337	1,001	0.002	6	291
56	53.50	338	967	0.002	6	291
55	52.50	339	934	0.002	5	292
54	51.50	340	901	0.002	5	293
53	50.50	341	869	0.002	5	294
52	49.52	328	804	0.002	5	283
51	49.02	21	52	0.000	0	19
50	48.50	539	1,268	0.002	7	465
49	47.50	541	1,221	0.002	7	467
48	46.50	543	1,174	0.002	7	468
47	45.50	545	1,128	0.002	6	470
46	44.50	547	1,083	0.002	6	472
45	43.50	549	1,039	0.002	6	473
44	42.98	24	44	0.000	0	21
43	42.48	357	645	0.001	4	308
42	41.50	374	645	0.001	4	323
41	40.50	375	616	0.001	4	324
40	39.50	377	587	0.001	3	325
39	38.50	378	560	0.001	3	326
38	37.50	379	532	0.001	3	326
37	36.50	380	506	0.001	3	327
36	35.50	381	480	0.001	3	328
35	34.50	382	454	0.001	3	329
34	33.50	383	430	0.001	2	330
33	32.50	384	405	0.001	2	331
32	31.50	385	382	0.001	2	332
31	30.50	386	359	0.001	2	333
30	29.50	387	337	0.001	2	334
29	28.50	388	315	0.001	2	335
28	27.50	389	294	0.001	2	336
27	26.50	390	274	0.001	2	337
26	25.50	391	254	0.000	1	337
25	24.50	392	236	0.000	1	338
24	23.50	393	217	0.000	1	339
23	22.50	394	200	0.000	1	340

22	21.50	396	183	0.000	1	341
21	20.50	397	167	0.000	1	342
20	19.50	398	151	0.000	1	343
19	18.50	399	136	0.000	1	344
18	17.50	400	122	0.000	1	345
17	16.50	401	109	0.000	1	346
16	15.50	402	97	0.000	1	346
15	14.50	403	85	0.000	0	347
14	13.50	404	74	0.000	0	348
13	12.50	405	63	0.000	0	349
12	11.50	406	54	0.000	0	350
11	10.50	407	45	0.000	0	351
10	9.50	408	37	0.000	0	352
9	8.50	409	30	0.000	0	353
8	7.50	410	23	0.000	0	354
7	6.50	411	17	0.000	0	354
6	5.50	412	12	0.000	0	355
5	4.50	413	8	0.000	0	356
4	3.50	414	5	0.000	0	357
3	2.50	415	3	0.000	0	358
2	1.50	416	1	0.000	0	359
1	0.50	417	0	0.000	0	360
Andrew ABT-DMDF-ADBH	180.00	1	36	0.000	0	1
Powerwave Allgon TT1	180.00	48	1,555	0.003	9	41
4' Omni	180.00	10	324	0.001	2	9
Powerwave Allgon LGP	180.00	42	1,371	0.003	8	36
Raycap DC6-48-60-18-	180.00	40	1,296	0.003	7	34
Ericsson RRUS 11 (Ba	180.00	150	4,860	0.009	28	129
Ericsson RRUS 32 (50	180.00	152	4,938	0.010	28	131
Ericsson RRUS-12 B2	180.00	174	5,638	0.011	32	150
Powerwave Allgon 777	180.00	105	3,402	0.007	19	91
KMW AM-X-CD-16-65-00	180.00	146	4,714	0.009	27	125
CCI HPA-65R-BUU-H6	180.00	153	4,957	0.010	28	132
Flat Low Profile Pla	180.00	1,500	48,600	0.094	278	1,293
Ericsson KRY 112 144	167.00	33	920	0.002	5	28
Ericsson AIR 21, 1.3	167.00	249	6,944	0.014	40	215
Ericsson AIR 21, 1.3	167.00	244	6,819	0.013	39	211
Round T-Arm	167.00	750	20,917	0.041	120	647
Sinclair SD210-SF2P4	150.00	8	187	0.000	1	7
Round Side Arm	150.00	150	3,375	0.007	19	129
Telewave ANT150D (5	140.00	5	98	0.000	1	4
Bird 432-83H-01-T	140.00	50	980	0.002	6	43
Sinclair SC432D-HF6L	140.00	34	666	0.001	4	29
Round Side Arm	140.00	450	8,820	0.017	50	388
Decibel DB809DK-XT	140.00	128	2,509	0.005	14	110
Alcatel-Lucent 800 M	135.00	185	3,379	0.007	19	160
Alcatel-Lucent 1900M	135.00	132	2,406	0.005	14	114
Alcatel-Lucent TD-RR	135.00	210	3,827	0.007	22	181
RFS APXVTM14-C-I20	135.00	159	2,892	0.006	17	137
RFS APXVSPP18-C-A20	135.00	171	3,116	0.006	18	147
Flat Platform w/ Han	135.00	2,000	36,450	0.071	209	1,724
RFS FD9R6004/2C-3L (	125.00	19	291	0.001	2	16
Nokia B5 RRH4x40-850	125.00	146	2,273	0.004	13	125
Alcatel-Lucent RRH2x	125.00	170	2,658	0.005	15	147
RFS DB-B1-6C-12AB-0Z	125.00	21	334	0.001	2	18
Alcatel-Lucent B66a	125.00	201	3,141	0.006	18	173
Antel LPA-80080/6CF	125.00	42	656	0.001	4	36
Antel LPA-80063/6CF	125.00	27	422	0.001	2	23
Round Low Profile Pl	125.00	1,500	23,438	0.046	134	1,293
Decibel DB844H90E-XY	112.00	168	2,107	0.004	12	145
Round Low Profile Pl	112.00	1,500	18,816	0.037	108	1,293
RFS APXV18-206517S-C	105.00	79	873	0.002	5	68
Andrew DB586	96.00	17	153	0.000	1	14
Bird 429-83H-01-T	96.00	20	184	0.000	1	17

Flat Side Arm	96.00	450	4,147	0.008	24	388
PCTEL GPS-TMG-HR-26N	79.00	1	4	0.000	0	1
GPS	30.00	10	9	0.000	0	9
		57,927	514,371	1.000	2,944	49,947

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	-71.18	-2.94	0.00	-403.05	0.00	403.05	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.065
1.00	-70.67	-2.95	0.00	-400.10	0.00	400.10	5,115.23	2,557.61	10,943.3	5,479.82	0.00	0.00	0.065
2.00	-70.15	-2.95	0.00	-397.15	0.00	397.15	5,100.42	2,550.21	10,865.3	5,440.75	0.00	-0.01	0.065
3.00	-69.64	-2.96	0.00	-394.20	0.00	394.20	5,085.56	2,542.78	10,787.4	5,401.75	0.00	-0.01	0.064
4.00	-69.13	-2.96	0.00	-391.25	0.00	391.25	5,070.64	2,535.32	10,709.7	5,362.83	0.01	-0.01	0.064
5.00	-68.62	-2.96	0.00	-388.29	0.00	388.29	5,055.67	2,527.83	10,632.1	5,323.99	0.01	-0.02	0.064
6.00	-68.11	-2.97	0.00	-385.32	0.00	385.32	5,040.63	2,520.32	10,554.7	5,285.22	0.01	-0.02	0.064
7.00	-67.60	-2.97	0.00	-382.35	0.00	382.35	5,025.54	2,512.77	10,477.4	5,246.53	0.02	-0.02	0.064
8.00	-67.10	-2.98	0.00	-379.38	0.00	379.38	5,010.40	2,505.20	10,400.3	5,207.92	0.02	-0.03	0.064
9.00	-66.59	-2.98	0.00	-376.41	0.00	376.41	4,995.19	2,497.60	10,323.4	5,169.39	0.03	-0.03	0.064
10.00	-66.09	-2.98	0.00	-373.43	0.00	373.43	4,979.93	2,489.97	10,246.6	5,130.93	0.04	-0.03	0.063
11.00	-65.58	-2.99	0.00	-370.45	0.00	370.45	4,964.61	2,482.31	10,170.0	5,092.56	0.04	-0.04	0.063
12.00	-65.08	-2.99	0.00	-367.46	0.00	367.46	4,949.24	2,474.62	10,093.5	5,054.27	0.05	-0.04	0.063
13.00	-64.58	-2.99	0.00	-364.47	0.00	364.47	4,933.81	2,466.90	10,017.2	5,016.06	0.06	-0.04	0.063
14.00	-64.08	-3.00	0.00	-361.48	0.00	361.48	4,918.32	2,459.16	9,941.08	4,977.93	0.07	-0.05	0.063
15.00	-63.59	-3.00	0.00	-358.48	0.00	358.48	4,902.77	2,451.39	9,865.10	4,939.88	0.08	-0.05	0.063
16.00	-63.09	-3.00	0.00	-355.49	0.00	355.49	4,887.17	2,443.58	9,789.30	4,901.92	0.09	-0.06	0.062
17.00	-62.60	-3.00	0.00	-352.49	0.00	352.49	4,871.51	2,435.75	9,713.66	4,864.05	0.10	-0.06	0.062
18.00	-62.10	-3.01	0.00	-349.48	0.00	349.48	4,855.79	2,427.89	9,638.20	4,826.26	0.12	-0.06	0.062
19.00	-61.61	-3.01	0.00	-346.48	0.00	346.48	4,840.02	2,420.01	9,562.90	4,788.56	0.13	-0.07	0.062
20.00	-61.12	-3.01	0.00	-343.47	0.00	343.47	4,824.18	2,412.09	9,487.79	4,750.94	0.14	-0.07	0.062
21.00	-60.63	-3.01	0.00	-340.46	0.00	340.46	4,808.29	2,404.15	9,412.84	4,713.42	0.16	-0.07	0.062
22.00	-60.14	-3.02	0.00	-337.44	0.00	337.44	4,792.35	2,396.17	9,338.08	4,675.98	0.18	-0.08	0.061
23.00	-59.65	-3.02	0.00	-334.43	0.00	334.43	4,776.35	2,388.17	9,263.49	4,638.63	0.19	-0.08	0.061
24.00	-59.17	-3.02	0.00	-331.41	0.00	331.41	4,760.29	2,380.14	9,189.09	4,601.37	0.21	-0.08	0.061
25.00	-58.68	-3.02	0.00	-328.39	0.00	328.39	4,744.17	2,372.08	9,114.87	4,564.21	0.23	-0.09	0.061
26.00	-58.20	-3.02	0.00	-325.37	0.00	325.37	4,728.00	2,364.00	9,040.83	4,527.13	0.25	-0.09	0.061
27.00	-57.72	-3.02	0.00	-322.35	0.00	322.35	4,711.76	2,355.88	8,966.98	4,490.15	0.27	-0.10	0.060
28.00	-57.24	-3.02	0.00	-319.33	0.00	319.33	4,695.48	2,347.74	8,893.31	4,453.26	0.29	-0.10	0.060
29.00	-56.76	-3.03	0.00	-316.30	0.00	316.30	4,679.13	2,339.57	8,819.83	4,416.47	0.31	-0.10	0.060
30.00	-56.27	-3.03	0.00	-313.28	0.00	313.28	4,662.73	2,331.36	8,746.54	4,379.77	0.33	-0.11	0.060
31.00	-55.79	-3.03	0.00	-310.25	0.00	310.25	4,646.27	2,323.14	8,673.45	4,343.17	0.35	-0.11	0.060
32.00	-55.32	-3.03	0.00	-307.22	0.00	307.22	4,629.75	2,314.88	8,600.55	4,306.67	0.38	-0.11	0.059
33.00	-54.84	-3.03	0.00	-304.20	0.00	304.20	4,613.18	2,306.59	8,527.84	4,270.26	0.40	-0.12	0.059
34.00	-54.37	-3.03	0.00	-301.17	0.00	301.17	4,596.55	2,298.27	8,455.33	4,233.95	0.43	-0.12	0.059
35.00	-53.90	-3.03	0.00	-298.14	0.00	298.14	4,579.86	2,289.93	8,383.01	4,197.74	0.45	-0.13	0.059
36.00	-53.43	-3.03	0.00	-295.12	0.00	295.12	4,563.12	2,281.56	8,310.90	4,161.63	0.48	-0.13	0.058
37.00	-52.96	-3.03	0.00	-292.09	0.00	292.09	4,546.32	2,273.16	8,238.99	4,125.62	0.51	-0.13	0.058
38.00	-52.49	-3.02	0.00	-289.07	0.00	289.07	4,529.46	2,264.73	8,167.27	4,089.71	0.53	-0.14	0.058
39.00	-52.03	-3.02	0.00	-286.04	0.00	286.04	4,512.54	2,256.27	8,095.77	4,053.90	0.56	-0.14	0.058
40.00	-51.56	-3.02	0.00	-283.02	0.00	283.02	4,491.22	2,245.61	8,016.71	4,014.31	0.59	-0.14	0.058
41.00	-51.10	-3.02	0.00	-280.00	0.00	280.00	4,468.58	2,234.29	7,935.69	3,973.74	0.62	-0.15	0.057
42.00	-50.65	-3.02	0.00	-276.97	0.00	276.97	4,445.95	2,222.97	7,855.09	3,933.38	0.65	-0.15	0.057
42.96	-50.62	-3.02	0.00	-274.09	0.00	274.09	4,424.29	2,212.15	7,778.37	3,894.97	0.69	-0.16	0.057
43.00	-49.95	-3.02	0.00	-273.95	0.00	273.95	4,423.31	2,211.65	7,774.90	3,893.23	0.69	-0.16	0.057
44.00	-49.27	-3.01	0.00	-270.94	0.00	270.94	4,400.67	2,200.33	7,695.11	3,853.28	0.72	-0.16	0.056
45.00	-48.59	-3.01	0.00	-267.93	0.00	267.93	4,378.03	2,189.01	7,615.75	3,813.53	0.75	-0.16	0.056
46.00	-47.92	-3.00	0.00	-264.92	0.00	264.92	4,355.39	2,177.70	7,536.79	3,773.99	0.79	-0.17	0.056
47.00	-47.25	-2.99	0.00	-261.92	0.00	261.92	4,332.75	2,166.38	7,458.24	3,734.66	0.82	-0.17	0.056
48.00	-46.58	-2.99	0.00	-258.93	0.00	258.93	4,310.11	2,155.06	7,380.10	3,695.54	0.86	-0.17	0.055
49.00	-46.56	-2.99	0.00	-255.94	0.00	255.94	4,287.47	2,143.74	7,302.38	3,656.62	0.90	-0.18	0.055
49.04	-46.15	-2.98	0.00	-255.82	0.00	255.82	3,622.99	1,811.50	6,300.42	3,154.89	0.90	-0.18	0.062
50.00	-45.73	-2.98	0.00	-252.96	0.00	252.96	3,610.23	1,805.12	6,246.74	3,128.01	0.94	-0.18	0.062
51.00	-45.31	-2.98	0.00	-249.98	0.00	249.98	3,596.89	1,798.44	6,190.96	3,100.08	0.97	-0.19	0.061
52.00	-44.89	-2.97	0.00	-247.00	0.00	247.00	3,583.49	1,791.74	6,135.33	3,072.23	1.01	-0.19	0.061
53.00	-44.47	-2.97	0.00	-244.02	0.00	244.02	3,570.03	1,785.02	6,079.85	3,044.45	1.05	-0.20	0.061

54.00	-44.05	-2.97	0.00	-241.05	0.00	241.05	3,556.52	1,778.26	6,024.52	3,016.74	1.10	-0.20	0.060
55.00	-43.64	-2.96	0.00	-238.09	0.00	238.09	3,542.95	1,771.47	5,969.33	2,989.10	1.14	-0.20	0.060
56.00	-43.22	-2.96	0.00	-235.12	0.00	235.12	3,529.32	1,764.66	5,914.30	2,961.55	1.18	-0.21	0.060
57.00	-42.81	-2.95	0.00	-232.16	0.00	232.16	3,515.63	1,757.82	5,859.42	2,934.06	1.22	-0.21	0.059
58.00	-42.39	-2.95	0.00	-229.21	0.00	229.21	3,501.89	1,750.94	5,804.69	2,906.66	1.27	-0.22	0.059
59.00	-41.98	-2.94	0.00	-226.26	0.00	226.26	3,488.09	1,744.04	5,750.12	2,879.33	1.32	-0.22	0.059
60.00	-41.57	-2.94	0.00	-223.32	0.00	223.32	3,474.23	1,737.12	5,695.71	2,852.09	1.36	-0.22	0.058
61.00	-41.16	-2.93	0.00	-220.38	0.00	220.38	3,460.32	1,730.16	5,641.45	2,824.92	1.41	-0.23	0.058
62.00	-40.75	-2.93	0.00	-217.45	0.00	217.45	3,446.35	1,723.17	5,587.36	2,797.83	1.46	-0.23	0.057
63.00	-40.35	-2.92	0.00	-214.52	0.00	214.52	3,432.32	1,716.16	5,533.43	2,770.83	1.51	-0.24	0.057
64.00	-39.94	-2.91	0.00	-211.60	0.00	211.60	3,418.23	1,709.12	5,479.66	2,743.90	1.56	-0.24	0.057
65.00	-39.53	-2.91	0.00	-208.69	0.00	208.69	3,404.09	1,702.05	5,426.05	2,717.06	1.61	-0.25	0.056
66.00	-39.13	-2.90	0.00	-205.78	0.00	205.78	3,389.89	1,694.95	5,372.62	2,690.30	1.66	-0.25	0.056
67.00	-38.73	-2.89	0.00	-202.89	0.00	202.89	3,375.64	1,687.82	5,319.35	2,663.63	1.71	-0.25	0.055
68.00	-38.33	-2.88	0.00	-199.99	0.00	199.99	3,361.32	1,680.66	5,266.25	2,637.04	1.77	-0.26	0.055
69.00	-37.92	-2.88	0.00	-197.11	0.00	197.11	3,346.95	1,673.48	5,213.32	2,610.53	1.82	-0.26	0.055
70.00	-37.53	-2.87	0.00	-194.23	0.00	194.23	3,332.53	1,666.26	5,160.56	2,584.12	1.88	-0.27	0.054
71.00	-37.13	-2.86	0.00	-191.37	0.00	191.37	3,318.04	1,659.02	5,107.98	2,557.79	1.93	-0.27	0.054
72.00	-36.73	-2.85	0.00	-188.51	0.00	188.51	3,300.52	1,650.26	5,051.01	2,529.26	1.99	-0.27	0.053
73.00	-36.33	-2.84	0.00	-185.66	0.00	185.66	3,281.11	1,640.56	4,991.50	2,499.46	2.05	-0.28	0.053
74.00	-35.94	-2.83	0.00	-182.82	0.00	182.82	3,261.71	1,630.85	4,932.34	2,469.84	2.11	-0.28	0.053
75.00	-35.54	-2.82	0.00	-179.98	0.00	179.98	3,242.30	1,621.15	4,873.54	2,440.39	2.17	-0.29	0.052
76.00	-35.15	-2.81	0.00	-177.16	0.00	177.16	3,222.90	1,611.45	4,815.08	2,411.12	2.23	-0.29	0.052
77.00	-34.76	-2.80	0.00	-174.35	0.00	174.35	3,203.49	1,601.75	4,756.98	2,382.03	2.29	-0.30	0.052
78.00	-34.37	-2.79	0.00	-171.55	0.00	171.55	3,184.09	1,592.04	4,699.23	2,353.11	2.35	-0.30	0.051
79.00	-33.98	-2.78	0.00	-168.76	0.00	168.76	3,164.68	1,582.34	4,641.84	2,324.37	2.41	-0.30	0.051
80.00	-33.59	-2.77	0.00	-165.98	0.00	165.98	3,145.28	1,572.64	4,584.79	2,295.80	2.48	-0.31	0.051
81.00	-33.20	-2.76	0.00	-163.21	0.00	163.21	3,125.87	1,562.94	4,528.10	2,267.42	2.54	-0.31	0.050
82.00	-32.81	-2.75	0.00	-160.45	0.00	160.45	3,106.47	1,553.24	4,471.77	2,239.21	2.61	-0.32	0.050
83.00	-32.43	-2.73	0.00	-157.71	0.00	157.71	3,087.07	1,543.53	4,415.78	2,211.17	2.67	-0.32	0.049
84.00	-32.05	-2.72	0.00	-154.97	0.00	154.97	3,067.66	1,533.83	4,360.15	2,183.32	2.74	-0.32	0.049
85.00	-31.66	-2.71	0.00	-152.25	0.00	152.25	3,048.26	1,524.13	4,304.87	2,155.63	2.81	-0.33	0.049
86.00	-31.28	-2.69	0.00	-149.55	0.00	149.55	3,028.85	1,514.43	4,249.94	2,128.13	2.88	-0.33	0.048
87.00	-31.07	-2.69	0.00	-146.85	0.00	146.85	3,009.45	1,504.72	4,195.37	2,100.80	2.95	-0.34	0.048
87.54	-30.83	-2.68	0.00	-145.40	0.00	145.40	2,998.97	1,499.48	4,166.05	2,086.12	2.99	-0.34	0.048
88.00	-30.31	-2.66	0.00	-144.17	0.00	144.17	2,990.04	1,495.02	4,141.15	2,073.65	3.02	-0.34	0.047
89.00	-29.79	-2.64	0.00	-141.51	0.00	141.51	2,970.64	1,485.32	4,087.28	2,046.68	3.09	-0.34	0.046
90.00	-29.27	-2.62	0.00	-138.87	0.00	138.87	2,951.23	1,475.62	4,033.76	2,019.88	3.17	-0.35	0.046
91.00	-28.75	-2.60	0.00	-136.25	0.00	136.25	2,931.83	1,465.91	3,980.60	1,993.26	3.24	-0.35	0.045
92.00	-28.52	-2.59	0.00	-133.66	0.00	133.66	2,912.42	1,456.21	3,927.79	1,966.81	3.31	-0.36	0.045
92.46	-28.33	-2.58	0.00	-132.48	0.00	132.48	2,424.49	1,212.24	3,334.85	1,669.90	3.35	-0.36	0.050
93.00	-27.98	-2.56	0.00	-131.08	0.00	131.08	2,418.22	1,209.11	3,314.29	1,659.61	3.39	-0.36	0.049
94.00	-27.63	-2.55	0.00	-128.51	0.00	128.51	2,406.65	1,203.32	3,276.56	1,640.72	3.46	-0.36	0.049
95.00	-27.28	-2.53	0.00	-125.96	0.00	125.96	2,395.02	1,197.51	3,238.97	1,621.89	3.54	-0.37	0.048
96.00	-26.33	-2.49	0.00	-123.43	0.00	123.43	2,383.33	1,191.67	3,201.50	1,603.13	3.62	-0.37	0.048
97.00	-25.99	-2.47	0.00	-120.94	0.00	120.94	2,371.59	1,185.79	3,164.18	1,584.44	3.70	-0.38	0.047
98.00	-25.64	-2.46	0.00	-118.46	0.00	118.46	2,359.79	1,179.89	3,126.99	1,565.82	3.78	-0.38	0.046
99.00	-25.30	-2.44	0.00	-116.00	0.00	116.00	2,347.93	1,173.97	3,089.94	1,547.27	3.86	-0.39	0.046
100.00	-24.96	-2.43	0.00	-113.56	0.00	113.56	2,336.02	1,168.01	3,053.03	1,528.79	3.94	-0.39	0.045
101.00	-24.62	-2.41	0.00	-111.14	0.00	111.14	2,324.05	1,162.02	3,016.27	1,510.38	4.02	-0.39	0.045
102.00	-24.27	-2.39	0.00	-108.73	0.00	108.73	2,312.02	1,156.01	2,979.65	1,492.04	4.10	-0.40	0.044
103.00	-24.02	-2.38	0.00	-106.34	0.00	106.34	2,299.80	1,149.90	2,943.01	1,473.69	4.19	-0.40	0.043
103.75	-23.96	-2.38	0.00	-104.55	0.00	104.55	2,287.68	1,143.84	2,911.90	1,458.11	4.25	-0.41	0.043
103.75	-23.96	-2.38	0.00	-104.55	0.00	104.55	2,287.68	1,143.84	2,911.90	1,458.11	4.25	-0.41	0.082
104.00	-23.70	-2.36	0.00	-103.96	0.00	103.96	2,283.63	1,141.82	2,901.57	1,452.94	4.27	-0.41	0.082
105.00	-23.35	-2.35	0.00	-101.59	0.00	101.59	2,267.46	1,133.73	2,860.42	1,432.33	4.36	-0.41	0.081
106.00	-23.10	-2.33	0.00	-99.25	0.00	99.25	2,251.29	1,125.65	2,819.56	1,411.88	4.45	-0.42	0.081
107.00	-22.86	-2.32	0.00	-96.91	0.00	96.91	2,235.12	1,117.56	2,779.00	1,391.56	4.54	-0.43	0.080
108.00	-22.61	-2.31	0.00	-94.59	0.00	94.59	2,218.95	1,109.48	2,738.73	1,371.40	4.63	-0.44	0.079
109.00	-22.37	-2.30	0.00	-92.28	0.00	92.28	2,202.78	1,101.39	2,698.75	1,351.38	4.72	-0.45	0.078
110.00	-22.12	-2.29	0.00	-89.98	0.00	89.98	2,186.61	1,093.30	2,659.07	1,331.51	4.81	-0.45	0.078
111.00	-21.88	-2.27	0.00	-87.70	0.00	87.70	2,170.44	1,085.22	2,619.69	1,311.79	4.91	-0.46	0.077
112.00	-19.61	-2.12	0.00	-85.42	0.00	85.42	2,154.27	1,077.13	2,580.59	1,292.21	5.01	-0.47	0.075
113.00	-19.43	-2.12	0.00	-83.30	0.00	83.30	2,138.10	1,069.05	2,541.79	1,272.79	5.10	-0.48	0.075

114.00	-19.25	-2.11	0.00	-81.18	0.00	81.18	2,121.93	1,060.96	2,503.29	1,253.50	5.21	-0.48	0.074
115.00	-19.07	-2.10	0.00	-79.08	0.00	79.08	2,105.76	1,052.88	2,465.08	1,234.37	5.31	-0.49	0.073
116.00	-18.90	-2.09	0.00	-76.98	0.00	76.98	2,089.59	1,044.79	2,427.16	1,215.38	5.41	-0.50	0.072
117.00	-18.72	-2.08	0.00	-74.90	0.00	74.90	2,073.42	1,036.71	2,389.54	1,196.54	5.52	-0.51	0.072
118.00	-18.55	-2.06	0.00	-72.82	0.00	72.82	2,057.25	1,028.62	2,352.21	1,177.85	5.62	-0.51	0.071
119.00	-18.37	-2.05	0.00	-70.76	0.00	70.76	2,041.07	1,020.54	2,315.17	1,159.31	5.73	-0.52	0.070
120.00	-18.20	-2.04	0.00	-68.70	0.00	68.70	2,024.90	1,012.45	2,278.43	1,140.91	5.84	-0.53	0.069
121.00	-18.03	-2.03	0.00	-66.66	0.00	66.66	2,008.73	1,004.37	2,241.98	1,122.66	5.95	-0.54	0.068
122.00	-17.86	-2.02	0.00	-64.63	0.00	64.63	1,992.56	996.28	2,205.83	1,104.55	6.07	-0.54	0.067
123.00	-17.69	-2.01	0.00	-62.61	0.00	62.61	1,976.39	988.20	2,169.97	1,086.60	6.18	-0.55	0.067
124.00	-17.52	-2.00	0.00	-60.60	0.00	60.60	1,960.22	980.11	2,134.40	1,068.79	6.30	-0.56	0.066
125.00	-14.73	-1.77	0.00	-58.60	0.00	58.60	1,944.05	972.03	2,099.13	1,051.12	6.42	-0.57	0.063
126.00	-14.57	-1.76	0.00	-56.83	0.00	56.83	1,927.88	963.94	2,064.15	1,033.61	6.53	-0.57	0.063
127.00	-14.41	-1.75	0.00	-55.07	0.00	55.07	1,911.71	955.86	2,029.46	1,016.24	6.66	-0.58	0.062
128.00	-14.25	-1.74	0.00	-53.32	0.00	53.32	1,895.54	947.77	1,995.07	999.02	6.78	-0.59	0.061
129.00	-14.10	-1.72	0.00	-51.58	0.00	51.58	1,879.37	939.68	1,960.98	981.95	6.90	-0.59	0.060
130.00	-13.94	-1.71	0.00	-49.86	0.00	49.86	1,863.20	931.60	1,927.17	965.02	7.03	-0.60	0.059
131.00	-13.78	-1.70	0.00	-48.15	0.00	48.15	1,847.03	923.51	1,893.66	948.24	7.15	-0.61	0.058
132.00	-13.77	-1.70	0.00	-46.45	0.00	46.45	1,830.86	915.43	1,860.45	931.61	7.28	-0.61	0.057
132.12	-13.58	-1.68	0.00	-46.24	0.00	46.24	1,828.92	914.46	1,856.49	929.63	7.30	-0.62	0.057
133.00	-13.36	-1.66	0.00	-44.76	0.00	44.76	1,814.69	907.34	1,827.53	915.12	7.41	-0.62	0.056
134.00	-13.15	-1.64	0.00	-43.10	0.00	43.10	1,798.52	899.26	1,794.90	898.78	7.54	-0.63	0.055
135.00	-9.43	-1.29	0.00	-41.46	0.00	41.46	1,782.35	891.17	1,762.57	882.59	7.67	-0.63	0.052
135.87	-9.42	-1.29	0.00	-40.33	0.00	40.33	999.39	499.70	1,006.16	503.83	7.79	-0.64	0.089
136.00	-9.31	-1.28	0.00	-40.16	0.00	40.16	998.64	499.32	1,004.22	502.86	7.81	-0.64	0.089
137.00	-9.20	-1.27	0.00	-38.88	0.00	38.88	992.83	496.42	989.37	495.42	7.94	-0.65	0.088
138.00	-9.10	-1.26	0.00	-37.61	0.00	37.61	986.97	493.49	974.56	488.00	8.08	-0.66	0.086
139.00	-8.99	-1.25	0.00	-36.35	0.00	36.35	981.05	490.53	959.80	480.61	8.22	-0.67	0.085
140.00	-8.07	-1.16	0.00	-35.09	0.00	35.09	975.08	487.54	945.09	473.25	8.36	-0.68	0.082
141.00	-7.97	-1.15	0.00	-33.93	0.00	33.93	969.05	484.52	930.44	465.91	8.50	-0.69	0.081
142.00	-7.88	-1.14	0.00	-32.78	0.00	32.78	962.96	481.48	915.84	458.60	8.65	-0.70	0.080
143.00	-7.78	-1.13	0.00	-31.64	0.00	31.64	956.81	478.41	901.30	451.32	8.80	-0.71	0.078
144.00	-7.68	-1.13	0.00	-30.50	0.00	30.50	950.61	475.30	886.82	444.07	8.95	-0.72	0.077
145.00	-7.59	-1.12	0.00	-29.38	0.00	29.38	944.35	472.17	872.40	436.85	9.10	-0.73	0.075
146.00	-7.49	-1.11	0.00	-28.26	0.00	28.26	938.03	469.01	858.03	429.66	9.25	-0.74	0.074
147.00	-7.40	-1.10	0.00	-27.16	0.00	27.16	931.66	465.83	843.74	422.50	9.41	-0.75	0.072
148.00	-7.31	-1.09	0.00	-26.06	0.00	26.06	925.22	462.61	829.51	415.37	9.57	-0.76	0.071
149.00	-7.21	-1.08	0.00	-24.97	0.00	24.97	918.73	459.37	815.34	408.28	9.73	-0.77	0.069
150.00	-6.93	-1.05	0.00	-23.89	0.00	23.89	912.19	456.09	801.24	401.22	9.89	-0.78	0.067
151.00	-6.83	-1.04	0.00	-22.85	0.00	22.85	905.59	452.79	787.21	394.19	10.05	-0.79	0.066
152.00	-6.74	-1.03	0.00	-21.81	0.00	21.81	898.93	449.46	773.25	387.20	10.22	-0.80	0.064
153.00	-6.65	-1.02	0.00	-20.79	0.00	20.79	892.21	446.10	759.37	380.25	10.39	-0.80	0.062
154.00	-6.56	-1.01	0.00	-19.77	0.00	19.77	885.44	442.72	745.56	373.33	10.56	-0.81	0.060
155.00	-6.48	-1.00	0.00	-18.77	0.00	18.77	878.60	439.30	731.82	366.45	10.73	-0.82	0.059
156.00	-6.39	-0.98	0.00	-17.77	0.00	17.77	871.72	435.86	718.16	359.61	10.90	-0.83	0.057
157.00	-6.30	-0.97	0.00	-16.79	0.00	16.79	864.77	432.39	704.58	352.81	11.08	-0.84	0.055
158.00	-6.21	-0.96	0.00	-15.81	0.00	15.81	857.77	428.88	691.08	346.05	11.25	-0.85	0.053
159.00	-6.13	-0.95	0.00	-14.85	0.00	14.85	850.71	425.35	677.66	339.34	11.43	-0.85	0.051
160.00	-6.04	-0.94	0.00	-13.89	0.00	13.89	843.59	421.80	664.33	332.66	11.61	-0.86	0.049
161.00	-5.96	-0.93	0.00	-12.95	0.00	12.95	836.42	418.21	651.08	326.02	11.79	-0.87	0.047
162.00	-5.87	-0.92	0.00	-12.02	0.00	12.02	829.19	414.59	637.92	319.43	11.97	-0.87	0.045
163.00	-5.79	-0.91	0.00	-11.10	0.00	11.10	819.85	409.92	623.28	312.10	12.16	-0.88	0.043
164.00	-5.70	-0.90	0.00	-10.19	0.00	10.19	810.15	405.07	608.54	304.72	12.34	-0.89	0.040
165.00	-5.62	-0.89	0.00	-9.29	0.00	9.29	800.44	400.22	593.98	297.43	12.53	-0.89	0.038
166.00	-5.54	-0.88	0.00	-8.40	0.00	8.40	790.74	395.37	579.60	290.23	12.72	-0.90	0.036
167.00	-3.89	-0.64	0.00	-7.53	0.00	7.53	781.04	390.52	565.39	283.11	12.90	-0.90	0.032
168.00	-3.82	-0.63	0.00	-6.89	0.00	6.89	771.34	385.67	551.35	276.09	13.09	-0.91	0.030
169.00	-3.76	-0.62	0.00	-6.26	0.00	6.26	761.63	380.82	537.50	269.15	13.29	-0.91	0.028
170.00	-3.69	-0.61	0.00	-5.64	0.00	5.64	751.93	375.97	523.82	262.30	13.48	-0.92	0.026
171.00	-3.62	-0.60	0.00	-5.03	0.00	5.03	742.23	371.11	510.32	255.54	13.67	-0.92	0.025
172.00	-3.56	-0.59	0.00	-4.43	0.00	4.43	732.53	366.26	496.99	248.86	13.86	-0.93	0.023
173.00	-3.49	-0.58	0.00	-3.84	0.00	3.84	722.82	361.41	483.84	242.28	14.06	-0.93	0.021
174.00	-3.43	-0.57	0.00	-3.26	0.00	3.26	713.12	356.56	470.86	235.78	14.25	-0.93	0.019
175.00	-3.36	-0.56	0.00	-2.70	0.00	2.70	703.42	351.71	458.07	229.37	14.45	-0.94	0.017

176.00	-3.30	-0.55	0.00	-2.14	0.00	2.14	693.72	346.86	445.44	223.05	14.65	-0.94	0.014
177.00	-3.24	-0.54	0.00	-1.59	0.00	1.59	684.02	342.01	433.00	216.82	14.84	-0.94	0.012
178.00	-3.17	-0.53	0.00	-1.05	0.00	1.05	674.31	337.16	420.73	210.68	15.04	-0.94	0.010
179.00	-3.11	-0.52	0.00	-0.52	0.00	0.52	664.61	332.31	408.64	204.62	15.24	-0.94	0.007
180.00	0.00	-0.47	0.00	0.00	0.00	0.00	654.91	327.45	396.72	198.65	15.43	-0.94	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	-49.59	-2.94	0.00	-395.60	0.00	395.60	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.061
1.00	-49.23	-2.94	0.00	-392.66	0.00	392.66	5,115.23	2,557.61	10,943.3	5,479.82	0.00	0.00	0.060
2.00	-48.87	-2.95	0.00	-389.72	0.00	389.72	5,100.42	2,550.21	10,865.3	5,440.75	0.00	-0.01	0.060
3.00	-48.51	-2.95	0.00	-386.77	0.00	386.77	5,085.56	2,542.78	10,787.4	5,401.75	0.00	-0.01	0.060
4.00	-48.16	-2.95	0.00	-383.82	0.00	383.82	5,070.64	2,535.32	10,709.7	5,362.83	0.01	-0.01	0.060
5.00	-47.80	-2.95	0.00	-380.87	0.00	380.87	5,055.67	2,527.83	10,632.1	5,323.99	0.01	-0.02	0.060
6.00	-47.45	-2.96	0.00	-377.91	0.00	377.91	5,040.63	2,520.32	10,554.7	5,285.22	0.01	-0.02	0.060
7.00	-47.09	-2.96	0.00	-374.96	0.00	374.96	5,025.54	2,512.77	10,477.4	5,246.53	0.02	-0.02	0.060
8.00	-46.74	-2.96	0.00	-372.00	0.00	372.00	5,010.40	2,505.20	10,400.3	5,207.92	0.02	-0.03	0.060
9.00	-46.39	-2.96	0.00	-369.03	0.00	369.03	4,995.19	2,497.60	10,323.4	5,169.39	0.03	-0.03	0.059
10.00	-46.04	-2.97	0.00	-366.07	0.00	366.07	4,979.93	2,489.97	10,246.6	5,130.93	0.04	-0.03	0.059
11.00	-45.69	-2.97	0.00	-363.10	0.00	363.10	4,964.61	2,482.31	10,170.0	5,092.56	0.04	-0.04	0.059
12.00	-45.34	-2.97	0.00	-360.13	0.00	360.13	4,949.24	2,474.62	10,093.5	5,054.27	0.05	-0.04	0.059
13.00	-44.99	-2.97	0.00	-357.16	0.00	357.16	4,933.81	2,466.90	10,017.2	5,016.06	0.06	-0.04	0.059
14.00	-44.64	-2.98	0.00	-354.19	0.00	354.19	4,918.32	2,459.16	9,941.08	4,977.93	0.07	-0.05	0.059
15.00	-44.29	-2.98	0.00	-351.21	0.00	351.21	4,902.77	2,451.39	9,865.10	4,939.88	0.08	-0.05	0.058
16.00	-43.95	-2.98	0.00	-348.24	0.00	348.24	4,887.17	2,443.58	9,789.30	4,901.92	0.09	-0.05	0.058
17.00	-43.60	-2.98	0.00	-345.26	0.00	345.26	4,871.51	2,435.75	9,713.66	4,864.05	0.10	-0.06	0.058
18.00	-43.26	-2.98	0.00	-342.28	0.00	342.28	4,855.79	2,427.89	9,638.20	4,826.26	0.11	-0.06	0.058
19.00	-42.92	-2.98	0.00	-339.29	0.00	339.29	4,840.02	2,420.01	9,562.90	4,788.56	0.13	-0.06	0.058
20.00	-42.58	-2.98	0.00	-336.31	0.00	336.31	4,824.18	2,412.09	9,487.79	4,750.94	0.14	-0.07	0.058
21.00	-42.23	-2.99	0.00	-333.33	0.00	333.33	4,808.29	2,404.15	9,412.84	4,713.42	0.16	-0.07	0.057
22.00	-41.89	-2.99	0.00	-330.34	0.00	330.34	4,792.35	2,396.17	9,338.08	4,675.98	0.17	-0.08	0.057
23.00	-41.55	-2.99	0.00	-327.35	0.00	327.35	4,776.35	2,388.17	9,263.49	4,638.63	0.19	-0.08	0.057
24.00	-41.22	-2.99	0.00	-324.37	0.00	324.37	4,760.29	2,380.14	9,189.09	4,601.37	0.21	-0.08	0.057
25.00	-40.88	-2.99	0.00	-321.38	0.00	321.38	4,744.17	2,372.08	9,114.87	4,564.21	0.22	-0.09	0.057
26.00	-40.54	-2.99	0.00	-318.39	0.00	318.39	4,728.00	2,364.00	9,040.83	4,527.13	0.24	-0.09	0.057
27.00	-40.21	-2.99	0.00	-315.40	0.00	315.40	4,711.76	2,355.88	8,966.98	4,490.15	0.26	-0.09	0.056
28.00	-39.87	-2.99	0.00	-312.41	0.00	312.41	4,695.48	2,347.74	8,893.31	4,453.26	0.28	-0.10	0.056
29.00	-39.54	-2.99	0.00	-309.42	0.00	309.42	4,679.13	2,339.57	8,819.83	4,416.47	0.30	-0.10	0.056
30.00	-39.20	-2.99	0.00	-306.43	0.00	306.43	4,662.73	2,331.36	8,746.54	4,379.77	0.32	-0.10	0.056
31.00	-38.86	-2.99	0.00	-303.44	0.00	303.44	4,646.27	2,323.14	8,673.45	4,343.17	0.35	-0.11	0.056
32.00	-38.53	-2.99	0.00	-300.45	0.00	300.45	4,629.75	2,314.88	8,600.55	4,306.67	0.37	-0.11	0.055
33.00	-38.20	-2.99	0.00	-297.46	0.00	297.46	4,613.18	2,306.59	8,527.84	4,270.26	0.39	-0.12	0.055
34.00	-37.87	-2.99	0.00	-294.47	0.00	294.47	4,596.55	2,298.27	8,455.33	4,233.95	0.42	-0.12	0.055
35.00	-37.54	-2.99	0.00	-291.48	0.00	291.48	4,579.86	2,289.93	8,383.01	4,197.74	0.44	-0.12	0.055
36.00	-37.22	-2.99	0.00	-288.50	0.00	288.50	4,563.12	2,281.56	8,310.90	4,161.63	0.47	-0.13	0.055
37.00	-36.89	-2.98	0.00	-285.51	0.00	285.51	4,546.32	2,273.16	8,238.99	4,125.62	0.50	-0.13	0.054
38.00	-36.56	-2.98	0.00	-282.53	0.00	282.53	4,529.46	2,264.73	8,167.27	4,089.71	0.52	-0.13	0.054
39.00	-36.24	-2.98	0.00	-279.55	0.00	279.55	4,512.54	2,256.27	8,095.77	4,053.90	0.55	-0.14	0.054
40.00	-35.92	-2.98	0.00	-276.57	0.00	276.57	4,491.22	2,245.61	8,016.71	4,014.31	0.58	-0.14	0.054
41.00	-35.59	-2.98	0.00	-273.59	0.00	273.59	4,468.58	2,234.29	7,935.69	3,973.74	0.61	-0.14	0.054
42.00	-35.28	-2.97	0.00	-270.61	0.00	270.61	4,445.95	2,222.97	7,855.09	3,933.38	0.64	-0.15	0.053
42.96	-35.26	-2.98	0.00	-267.77	0.00	267.77	4,424.29	2,212.15	7,778.37	3,894.97	0.67	-0.15	0.053
43.00	-34.79	-2.97	0.00	-267.64	0.00	267.64	4,423.31	2,211.65	7,774.90	3,893.23	0.67	-0.15	0.053
44.00	-34.32	-2.96	0.00	-264.67	0.00	264.67	4,400.67	2,200.33	7,695.11	3,853.28	0.71	-0.16	0.053
45.00	-33.85	-2.96	0.00	-261.70	0.00	261.70	4,378.03	2,189.01	7,615.75	3,813.53	0.74	-0.16	0.052
46.00	-33.38	-2.95	0.00	-258.74	0.00	258.74	4,355.39	2,177.70	7,536.79	3,773.99	0.77	-0.16	0.052
47.00	-32.91	-2.95	0.00	-255.79	0.00	255.79	4,332.75	2,166.38	7,458.24	3,734.66	0.81	-0.17	0.052
48.00	-32.45	-2.94	0.00	-252.85	0.00	252.85	4,310.11	2,155.06	7,380.10	3,695.54	0.84	-0.17	0.052
49.00	-32.43	-2.94	0.00	-249.91	0.00	249.91	4,287.47	2,143.74	7,302.38	3,656.62	0.88	-0.18	0.052
49.04	-32.15	-2.94	0.00	-249.79	0.00	249.79	3,622.99	1,811.50	6,300.42	3,154.89	0.88	-0.18	0.058
50.00	-31.85	-2.93	0.00	-246.97	0.00	246.97	3,610.23	1,805.12	6,246.74	3,128.01	0.92	-0.18	0.058
51.00	-31.56	-2.93	0.00	-244.04	0.00	244.04	3,596.89	1,798.44	6,190.96	3,100.08	0.95	-0.18	0.057
52.00	-31.27	-2.92	0.00	-241.11	0.00	241.11	3,583.49	1,791.74	6,135.33	3,072.23	0.99	-0.19	0.057
53.00	-30.98	-2.92	0.00	-238.18	0.00	238.18	3,570.03	1,785.02	6,079.85	3,044.45	1.03	-0.19	0.057

54.00	-30.68	-2.92	0.00	-235.26	0.00	235.26	3,556.52	1,778.26	6,024.52	3,016.74	1.07	-0.19	0.056
55.00	-30.39	-2.91	0.00	-232.35	0.00	232.35	3,542.95	1,771.47	5,969.33	2,989.10	1.11	-0.20	0.056
56.00	-30.11	-2.91	0.00	-229.44	0.00	229.44	3,529.32	1,764.66	5,914.30	2,961.55	1.16	-0.20	0.056
57.00	-29.82	-2.90	0.00	-226.53	0.00	226.53	3,515.63	1,757.82	5,859.42	2,934.06	1.20	-0.21	0.055
58.00	-29.53	-2.90	0.00	-223.63	0.00	223.63	3,501.89	1,750.94	5,804.69	2,906.66	1.24	-0.21	0.055
59.00	-29.24	-2.89	0.00	-220.74	0.00	220.74	3,488.09	1,744.04	5,750.12	2,879.33	1.29	-0.22	0.055
60.00	-28.96	-2.88	0.00	-217.85	0.00	217.85	3,474.23	1,737.12	5,695.71	2,852.09	1.33	-0.22	0.054
61.00	-28.67	-2.88	0.00	-214.96	0.00	214.96	3,460.32	1,730.16	5,641.45	2,824.92	1.38	-0.22	0.054
62.00	-28.39	-2.87	0.00	-212.09	0.00	212.09	3,446.35	1,723.17	5,587.36	2,797.83	1.43	-0.23	0.054
63.00	-28.10	-2.86	0.00	-209.21	0.00	209.21	3,432.32	1,716.16	5,533.43	2,770.83	1.48	-0.23	0.053
64.00	-27.82	-2.86	0.00	-206.35	0.00	206.35	3,418.23	1,709.12	5,479.66	2,743.90	1.52	-0.24	0.053
65.00	-27.54	-2.85	0.00	-203.49	0.00	203.49	3,404.09	1,702.05	5,426.05	2,717.06	1.57	-0.24	0.053
66.00	-27.26	-2.84	0.00	-200.64	0.00	200.64	3,389.89	1,694.95	5,372.62	2,690.30	1.62	-0.24	0.052
67.00	-26.97	-2.83	0.00	-197.80	0.00	197.80	3,375.64	1,687.82	5,319.35	2,663.63	1.68	-0.25	0.052
68.00	-26.69	-2.83	0.00	-194.97	0.00	194.97	3,361.32	1,680.66	5,266.25	2,637.04	1.73	-0.25	0.051
69.00	-26.42	-2.82	0.00	-192.14	0.00	192.14	3,346.95	1,673.48	5,213.32	2,610.53	1.78	-0.26	0.051
70.00	-26.14	-2.81	0.00	-189.32	0.00	189.32	3,332.53	1,666.26	5,160.56	2,584.12	1.84	-0.26	0.051
71.00	-25.86	-2.80	0.00	-186.51	0.00	186.51	3,318.04	1,659.02	5,107.98	2,557.79	1.89	-0.26	0.050
72.00	-25.58	-2.79	0.00	-183.71	0.00	183.71	3,300.52	1,650.26	5,051.01	2,529.26	1.95	-0.27	0.050
73.00	-25.31	-2.78	0.00	-180.92	0.00	180.92	3,281.11	1,640.56	4,991.50	2,499.46	2.00	-0.27	0.050
74.00	-25.03	-2.77	0.00	-178.14	0.00	178.14	3,261.71	1,630.85	4,932.34	2,469.84	2.06	-0.28	0.049
75.00	-24.76	-2.76	0.00	-175.36	0.00	175.36	3,242.30	1,621.15	4,873.54	2,440.39	2.12	-0.28	0.049
76.00	-24.48	-2.75	0.00	-172.60	0.00	172.60	3,222.90	1,611.45	4,815.08	2,411.12	2.18	-0.28	0.049
77.00	-24.21	-2.74	0.00	-169.85	0.00	169.85	3,203.49	1,601.75	4,756.98	2,382.03	2.24	-0.29	0.048
78.00	-23.94	-2.73	0.00	-167.11	0.00	167.11	3,184.09	1,592.04	4,699.23	2,353.11	2.30	-0.29	0.048
79.00	-23.66	-2.72	0.00	-164.38	0.00	164.38	3,164.68	1,582.34	4,641.84	2,324.37	2.36	-0.30	0.048
80.00	-23.39	-2.71	0.00	-161.66	0.00	161.66	3,145.28	1,572.64	4,584.79	2,295.80	2.42	-0.30	0.047
81.00	-23.12	-2.70	0.00	-158.95	0.00	158.95	3,125.87	1,562.94	4,528.10	2,267.42	2.49	-0.30	0.047
82.00	-22.86	-2.69	0.00	-156.25	0.00	156.25	3,106.47	1,553.24	4,471.77	2,239.21	2.55	-0.31	0.047
83.00	-22.59	-2.67	0.00	-153.57	0.00	153.57	3,087.07	1,543.53	4,415.78	2,211.17	2.62	-0.31	0.046
84.00	-22.32	-2.66	0.00	-150.89	0.00	150.89	3,067.66	1,533.83	4,360.15	2,183.32	2.68	-0.32	0.046
85.00	-22.05	-2.65	0.00	-148.23	0.00	148.23	3,048.26	1,524.13	4,304.87	2,155.63	2.75	-0.32	0.045
86.00	-21.79	-2.63	0.00	-145.59	0.00	145.59	3,028.85	1,514.43	4,249.94	2,128.13	2.82	-0.32	0.045
87.00	-21.64	-2.63	0.00	-142.95	0.00	142.95	3,009.45	1,504.72	4,195.37	2,100.80	2.89	-0.33	0.045
87.54	-21.47	-2.62	0.00	-141.53	0.00	141.53	2,998.97	1,499.48	4,166.05	2,086.12	2.92	-0.33	0.044
88.00	-21.11	-2.60	0.00	-140.33	0.00	140.33	2,990.04	1,495.02	4,141.15	2,073.65	2.96	-0.33	0.044
89.00	-20.75	-2.58	0.00	-137.73	0.00	137.73	2,970.64	1,485.32	4,087.28	2,046.68	3.03	-0.34	0.043
90.00	-20.39	-2.56	0.00	-135.15	0.00	135.15	2,951.23	1,475.62	4,033.76	2,019.88	3.10	-0.34	0.043
91.00	-20.02	-2.54	0.00	-132.59	0.00	132.59	2,931.83	1,465.91	3,980.60	1,993.26	3.17	-0.34	0.042
92.00	-19.86	-2.53	0.00	-130.06	0.00	130.06	2,912.42	1,456.21	3,927.79	1,966.81	3.24	-0.35	0.042
92.46	-19.73	-2.52	0.00	-128.90	0.00	128.90	2,424.49	1,212.24	3,334.85	1,669.90	3.27	-0.35	0.046
93.00	-19.48	-2.51	0.00	-127.53	0.00	127.53	2,418.22	1,209.11	3,314.29	1,659.61	3.31	-0.35	0.046
94.00	-19.24	-2.49	0.00	-125.03	0.00	125.03	2,406.65	1,203.32	3,276.56	1,640.72	3.39	-0.36	0.046
95.00	-19.00	-2.48	0.00	-122.54	0.00	122.54	2,395.02	1,197.51	3,238.97	1,621.89	3.46	-0.36	0.045
96.00	-18.34	-2.43	0.00	-120.06	0.00	120.06	2,383.33	1,191.67	3,201.50	1,603.13	3.54	-0.36	0.044
97.00	-18.10	-2.42	0.00	-117.63	0.00	117.63	2,371.59	1,185.79	3,164.18	1,584.44	3.62	-0.37	0.044
98.00	-17.86	-2.40	0.00	-115.21	0.00	115.21	2,359.79	1,179.89	3,126.99	1,565.82	3.69	-0.37	0.043
99.00	-17.62	-2.39	0.00	-112.81	0.00	112.81	2,347.93	1,173.97	3,089.94	1,547.27	3.77	-0.38	0.043
100.00	-17.38	-2.37	0.00	-110.42	0.00	110.42	2,336.02	1,168.01	3,053.03	1,528.79	3.85	-0.38	0.042
101.00	-17.14	-2.35	0.00	-108.05	0.00	108.05	2,324.05	1,162.02	3,016.27	1,510.38	3.93	-0.38	0.041
102.00	-16.91	-2.34	0.00	-105.70	0.00	105.70	2,312.02	1,156.01	2,979.65	1,492.04	4.01	-0.39	0.041
103.00	-16.73	-2.32	0.00	-103.36	0.00	103.36	2,299.80	1,149.90	2,943.01	1,473.69	4.10	-0.39	0.040
103.75	-16.68	-2.32	0.00	-101.62	0.00	101.62	2,287.68	1,143.84	2,911.90	1,458.11	4.16	-0.40	0.040
103.75	-16.68	-2.32	0.00	-101.62	0.00	101.62	2,287.68	1,143.84	2,911.90	1,458.11	4.16	-0.40	0.077
104.00	-16.51	-2.31	0.00	-101.04	0.00	101.04	2,283.63	1,141.82	2,901.57	1,452.94	4.18	-0.40	0.077
105.00	-16.26	-2.29	0.00	-98.73	0.00	98.73	2,267.46	1,133.73	2,860.42	1,432.33	4.26	-0.40	0.076
106.00	-16.09	-2.28	0.00	-96.44	0.00	96.44	2,251.29	1,125.65	2,819.56	1,411.88	4.35	-0.41	0.075
107.00	-15.92	-2.27	0.00	-94.17	0.00	94.17	2,235.12	1,117.56	2,779.00	1,391.56	4.43	-0.42	0.075
108.00	-15.75	-2.25	0.00	-91.90	0.00	91.90	2,218.95	1,109.48	2,738.73	1,371.40	4.52	-0.43	0.074
109.00	-15.58	-2.24	0.00	-89.65	0.00	89.65	2,202.78	1,101.39	2,698.75	1,351.38	4.61	-0.43	0.073
110.00	-15.40	-2.23	0.00	-87.41	0.00	87.41	2,186.61	1,093.30	2,659.07	1,331.51	4.70	-0.44	0.073
111.00	-15.24	-2.21	0.00	-85.18	0.00	85.18	2,170.44	1,085.22	2,619.69	1,311.79	4.80	-0.45	0.072
112.00	-13.65	-2.07	0.00	-82.97	0.00	82.97	2,154.27	1,077.13	2,580.59	1,292.21	4.89	-0.46	0.071
113.00	-13.53	-2.06	0.00	-80.89	0.00	80.89	2,138.10	1,069.05	2,541.79	1,272.79	4.99	-0.46	0.070

114.00	-13.40	-2.05	0.00	-78.83	0.00	78.83	2,121.93	1,060.96	2,503.29	1,253.50	5.09	-0.47	0.069
115.00	-13.28	-2.04	0.00	-76.78	0.00	76.78	2,105.76	1,052.88	2,465.08	1,234.37	5.19	-0.48	0.069
116.00	-13.16	-2.03	0.00	-74.74	0.00	74.74	2,089.59	1,044.79	2,427.16	1,215.38	5.29	-0.49	0.068
117.00	-13.04	-2.02	0.00	-72.71	0.00	72.71	2,073.42	1,036.71	2,389.54	1,196.54	5.39	-0.49	0.067
118.00	-12.91	-2.01	0.00	-70.69	0.00	70.69	2,057.25	1,028.62	2,352.21	1,177.85	5.50	-0.50	0.066
119.00	-12.79	-2.00	0.00	-68.68	0.00	68.68	2,041.07	1,020.54	2,315.17	1,159.31	5.60	-0.51	0.066
120.00	-12.67	-1.99	0.00	-66.68	0.00	66.68	2,024.90	1,012.45	2,278.43	1,140.91	5.71	-0.52	0.065
121.00	-12.55	-1.98	0.00	-64.69	0.00	64.69	2,008.73	1,004.37	2,241.98	1,122.66	5.82	-0.52	0.064
122.00	-12.43	-1.97	0.00	-62.72	0.00	62.72	1,992.56	996.28	2,205.83	1,104.55	5.93	-0.53	0.063
123.00	-12.32	-1.95	0.00	-60.75	0.00	60.75	1,976.39	988.20	2,169.97	1,086.60	6.04	-0.54	0.062
124.00	-12.20	-1.94	0.00	-58.80	0.00	58.80	1,960.22	980.11	2,134.40	1,068.79	6.15	-0.54	0.061
125.00	-10.26	-1.72	0.00	-56.86	0.00	56.86	1,944.05	972.03	2,099.13	1,051.12	6.27	-0.55	0.059
126.00	-10.14	-1.71	0.00	-55.13	0.00	55.13	1,927.88	963.94	2,064.15	1,033.61	6.38	-0.56	0.059
127.00	-10.03	-1.70	0.00	-53.42	0.00	53.42	1,911.71	955.86	2,029.46	1,016.24	6.50	-0.56	0.058
128.00	-9.92	-1.69	0.00	-51.72	0.00	51.72	1,895.54	947.77	1,995.07	999.02	6.62	-0.57	0.057
129.00	-9.81	-1.68	0.00	-50.04	0.00	50.04	1,879.37	939.68	1,960.98	981.95	6.74	-0.58	0.056
130.00	-9.71	-1.66	0.00	-48.36	0.00	48.36	1,863.20	931.60	1,927.17	965.02	6.86	-0.59	0.055
131.00	-9.60	-1.65	0.00	-46.70	0.00	46.70	1,847.03	923.51	1,893.66	948.24	6.99	-0.59	0.054
132.00	-9.59	-1.65	0.00	-45.05	0.00	45.05	1,830.86	915.43	1,860.45	931.61	7.11	-0.60	0.054
132.12	-9.45	-1.63	0.00	-44.85	0.00	44.85	1,828.92	914.46	1,856.49	929.63	7.13	-0.60	0.053
133.00	-9.30	-1.62	0.00	-43.41	0.00	43.41	1,814.69	907.34	1,827.53	915.12	7.24	-0.61	0.053
134.00	-9.15	-1.60	0.00	-41.80	0.00	41.80	1,798.52	899.26	1,794.90	898.78	7.36	-0.61	0.052
135.00	-6.57	-1.26	0.00	-40.20	0.00	40.20	1,782.35	891.17	1,762.57	882.59	7.49	-0.62	0.049
135.87	-6.56	-1.26	0.00	-39.11	0.00	39.11	999.39	499.70	1,006.16	503.83	7.61	-0.62	0.084
136.00	-6.48	-1.25	0.00	-38.94	0.00	38.94	998.64	499.32	1,004.22	502.86	7.62	-0.62	0.084
137.00	-6.41	-1.24	0.00	-37.70	0.00	37.70	992.83	496.42	989.37	495.42	7.76	-0.63	0.083
138.00	-6.33	-1.23	0.00	-36.46	0.00	36.46	986.97	493.49	974.56	488.00	7.89	-0.64	0.081
139.00	-6.26	-1.22	0.00	-35.23	0.00	35.23	981.05	490.53	959.80	480.61	8.03	-0.65	0.080
140.00	-5.62	-1.13	0.00	-34.01	0.00	34.01	975.08	487.54	945.09	473.25	8.16	-0.66	0.078
141.00	-5.55	-1.12	0.00	-32.88	0.00	32.88	969.05	484.52	930.44	465.91	8.30	-0.67	0.076
142.00	-5.48	-1.11	0.00	-31.76	0.00	31.76	962.96	481.48	915.84	458.60	8.45	-0.68	0.075
143.00	-5.42	-1.10	0.00	-30.65	0.00	30.65	956.81	478.41	901.30	451.32	8.59	-0.69	0.074
144.00	-5.35	-1.09	0.00	-29.55	0.00	29.55	950.61	475.30	886.82	444.07	8.74	-0.70	0.072
145.00	-5.28	-1.08	0.00	-28.46	0.00	28.46	944.35	472.17	872.40	436.85	8.88	-0.71	0.071
146.00	-5.22	-1.07	0.00	-27.38	0.00	27.38	938.03	469.01	858.03	429.66	9.03	-0.72	0.069
147.00	-5.15	-1.06	0.00	-26.30	0.00	26.30	931.66	465.83	843.74	422.50	9.19	-0.73	0.068
148.00	-5.09	-1.06	0.00	-25.24	0.00	25.24	925.22	462.61	829.51	415.37	9.34	-0.74	0.066
149.00	-5.02	-1.05	0.00	-24.18	0.00	24.18	918.73	459.37	815.34	408.28	9.49	-0.75	0.065
150.00	-4.82	-1.01	0.00	-23.14	0.00	23.14	912.19	456.09	801.24	401.22	9.65	-0.76	0.063
151.00	-4.76	-1.00	0.00	-22.12	0.00	22.12	905.59	452.79	787.21	394.19	9.81	-0.77	0.061
152.00	-4.69	-0.99	0.00	-21.12	0.00	21.12	898.93	449.46	773.25	387.20	9.97	-0.77	0.060
153.00	-4.63	-0.98	0.00	-20.12	0.00	20.12	892.21	446.10	759.37	380.25	10.14	-0.78	0.058
154.00	-4.57	-0.97	0.00	-19.14	0.00	19.14	885.44	442.72	745.56	373.33	10.30	-0.79	0.056
155.00	-4.51	-0.96	0.00	-18.17	0.00	18.17	878.60	439.30	731.82	366.45	10.47	-0.80	0.055
156.00	-4.45	-0.95	0.00	-17.20	0.00	17.20	871.72	435.86	718.16	359.61	10.64	-0.81	0.053
157.00	-4.39	-0.94	0.00	-16.25	0.00	16.25	864.77	432.39	704.58	352.81	10.81	-0.81	0.051
158.00	-4.32	-0.93	0.00	-15.30	0.00	15.30	857.77	428.88	691.08	346.05	10.98	-0.82	0.049
159.00	-4.26	-0.92	0.00	-14.37	0.00	14.37	850.71	425.35	677.66	339.34	11.15	-0.83	0.047
160.00	-4.20	-0.91	0.00	-13.45	0.00	13.45	843.59	421.80	664.33	332.66	11.32	-0.84	0.045
161.00	-4.15	-0.90	0.00	-12.53	0.00	12.53	836.42	418.21	651.08	326.02	11.50	-0.84	0.043
162.00	-4.09	-0.89	0.00	-11.63	0.00	11.63	829.19	414.59	637.92	319.43	11.68	-0.85	0.041
163.00	-4.03	-0.88	0.00	-10.74	0.00	10.74	819.85	409.92	623.28	312.10	11.86	-0.86	0.039
164.00	-3.97	-0.87	0.00	-9.86	0.00	9.86	810.15	405.07	608.54	304.72	12.04	-0.86	0.037
165.00	-3.91	-0.86	0.00	-8.99	0.00	8.99	800.44	400.22	593.98	297.43	12.22	-0.87	0.035
166.00	-3.85	-0.85	0.00	-8.13	0.00	8.13	790.74	395.37	579.60	290.23	12.40	-0.87	0.033
167.00	-2.71	-0.62	0.00	-7.28	0.00	7.28	781.04	390.52	565.39	283.11	12.59	-0.88	0.029
168.00	-2.66	-0.61	0.00	-6.67	0.00	6.67	771.34	385.67	551.35	276.09	12.77	-0.88	0.028
169.00	-2.61	-0.60	0.00	-6.06	0.00	6.06	761.63	380.82	537.50	269.15	12.96	-0.89	0.026
170.00	-2.57	-0.59	0.00	-5.46	0.00	5.46	751.93	375.97	523.82	262.30	13.14	-0.89	0.024
171.00	-2.52	-0.58	0.00	-4.87	0.00	4.87	742.23	371.11	510.32	255.54	13.33	-0.90	0.022
172.00	-2.48	-0.57	0.00	-4.29	0.00	4.29	732.53	366.26	496.99	248.86	13.52	-0.90	0.021
173.00	-2.43	-0.56	0.00	-3.72	0.00	3.72	722.82	361.41	483.84	242.28	13.71	-0.90	0.019
174.00	-2.39	-0.55	0.00	-3.16	0.00	3.16	713.12	356.56	470.86	235.78	13.90	-0.91	0.017
175.00	-2.34	-0.54	0.00	-2.61	0.00	2.61	703.42	351.71	458.07	229.37	14.09	-0.91	0.015

176.00	-2.30	-0.53	0.00	-2.07	0.00	2.07	693.72	346.86	445.44	223.05	14.28	-0.91	0.013
177.00	-2.25	-0.52	0.00	-1.54	0.00	1.54	684.02	342.01	433.00	216.82	14.47	-0.91	0.010
178.00	-2.21	-0.51	0.00	-1.01	0.00	1.01	674.31	337.16	420.73	210.68	14.66	-0.91	0.008
179.00	-2.17	-0.50	0.00	-0.50	0.00	0.50	664.61	332.31	408.64	204.62	14.85	-0.92	0.006
180.00	0.00	-0.47	0.00	0.00	0.00	0.00	654.91	327.45	396.72	198.65	15.04	-0.92	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):	1.50
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):	2.66
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)
187	179.50	50	1.880	1.925	1.120	0.351	23	62
186	178.50	51	1.859	1.819	1.081	0.338	22	63
185	177.50	51	1.838	1.716	1.044	0.325	22	63
184	176.50	51	1.817	1.618	1.007	0.312	21	64
183	175.50	52	1.797	1.523	0.972	0.300	20	64
182	174.50	52	1.776	1.433	0.937	0.288	20	65
181	173.50	53	1.756	1.346	0.903	0.276	19	65
180	172.50	53	1.736	1.263	0.871	0.264	18	66
179	171.50	54	1.716	1.183	0.839	0.253	18	66
178	170.50	54	1.696	1.106	0.808	0.241	17	67
177	169.50	55	1.676	1.033	0.778	0.230	16	68
176	168.50	55	1.656	0.963	0.749	0.219	16	68
175	167.50	55	1.637	0.896	0.721	0.209	15	69
174	166.50	67	1.617	0.832	0.694	0.198	17	83
173	165.50	67	1.598	0.772	0.667	0.188	16	83
172	164.50	68	1.579	0.713	0.641	0.178	16	84
171	163.50	68	1.559	0.658	0.616	0.169	15	84
170	162.50	69	1.540	0.605	0.592	0.159	14	85
169	161.50	69	1.521	0.555	0.569	0.150	13	85
168	160.50	69	1.503	0.508	0.546	0.141	13	86
167	159.50	70	1.484	0.462	0.524	0.132	12	86
166	158.50	70	1.465	0.420	0.503	0.123	11	87
165	157.50	71	1.447	0.379	0.482	0.115	11	88
164	156.50	71	1.429	0.340	0.462	0.107	10	88
163	155.50	72	1.411	0.304	0.443	0.099	9	89
162	154.50	72	1.392	0.270	0.424	0.091	9	89
161	153.50	73	1.374	0.237	0.406	0.083	8	90
160	152.50	73	1.357	0.207	0.388	0.076	7	90
159	151.50	73	1.339	0.178	0.372	0.069	7	91
158	150.50	74	1.321	0.151	0.355	0.062	6	91
157	149.50	75	1.304	0.126	0.339	0.055	5	93
156	148.50	76	1.286	0.102	0.324	0.049	5	94
155	147.50	76	1.269	0.080	0.309	0.043	4	94
154	146.50	76	1.252	0.059	0.295	0.037	4	95

153	145.50	77	1.235	0.040	0.282	0.031	3	95
152	144.50	77	1.218	0.022	0.268	0.025	3	96
151	143.50	78	1.201	0.006	0.256	0.020	2	96
150	142.50	78	1.185	-0.009	0.243	0.015	1	97
149	141.50	79	1.168	-0.023	0.232	0.010	1	97
148	140.50	79	1.152	-0.036	0.220	0.005	0	98
147	139.50	85	1.135	-0.048	0.209	0.000	0	105
146	138.50	86	1.119	-0.059	0.199	-0.004	0	106
145	137.50	86	1.103	-0.068	0.189	-0.008	-1	106
144	136.50	86	1.087	-0.077	0.179	-0.012	-1	107
143	135.93	11	1.078	-0.082	0.174	-0.014	0	14
142	135.43	146	1.070	-0.085	0.169	-0.016	-3	181
141	134.50	173	1.055	-0.092	0.161	-0.019	-4	214
140	133.50	174	1.040	-0.098	0.152	-0.023	-5	216
139	132.56	154	1.025	-0.103	0.144	-0.026	-5	191
138	132.06	15	1.017	-0.105	0.140	-0.027	-1	18
137	131.50	125	1.009	-0.108	0.136	-0.029	-5	155
136	130.50	126	0.993	-0.111	0.128	-0.031	-5	156
135	129.50	127	0.978	-0.115	0.121	-0.034	-6	157
134	128.50	127	0.963	-0.117	0.114	-0.036	-6	158
133	127.50	128	0.948	-0.119	0.107	-0.038	-6	158
132	126.50	129	0.933	-0.121	0.101	-0.040	-7	159
131	125.50	130	0.919	-0.121	0.095	-0.042	-7	160
130	124.50	136	0.904	-0.122	0.089	-0.043	-8	169
129	123.50	137	0.890	-0.122	0.083	-0.044	-8	170
128	122.50	138	0.875	-0.121	0.078	-0.045	-8	171
127	121.50	139	0.861	-0.120	0.073	-0.046	-8	172
126	120.50	139	0.847	-0.119	0.068	-0.047	-8	173
125	119.50	140	0.833	-0.117	0.064	-0.047	-9	174
124	118.50	141	0.819	-0.115	0.059	-0.047	-9	174
123	117.50	142	0.805	-0.113	0.055	-0.047	-9	175
122	116.50	142	0.792	-0.110	0.051	-0.047	-9	176
121	115.50	143	0.778	-0.108	0.048	-0.046	-9	177
120	114.50	144	0.765	-0.104	0.044	-0.046	-9	178
119	113.50	145	0.751	-0.101	0.041	-0.045	-8	179
118	112.50	167	0.738	-0.098	0.038	-0.044	-10	207
117	111.50	197	0.725	-0.094	0.035	-0.043	-11	243
116	110.50	197	0.712	-0.091	0.032	-0.041	-11	244
115	109.50	198	0.699	-0.087	0.030	-0.040	-10	245
114	108.50	199	0.687	-0.083	0.027	-0.038	-10	246
113	107.50	200	0.674	-0.079	0.025	-0.036	-9	247
112	106.50	200	0.662	-0.075	0.023	-0.034	-9	248
111	105.50	201	0.649	-0.070	0.021	-0.032	-8	249
110	104.50	207	0.637	-0.066	0.019	-0.029	-8	256
109	103.88	52	0.629	-0.063	0.018	-0.028	-2	64
108	103.38	206	0.623	-0.061	0.017	-0.027	-7	255
107	102.50	275	0.613	-0.058	0.016	-0.024	-9	340
106	101.50	276	0.601	-0.053	0.015	-0.022	-8	341
105	100.50	277	0.589	-0.049	0.013	-0.019	-7	342
104	99.50	277	0.578	-0.045	0.012	-0.016	-6	343
103	98.50	278	0.566	-0.040	0.011	-0.013	-5	344
102	97.50	279	0.555	-0.036	0.010	-0.010	-4	345
101	96.50	279	0.543	-0.032	0.009	-0.007	-3	346
100	95.50	281	0.532	-0.028	0.009	-0.004	-2	348
99	94.50	282	0.521	-0.024	0.008	-0.001	0	349
98	93.50	283	0.510	-0.020	0.007	0.002	1	350
97	92.73	154	0.502	-0.017	0.007	0.004	1	190
96	92.23	190	0.496	-0.015	0.007	0.006	1	235
95	91.50	418	0.488	-0.012	0.007	0.008	4	517
94	90.50	419	0.478	-0.008	0.006	0.011	6	519
93	89.50	421	0.467	-0.004	0.006	0.013	7	521
92	88.50	423	0.457	-0.001	0.006	0.016	9	523
91	87.77	195	0.449	0.002	0.006	0.018	5	241
90	87.27	166	0.444	0.004	0.006	0.019	4	206

89	86.50	308	0.436	0.006	0.006	0.021	9	382
88	85.50	309	0.426	0.010	0.006	0.024	10	383
87	84.50	310	0.417	0.013	0.006	0.026	11	384
86	83.50	311	0.407	0.016	0.006	0.028	11	385
85	82.50	312	0.397	0.019	0.007	0.031	12	386
84	81.50	313	0.387	0.022	0.007	0.033	13	387
83	80.50	314	0.378	0.025	0.007	0.035	14	388
82	79.50	315	0.369	0.028	0.008	0.036	15	389
81	78.50	316	0.359	0.030	0.008	0.038	16	391
80	77.50	317	0.350	0.033	0.009	0.040	16	392
79	76.50	317	0.341	0.035	0.009	0.041	17	393
78	75.50	318	0.333	0.037	0.010	0.043	18	394
77	74.50	319	0.324	0.040	0.010	0.044	18	395
76	73.50	320	0.315	0.042	0.011	0.045	19	396
75	72.50	321	0.307	0.044	0.012	0.046	19	397
74	71.50	322	0.298	0.046	0.012	0.047	20	398
73	70.50	323	0.290	0.048	0.013	0.048	20	400
72	69.50	324	0.282	0.049	0.014	0.049	20	401
71	68.50	325	0.274	0.051	0.015	0.049	21	402
70	67.50	325	0.266	0.052	0.015	0.050	21	403
69	66.50	326	0.258	0.054	0.016	0.050	21	404
68	65.50	327	0.250	0.055	0.017	0.051	22	405
67	64.50	328	0.243	0.057	0.018	0.051	22	406
66	63.50	329	0.235	0.058	0.019	0.052	22	407
65	62.50	330	0.228	0.059	0.020	0.052	22	408
64	61.50	331	0.221	0.060	0.021	0.052	22	409
63	60.50	332	0.214	0.061	0.021	0.052	23	411
62	59.50	333	0.207	0.062	0.022	0.052	23	412
61	58.50	333	0.200	0.063	0.023	0.052	23	413
60	57.50	334	0.193	0.064	0.024	0.052	23	414
59	56.50	335	0.186	0.064	0.025	0.052	23	415
58	55.50	336	0.180	0.065	0.026	0.052	23	416
57	54.50	337	0.173	0.066	0.027	0.052	23	417
56	53.50	338	0.167	0.066	0.028	0.052	23	418
55	52.50	339	0.161	0.067	0.029	0.052	23	419
54	51.50	340	0.155	0.068	0.029	0.052	23	420
53	50.50	341	0.149	0.068	0.030	0.052	23	422
52	49.52	328	0.143	0.068	0.031	0.052	22	406
51	49.02	21	0.140	0.069	0.032	0.052	1	27
50	48.50	539	0.137	0.069	0.032	0.052	36	667
49	47.50	541	0.132	0.069	0.033	0.051	36	670
48	46.50	543	0.126	0.070	0.034	0.051	36	672
47	45.50	545	0.121	0.070	0.034	0.051	36	675
46	44.50	547	0.116	0.070	0.035	0.051	36	677
45	43.50	549	0.110	0.070	0.036	0.051	36	679
44	42.98	24	0.108	0.071	0.036	0.051	2	30
43	42.48	357	0.105	0.071	0.036	0.050	23	442
42	41.50	374	0.100	0.071	0.037	0.050	24	463
41	40.50	375	0.096	0.071	0.038	0.050	24	465
40	39.50	377	0.091	0.071	0.038	0.050	24	466
39	38.50	378	0.086	0.071	0.039	0.050	24	467
38	37.50	379	0.082	0.072	0.039	0.049	24	469
37	36.50	380	0.078	0.072	0.040	0.049	24	470
36	35.50	381	0.074	0.072	0.040	0.049	24	471
35	34.50	382	0.069	0.072	0.041	0.049	24	472
34	33.50	383	0.065	0.072	0.041	0.049	24	474
33	32.50	384	0.062	0.072	0.041	0.048	24	475
32	31.50	385	0.058	0.072	0.041	0.048	24	476
31	30.50	386	0.054	0.071	0.042	0.048	24	478
30	29.50	387	0.051	0.071	0.042	0.048	24	479
29	28.50	388	0.047	0.071	0.042	0.047	24	481
28	27.50	389	0.044	0.071	0.042	0.047	24	482
27	26.50	390	0.041	0.070	0.042	0.047	24	483
26	25.50	391	0.038	0.070	0.041	0.046	24	484

25	24.50	392	0.035	0.069	0.041	0.046	24	486
24	23.50	393	0.032	0.069	0.041	0.046	23	487
23	22.50	394	0.030	0.068	0.040	0.045	23	488
22	21.50	396	0.027	0.067	0.040	0.045	23	490
21	20.50	397	0.025	0.066	0.039	0.044	23	491
20	19.50	398	0.022	0.065	0.039	0.044	23	492
19	18.50	399	0.020	0.064	0.038	0.043	22	493
18	17.50	400	0.018	0.063	0.037	0.042	22	495
17	16.50	401	0.016	0.061	0.036	0.042	22	496
16	15.50	402	0.014	0.060	0.035	0.041	21	497
15	14.50	403	0.012	0.058	0.034	0.040	21	499
14	13.50	404	0.011	0.056	0.032	0.039	20	500
13	12.50	405	0.009	0.054	0.031	0.037	20	501
12	11.50	406	0.008	0.051	0.029	0.036	19	502
11	10.50	407	0.006	0.048	0.028	0.035	18	504
10	9.50	408	0.005	0.045	0.026	0.033	17	505
9	8.50	409	0.004	0.042	0.024	0.031	16	506
8	7.50	410	0.003	0.039	0.022	0.029	15	508
7	6.50	411	0.002	0.035	0.019	0.026	14	509
6	5.50	412	0.002	0.030	0.017	0.024	13	510
5	4.50	413	0.001	0.026	0.014	0.020	11	511
4	3.50	414	0.001	0.021	0.011	0.017	9	513
3	2.50	415	0.000	0.015	0.008	0.013	7	514
2	1.50	416	0.000	0.010	0.005	0.008	4	515
1	0.50	417	0.000	0.003	0.002	0.003	2	517
Andrew ABT-DMDF-	180.00	1	1.890	1.980	1.140	0.358	1	1
Powerwave Allgon TT1	180.00	48	1.890	1.980	1.140	0.358	22	59
4' Omni	180.00	10	1.890	1.980	1.140	0.358	5	12
Powerwave Allgon LGP	180.00	42	1.890	1.980	1.140	0.358	20	52
Raycap DC6-48-60-18-	180.00	40	1.890	1.980	1.140	0.358	19	50
Ericsson RRUS 11 (Ba	180.00	150	1.890	1.980	1.140	0.358	70	186
Ericsson RRUS 32 (50	180.00	152	1.890	1.980	1.140	0.358	71	189
Ericsson RRUS-12 B2	180.00	174	1.890	1.980	1.140	0.358	81	215
Powerwave Allgon 777	180.00	105	1.890	1.980	1.140	0.358	49	130
KMW AM-X-CD-16-65-00	180.00	146	1.890	1.980	1.140	0.358	68	180
CCI HPA-65R-BUU-H6	180.00	153	1.890	1.980	1.140	0.358	71	189
Flat Low Profile Pla	180.00	1,500	1.890	1.980	1.140	0.358	698	1,857
Ericsson KRY 112 144	167.00	33	1.627	0.864	0.707	0.204	9	41
Ericsson AIR 21, 1.3	167.00	249	1.627	0.864	0.707	0.204	66	308
Ericsson AIR 21, 1.3	167.00	244	1.627	0.864	0.707	0.204	65	303
Round T-Arm	167.00	750	1.627	0.864	0.707	0.204	198	928
Sinclair SD210-SF2P4	150.00	8	1.312	0.138	0.347	0.059	1	10
Round Side Arm	150.00	150	1.312	0.138	0.347	0.059	11	186
Telewave ANT150D (5	140.00	5	1.143	-0.042	0.215	0.003	0	6
Bird 432-83H-01-T	140.00	50	1.143	-0.042	0.215	0.003	0	62
Sinclair SC432D-HF6L	140.00	34	1.143	-0.042	0.215	0.003	0	42
Round Side Arm	140.00	450	1.143	-0.042	0.215	0.003	1	557
Decibel DB809DK-XT	140.00	128	1.143	-0.042	0.215	0.003	0	158
Alcatel-Lucent 800 M	135.00	185	1.063	-0.088	0.165	-0.018	-4	229
Alcatel-Lucent 1900M	135.00	132	1.063	-0.088	0.165	-0.018	-3	163
Alcatel-Lucent TD-RR	135.00	210	1.063	-0.088	0.165	-0.018	-5	260
RFS APXVTM14-C-I20	135.00	159	1.063	-0.088	0.165	-0.018	-4	196
RFS APXVSPP18-C-A20	135.00	171	1.063	-0.088	0.165	-0.018	-4	212
Flat Platform w/ Han	135.00	2,000	1.063	-0.088	0.165	-0.018	-46	2,476
RFS FD9R6004/2C-3L (	125.00	19	0.911	-0.122	0.092	-0.042	-1	23
Nokia B5 RRH4x40-850	125.00	146	0.911	-0.122	0.092	-0.042	-8	180
Alcatel-Lucent RRH2x	125.00	170	0.911	-0.122	0.092	-0.042	-9	211
RFS DB-B1-6C-12AB-0Z	125.00	21	0.911	-0.122	0.092	-0.042	-1	26
Alcatel-Lucent B66a	125.00	201	0.911	-0.122	0.092	-0.042	-11	249
Antel LPA-80080/6CF	125.00	42	0.911	-0.122	0.092	-0.042	-2	52
Antel LPA-80063/6CF	125.00	27	0.911	-0.122	0.092	-0.042	-1	33
Round Low Profile Pl	125.00	1,500	0.911	-0.122	0.092	-0.042	-83	1,857
Decibel DB844H90E-XY	112.00	168	0.732	-0.096	0.036	-0.043	-9	208
Round Low Profile Pl	112.00	1,500	0.732	-0.096	0.036	-0.043	-85	1,857

RFS APXV18-206517S-C	105.00	79	0.643	-0.068	0.020	-0.031	-3	98
Andrew DB586	96.00	17	0.538	-0.030	0.009	-0.006	0	21
Bird 429-83H-01-T	96.00	20	0.538	-0.030	0.009	-0.006	0	25
Flat Side Arm	96.00	450	0.538	-0.030	0.009	-0.006	-3	557
PCTEL GPS-TMG-HR-	79.00	1	0.364	0.029	0.008	0.037	0	1
GPS	30.00	10	0.053	0.071	0.042	0.048	1	12
		57,927	172.651	51.800	49.471	13.235	3,259	71,700

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)
187	179.50	50	1.880	1.925	1.120	0.351	23	43
186	178.50	51	1.859	1.819	1.081	0.338	22	44
185	177.50	51	1.838	1.716	1.044	0.325	22	44
184	176.50	51	1.817	1.618	1.007	0.312	21	44
183	175.50	52	1.797	1.523	0.972	0.300	20	45
182	174.50	52	1.776	1.433	0.937	0.288	20	45
181	173.50	53	1.756	1.346	0.903	0.276	19	46
180	172.50	53	1.736	1.263	0.871	0.264	18	46
179	171.50	54	1.716	1.183	0.839	0.253	18	46
178	170.50	54	1.696	1.106	0.808	0.241	17	47
177	169.50	55	1.676	1.033	0.778	0.230	16	47
176	168.50	55	1.656	0.963	0.749	0.219	16	47
175	167.50	55	1.637	0.896	0.721	0.209	15	48
174	166.50	67	1.617	0.832	0.694	0.198	17	58
173	165.50	67	1.598	0.772	0.667	0.188	16	58
172	164.50	68	1.579	0.713	0.641	0.178	16	58
171	163.50	68	1.559	0.658	0.616	0.169	15	59
170	162.50	69	1.540	0.605	0.592	0.159	14	59
169	161.50	69	1.521	0.555	0.569	0.150	13	59
168	160.50	69	1.503	0.508	0.546	0.141	13	60
167	159.50	70	1.484	0.462	0.524	0.132	12	60
166	158.50	70	1.465	0.420	0.503	0.123	11	61
165	157.50	71	1.447	0.379	0.482	0.115	11	61
164	156.50	71	1.429	0.340	0.462	0.107	10	61
163	155.50	72	1.411	0.304	0.443	0.099	9	62
162	154.50	72	1.392	0.270	0.424	0.091	9	62
161	153.50	73	1.374	0.237	0.406	0.083	8	63
160	152.50	73	1.357	0.207	0.388	0.076	7	63
159	151.50	73	1.339	0.178	0.372	0.069	7	63
158	150.50	74	1.321	0.151	0.355	0.062	6	64
157	149.50	75	1.304	0.126	0.339	0.055	5	65
156	148.50	76	1.286	0.102	0.324	0.049	5	65
155	147.50	76	1.269	0.080	0.309	0.043	4	66
154	146.50	76	1.252	0.059	0.295	0.037	4	66
153	145.50	77	1.235	0.040	0.282	0.031	3	66
152	144.50	77	1.218	0.022	0.268	0.025	3	67
151	143.50	78	1.201	0.006	0.256	0.020	2	67
150	142.50	78	1.185	-0.009	0.243	0.015	1	67
149	141.50	79	1.168	-0.023	0.232	0.010	1	68
148	140.50	79	1.152	-0.036	0.220	0.005	0	68
147	139.50	85	1.135	-0.048	0.209	0.000	0	73
146	138.50	86	1.119	-0.059	0.199	-0.004	0	74
145	137.50	86	1.103	-0.068	0.189	-0.008	-1	74
144	136.50	86	1.087	-0.077	0.179	-0.012	-1	75
143	135.93	11	1.078	-0.082	0.174	-0.014	0	10
142	135.43	146	1.070	-0.085	0.169	-0.016	-3	126
141	134.50	173	1.055	-0.092	0.161	-0.019	-4	149

140	133.50	174	1.040	-0.098	0.152	-0.023	-5	150
139	132.56	154	1.025	-0.103	0.144	-0.026	-5	133
138	132.06	15	1.017	-0.105	0.140	-0.027	-1	13
137	131.50	125	1.009	-0.108	0.136	-0.029	-5	108
136	130.50	126	0.993	-0.111	0.128	-0.031	-5	108
135	129.50	127	0.978	-0.115	0.121	-0.034	-6	109
134	128.50	127	0.963	-0.117	0.114	-0.036	-6	110
133	127.50	128	0.948	-0.119	0.107	-0.038	-6	110
132	126.50	129	0.933	-0.121	0.101	-0.040	-7	111
131	125.50	130	0.919	-0.121	0.095	-0.042	-7	112
130	124.50	136	0.904	-0.122	0.089	-0.043	-8	118
129	123.50	137	0.890	-0.122	0.083	-0.044	-8	118
128	122.50	138	0.875	-0.121	0.078	-0.045	-8	119
127	121.50	139	0.861	-0.120	0.073	-0.046	-8	120
126	120.50	139	0.847	-0.119	0.068	-0.047	-8	120
125	119.50	140	0.833	-0.117	0.064	-0.047	-9	121
124	118.50	141	0.819	-0.115	0.059	-0.047	-9	122
123	117.50	142	0.805	-0.113	0.055	-0.047	-9	122
122	116.50	142	0.792	-0.110	0.051	-0.047	-9	123
121	115.50	143	0.778	-0.108	0.048	-0.046	-9	123
120	114.50	144	0.765	-0.104	0.044	-0.046	-9	124
119	113.50	145	0.751	-0.101	0.041	-0.045	-8	125
118	112.50	167	0.738	-0.098	0.038	-0.044	-10	144
117	111.50	197	0.725	-0.094	0.035	-0.043	-11	170
116	110.50	197	0.712	-0.091	0.032	-0.041	-11	170
115	109.50	198	0.699	-0.087	0.030	-0.040	-10	171
114	108.50	199	0.687	-0.083	0.027	-0.038	-10	171
113	107.50	200	0.674	-0.079	0.025	-0.036	-9	172
112	106.50	200	0.662	-0.075	0.023	-0.034	-9	173
111	105.50	201	0.649	-0.070	0.021	-0.032	-8	173
110	104.50	207	0.637	-0.066	0.019	-0.029	-8	178
109	103.88	52	0.629	-0.063	0.018	-0.028	-2	45
108	103.38	206	0.623	-0.061	0.017	-0.027	-7	177
107	102.50	275	0.613	-0.058	0.016	-0.024	-9	237
106	101.50	276	0.601	-0.053	0.015	-0.022	-8	238
105	100.50	277	0.589	-0.049	0.013	-0.019	-7	238
104	99.50	277	0.578	-0.045	0.012	-0.016	-6	239
103	98.50	278	0.566	-0.040	0.011	-0.013	-5	240
102	97.50	279	0.555	-0.036	0.010	-0.010	-4	240
101	96.50	279	0.543	-0.032	0.009	-0.007	-3	241
100	95.50	281	0.532	-0.028	0.009	-0.004	-2	242
99	94.50	282	0.521	-0.024	0.008	-0.001	0	243
98	93.50	283	0.510	-0.020	0.007	0.002	1	244
97	92.73	154	0.502	-0.017	0.007	0.004	1	133
96	92.23	190	0.496	-0.015	0.007	0.006	1	164
95	91.50	418	0.488	-0.012	0.007	0.008	4	360
94	90.50	419	0.478	-0.008	0.006	0.011	6	362
93	89.50	421	0.467	-0.004	0.006	0.013	7	363
92	88.50	423	0.457	-0.001	0.006	0.016	9	364
91	87.77	195	0.449	0.002	0.006	0.018	5	168
90	87.27	166	0.444	0.004	0.006	0.019	4	143
89	86.50	308	0.436	0.006	0.006	0.021	9	266
88	85.50	309	0.426	0.010	0.006	0.024	10	267
87	84.50	310	0.417	0.013	0.006	0.026	11	267
86	83.50	311	0.407	0.016	0.006	0.028	11	268
85	82.50	312	0.397	0.019	0.007	0.031	12	269
84	81.50	313	0.387	0.022	0.007	0.033	13	270
83	80.50	314	0.378	0.025	0.007	0.035	14	271
82	79.50	315	0.369	0.028	0.008	0.036	15	271
81	78.50	316	0.359	0.030	0.008	0.038	16	272
80	77.50	317	0.350	0.033	0.009	0.040	16	273
79	76.50	317	0.341	0.035	0.009	0.041	17	274
78	75.50	318	0.333	0.037	0.010	0.043	18	275
77	74.50	319	0.324	0.040	0.010	0.044	18	275

76	73.50	320	0.315	0.042	0.011	0.045	19	276
75	72.50	321	0.307	0.044	0.012	0.046	19	277
74	71.50	322	0.298	0.046	0.012	0.047	20	278
73	70.50	323	0.290	0.048	0.013	0.048	20	278
72	69.50	324	0.282	0.049	0.014	0.049	20	279
71	68.50	325	0.274	0.051	0.015	0.049	21	280
70	67.50	325	0.266	0.052	0.015	0.050	21	281
69	66.50	326	0.258	0.054	0.016	0.050	21	281
68	65.50	327	0.250	0.055	0.017	0.051	22	282
67	64.50	328	0.243	0.057	0.018	0.051	22	283
66	63.50	329	0.235	0.058	0.019	0.052	22	284
65	62.50	330	0.228	0.059	0.020	0.052	22	284
64	61.50	331	0.221	0.060	0.021	0.052	22	285
63	60.50	332	0.214	0.061	0.021	0.052	23	286
62	59.50	333	0.207	0.062	0.022	0.052	23	287
61	58.50	333	0.200	0.063	0.023	0.052	23	288
60	57.50	334	0.193	0.064	0.024	0.052	23	288
59	56.50	335	0.186	0.064	0.025	0.052	23	289
58	55.50	336	0.180	0.065	0.026	0.052	23	290
57	54.50	337	0.173	0.066	0.027	0.052	23	291
56	53.50	338	0.167	0.066	0.028	0.052	23	291
55	52.50	339	0.161	0.067	0.029	0.052	23	292
54	51.50	340	0.155	0.068	0.029	0.052	23	293
53	50.50	341	0.149	0.068	0.030	0.052	23	294
52	49.52	328	0.143	0.068	0.031	0.052	22	283
51	49.02	21	0.140	0.069	0.032	0.052	1	19
50	48.50	539	0.137	0.069	0.032	0.052	36	465
49	47.50	541	0.132	0.069	0.033	0.051	36	467
48	46.50	543	0.126	0.070	0.034	0.051	36	468
47	45.50	545	0.121	0.070	0.034	0.051	36	470
46	44.50	547	0.116	0.070	0.035	0.051	36	472
45	43.50	549	0.110	0.070	0.036	0.051	36	473
44	42.98	24	0.108	0.071	0.036	0.051	2	21
43	42.48	357	0.105	0.071	0.036	0.050	23	308
42	41.50	374	0.100	0.071	0.037	0.050	24	323
41	40.50	375	0.096	0.071	0.038	0.050	24	324
40	39.50	377	0.091	0.071	0.038	0.050	24	325
39	38.50	378	0.086	0.071	0.039	0.050	24	326
38	37.50	379	0.082	0.072	0.039	0.049	24	326
37	36.50	380	0.078	0.072	0.040	0.049	24	327
36	35.50	381	0.074	0.072	0.040	0.049	24	328
35	34.50	382	0.069	0.072	0.041	0.049	24	329
34	33.50	383	0.065	0.072	0.041	0.049	24	330
33	32.50	384	0.062	0.072	0.041	0.048	24	331
32	31.50	385	0.058	0.072	0.041	0.048	24	332
31	30.50	386	0.054	0.071	0.042	0.048	24	333
30	29.50	387	0.051	0.071	0.042	0.048	24	334
29	28.50	388	0.047	0.071	0.042	0.047	24	335
28	27.50	389	0.044	0.071	0.042	0.047	24	336
27	26.50	390	0.041	0.070	0.042	0.047	24	337
26	25.50	391	0.038	0.070	0.041	0.046	24	337
25	24.50	392	0.035	0.069	0.041	0.046	24	338
24	23.50	393	0.032	0.069	0.041	0.046	23	339
23	22.50	394	0.030	0.068	0.040	0.045	23	340
22	21.50	396	0.027	0.067	0.040	0.045	23	341
21	20.50	397	0.025	0.066	0.039	0.044	23	342
20	19.50	398	0.022	0.065	0.039	0.044	23	343
19	18.50	399	0.020	0.064	0.038	0.043	22	344
18	17.50	400	0.018	0.063	0.037	0.042	22	345
17	16.50	401	0.016	0.061	0.036	0.042	22	346
16	15.50	402	0.014	0.060	0.035	0.041	21	346
15	14.50	403	0.012	0.058	0.034	0.040	21	347
14	13.50	404	0.011	0.056	0.032	0.039	20	348
13	12.50	405	0.009	0.054	0.031	0.037	20	349

12	11.50	406	0.008	0.051	0.029	0.036	19	350
11	10.50	407	0.006	0.048	0.028	0.035	18	351
10	9.50	408	0.005	0.045	0.026	0.033	17	352
9	8.50	409	0.004	0.042	0.024	0.031	16	353
8	7.50	410	0.003	0.039	0.022	0.029	15	354
7	6.50	411	0.002	0.035	0.019	0.026	14	354
6	5.50	412	0.002	0.030	0.017	0.024	13	355
5	4.50	413	0.001	0.026	0.014	0.020	11	356
4	3.50	414	0.001	0.021	0.011	0.017	9	357
3	2.50	415	0.000	0.015	0.008	0.013	7	358
2	1.50	416	0.000	0.010	0.005	0.008	4	359
1	0.50	417	0.000	0.003	0.002	0.003	2	360
Andrew ABT-DMDF-	180.00	1	1.890	1.980	1.140	0.358	1	1
Powerwave Allgon TT1	180.00	48	1.890	1.980	1.140	0.358	22	41
4' Omni	180.00	10	1.890	1.980	1.140	0.358	5	9
Powerwave Allgon LGP	180.00	42	1.890	1.980	1.140	0.358	20	36
Raycap DC6-48-60-18-	180.00	40	1.890	1.980	1.140	0.358	19	34
Ericsson RRUS 11 (Ba	180.00	150	1.890	1.980	1.140	0.358	70	129
Ericsson RRUS 32 (50	180.00	152	1.890	1.980	1.140	0.358	71	131
Ericsson RRUS-12 B2	180.00	174	1.890	1.980	1.140	0.358	81	150
Powerwave Allgon 777	180.00	105	1.890	1.980	1.140	0.358	49	91
KMW AM-X-CD-16-65-00	180.00	146	1.890	1.980	1.140	0.358	68	125
CCI HPA-65R-BUU-H6	180.00	153	1.890	1.980	1.140	0.358	71	132
Flat Low Profile Pla	180.00	1,500	1.890	1.980	1.140	0.358	698	1,293
Ericsson KRY 112 144	167.00	33	1.627	0.864	0.707	0.204	9	28
Ericsson AIR 21, 1.3	167.00	249	1.627	0.864	0.707	0.204	66	215
Ericsson AIR 21, 1.3	167.00	244	1.627	0.864	0.707	0.204	65	211
Round T-Arm	167.00	750	1.627	0.864	0.707	0.204	198	647
Sinclair SD210-SF2P4	150.00	8	1.312	0.138	0.347	0.059	1	7
Round Side Arm	150.00	150	1.312	0.138	0.347	0.059	11	129
Telewave ANT150D (5	140.00	5	1.143	-0.042	0.215	0.003	0	4
Bird 432-83H-01-T	140.00	50	1.143	-0.042	0.215	0.003	0	43
Sinclair SC432D-HF6L	140.00	34	1.143	-0.042	0.215	0.003	0	29
Round Side Arm	140.00	450	1.143	-0.042	0.215	0.003	1	388
Decibel DB809DK-XT	140.00	128	1.143	-0.042	0.215	0.003	0	110
Alcatel-Lucent 800 M	135.00	185	1.063	-0.088	0.165	-0.018	-4	160
Alcatel-Lucent 1900M	135.00	132	1.063	-0.088	0.165	-0.018	-3	114
Alcatel-Lucent TD-RR	135.00	210	1.063	-0.088	0.165	-0.018	-5	181
RFS APXVTM14-C-I20	135.00	159	1.063	-0.088	0.165	-0.018	-4	137
RFS APXVSPP18-C-A20	135.00	171	1.063	-0.088	0.165	-0.018	-4	147
Flat Platform w/ Han	135.00	2,000	1.063	-0.088	0.165	-0.018	-46	1,724
RFS FD9R6004/2C-3L (	125.00	19	0.911	-0.122	0.092	-0.042	-1	16
Nokia B5 RRH4x40-850	125.00	146	0.911	-0.122	0.092	-0.042	-8	125
Alcatel-Lucent RRH2x	125.00	170	0.911	-0.122	0.092	-0.042	-9	147
RFS DB-B1-6C-12AB-0Z	125.00	21	0.911	-0.122	0.092	-0.042	-1	18
Alcatel-Lucent B66a	125.00	201	0.911	-0.122	0.092	-0.042	-11	173
Antel LPA-80080/6CF	125.00	42	0.911	-0.122	0.092	-0.042	-2	36
Antel LPA-80063/6CF	125.00	27	0.911	-0.122	0.092	-0.042	-1	23
Round Low Profile Pl	125.00	1,500	0.911	-0.122	0.092	-0.042	-83	1,293
Decibel DB844H90E-XY	112.00	168	0.732	-0.096	0.036	-0.043	-9	145
Round Low Profile Pl	112.00	1,500	0.732	-0.096	0.036	-0.043	-85	1,293
RFS APXV18-206517S-C	105.00	79	0.643	-0.068	0.020	-0.031	-3	68
Andrew DB586	96.00	17	0.538	-0.030	0.009	-0.006	0	14
Bird 429-83H-01-T	96.00	20	0.538	-0.030	0.009	-0.006	0	17
Flat Side Arm	96.00	450	0.538	-0.030	0.009	-0.006	-3	388
PCTEL GPS-TMG-HR-	79.00	1	0.364	0.029	0.008	0.037	0	1
GPS	30.00	10	0.053	0.071	0.042	0.048	1	9
		57,927	172.651	51.800	49.471	13.235	3,259	49,947

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	-71.18	-3.26	0.00	-383.39	0.00	383.39	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.062
1.00	-70.67	-3.26	0.00	-380.13	0.00	380.13	5,115.23	2,557.61	10,943.3	5,479.82	0.00	0.00	0.062
2.00	-70.15	-3.25	0.00	-376.88	0.00	376.88	5,100.42	2,550.21	10,865.3	5,440.75	0.00	-0.01	0.062
3.00	-69.64	-3.25	0.00	-373.62	0.00	373.62	5,085.56	2,542.78	10,787.4	5,401.75	0.00	-0.01	0.062
4.00	-69.13	-3.24	0.00	-370.37	0.00	370.37	5,070.64	2,535.32	10,709.7	5,362.83	0.01	-0.01	0.061
5.00	-68.62	-3.23	0.00	-367.13	0.00	367.13	5,055.67	2,527.83	10,632.1	5,323.99	0.01	-0.02	0.061
6.00	-68.11	-3.22	0.00	-363.90	0.00	363.90	5,040.63	2,520.32	10,554.7	5,285.22	0.01	-0.02	0.061
7.00	-67.60	-3.21	0.00	-360.68	0.00	360.68	5,025.54	2,512.77	10,477.4	5,246.53	0.02	-0.02	0.061
8.00	-67.10	-3.20	0.00	-357.47	0.00	357.47	5,010.40	2,505.20	10,400.3	5,207.92	0.02	-0.03	0.061
9.00	-66.59	-3.18	0.00	-354.27	0.00	354.27	4,995.19	2,497.60	10,323.4	5,169.39	0.03	-0.03	0.060
10.00	-66.09	-3.17	0.00	-351.09	0.00	351.09	4,979.93	2,489.97	10,246.6	5,130.93	0.03	-0.03	0.060
11.00	-65.58	-3.15	0.00	-347.92	0.00	347.92	4,964.61	2,482.31	10,170.0	5,092.56	0.04	-0.04	0.060
12.00	-65.08	-3.14	0.00	-344.77	0.00	344.77	4,949.24	2,474.62	10,093.5	5,054.27	0.05	-0.04	0.060
13.00	-64.58	-3.12	0.00	-341.63	0.00	341.63	4,933.81	2,466.90	10,017.2	5,016.06	0.06	-0.04	0.060
14.00	-64.08	-3.10	0.00	-338.52	0.00	338.52	4,918.32	2,459.16	9,941.08	4,977.93	0.07	-0.05	0.059
15.00	-63.59	-3.08	0.00	-335.41	0.00	335.41	4,902.77	2,451.39	9,865.10	4,939.88	0.08	-0.05	0.059
16.00	-63.09	-3.07	0.00	-332.33	0.00	332.33	4,887.17	2,443.58	9,789.30	4,901.92	0.09	-0.05	0.059
17.00	-62.60	-3.05	0.00	-329.26	0.00	329.26	4,871.51	2,435.75	9,713.66	4,864.05	0.10	-0.06	0.059
18.00	-62.10	-3.03	0.00	-326.22	0.00	326.22	4,855.79	2,427.89	9,638.20	4,826.26	0.11	-0.06	0.059
19.00	-61.61	-3.01	0.00	-323.19	0.00	323.19	4,840.02	2,420.01	9,562.90	4,788.56	0.12	-0.06	0.058
20.00	-61.12	-2.99	0.00	-320.18	0.00	320.18	4,824.18	2,412.09	9,487.79	4,750.94	0.14	-0.07	0.058
21.00	-60.63	-2.97	0.00	-317.19	0.00	317.19	4,808.29	2,404.15	9,412.84	4,713.42	0.15	-0.07	0.058
22.00	-60.14	-2.95	0.00	-314.23	0.00	314.23	4,792.35	2,396.17	9,338.08	4,675.98	0.17	-0.07	0.058
23.00	-59.65	-2.93	0.00	-311.28	0.00	311.28	4,776.35	2,388.17	9,263.49	4,638.63	0.18	-0.08	0.058
24.00	-59.17	-2.91	0.00	-308.35	0.00	308.35	4,760.29	2,380.14	9,189.09	4,601.37	0.20	-0.08	0.057
25.00	-58.68	-2.89	0.00	-305.45	0.00	305.45	4,744.17	2,372.08	9,114.87	4,564.21	0.21	-0.08	0.057
26.00	-58.20	-2.86	0.00	-302.56	0.00	302.56	4,728.00	2,364.00	9,040.83	4,527.13	0.23	-0.09	0.057
27.00	-57.72	-2.84	0.00	-299.69	0.00	299.69	4,711.76	2,355.88	8,966.98	4,490.15	0.25	-0.09	0.057
28.00	-57.24	-2.82	0.00	-296.85	0.00	296.85	4,695.48	2,347.74	8,893.31	4,453.26	0.27	-0.09	0.057
29.00	-56.76	-2.80	0.00	-294.03	0.00	294.03	4,679.13	2,339.57	8,819.83	4,416.47	0.29	-0.10	0.056
30.00	-56.27	-2.78	0.00	-291.23	0.00	291.23	4,662.73	2,331.36	8,746.54	4,379.77	0.31	-0.10	0.056
31.00	-55.79	-2.76	0.00	-288.45	0.00	288.45	4,646.27	2,323.14	8,673.45	4,343.17	0.33	-0.10	0.056
32.00	-55.32	-2.74	0.00	-285.69	0.00	285.69	4,629.75	2,314.88	8,600.55	4,306.67	0.35	-0.11	0.056
33.00	-54.84	-2.71	0.00	-282.96	0.00	282.96	4,613.18	2,306.59	8,527.84	4,270.26	0.38	-0.11	0.056
34.00	-54.37	-2.69	0.00	-280.24	0.00	280.24	4,596.55	2,298.27	8,455.33	4,233.95	0.40	-0.11	0.055
35.00	-53.90	-2.67	0.00	-277.55	0.00	277.55	4,579.86	2,289.93	8,383.01	4,197.74	0.42	-0.12	0.055
36.00	-53.43	-2.65	0.00	-274.88	0.00	274.88	4,563.12	2,281.56	8,310.90	4,161.63	0.45	-0.12	0.055
37.00	-52.96	-2.63	0.00	-272.23	0.00	272.23	4,546.32	2,273.16	8,238.99	4,125.62	0.47	-0.12	0.055
38.00	-52.49	-2.60	0.00	-269.60	0.00	269.60	4,529.46	2,264.73	8,167.27	4,089.71	0.50	-0.13	0.055
39.00	-52.03	-2.58	0.00	-267.00	0.00	267.00	4,512.54	2,256.27	8,095.77	4,053.90	0.53	-0.13	0.054
40.00	-51.56	-2.56	0.00	-264.42	0.00	264.42	4,491.22	2,245.61	8,016.71	4,014.31	0.56	-0.13	0.054
41.00	-51.10	-2.54	0.00	-261.86	0.00	261.86	4,468.58	2,234.29	7,935.69	3,973.74	0.58	-0.14	0.054
42.00	-50.66	-2.52	0.00	-259.32	0.00	259.32	4,445.95	2,222.97	7,855.09	3,933.38	0.61	-0.14	0.054
42.96	-50.63	-2.52	0.00	-256.91	0.00	256.91	4,424.29	2,212.15	7,778.37	3,894.97	0.64	-0.15	0.054
43.00	-49.95	-2.48	0.00	-256.80	0.00	256.80	4,423.31	2,211.65	7,774.90	3,893.23	0.64	-0.15	0.053
44.00	-49.27	-2.45	0.00	-254.32	0.00	254.32	4,400.67	2,200.33	7,695.11	3,853.28	0.68	-0.15	0.053
45.00	-48.60	-2.41	0.00	-251.88	0.00	251.88	4,378.03	2,189.01	7,615.75	3,813.53	0.71	-0.15	0.053
46.00	-47.92	-2.38	0.00	-249.47	0.00	249.47	4,355.39	2,177.70	7,536.79	3,773.99	0.74	-0.16	0.053
47.00	-47.25	-2.34	0.00	-247.09	0.00	247.09	4,332.75	2,166.38	7,458.24	3,734.66	0.77	-0.16	0.053
48.00	-46.59	-2.31	0.00	-244.75	0.00	244.75	4,310.11	2,155.06	7,380.10	3,695.54	0.81	-0.16	0.053
49.00	-46.56	-2.31	0.00	-242.45	0.00	242.45	4,287.47	2,143.74	7,302.38	3,656.62	0.84	-0.17	0.053
49.04	-46.15	-2.28	0.00	-242.36	0.00	242.36	3,622.99	1,811.50	6,300.42	3,154.89	0.84	-0.17	0.059
50.00	-45.73	-2.26	0.00	-240.16	0.00	240.16	3,610.23	1,805.12	6,246.74	3,128.01	0.88	-0.17	0.059
51.00	-45.31	-2.24	0.00	-237.90	0.00	237.90	3,596.89	1,798.44	6,190.96	3,100.08	0.91	-0.18	0.059
52.00	-44.89	-2.22	0.00	-235.66	0.00	235.66	3,583.49	1,791.74	6,135.33	3,072.23	0.95	-0.18	0.059
53.00	-44.47	-2.20	0.00	-233.44	0.00	233.44	3,570.03	1,785.02	6,079.85	3,044.45	0.99	-0.18	0.058

54.00	-44.06	-2.18	0.00	-231.24	0.00	231.24	3,556.52	1,778.26	6,024.52	3,016.74	1.03	-0.19	0.058
55.00	-43.64	-2.16	0.00	-229.07	0.00	229.07	3,542.95	1,771.47	5,969.33	2,989.10	1.07	-0.19	0.058
56.00	-43.22	-2.14	0.00	-226.91	0.00	226.91	3,529.32	1,764.66	5,914.30	2,961.55	1.11	-0.19	0.058
57.00	-42.81	-2.11	0.00	-224.77	0.00	224.77	3,515.63	1,757.82	5,859.42	2,934.06	1.15	-0.20	0.058
58.00	-42.40	-2.09	0.00	-222.66	0.00	222.66	3,501.89	1,750.94	5,804.69	2,906.66	1.19	-0.20	0.057
59.00	-41.99	-2.07	0.00	-220.57	0.00	220.57	3,488.09	1,744.04	5,750.12	2,879.33	1.23	-0.21	0.057
60.00	-41.58	-2.05	0.00	-218.50	0.00	218.50	3,474.23	1,737.12	5,695.71	2,852.09	1.28	-0.21	0.057
61.00	-41.17	-2.03	0.00	-216.45	0.00	216.45	3,460.32	1,730.16	5,641.45	2,824.92	1.32	-0.22	0.057
62.00	-40.76	-2.01	0.00	-214.42	0.00	214.42	3,446.35	1,723.17	5,587.36	2,797.83	1.37	-0.22	0.057
63.00	-40.35	-1.99	0.00	-212.41	0.00	212.41	3,432.32	1,716.16	5,533.43	2,770.83	1.41	-0.22	0.057
64.00	-39.94	-1.97	0.00	-210.42	0.00	210.42	3,418.23	1,709.12	5,479.66	2,743.90	1.46	-0.23	0.056
65.00	-39.54	-1.95	0.00	-208.45	0.00	208.45	3,404.09	1,702.05	5,426.05	2,717.06	1.51	-0.23	0.056
66.00	-39.14	-1.93	0.00	-206.51	0.00	206.51	3,389.89	1,694.95	5,372.62	2,690.30	1.56	-0.24	0.056
67.00	-38.73	-1.91	0.00	-204.58	0.00	204.58	3,375.64	1,687.82	5,319.35	2,663.63	1.61	-0.24	0.056
68.00	-38.33	-1.89	0.00	-202.67	0.00	202.67	3,361.32	1,680.66	5,266.25	2,637.04	1.66	-0.24	0.056
69.00	-37.93	-1.87	0.00	-200.79	0.00	200.79	3,346.95	1,673.48	5,213.32	2,610.53	1.71	-0.25	0.056
70.00	-37.53	-1.85	0.00	-198.92	0.00	198.92	3,332.53	1,666.26	5,160.56	2,584.12	1.76	-0.25	0.055
71.00	-37.13	-1.83	0.00	-197.07	0.00	197.07	3,318.04	1,659.02	5,107.98	2,557.79	1.82	-0.26	0.055
72.00	-36.73	-1.81	0.00	-195.24	0.00	195.24	3,300.52	1,650.26	5,051.01	2,529.26	1.87	-0.26	0.055
73.00	-36.34	-1.79	0.00	-193.43	0.00	193.43	3,281.11	1,640.56	4,991.50	2,499.46	1.93	-0.27	0.055
74.00	-35.94	-1.78	0.00	-191.63	0.00	191.63	3,261.71	1,630.85	4,932.34	2,469.84	1.98	-0.27	0.055
75.00	-35.55	-1.76	0.00	-189.86	0.00	189.86	3,242.30	1,621.15	4,873.54	2,440.39	2.04	-0.27	0.055
76.00	-35.16	-1.74	0.00	-188.10	0.00	188.10	3,222.90	1,611.45	4,815.08	2,411.12	2.10	-0.28	0.055
77.00	-34.76	-1.73	0.00	-186.35	0.00	186.35	3,203.49	1,601.75	4,756.98	2,382.03	2.16	-0.28	0.055
78.00	-34.37	-1.71	0.00	-184.62	0.00	184.62	3,184.09	1,592.04	4,699.23	2,353.11	2.22	-0.29	0.055
79.00	-33.98	-1.70	0.00	-182.91	0.00	182.91	3,164.68	1,582.34	4,641.84	2,324.37	2.28	-0.29	0.055
80.00	-33.59	-1.69	0.00	-181.21	0.00	181.21	3,145.28	1,572.64	4,584.79	2,295.80	2.34	-0.30	0.055
81.00	-33.21	-1.67	0.00	-179.52	0.00	179.52	3,125.87	1,562.94	4,528.10	2,267.42	2.40	-0.30	0.054
82.00	-32.82	-1.66	0.00	-177.85	0.00	177.85	3,106.47	1,553.24	4,471.77	2,239.21	2.47	-0.31	0.054
83.00	-32.44	-1.65	0.00	-176.19	0.00	176.19	3,087.07	1,543.53	4,415.78	2,211.17	2.53	-0.31	0.054
84.00	-32.05	-1.64	0.00	-174.54	0.00	174.54	3,067.66	1,533.83	4,360.15	2,183.32	2.60	-0.32	0.054
85.00	-31.67	-1.63	0.00	-172.90	0.00	172.90	3,048.26	1,524.13	4,304.87	2,155.63	2.66	-0.32	0.054
86.00	-31.29	-1.62	0.00	-171.27	0.00	171.27	3,028.85	1,514.43	4,249.94	2,128.13	2.73	-0.32	0.054
87.00	-31.08	-1.62	0.00	-169.64	0.00	169.64	3,009.45	1,504.72	4,195.37	2,100.80	2.80	-0.33	0.054
87.54	-30.84	-1.62	0.00	-168.77	0.00	168.77	2,998.97	1,499.48	4,166.05	2,086.12	2.84	-0.33	0.054
88.00	-30.32	-1.61	0.00	-168.03	0.00	168.03	2,990.04	1,495.02	4,141.15	2,073.65	2.87	-0.33	0.053
89.00	-29.80	-1.60	0.00	-166.42	0.00	166.42	2,970.64	1,485.32	4,087.28	2,046.68	2.94	-0.34	0.053
90.00	-29.28	-1.59	0.00	-164.82	0.00	164.82	2,951.23	1,475.62	4,033.76	2,019.88	3.01	-0.34	0.053
91.00	-28.76	-1.59	0.00	-163.23	0.00	163.23	2,931.83	1,465.91	3,980.60	1,993.26	3.08	-0.35	0.053
92.00	-28.52	-1.58	0.00	-161.65	0.00	161.65	2,912.42	1,456.21	3,927.79	1,966.81	3.16	-0.35	0.053
92.46	-28.33	-1.58	0.00	-160.92	0.00	160.92	2,424.49	1,212.24	3,334.85	1,669.90	3.19	-0.36	0.059
93.00	-27.98	-1.58	0.00	-160.06	0.00	160.06	2,418.22	1,209.11	3,314.29	1,659.61	3.23	-0.36	0.059
94.00	-27.63	-1.58	0.00	-158.48	0.00	158.48	2,406.65	1,203.32	3,276.56	1,640.72	3.31	-0.36	0.059
95.00	-27.29	-1.59	0.00	-156.90	0.00	156.90	2,395.02	1,197.51	3,238.97	1,621.89	3.38	-0.37	0.058
96.00	-26.34	-1.59	0.00	-155.31	0.00	155.31	2,383.33	1,191.67	3,201.50	1,603.13	3.46	-0.37	0.058
97.00	-25.99	-1.59	0.00	-153.72	0.00	153.72	2,371.59	1,185.79	3,164.18	1,584.44	3.54	-0.38	0.058
98.00	-25.65	-1.60	0.00	-152.13	0.00	152.13	2,359.79	1,179.89	3,126.99	1,565.82	3.62	-0.38	0.058
99.00	-25.30	-1.60	0.00	-150.53	0.00	150.53	2,347.93	1,173.97	3,089.94	1,547.27	3.70	-0.39	0.057
100.00	-24.96	-1.61	0.00	-148.93	0.00	148.93	2,336.02	1,168.01	3,053.03	1,528.79	3.78	-0.39	0.057
101.00	-24.62	-1.62	0.00	-147.32	0.00	147.32	2,324.05	1,162.02	3,016.27	1,510.38	3.87	-0.40	0.057
102.00	-24.28	-1.63	0.00	-145.70	0.00	145.70	2,312.02	1,156.01	2,979.65	1,492.04	3.95	-0.41	0.057
103.00	-24.02	-1.63	0.00	-144.08	0.00	144.08	2,299.80	1,149.90	2,943.01	1,473.69	4.04	-0.41	0.056
103.75	-23.96	-1.64	0.00	-142.85	0.00	142.85	2,287.68	1,143.84	2,911.90	1,458.11	4.10	-0.42	0.056
103.75	-23.96	-1.64	0.00	-142.85	0.00	142.85	2,287.68	1,143.84	2,911.90	1,458.11	4.10	-0.42	0.108
104.00	-23.70	-1.64	0.00	-142.44	0.00	142.44	2,283.63	1,141.82	2,901.57	1,452.94	4.12	-0.42	0.108
105.00	-23.36	-1.66	0.00	-140.80	0.00	140.80	2,267.46	1,133.73	2,860.42	1,432.33	4.21	-0.43	0.109
106.00	-23.11	-1.67	0.00	-139.14	0.00	139.14	2,251.29	1,125.65	2,819.56	1,411.88	4.30	-0.44	0.109
107.00	-22.86	-1.68	0.00	-137.47	0.00	137.47	2,235.12	1,117.56	2,779.00	1,391.56	4.39	-0.45	0.109
108.00	-22.61	-1.69	0.00	-135.79	0.00	135.79	2,218.95	1,109.48	2,738.73	1,371.40	4.49	-0.46	0.109
109.00	-22.37	-1.71	0.00	-134.10	0.00	134.10	2,202.78	1,101.39	2,698.75	1,351.38	4.59	-0.47	0.109
110.00	-22.12	-1.72	0.00	-132.39	0.00	132.39	2,186.61	1,093.30	2,659.07	1,331.51	4.69	-0.48	0.110
111.00	-21.88	-1.73	0.00	-130.67	0.00	130.67	2,170.44	1,085.22	2,619.69	1,311.79	4.79	-0.49	0.110
112.00	-19.61	-1.82	0.00	-128.94	0.00	128.94	2,154.27	1,077.13	2,580.59	1,292.21	4.89	-0.51	0.109
113.00	-19.43	-1.83	0.00	-127.12	0.00	127.12	2,138.10	1,069.05	2,541.79	1,272.79	5.00	-0.52	0.109

114.00	-19.25	-1.84	0.00	-125.29	0.00	125.29	2,121.93	1,060.96	2,503.29	1,253.50	5.11	-0.53	0.109
115.00	-19.07	-1.85	0.00	-123.45	0.00	123.45	2,105.76	1,052.88	2,465.08	1,234.37	5.22	-0.54	0.109
116.00	-18.90	-1.86	0.00	-121.59	0.00	121.59	2,089.59	1,044.79	2,427.16	1,215.38	5.34	-0.55	0.109
117.00	-18.72	-1.87	0.00	-119.73	0.00	119.73	2,073.42	1,036.71	2,389.54	1,196.54	5.45	-0.57	0.109
118.00	-18.55	-1.89	0.00	-117.86	0.00	117.86	2,057.25	1,028.62	2,352.21	1,177.85	5.57	-0.58	0.109
119.00	-18.37	-1.90	0.00	-115.97	0.00	115.97	2,041.07	1,020.54	2,315.17	1,159.31	5.70	-0.59	0.109
120.00	-18.20	-1.91	0.00	-114.07	0.00	114.07	2,024.90	1,012.45	2,278.43	1,140.91	5.82	-0.60	0.109
121.00	-18.03	-1.92	0.00	-112.17	0.00	112.17	2,008.73	1,004.37	2,241.98	1,122.66	5.95	-0.61	0.109
122.00	-17.85	-1.93	0.00	-110.25	0.00	110.25	1,992.56	996.28	2,205.83	1,104.55	6.08	-0.63	0.109
123.00	-17.68	-1.94	0.00	-108.32	0.00	108.32	1,976.39	988.20	2,169.97	1,086.60	6.21	-0.64	0.109
124.00	-17.51	-1.95	0.00	-106.38	0.00	106.38	1,960.22	980.11	2,134.40	1,068.79	6.35	-0.65	0.108
125.00	-14.72	-2.04	0.00	-104.44	0.00	104.44	1,944.05	972.03	2,099.13	1,051.12	6.48	-0.66	0.107
126.00	-14.56	-2.05	0.00	-102.39	0.00	102.39	1,927.88	963.94	2,064.15	1,033.61	6.62	-0.68	0.107
127.00	-14.40	-2.06	0.00	-100.34	0.00	100.34	1,911.71	955.86	2,029.46	1,016.24	6.77	-0.69	0.106
128.00	-14.24	-2.07	0.00	-98.29	0.00	98.29	1,895.54	947.77	1,995.07	999.02	6.91	-0.70	0.106
129.00	-14.09	-2.07	0.00	-96.22	0.00	96.22	1,879.37	939.68	1,960.98	981.95	7.06	-0.72	0.105
130.00	-13.93	-2.08	0.00	-94.15	0.00	94.15	1,863.20	931.60	1,927.17	965.02	7.21	-0.73	0.105
131.00	-13.78	-2.09	0.00	-92.07	0.00	92.07	1,847.03	923.51	1,893.66	948.24	7.37	-0.74	0.105
132.00	-13.76	-2.09	0.00	-89.98	0.00	89.98	1,830.86	915.43	1,860.45	931.61	7.53	-0.76	0.104
132.12	-13.57	-2.09	0.00	-89.73	0.00	89.73	1,828.92	914.46	1,856.49	929.63	7.54	-0.76	0.104
133.00	-13.35	-2.10	0.00	-87.89	0.00	87.89	1,814.69	907.34	1,827.53	915.12	7.68	-0.77	0.103
134.00	-13.14	-2.10	0.00	-85.80	0.00	85.80	1,798.52	899.26	1,794.90	898.78	7.85	-0.78	0.103
135.00	-9.42	-2.12	0.00	-83.69	0.00	83.69	1,782.35	891.17	1,762.57	882.59	8.01	-0.79	0.100
135.87	-9.40	-2.12	0.00	-81.85	0.00	81.85	999.39	499.70	1,006.16	503.83	8.16	-0.81	0.172
136.00	-9.29	-2.12	0.00	-81.57	0.00	81.57	998.64	499.32	1,004.22	502.86	8.18	-0.81	0.172
137.00	-9.19	-2.13	0.00	-79.45	0.00	79.45	992.83	496.42	989.37	495.42	8.35	-0.83	0.170
138.00	-9.08	-2.13	0.00	-77.32	0.00	77.32	986.97	493.49	974.56	488.00	8.53	-0.85	0.168
139.00	-8.97	-2.13	0.00	-75.19	0.00	75.19	981.05	490.53	959.80	480.61	8.71	-0.87	0.166
140.00	-8.05	-2.12	0.00	-73.06	0.00	73.06	975.08	487.54	945.09	473.25	8.89	-0.89	0.163
141.00	-7.95	-2.12	0.00	-70.95	0.00	70.95	969.05	484.52	930.44	465.91	9.08	-0.91	0.161
142.00	-7.85	-2.12	0.00	-68.83	0.00	68.83	962.96	481.48	915.84	458.60	9.27	-0.93	0.158
143.00	-7.76	-2.12	0.00	-66.72	0.00	66.72	956.81	478.41	901.30	451.32	9.47	-0.95	0.156
144.00	-7.66	-2.11	0.00	-64.60	0.00	64.60	950.61	475.30	886.82	444.07	9.67	-0.97	0.154
145.00	-7.57	-2.11	0.00	-62.48	0.00	62.48	944.35	472.17	872.40	436.85	9.88	-0.99	0.151
146.00	-7.47	-2.11	0.00	-60.37	0.00	60.37	938.03	469.01	858.03	429.66	10.09	-1.01	0.148
147.00	-7.38	-2.11	0.00	-58.26	0.00	58.26	931.66	465.83	843.74	422.50	10.31	-1.04	0.146
148.00	-7.28	-2.10	0.00	-56.16	0.00	56.16	925.22	462.61	829.51	415.37	10.52	-1.06	0.143
149.00	-7.19	-2.10	0.00	-54.05	0.00	54.05	918.73	459.37	815.34	408.28	10.75	-1.08	0.140
150.00	-6.90	-2.08	0.00	-51.96	0.00	51.96	912.19	456.09	801.24	401.22	10.98	-1.10	0.137
151.00	-6.81	-2.07	0.00	-49.88	0.00	49.88	905.59	452.79	787.21	394.19	11.21	-1.11	0.134
152.00	-6.72	-2.06	0.00	-47.81	0.00	47.81	898.93	449.46	773.25	387.20	11.44	-1.13	0.131
153.00	-6.63	-2.06	0.00	-45.74	0.00	45.74	892.21	446.10	759.37	380.25	11.68	-1.15	0.128
154.00	-6.54	-2.05	0.00	-43.69	0.00	43.69	885.44	442.72	745.56	373.33	11.93	-1.17	0.124
155.00	-6.45	-2.04	0.00	-41.64	0.00	41.64	878.60	439.30	731.82	366.45	12.17	-1.19	0.121
156.00	-6.36	-2.03	0.00	-39.60	0.00	39.60	871.72	435.86	718.16	359.61	12.43	-1.21	0.117
157.00	-6.27	-2.02	0.00	-37.57	0.00	37.57	864.77	432.39	704.58	352.81	12.68	-1.23	0.114
158.00	-6.18	-2.01	0.00	-35.55	0.00	35.55	857.77	428.88	691.08	346.05	12.94	-1.25	0.110
159.00	-6.10	-2.00	0.00	-33.54	0.00	33.54	850.71	425.35	677.66	339.34	13.20	-1.26	0.106
160.00	-6.01	-1.98	0.00	-31.54	0.00	31.54	843.59	421.80	664.33	332.66	13.47	-1.28	0.102
161.00	-5.93	-1.97	0.00	-29.56	0.00	29.56	836.42	418.21	651.08	326.02	13.74	-1.30	0.098
162.00	-5.84	-1.96	0.00	-27.59	0.00	27.59	829.19	414.59	637.92	319.43	14.01	-1.31	0.093
163.00	-5.76	-1.94	0.00	-25.64	0.00	25.64	819.85	409.92	623.28	312.10	14.29	-1.33	0.089
164.00	-5.67	-1.92	0.00	-23.70	0.00	23.70	810.15	405.07	608.54	304.72	14.57	-1.34	0.085
165.00	-5.59	-1.91	0.00	-21.77	0.00	21.77	800.44	400.22	593.98	297.43	14.85	-1.36	0.080
166.00	-5.51	-1.89	0.00	-19.86	0.00	19.86	790.74	395.37	579.60	290.23	15.14	-1.37	0.075
167.00	-3.87	-1.50	0.00	-17.98	0.00	17.98	781.04	390.52	565.39	283.11	15.42	-1.38	0.068
168.00	-3.80	-1.48	0.00	-16.48	0.00	16.48	771.34	385.67	551.35	276.09	15.71	-1.39	0.065
169.00	-3.73	-1.46	0.00	-15.00	0.00	15.00	761.63	380.82	537.50	269.15	16.01	-1.40	0.061
170.00	-3.66	-1.45	0.00	-13.53	0.00	13.53	751.93	375.97	523.82	262.30	16.30	-1.41	0.056
171.00	-3.60	-1.43	0.00	-12.09	0.00	12.09	742.23	371.11	510.32	255.54	16.60	-1.42	0.052
172.00	-3.53	-1.41	0.00	-10.66	0.00	10.66	732.53	366.26	496.99	248.86	16.90	-1.43	0.048
173.00	-3.47	-1.39	0.00	-9.25	0.00	9.25	722.82	361.41	483.84	242.28	17.20	-1.44	0.043
174.00	-3.40	-1.37	0.00	-7.87	0.00	7.87	713.12	356.56	470.86	235.78	17.50	-1.45	0.038
175.00	-3.34	-1.35	0.00	-6.50	0.00	6.50	703.42	351.71	458.07	229.37	17.81	-1.46	0.033

176.00	-3.28	-1.32	0.00	-5.15	0.00	5.15	693.72	346.86	445.44	223.05	18.11	-1.46	0.028
177.00	-3.21	-1.30	0.00	-3.83	0.00	3.83	684.02	342.01	433.00	216.82	18.42	-1.47	0.022
178.00	-3.15	-1.28	0.00	-2.53	0.00	2.53	674.31	337.16	420.73	210.68	18.73	-1.47	0.017
179.00	-3.09	-1.25	0.00	-1.25	0.00	1.25	664.61	332.31	408.64	204.62	19.04	-1.47	0.011
180.00	0.00	-1.17	0.00	0.00	0.00	0.00	654.91	327.45	396.72	198.65	19.34	-1.47	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	-49.59	-3.25	0.00	-375.32	0.00	375.32	5,129.98	2,564.99	11,021.5	5,518.96	0.00	0.00	0.058
1.00	-49.23	-3.25	0.00	-372.07	0.00	372.07	5,115.23	2,557.61	10,943.3	5,479.82	0.00	0.00	0.058
2.00	-48.87	-3.25	0.00	-368.82	0.00	368.82	5,100.42	2,550.21	10,865.3	5,440.75	0.00	-0.01	0.058
3.00	-48.51	-3.24	0.00	-365.57	0.00	365.57	5,085.56	2,542.78	10,787.4	5,401.75	0.00	-0.01	0.057
4.00	-48.16	-3.23	0.00	-362.33	0.00	362.33	5,070.64	2,535.32	10,709.7	5,362.83	0.01	-0.01	0.057
5.00	-47.80	-3.22	0.00	-359.09	0.00	359.09	5,055.67	2,527.83	10,632.1	5,323.99	0.01	-0.02	0.057
6.00	-47.45	-3.21	0.00	-355.87	0.00	355.87	5,040.63	2,520.32	10,554.7	5,285.22	0.01	-0.02	0.057
7.00	-47.09	-3.20	0.00	-352.66	0.00	352.66	5,025.54	2,512.77	10,477.4	5,246.53	0.02	-0.02	0.057
8.00	-46.74	-3.18	0.00	-349.46	0.00	349.46	5,010.40	2,505.20	10,400.3	5,207.92	0.02	-0.03	0.056
9.00	-46.39	-3.17	0.00	-346.28	0.00	346.28	4,995.19	2,497.60	10,323.4	5,169.39	0.03	-0.03	0.056
10.00	-46.04	-3.15	0.00	-343.11	0.00	343.11	4,979.93	2,489.97	10,246.6	5,130.93	0.03	-0.03	0.056
11.00	-45.69	-3.14	0.00	-339.96	0.00	339.96	4,964.61	2,482.31	10,170.0	5,092.56	0.04	-0.03	0.056
12.00	-45.34	-3.12	0.00	-336.82	0.00	336.82	4,949.24	2,474.62	10,093.5	5,054.27	0.05	-0.04	0.056
13.00	-44.99	-3.10	0.00	-333.70	0.00	333.70	4,933.81	2,466.90	10,017.2	5,016.06	0.06	-0.04	0.055
14.00	-44.64	-3.08	0.00	-330.60	0.00	330.60	4,918.32	2,459.16	9,941.08	4,977.93	0.07	-0.04	0.055
15.00	-44.29	-3.06	0.00	-327.52	0.00	327.52	4,902.77	2,451.39	9,865.10	4,939.88	0.08	-0.05	0.055
16.00	-43.95	-3.04	0.00	-324.45	0.00	324.45	4,887.17	2,443.58	9,789.30	4,901.92	0.09	-0.05	0.055
17.00	-43.60	-3.02	0.00	-321.41	0.00	321.41	4,871.51	2,435.75	9,713.66	4,864.05	0.10	-0.05	0.055
18.00	-43.26	-3.00	0.00	-318.38	0.00	318.38	4,855.79	2,427.89	9,638.20	4,826.26	0.11	-0.06	0.054
19.00	-42.92	-2.98	0.00	-315.38	0.00	315.38	4,840.02	2,420.01	9,562.90	4,788.56	0.12	-0.06	0.054
20.00	-42.58	-2.96	0.00	-312.40	0.00	312.40	4,824.18	2,412.09	9,487.79	4,750.94	0.13	-0.06	0.054
21.00	-42.23	-2.94	0.00	-309.43	0.00	309.43	4,808.29	2,404.15	9,412.84	4,713.42	0.15	-0.07	0.054
22.00	-41.89	-2.92	0.00	-306.49	0.00	306.49	4,792.35	2,396.17	9,338.08	4,675.98	0.16	-0.07	0.054
23.00	-41.55	-2.90	0.00	-303.57	0.00	303.57	4,776.35	2,388.17	9,263.49	4,638.63	0.18	-0.07	0.053
24.00	-41.22	-2.88	0.00	-300.67	0.00	300.67	4,760.29	2,380.14	9,189.09	4,601.37	0.19	-0.08	0.053
25.00	-40.88	-2.86	0.00	-297.80	0.00	297.80	4,744.17	2,372.08	9,114.87	4,564.21	0.21	-0.08	0.053
26.00	-40.54	-2.83	0.00	-294.94	0.00	294.94	4,728.00	2,364.00	9,040.83	4,527.13	0.23	-0.08	0.053
27.00	-40.21	-2.81	0.00	-292.11	0.00	292.11	4,711.76	2,355.88	8,966.98	4,490.15	0.25	-0.09	0.053
28.00	-39.87	-2.79	0.00	-289.29	0.00	289.29	4,695.48	2,347.74	8,893.31	4,453.26	0.26	-0.09	0.053
29.00	-39.54	-2.77	0.00	-286.50	0.00	286.50	4,679.13	2,339.57	8,819.83	4,416.47	0.28	-0.09	0.052
30.00	-39.20	-2.74	0.00	-283.74	0.00	283.74	4,662.73	2,331.36	8,746.54	4,379.77	0.30	-0.10	0.052
31.00	-38.86	-2.72	0.00	-280.99	0.00	280.99	4,646.27	2,323.14	8,673.45	4,343.17	0.32	-0.10	0.052
32.00	-38.53	-2.70	0.00	-278.27	0.00	278.27	4,629.75	2,314.88	8,600.55	4,306.67	0.35	-0.10	0.052
33.00	-38.20	-2.68	0.00	-275.57	0.00	275.57	4,613.18	2,306.59	8,527.84	4,270.26	0.37	-0.11	0.052
34.00	-37.87	-2.65	0.00	-272.89	0.00	272.89	4,596.55	2,298.27	8,455.33	4,233.95	0.39	-0.11	0.051
35.00	-37.55	-2.63	0.00	-270.24	0.00	270.24	4,579.86	2,289.93	8,383.01	4,197.74	0.41	-0.11	0.051
36.00	-37.22	-2.61	0.00	-267.60	0.00	267.60	4,563.12	2,281.56	8,310.90	4,161.63	0.44	-0.12	0.051
37.00	-36.89	-2.59	0.00	-265.00	0.00	265.00	4,546.32	2,273.16	8,238.99	4,125.62	0.46	-0.12	0.051
38.00	-36.57	-2.56	0.00	-262.41	0.00	262.41	4,529.46	2,264.73	8,167.27	4,089.71	0.49	-0.12	0.051
39.00	-36.24	-2.54	0.00	-259.84	0.00	259.84	4,512.54	2,256.27	8,095.77	4,053.90	0.52	-0.13	0.051
40.00	-35.92	-2.52	0.00	-257.30	0.00	257.30	4,491.22	2,245.61	8,016.71	4,014.31	0.54	-0.13	0.050
41.00	-35.59	-2.50	0.00	-254.79	0.00	254.79	4,468.58	2,234.29	7,935.69	3,973.74	0.57	-0.14	0.050
42.00	-35.29	-2.47	0.00	-252.29	0.00	252.29	4,445.95	2,222.97	7,855.09	3,933.38	0.60	-0.14	0.050
42.96	-35.27	-2.47	0.00	-249.92	0.00	249.92	4,424.29	2,212.15	7,778.37	3,894.97	0.63	-0.14	0.050
43.00	-34.79	-2.44	0.00	-249.82	0.00	249.82	4,423.31	2,211.65	7,774.90	3,893.23	0.63	-0.14	0.050
44.00	-34.32	-2.40	0.00	-247.38	0.00	247.38	4,400.67	2,200.33	7,695.11	3,853.28	0.66	-0.15	0.050
45.00	-33.85	-2.37	0.00	-244.98	0.00	244.98	4,378.03	2,189.01	7,615.75	3,813.53	0.69	-0.15	0.049
46.00	-33.38	-2.33	0.00	-242.61	0.00	242.61	4,355.39	2,177.70	7,536.79	3,773.99	0.72	-0.15	0.049
47.00	-32.92	-2.30	0.00	-240.28	0.00	240.28	4,332.75	2,166.38	7,458.24	3,734.66	0.75	-0.16	0.049
48.00	-32.45	-2.26	0.00	-237.99	0.00	237.99	4,310.11	2,155.06	7,380.10	3,695.54	0.79	-0.16	0.049
49.00	-32.43	-2.26	0.00	-235.73	0.00	235.73	4,287.47	2,143.74	7,302.38	3,656.62	0.82	-0.16	0.049
49.04	-32.15	-2.24	0.00	-235.64	0.00	235.64	3,622.99	1,811.50	6,300.42	3,154.89	0.82	-0.16	0.055
50.00	-31.86	-2.22	0.00	-233.49	0.00	233.49	3,610.23	1,805.12	6,246.74	3,128.01	0.86	-0.17	0.055
51.00	-31.56	-2.19	0.00	-231.28	0.00	231.28	3,596.89	1,798.44	6,190.96	3,100.08	0.89	-0.17	0.055
52.00	-31.27	-2.17	0.00	-229.08	0.00	229.08	3,583.49	1,791.74	6,135.33	3,072.23	0.93	-0.17	0.055
53.00	-30.98	-2.15	0.00	-226.91	0.00	226.91	3,570.03	1,785.02	6,079.85	3,044.45	0.96	-0.18	0.054

54.00	-30.69	-2.13	0.00	-224.76	0.00	224.76	3,556.52	1,778.26	6,024.52	3,016.74	1.00	-0.18	0.054
55.00	-30.40	-2.11	0.00	-222.63	0.00	222.63	3,542.95	1,771.47	5,969.33	2,989.10	1.04	-0.19	0.054
56.00	-30.11	-2.08	0.00	-220.53	0.00	220.53	3,529.32	1,764.66	5,914.30	2,961.55	1.08	-0.19	0.054
57.00	-29.82	-2.06	0.00	-218.44	0.00	218.44	3,515.63	1,757.82	5,859.42	2,934.06	1.12	-0.19	0.054
58.00	-29.53	-2.04	0.00	-216.38	0.00	216.38	3,501.89	1,750.94	5,804.69	2,906.66	1.16	-0.20	0.053
59.00	-29.25	-2.02	0.00	-214.34	0.00	214.34	3,488.09	1,744.04	5,750.12	2,879.33	1.20	-0.20	0.053
60.00	-28.96	-2.00	0.00	-212.32	0.00	212.32	3,474.23	1,737.12	5,695.71	2,852.09	1.25	-0.21	0.053
61.00	-28.67	-1.98	0.00	-210.32	0.00	210.32	3,460.32	1,730.16	5,641.45	2,824.92	1.29	-0.21	0.053
62.00	-28.39	-1.96	0.00	-208.34	0.00	208.34	3,446.35	1,723.17	5,587.36	2,797.83	1.33	-0.21	0.053
63.00	-28.11	-1.93	0.00	-206.38	0.00	206.38	3,432.32	1,716.16	5,533.43	2,770.83	1.38	-0.22	0.053
64.00	-27.82	-1.91	0.00	-204.45	0.00	204.45	3,418.23	1,709.12	5,479.66	2,743.90	1.43	-0.22	0.053
65.00	-27.54	-1.89	0.00	-202.54	0.00	202.54	3,404.09	1,702.05	5,426.05	2,717.06	1.47	-0.23	0.052
66.00	-27.26	-1.87	0.00	-200.64	0.00	200.64	3,389.89	1,694.95	5,372.62	2,690.30	1.52	-0.23	0.052
67.00	-26.98	-1.85	0.00	-198.77	0.00	198.77	3,375.64	1,687.82	5,319.35	2,663.63	1.57	-0.23	0.052
68.00	-26.70	-1.83	0.00	-196.92	0.00	196.92	3,361.32	1,680.66	5,266.25	2,637.04	1.62	-0.24	0.052
69.00	-26.42	-1.81	0.00	-195.09	0.00	195.09	3,346.95	1,673.48	5,213.32	2,610.53	1.67	-0.24	0.052
70.00	-26.14	-1.79	0.00	-193.28	0.00	193.28	3,332.53	1,666.26	5,160.56	2,584.12	1.72	-0.25	0.052
71.00	-25.86	-1.77	0.00	-191.48	0.00	191.48	3,318.04	1,659.02	5,107.98	2,557.79	1.77	-0.25	0.052
72.00	-25.59	-1.76	0.00	-189.71	0.00	189.71	3,300.52	1,650.26	5,051.01	2,529.26	1.82	-0.25	0.051
73.00	-25.31	-1.74	0.00	-187.95	0.00	187.95	3,281.11	1,640.56	4,991.50	2,499.46	1.88	-0.26	0.051
74.00	-25.04	-1.72	0.00	-186.22	0.00	186.22	3,261.71	1,630.85	4,932.34	2,469.84	1.93	-0.26	0.051
75.00	-24.76	-1.70	0.00	-184.50	0.00	184.50	3,242.30	1,621.15	4,873.54	2,440.39	1.99	-0.27	0.051
76.00	-24.49	-1.69	0.00	-182.79	0.00	182.79	3,222.90	1,611.45	4,815.08	2,411.12	2.05	-0.27	0.051
77.00	-24.21	-1.67	0.00	-181.11	0.00	181.11	3,203.49	1,601.75	4,756.98	2,382.03	2.10	-0.28	0.051
78.00	-23.94	-1.66	0.00	-179.44	0.00	179.44	3,184.09	1,592.04	4,699.23	2,353.11	2.16	-0.28	0.051
79.00	-23.67	-1.64	0.00	-177.78	0.00	177.78	3,164.68	1,582.34	4,641.84	2,324.37	2.22	-0.28	0.051
80.00	-23.40	-1.63	0.00	-176.14	0.00	176.14	3,145.28	1,572.64	4,584.79	2,295.80	2.28	-0.29	0.051
81.00	-23.13	-1.61	0.00	-174.51	0.00	174.51	3,125.87	1,562.94	4,528.10	2,267.42	2.34	-0.29	0.051
82.00	-22.86	-1.60	0.00	-172.90	0.00	172.90	3,106.47	1,553.24	4,471.77	2,239.21	2.40	-0.30	0.051
83.00	-22.59	-1.59	0.00	-171.30	0.00	171.30	3,087.07	1,543.53	4,415.78	2,211.17	2.47	-0.30	0.051
84.00	-22.33	-1.58	0.00	-169.71	0.00	169.71	3,067.66	1,533.83	4,360.15	2,183.32	2.53	-0.31	0.051
85.00	-22.06	-1.57	0.00	-168.13	0.00	168.13	3,048.26	1,524.13	4,304.87	2,155.63	2.59	-0.31	0.051
86.00	-21.79	-1.56	0.00	-166.55	0.00	166.55	3,028.85	1,514.43	4,249.94	2,128.13	2.66	-0.32	0.051
87.00	-21.65	-1.56	0.00	-164.99	0.00	164.99	3,009.45	1,504.72	4,195.37	2,100.80	2.73	-0.32	0.051
87.54	-21.48	-1.56	0.00	-164.15	0.00	164.15	2,998.97	1,499.48	4,166.05	2,086.12	2.76	-0.32	0.051
88.00	-21.12	-1.55	0.00	-163.43	0.00	163.43	2,990.04	1,495.02	4,141.15	2,073.65	2.80	-0.33	0.050
89.00	-20.75	-1.54	0.00	-161.89	0.00	161.89	2,970.64	1,485.32	4,087.28	2,046.68	2.86	-0.33	0.050
90.00	-20.39	-1.53	0.00	-160.35	0.00	160.35	2,951.23	1,475.62	4,033.76	2,019.88	2.93	-0.33	0.050
91.00	-20.03	-1.53	0.00	-158.82	0.00	158.82	2,931.83	1,465.91	3,980.60	1,993.26	3.00	-0.34	0.050
92.00	-19.87	-1.53	0.00	-157.29	0.00	157.29	2,912.42	1,456.21	3,927.79	1,966.81	3.08	-0.34	0.050
92.46	-19.73	-1.53	0.00	-156.59	0.00	156.59	2,424.49	1,212.24	3,334.85	1,669.90	3.11	-0.35	0.055
93.00	-19.49	-1.52	0.00	-155.76	0.00	155.76	2,418.22	1,209.11	3,314.29	1,659.61	3.15	-0.35	0.055
94.00	-19.25	-1.53	0.00	-154.24	0.00	154.24	2,406.65	1,203.32	3,276.56	1,640.72	3.22	-0.35	0.055
95.00	-19.01	-1.53	0.00	-152.71	0.00	152.71	2,395.02	1,197.51	3,238.97	1,621.89	3.30	-0.36	0.055
96.00	-18.34	-1.53	0.00	-151.19	0.00	151.19	2,383.33	1,191.67	3,201.50	1,603.13	3.37	-0.36	0.055
97.00	-18.10	-1.53	0.00	-149.66	0.00	149.66	2,371.59	1,185.79	3,164.18	1,584.44	3.45	-0.37	0.054
98.00	-17.86	-1.54	0.00	-148.12	0.00	148.12	2,359.79	1,179.89	3,126.99	1,565.82	3.53	-0.37	0.054
99.00	-17.62	-1.55	0.00	-146.58	0.00	146.58	2,347.93	1,173.97	3,089.94	1,547.27	3.61	-0.38	0.054
100.00	-17.39	-1.55	0.00	-145.04	0.00	145.04	2,336.02	1,168.01	3,053.03	1,528.79	3.69	-0.38	0.054
101.00	-17.15	-1.56	0.00	-143.49	0.00	143.49	2,324.05	1,162.02	3,016.27	1,510.38	3.77	-0.39	0.054
102.00	-16.91	-1.57	0.00	-141.93	0.00	141.93	2,312.02	1,156.01	2,979.65	1,492.04	3.85	-0.39	0.053
103.00	-16.73	-1.58	0.00	-140.36	0.00	140.36	2,299.80	1,149.90	2,943.01	1,473.69	3.93	-0.40	0.053
103.75	-16.69	-1.58	0.00	-139.18	0.00	139.18	2,287.68	1,143.84	2,911.90	1,458.11	3.99	-0.40	0.053
103.75	-16.69	-1.58	0.00	-139.18	0.00	139.18	2,287.68	1,143.84	2,911.90	1,458.11	3.99	-0.40	0.103
104.00	-16.51	-1.59	0.00	-138.78	0.00	138.78	2,283.63	1,141.82	2,901.57	1,452.94	4.02	-0.41	0.103
105.00	-16.27	-1.60	0.00	-137.20	0.00	137.20	2,267.46	1,133.73	2,860.42	1,432.33	4.10	-0.42	0.103
106.00	-16.09	-1.61	0.00	-135.60	0.00	135.60	2,251.29	1,125.65	2,819.56	1,411.88	4.19	-0.43	0.103
107.00	-15.92	-1.62	0.00	-133.99	0.00	133.99	2,235.12	1,117.56	2,779.00	1,391.56	4.28	-0.44	0.103
108.00	-15.75	-1.63	0.00	-132.37	0.00	132.37	2,218.95	1,109.48	2,738.73	1,371.40	4.37	-0.45	0.104
109.00	-15.58	-1.64	0.00	-130.73	0.00	130.73	2,202.78	1,101.39	2,698.75	1,351.38	4.47	-0.46	0.104
110.00	-15.41	-1.66	0.00	-129.09	0.00	129.09	2,186.61	1,093.30	2,659.07	1,331.51	4.57	-0.47	0.104
111.00	-15.24	-1.67	0.00	-127.43	0.00	127.43	2,170.44	1,085.22	2,619.69	1,311.79	4.67	-0.48	0.104
112.00	-13.66	-1.76	0.00	-125.76	0.00	125.76	2,154.27	1,077.13	2,580.59	1,292.21	4.77	-0.49	0.104
113.00	-13.53	-1.77	0.00	-124.00	0.00	124.00	2,138.10	1,069.05	2,541.79	1,272.79	4.87	-0.50	0.104

114.00	-13.41	-1.78	0.00	-122.23	0.00	122.23	2,121.93	1,060.96	2,503.29	1,253.50	4.98	-0.52	0.104
115.00	-13.28	-1.79	0.00	-120.45	0.00	120.45	2,105.76	1,052.88	2,465.08	1,234.37	5.09	-0.53	0.104
116.00	-13.16	-1.80	0.00	-118.66	0.00	118.66	2,089.59	1,044.79	2,427.16	1,215.38	5.20	-0.54	0.104
117.00	-13.04	-1.81	0.00	-116.85	0.00	116.85	2,073.42	1,036.71	2,389.54	1,196.54	5.31	-0.55	0.104
118.00	-12.91	-1.82	0.00	-115.04	0.00	115.04	2,057.25	1,028.62	2,352.21	1,177.85	5.43	-0.56	0.104
119.00	-12.79	-1.83	0.00	-113.22	0.00	113.22	2,041.07	1,020.54	2,315.17	1,159.31	5.55	-0.57	0.104
120.00	-12.67	-1.84	0.00	-111.38	0.00	111.38	2,024.90	1,012.45	2,278.43	1,140.91	5.67	-0.59	0.104
121.00	-12.55	-1.85	0.00	-109.54	0.00	109.54	2,008.73	1,004.37	2,241.98	1,122.66	5.80	-0.60	0.104
122.00	-12.43	-1.86	0.00	-107.69	0.00	107.69	1,992.56	996.28	2,205.83	1,104.55	5.92	-0.61	0.104
123.00	-12.31	-1.87	0.00	-105.83	0.00	105.83	1,976.39	988.20	2,169.97	1,086.60	6.05	-0.62	0.104
124.00	-12.20	-1.88	0.00	-103.95	0.00	103.95	1,960.22	980.11	2,134.40	1,068.79	6.18	-0.63	0.103
125.00	-10.25	-1.99	0.00	-102.07	0.00	102.07	1,944.05	972.03	2,099.13	1,051.12	6.32	-0.65	0.102
126.00	-10.14	-1.99	0.00	-100.09	0.00	100.09	1,927.88	963.94	2,064.15	1,033.61	6.45	-0.66	0.102
127.00	-10.03	-2.00	0.00	-98.09	0.00	98.09	1,911.71	955.86	2,029.46	1,016.24	6.59	-0.67	0.102
128.00	-9.92	-2.01	0.00	-96.09	0.00	96.09	1,895.54	947.77	1,995.07	999.02	6.74	-0.68	0.101
129.00	-9.81	-2.01	0.00	-94.09	0.00	94.09	1,879.37	939.68	1,960.98	981.95	6.88	-0.70	0.101
130.00	-9.70	-2.02	0.00	-92.07	0.00	92.07	1,863.20	931.60	1,927.17	965.02	7.03	-0.71	0.101
131.00	-9.59	-2.03	0.00	-90.05	0.00	90.05	1,847.03	923.51	1,893.66	948.24	7.18	-0.72	0.100
132.00	-9.58	-2.03	0.00	-88.03	0.00	88.03	1,830.86	915.43	1,860.45	931.61	7.33	-0.74	0.100
132.12	-9.44	-2.03	0.00	-87.78	0.00	87.78	1,828.92	914.46	1,856.49	929.63	7.35	-0.74	0.100
133.00	-9.29	-2.04	0.00	-86.00	0.00	86.00	1,814.69	907.34	1,827.53	915.12	7.49	-0.75	0.099
134.00	-9.14	-2.04	0.00	-83.96	0.00	83.96	1,798.52	899.26	1,794.90	898.78	7.65	-0.76	0.099
135.00	-6.55	-2.08	0.00	-81.92	0.00	81.92	1,782.35	891.17	1,762.57	882.59	7.81	-0.77	0.096
135.87	-6.54	-2.08	0.00	-80.11	0.00	80.11	999.39	499.70	1,006.16	503.83	7.95	-0.79	0.166
136.00	-6.47	-2.08	0.00	-79.84	0.00	79.84	998.64	499.32	1,004.22	502.86	7.97	-0.79	0.165
137.00	-6.39	-2.08	0.00	-77.76	0.00	77.76	992.83	496.42	989.37	495.42	8.14	-0.81	0.163
138.00	-6.32	-2.08	0.00	-75.68	0.00	75.68	986.97	493.49	974.56	488.00	8.31	-0.83	0.161
139.00	-6.24	-2.08	0.00	-73.60	0.00	73.60	981.05	490.53	959.80	480.61	8.48	-0.85	0.160
140.00	-5.60	-2.07	0.00	-71.51	0.00	71.51	975.08	487.54	945.09	473.25	8.66	-0.87	0.157
141.00	-5.53	-2.07	0.00	-69.44	0.00	69.44	969.05	484.52	930.44	465.91	8.85	-0.89	0.155
142.00	-5.46	-2.07	0.00	-67.36	0.00	67.36	962.96	481.48	915.84	458.60	9.04	-0.91	0.153
143.00	-5.39	-2.07	0.00	-65.29	0.00	65.29	956.81	478.41	901.30	451.32	9.23	-0.93	0.150
144.00	-5.33	-2.07	0.00	-63.22	0.00	63.22	950.61	475.30	886.82	444.07	9.43	-0.95	0.148
145.00	-5.26	-2.07	0.00	-61.14	0.00	61.14	944.35	472.17	872.40	436.85	9.63	-0.97	0.146
146.00	-5.19	-2.07	0.00	-59.08	0.00	59.08	938.03	469.01	858.03	429.66	9.83	-0.99	0.143
147.00	-5.13	-2.06	0.00	-57.01	0.00	57.01	931.66	465.83	843.74	422.50	10.04	-1.01	0.140
148.00	-5.06	-2.06	0.00	-54.95	0.00	54.95	925.22	462.61	829.51	415.37	10.26	-1.03	0.138
149.00	-5.00	-2.05	0.00	-52.89	0.00	52.89	918.73	459.37	815.34	408.28	10.48	-1.05	0.135
150.00	-4.80	-2.03	0.00	-50.84	0.00	50.84	912.19	456.09	801.24	401.22	10.70	-1.07	0.132
151.00	-4.73	-2.03	0.00	-48.80	0.00	48.80	905.59	452.79	787.21	394.19	10.92	-1.09	0.129
152.00	-4.67	-2.02	0.00	-46.78	0.00	46.78	898.93	449.46	773.25	387.20	11.15	-1.11	0.126
153.00	-4.61	-2.01	0.00	-44.76	0.00	44.76	892.21	446.10	759.37	380.25	11.39	-1.13	0.123
154.00	-4.54	-2.00	0.00	-42.75	0.00	42.75	885.44	442.72	745.56	373.33	11.63	-1.14	0.120
155.00	-4.48	-2.00	0.00	-40.74	0.00	40.74	878.60	439.30	731.82	366.45	11.87	-1.16	0.116
156.00	-4.42	-1.99	0.00	-38.75	0.00	38.75	871.72	435.86	718.16	359.61	12.11	-1.18	0.113
157.00	-4.36	-1.98	0.00	-36.76	0.00	36.76	864.77	432.39	704.58	352.81	12.36	-1.20	0.109
158.00	-4.30	-1.96	0.00	-34.79	0.00	34.79	857.77	428.88	691.08	346.05	12.61	-1.22	0.106
159.00	-4.24	-1.95	0.00	-32.82	0.00	32.82	850.71	425.35	677.66	339.34	12.87	-1.23	0.102
160.00	-4.18	-1.94	0.00	-30.87	0.00	30.87	843.59	421.80	664.33	332.66	13.13	-1.25	0.098
161.00	-4.12	-1.93	0.00	-28.93	0.00	28.93	836.42	418.21	651.08	326.02	13.39	-1.27	0.094
162.00	-4.06	-1.91	0.00	-27.00	0.00	27.00	829.19	414.59	637.92	319.43	13.66	-1.28	0.089
163.00	-4.00	-1.90	0.00	-25.09	0.00	25.09	819.85	409.92	623.28	312.10	13.93	-1.30	0.085
164.00	-3.94	-1.88	0.00	-23.20	0.00	23.20	810.15	405.07	608.54	304.72	14.20	-1.31	0.081
165.00	-3.88	-1.86	0.00	-21.32	0.00	21.32	800.44	400.22	593.98	297.43	14.48	-1.32	0.077
166.00	-3.82	-1.85	0.00	-19.45	0.00	19.45	790.74	395.37	579.60	290.23	14.76	-1.34	0.072
167.00	-2.68	-1.47	0.00	-17.61	0.00	17.61	781.04	390.52	565.39	283.11	15.04	-1.35	0.066
168.00	-2.64	-1.45	0.00	-16.14	0.00	16.14	771.34	385.67	551.35	276.09	15.32	-1.36	0.062
169.00	-2.59	-1.43	0.00	-14.69	0.00	14.69	761.63	380.82	537.50	269.15	15.61	-1.37	0.058
170.00	-2.54	-1.42	0.00	-13.26	0.00	13.26	751.93	375.97	523.82	262.30	15.90	-1.38	0.054
171.00	-2.50	-1.40	0.00	-11.84	0.00	11.84	742.23	371.11	510.32	255.54	16.19	-1.39	0.050
172.00	-2.45	-1.38	0.00	-10.44	0.00	10.44	732.53	366.26	496.99	248.86	16.48	-1.40	0.045
173.00	-2.41	-1.36	0.00	-9.06	0.00	9.06	722.82	361.41	483.84	242.28	16.78	-1.41	0.041
174.00	-2.36	-1.34	0.00	-7.70	0.00	7.70	713.12	356.56	470.86	235.78	17.07	-1.42	0.036
175.00	-2.32	-1.32	0.00	-6.37	0.00	6.37	703.42	351.71	458.07	229.37	17.37	-1.42	0.031

176.00	-2.27	-1.30	0.00	-5.05	0.00	5.05	693.72	346.86	445.44	223.05	17.67	-1.43	0.026
177.00	-2.23	-1.27	0.00	-3.75	0.00	3.75	684.02	342.01	433.00	216.82	17.97	-1.43	0.021
178.00	-2.19	-1.25	0.00	-2.48	0.00	2.48	674.31	337.16	420.73	210.68	18.27	-1.43	0.015
179.00	-2.14	-1.23	0.00	-1.23	0.00	1.23	664.61	332.31	408.64	204.62	18.57	-1.44	0.009
180.00	0.00	-1.17	0.00	0.00	0.00	0.00	654.91	327.45	396.72	198.65	18.87	-1.44	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	33.42	0.00	69.50	0.00	0.00	3922.10	135.87	0.67
0.9D + 1.6W	31.95	0.00	52.12	0.00	0.00	3769.71	135.87	0.64
1.2D + 1.0Di + 1.0Wi	6.02	0.00	143.82	0.00	0.00	793.01	135.87	0.18
(1.2 + 0.2Sds) * DL + E ELFM	2.94	0.00	71.18	0.00	0.00	403.05	135.87	0.09
(1.2 + 0.2Sds) * DL + E EMAM	3.26	0.00	71.18	0.00	0.00	383.39	135.87	0.17
(0.9 - 0.2Sds) * DL + E ELFM	2.94	0.00	49.59	0.00	0.00	395.60	135.87	0.08
(0.9 - 0.2Sds) * DL + E EMAM	3.25	0.00	49.59	0.00	0.00	375.32	135.87	0.17
1.0D + 1.0W	8.91	0.00	57.93	0.00	0.00	1056.35	135.87	0.19

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	103.	(4) SOL-#20 All Thre	281.2	8.4	16.8	135.3	12.0	12	24	0.0	12.0	0	0	207.8	330.5	0.629

Code Rev.	G	
Moment	3922.1 k-ft	
Axial	69.5 k	

Date	10/24/2017	
Engineer	Trevor.Ridilla	
Site #	302506	
Carrier	AT&T MOBILITY	

Base/Flange Plate	Plate Type	*Baseplate*	
	Pole Diameter	52.75	in
	Pole Thickness	0.4375	in
	Plate Diameter	68	in
	Plate Thickness	2	in
	Plate Fy	50	ksi
	Weld Length	0.375	in
	ϕ_s Resistance	1448.04	k-in
	Applied	414.92	k-in
Stiffeners	#	*12*	*Show*
	Thickness	0.75	in
	Length	6	in
	Height	15	in
	Chamfer	1	in
	Offset Angle	22.5	°
	Fy	36	ksi

Bolts	#	*16*	
	Bolt Circle	62	in
	(R)adial / (S)quare	R	
●	Diameter	2.25	in
	Hole Diameter	2.75	in
	Type	A615-75	
	Fy	75	ksi
	Fu	100	ksi
	ϕ_s Resistance	259.82	k
	Applied	144.32	k
Reinforcement ●	#	*4*	
	DYW. Circle	59.625	in
	Offset Angle	11.25	°
	Type	#20	
	Diameter	2.5	in
	Fu	100	ksi
	ϕ_s Resistance	392.70	k
	Applied	202.68	k
Extra Bolts O	#	*0*	

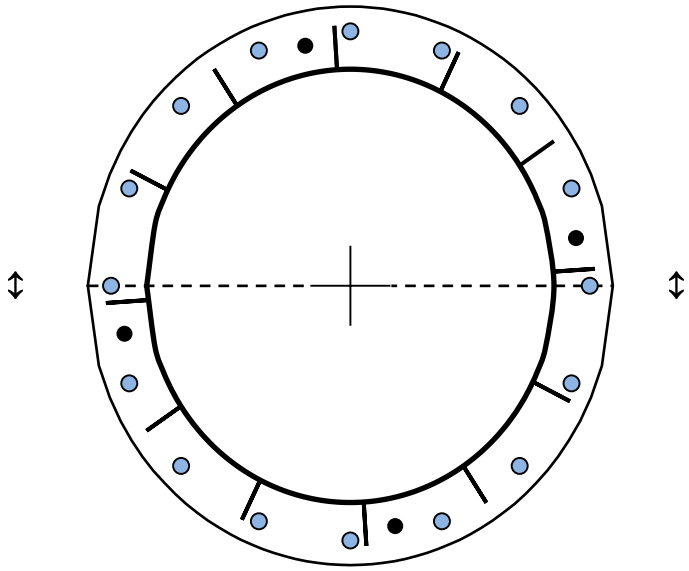
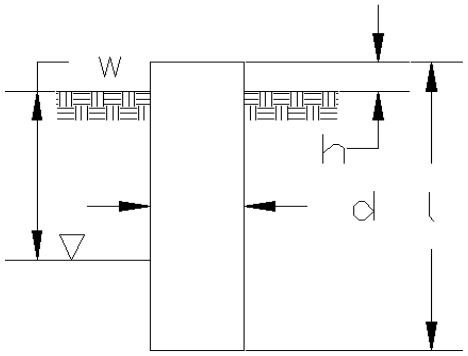


Plate Stress Ratio:
0.29 (Pass)

Bolt Stress Ratio:
0.56 (Pass)

Reinforcement Stress Ratio:
0.52 (Pass)

Site Name:	Winchester CT 3, CT	*Program Last Updated:*	*5/13/2014*
Site Number:	302506	*American Tower Corporation*	
Engineer:	Trevor.Ridilla		
Engineering Number:	OAA714359		
Date:	10/24/17		



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

Analyze or Design a Foundation?	Analyze	
Foundation Mapped:	N	
Moment (M):	3922.1	k-ft
Shear/Leg (V):	33.4	k
Axial Load (P):	69.5	k
Uplift/Leg (U):	0.0	k
Tower Type (GT / SST / MP):	MP	
Diameter of Caisson (d):	7.0	ft
Caisson Embedment (L-h):	17.0	ft
Caisson Height Above Ground (h):	1.0	ft
Depth Below Ground Surface to Water Table (w):	99.0	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Water:	62.4	pcf
Tension Skin Friction/Compression Skin Friction:	1.00	
Pullout Angle:	30.0	degrees

Engineer Notes

Soil Mechanical Properties

Depth (ft) Top	Depth (ft) Bottom	γ_{Soil} (pcf)	Cohesion (psf)	ϕ (degree)	Ultimate Skin Friction (psf)	Ultimate Bearing Pressure (psf)
0.0	3.5	165	0	0	0	0
3.5	7.5	165	6000	0	2700	0
7.5	18.0	165	6000	0	2700	11277

Required Embedment:	13.4	ft - OK, Caisson Embedment Satisfactory
Volume of Concrete:	692.7	ft^3 = 25.7 yd^3
Weight of Concrete (Buoyancy Effect Considered):	103.9	k
Average Soil Unit Weight:	165.0	pcf
Skin Friction Resistance:	801.6	k
Compressive Bearing Resistance:	434.0	k
Pullout Weight (Minus Concrete Weight):	585.7	k
Nominal Uplift Capacity per Leg ($\phi_s T_n$):	439.3	k
Nominal Compressive Capacity per Leg ($\phi_s P_n$):	926.7	k
P_u:	57.7	k
$T_u/\phi_s T_n$:	0.00	Result: OK
$P_u/\phi_s P_n$:	0.06	Result: OK
Total Lateral Resistance:	4082.8	k
Inflection Point (Below Ground Surface):	10.8	ft
Design Overturning Moment At Inflection Point (M_D):	4315.5	k-ft
Nominal Moment Capacity ($\phi_s M_n$):	9851.4	k-ft
$M_D/\phi_s M_n$:	0.44	Result: OK
ϕ_s:	0.75	

Caisson Strength Capacity

Concrete Compressive Strength (f'_c):	4000	psi
Vertical Steel Rebar Size #:	11	
Vertical Steel Rebar Area:	1.56	in^2
# of Vertical Steel Rebars:	42	
Vertical Steel Rebar Yield Strength (F_y):	60	ksi
Horizontal Tie / Stirrup Size #:	5	
Horizontal Tie / Stirrup Area:	0.31	in^2
Design Horizontal Tie / Stirrup Spacing:	12.0	in
Horizontal Tie / Stirrup Steel Yield Strength (F_y):	60	ksi
Rebar Cage Diameter:	76.0	in
Strength Bending/Tension Reduction Factor (ϕ_B):	0.90	ACI318-05 - 9.3.2.1
Strength Shear Reduction Factor (ϕ_V):	0.75	ACI318-05 - 9.3.2.3
Strength Compression Reduction Factor (ϕ_V):	0.65	ACI318-05 - 9.3.2.2
Steel Elastic Modulus:	29000	ksi
Design Moment (M_u):	3963.6	k-ft
Nominal Moment Capacity ($\phi_B M_n$):	10956.3	k-ft - ACI318-005 - 10.2
$M_u/\phi_B M_n$:	0.36	Result: OK
Design Shear (V_u):	582.9	k
Nominal Shear Capacity ($\phi_V V_n$):	685.3	k - ACI318-05 - 11.3.1.1 or 11.5.7.2
$V_u/\phi_V V_n$:	0.85	Result: OK
Design Tension (T_u):	0.0	k
Nominal Tension Capacity ($\phi_T T_n$):	3538.1	k - ACI318-05 - 10.2
$T_u/\phi_T T_n$:	0.00	Result: OK
Design Compression (P_u):	57.7	k
Nominal Compression Capacity ($\phi_P P_n$):	9682.0	k - ACI318-05 - 10.3.6.2
$P_u/\phi_P P_n$:	0.01	Result: OK
Bending Reinforcement Ratio:	0.012	ACI318-05 - 10.8.4 & 10.9.1
$M_u/\phi_B M_n + T_u/\phi_T T_n$:	0.36	Result: OK

EXHIBIT 4

Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CT1071
FA#: 10035017

Winsted_Winchester
15 Oakdale Avenue
Winsted, CT 06098

February 28, 2018

Centerline Communications Project Number: 950012-040

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**8.42 %**

February 28, 2018

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

Emissions Analysis for Site: **CT1071 – Winsted_Winchester**

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed AT&T facility located at **15 Oakdale Avenue, Winsted, 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 **15 Oakdale Avenue, Winsted, 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	1	30
LTE	700 MHz	2	40
LTE	1900 MHz (PCS)	4	40
LTE	700 MHz (Band 14)	4	40
LTE	2100 MHz (AWS)	4	60

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, 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) 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	184
A	2	KMW AM-X-CD-16-65-00T-RET	184
A	3	CCI HPA-65R-BUU-H6	184
B	1	Powerwave 7770	184
B	2	KMW AM-X-CD-16-65-00T-RET	184
B	3	CCI HPA-65R-BUU-H6	184
C	1	Powerwave 7770	184
C	2	KMW AM-X-CD-16-65-00T-RET	184
C	3	CCI HPA-65R-BUU-H6	184

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	1	30	414.12	0.08
Antenna A2	KMW AM-X-CD-16-65-00T-RET	700 MHz / 1900 MHz (PCS)	13.35 / 15.25	6	240	7,089.62	1.03
Antenna A3	CCI HPA-65R-BUU-H6	700 MHz (Band 14) / 2100 MHz (AWS)	11.95 / 15.05	8	280	6,345.48	1.04
						Sector A Composite MPE%	**2.16**
Antenna B1	Powerwave 7770	850 MHz	11.4	1	30	414.12	0.08
Antenna B2	KMW AM-X-CD-16-65-00T-RET	700 MHz / 1900 MHz (PCS)	13.35 / 15.25	6	240	7,089.62	1.03
Antenna B3	CCI HPA-65R-BUU-H6	700 MHz (Band 14) / 2100 MHz (AWS)	11.95 / 15.05	8	280	6,345.48	1.04
						Sector B Composite MPE%	**2.16**
Antenna C1	Powerwave 7770	850 MHz	11.4	1	30	414.12	0.08
Antenna C2	KMW AM-X-CD-16-65-00T-RET	700 MHz / 1900 MHz (PCS)	13.35 / 15.25	6	240	7,089.62	1.03
Antenna C3	CCI HPA-65R-BUU-H6	700 MHz (Band 14) / 2100 MHz (AWS)	11.95 / 15.05	8	280	6,345.48	1.04
						Sector C Composite MPE%	**2.16**

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	**2.16 %**
MetroPCS	0.69 %
T-Mobile	0.01 %
CTPD	0.57 %
Sprint	0.96 %
Verizon Wireless	3.36 %
Nextel	0.48 %
Northeast Utilities	0.19 %
Site Total MPE %:	**8.42 %**

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	2.16 %
AT&T Sector B Total:	2.16 %
AT&T Sector C Total:	2.16 %
Site Total:	8.42 %

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 Max Power Values (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 (Antenna 1)	1	414.12	184	0.47	850 MHz	567	0.08%
AT&T 700 MHz LTE (Antenna 2)	2	865.09	184	1.96	700 MHz	467	0.42%
AT&T 1900 MHz (PCS) LTE (Antenna 2)	4	1,339.86	184	6.08	1900 MHz (PCS)	1000	0.61%
AT&T 700 MHz LTE – Band 14 (Antenna 3)	4	626.70	184	2.84	700 MHz	467	0.61%
AT&T 2100 MHz (AWS) LTE (Antenna 3)	4	959.67	184	4.36	2100 MHz (AWS)	1000	0.44%
						Total:	**2.16%**

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:	2.16 %
Sector B:	2.16 %
Sector C:	2.16 %
AT&T Maximum Total (per sector):	2.16 %
Site Total:	8.42 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **8.42 %** 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.

Scott Heffernan
RF Engineering Director
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767