Filed by:
G. Scott Shepherd, Site Development Specialist II - SBA Communications
134 Flanders Rd., Suite 125, Westborough, MA 01581
508.251.0720 x 3807 - gshepherd@sbasite.com

January 11, 2022

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

RE: Notice of Exempt Modification
193 Windham Center Rd., Windham, CT
Latitude: 41.690055
Longitude: -72.162536
Sprint, now a part of T-Mobile USA #: CTHA705A_Sprint Keep

Dear Ms. Bachman:

Sprint, now a part of T-Mobile USA, hereinafter referred to as "Sprint/T-Mobile" currently maintains nine (9) antennas at the 167-foot level of the existing 180-foot Monopole Tower at 193 Windham Center Rd., Windham, CT. The 180-foot tower is owned by SBA Properties, LLC. The property is owned by the Town of Windham, CT. Sprint/T-Mobile now intends to remove three (3) existing antennas and remove and replace three (3) antennas replace with three (3) new 2500MHz antennas. "Sprint/T-Mobile" will be going from having nine (9) antennas to having six (6) antennas

The new antennas support 5G services and would be installed at the 167-foot level of the tower.

Planned Modifications:

TOWER

Remove:

- N/A

Remove and Replace:

- (3) RFS APXVTM14-C-I20 antennas (remove) – (3) Ericsson AIR6449 B41 2500MHz (replace)
- (3) RFS APXVSPP18-C-A20 antennas (remove) – (3) RFS APXVAALL24_43-U-NA20 600/700/1900MHz antennas (replace)
- (3) TD-RRH8x20-2500 RRUs (remove) – (3) Ericsson 4480 B71 + B85 RRUs (replace)
- (3) Alcatel 1900 MHz RRU (remove) – (3) Ericsson 4460 B25 + B66 RRUs (replace)
- (1) Low Profile Platform (remove) – (1) Low profile Platform w/handrail kit (SitePro RMQP-4096-HK) – (Replace)

Install New:

- N/A

Existing Equipment to Remain:

- (3) 1.99" Hybrid (replace)

Entitlements:

- RFS ACU-A20-N-RET
- Alcatel Lucent RRH2x50 (800) MHz filter
- RFS APXVSPP18-C-A20 Panel antennas
- (3) Aclatel 800 MHz RRUs

GROUND

Install New:

- Purcell RAC24 cabinet
- (5) 2" RGS conduit
- Ericsson B160 Battery cabinet
- Ericsson 6160 Equipment cabinet
- Slackbox
- Breakers within existing power panel

Remain:

- T-Mobile Equip. within existing Sprint Equip. Shelter
- T-Mobile Manual Transfer Switch
- T-Mobile Power panel
- T-Mobile Cable bridge

Remove:

- Sprint Fiber Distribution Box
- Sprint Cabinet within existing shelter
- Battery Backup Shelter

The telecommunications facility located at 193 Windham Center Rd., Windham, CT was granted a variance from Section 62.6.6a on setback requirements and Section 78.3.8 on maximum length in order to construct a cellular tower for lease by The Town of Windham on May 4, 2000. The Town of Windham later approved a declaratory ruling for construction of a cell tower on May 11, 2000, and further approved the construction of a wireless telecommunications tower on June 15, 2000. There were no other stipulations set forth by the Town of Windham. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16.50j-72(b)(2). In accordance with R.C.S.A. § 16.50j-73, a copy of this letter is being sent to the Town of Hebron's Mayor, Thomas DeVivo, Building Official, Joe Smith. The property is owned by the Town of Windham. (Separate notice is not being sent to tower owner, as it belongs to SBA.)

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16.50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modification will not require the 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 replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modification will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,

G. Scott Shepherd
Site Development Specialist II
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3807 + T
508.366.2610 + F
508.868.6000 + C
gshepherd@sbasite.com

Attachments

cc: Thomas DeVivo, Mayor / with attachments
Windham Town Hall, 979 Main St., Willimantic, CT 06226
Joe Smith, Building Official / with attachments
Windham Town Hall, 979 Main St., Willimantic, CT 06226

EXHIBIT LIST

Exhibit 1	Check Copy	x
Exhibit 2	Notification Receipts	x
Exhibit 3	Property Card	x
Exhibit 4	Property Map	x
Exhibit 5	Original Zoning Approval	Town of Windham 5/4/00, 5/11/00, 6/15/00
Exhibit 6	Construction Drawings	Chappell Engineering 9/15/21
Exhibit 7	Structural Analysis	TES 12/16/21
Exhibit 8	Mount Analysis	TES 12/2/21
Exhibit 8	EME Report	Centerline 1/5/22

EXHIBIT 1

Copy of check

EXHIBIT 2

FedEx Labels

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx

TRACK ANOTHER SHIPMENT

775717536978

ADD NICKNAME

ON TIME

Scheduled delivery:
Wednesday, 1/12/2022 before 10:30 am

PICKED UP
WESTBOROUGH, MA

GET STATUS UPDATES

FROM
SBA COMMUNICATIONS CORPORATION
Rick Woods

134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Melanie A. Bachman Exec. Dir
Connecticut Siting Council

Ten Franklin Square
NEW BRITAIN, CT US 06051
508-251-0720

MANAGE DELIVERY

Travel History | Shipment Facts

Travel History

TIME ZONE
Local Scan Time

Tuesday, January 11, 2022

12:17 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
10:04 AM		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER	SERVICE	WEIGHT
775717536978	FedEx Priority Overnight	2 lbs / 0.91 kgs
TOTAL PIECES	**TOTAL SHIPMENT WEIGHT**	**TERMS**

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx

TRACK ANOTHER SHIPMENT

775717578687

ADD NICKNAME

ON TIME

Scheduled delivery:
Wednesday, 1/12/2022 before 10:30 am

PICKED UP
WESTBOROUGH, MA

GET STATUS UPDATES

FROM
SBA COMMUNICATIONS CORPORATION
Rick Woods

134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Thomas DeVivo
Windham Town Hall

Mayor
979 Main St
WILLIMANTIC, CT US 06226
508-251-0720

MANAGE DELIVERY

Travel History | Shipment Facts

Travel History

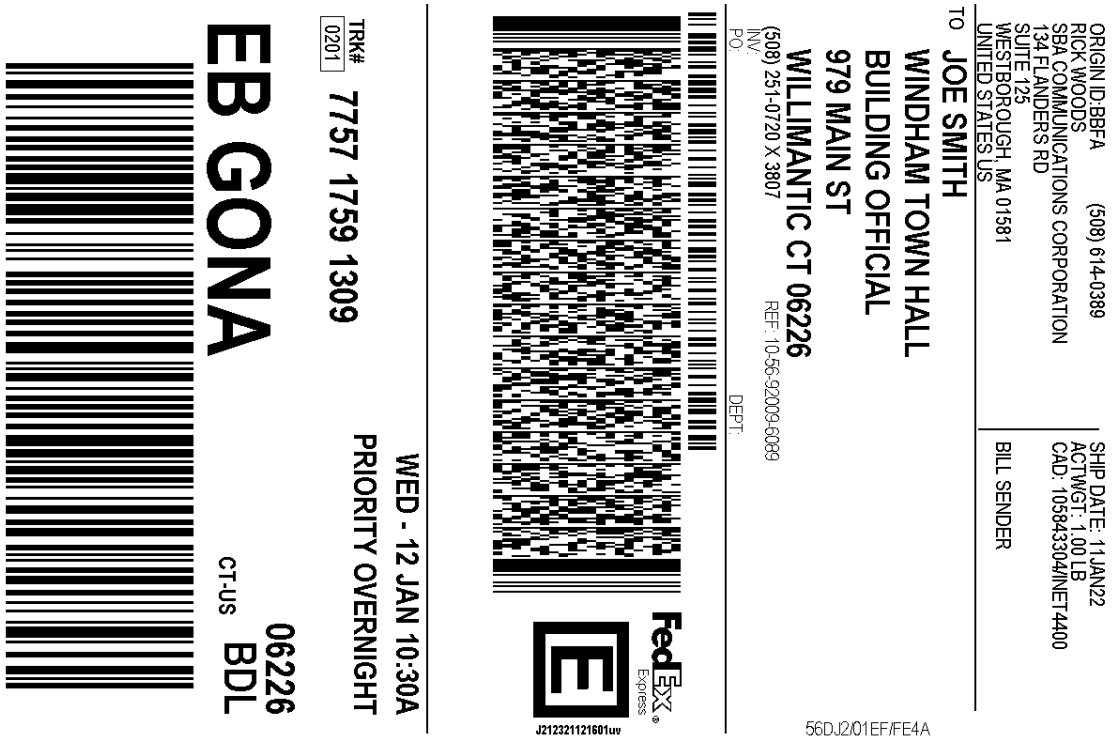
TIME ZONE
Local Scan Time

Tuesday, January 11, 2022

12:17 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
10:06 AM		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER	SERVICE	WEIGHT
775717578687	FedEx Priority Overnight	0.5 lbs / 0.23 kgs
TOTAL PIECES	**TOTAL SHIPMENT WEIGHT**	**TERMS**



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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FedEx

TRACK ANOTHER SHIPMENT

775717591309

ADD NICKNAME

ON TIME

Scheduled delivery:
Wednesday, 1/12/2022 before 10:30 am

PICKED UP
WESTBOROUGH, MA

GET STATUS UPDATES

FROM
SBA COMMUNICATIONS CORPORATION
Rick Woods
134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Joe Smith
Windham Town Hall
Building Official
979 Main St
WILLIMANTIC, CT US 06226
508-251-0720

MANAGE DELIVERY

Travel History | Shipment Facts

Travel History

TIME ZONE
Local Scan Time

Tuesday, January 11, 2022

12:17 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
10:07 AM		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER	SERVICE	WEIGHT
775717591309	FedEx Priority Overnight	0.5 lbs / 0.23 kgs
TOTAL PIECES	**TOTAL SHIPMENT WEIGHT**	**TERMS**

EXHIBIT 3

Property Card

Property Card: **193 WINDHAM CENTER RD**

Town of Windham, CT

Parcel Information

Parcel ID:	6-9-240-29	**Map:**	6-9
Vision ID:	5764	**Lot:**	240-29
Owner:	WINDHAM TOWN OF	**Use Description:**	Exempt Comm
Co-Owner:		**Zone:**	M2
Mailing Address:	979 MAIN ST WILLIMANTIC, CT 06226	**Land Area in Acres:**	30.92

Sale History		Assessed Value	
Book/Page:	234/ 304	**Land:**	$353,250
Sale Date:	12/12/1972	**Buildings:**	$24,590
Sale Price:	$0	**Total:**	$377,840

Building Details: Building # 1

Model:	Commercial	**Int Wall Desc 1:**	
Living Area:	240	**Int Wall Desc 2:**	
Appr. Year Built:		**Ext Wall Desc 1:**	Reinforc Concr
Style:	Warehouse	**Ext Wall Desc 2:**	01
Stories:	1	**Roof Cover:**	
Occupancy:	1	**Roof Structure:**	01
No. Total Rooms:		**Heat Type:**	
No. Bedrooms:		**Heat Fuel:**	
No. Baths:		**A/C Type:**	Central
No. Half Baths:			

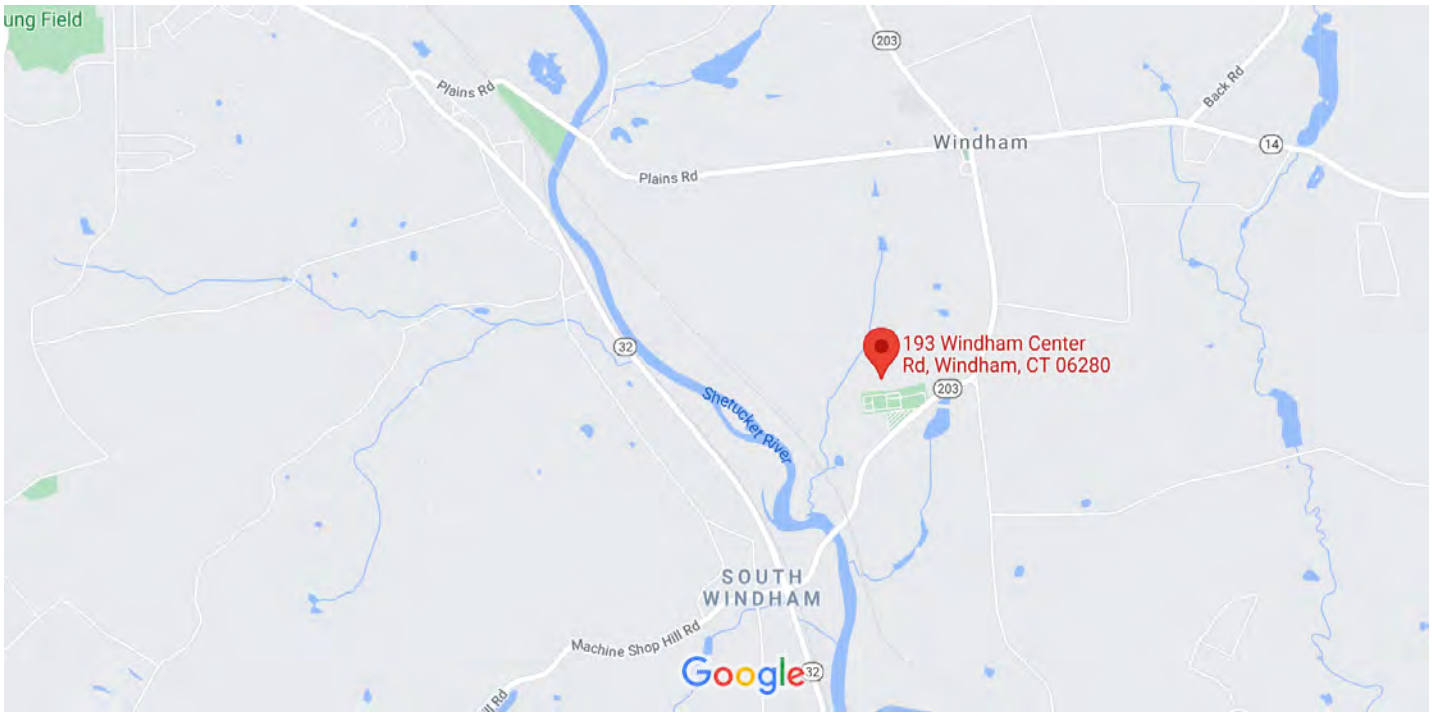
Building Details: Building # 2

Model:	Commercial	**Int Wall Desc 1:**	
Living Area:	360	**Int Wall Desc 2:**	
Appr. Year Built:		**Ext Wall Desc 1:**	Reinforc Concr
Style:	Warehouse	**Ext Wall Desc 2:**	01
Stories:	1	**Roof Cover:**	
Occupancy:	1	**Roof Structure:**	01
No. Total Rooms:		**Heat Type:**	
No. Bedrooms:		**Heat Fuel:**	
No. Baths:		**A/C Type:**	Central
No. Half Baths:			

EXHIBIT 4

Property Map

Google Maps 193 Windham Center Rd



Map data ©2021 2000 ft

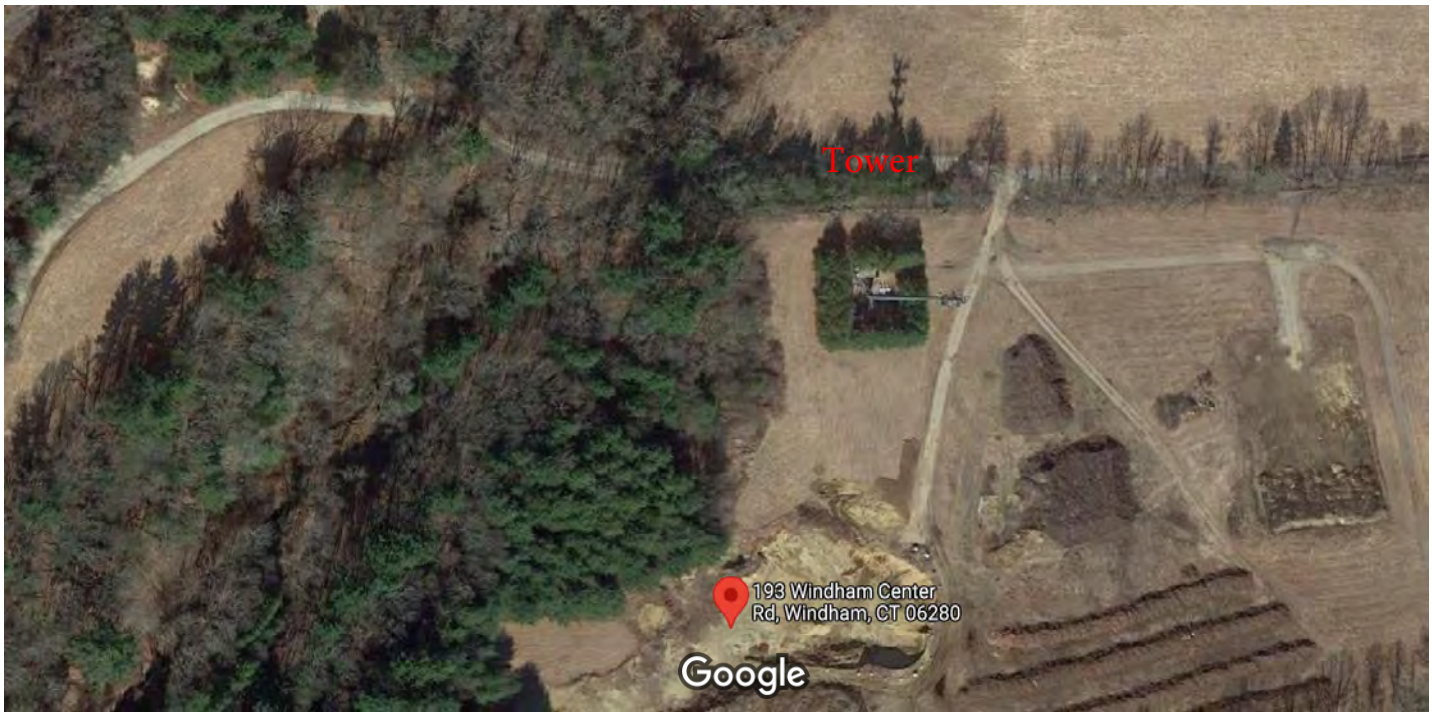
193 Windham Center Rd

Directions Save Nearby Send to your phone Share

193 Windham Center Rd, Windham, CT 06280

MRQP+MQ Windham, Connecticut

Google Maps 193 Windham Center Rd



Imagery ©2021 Maxar Technologies, USDA Farm Service Agency, Map data ©2021 100 ft

193 Windham Center Rd

Directions Save Nearby Send to your phone Share

193 Windham Center Rd, Windham, CT 06280

MRQP+MQ Windham, Connecticut

EXHIBIT 5

Zoning Docs

NOTICE OF ACTION

SPECIAL PERMIT: X SPECIAL EXCEPTION: _____ VARIANCE: _____

SITE PLAN: _____ ZONE CHANGE: _____ APPEAL: _____

SUBDIVISION: _____ WETLANDS: _____ OTHER: _____

ZONING REG: _____ SECTION: _____

APPLICANT: SBA Inc.

NAME OF RECORD OWNER (IF DIFFERENT): Town of Windham

STREET ADDRESS OF PROPERTY: 193 Windham Center Road

DEED REFERENCE – VOLUME: 234 PAGE: 304 ZONE: R-3

DESCRIPTION OF PROPERTY: (MAY BE ATTACHED)

DESCRIPTION OF ACTION: Approved the construction of a wireless telecommunication tower.

DATE APPROVED: 06/15/00 EFFECTIVE DATE: 07/06/00

LEGAL NOTICE OF ACTION PUBLISHED – DATE: 06/21/00

CONDITIONS – IF ANY: _____

_____ Clarence Sylvester

TOWN CLERK CHAIRMAN

_____ Windham Zoning Commission

DATE AGENCY

_____ June 28, 2000

TIME DATE

This Notice of Action must be recorded by the applicant within 90 days of the effective date, otherwise it shall become null and void.

NOTICE OF ACTION

SPECIAL PERMIT: _____ SECTION: _____ VARIANCE: _____

SITE PLAN: _____ ZONE CHANGE: _____ APPEAL: _____

SUBDIVISION: _____ WETLANDS: X OTHER: _____

ZONING REG: _____ SECTION: _____

APPLICANT: SBA Inc.

NAME OF RECORD OWNER (IF DIFFERENT): Town of Windham

STREET ADDRESS OF PROPERTY: 193 Windham Center Road

DEED REFERENCE – VOLUME: _____ PAGE: _____ ZONE: _____

DESCRIPTION OF PROPERTY: (MAY BE ATTACHED)

DESCRIPTION OF ACTION: Approved a declaratory ruling for construction of a cell tower.

DATE APPROVED: 05/11/00 EFFECTIVE DATE: 06/03/00

LEGAL NOTICE OF ACTION PUBLISHED – DATE: 05/19/00

CONDITIONS – IF ANY: _____

George F. DeCloutier

_____ George Cloutier

TOWN CLERK CHAIRMAN

_____ Windham Conservation Commission

DATE AGENCY

_____ June 1, 2000

TIME DATE

This Notice of Action must be recorded by the applicant within 90 days of the effective date, otherwise it shall become null and void.

NOTICE OF ACTION

SPECIAL PERMIT: _____ SPECIAL EXCEPTION: _____ VARIANCE: X

SITE PLAN: _____ ZONE CHANGE: _____ APPEAL: _____

SUBDIVISION: _____ WETLANDS: _____ OTHER: _____

ZONING REG: _____ SECTION: 62.6.6a & 78.3.8

APPLICANT: SBA Inc.

NAME OF RECORD OWNER (IF DIFFERENT): Town of Windham

STREET ADDRESS OF PROPERTY: 193 Windham Center Road

DEED REFERENCE – VOLUME: 234 PAGE: 304 ZONE: R-3

DESCRIPTION OF PROPERTY: (MAY BE ATTACHED)

DESCRIPTION OF ACTION: Granted a Variance from Section 62.6.6a on setback requirements and Section 78.3.8 on maximum length in order to construct a cellular tower for lease.

DATE APPROVED: 05/04/00 EFFECTIVE DATE: 05/28/00

LEGAL NOTICE OF ACTION PUBLISHED – DATE: 05/13/00

CONDITIONS – IF ANY: _____

Thomas Praakli

_____ Thomas Praakli
TOWN CLERK VICE CHAIRMAN

_____ Windham Zoning Board of Appeals
DATE AGENCY

_____ May 10, 2000
TIME DATE

This Notice of Action must be recorded by the applicant within 90 days of the effective date, otherwise it shall become null and void.

EXHIBIT 6

Construction Drawings

SPECIAL CONSTRUCTION NOTE:
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT T-MOBILE'S RAD/VERTICAL EQUIPMENT SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).

SBA APPROVED

By Stephen Roth at 8:25:21 AM, 9/17/2021

CTHA705A

187 WINDHAM CENTER ROAD
WINDHAM, CT 06280

SITE NO.: CTHA705A
CARRIER SITE ID: CT72XC043-A

RF DESIGN GUIDELINE: 67D5A998E 6160 (GSM ONLY)

SCOPE OF WORK

REMOVE:
- 6 ANTENNAS
- 9 RRUs
- 2 SPRINT CABINETS
- 1 FIBER DISTRIBUTION BOX
- ALL SPRINT CABLES
- 1 LOW-PROFILE MOUNT

INSTALL:
- 6 ANTENNAS
- 6 RRUs
- 1 B160 BATTERY CABINET
- 1 6160 CABINET
- 1 SLACKBOX
- 1 PURCELL CABINET
- 3 HYBRID CABLES
- 1 LOW-PROFILE MOUNT W/HANDRAIL

SITE NOTES

1. THIS IS AN UNMANNED AND RESTRICTED ACCESS TELECOMMUNICATION FACILITY, AND IS NOT FOR HUMAN HABITATION. IT WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
   - ADA COMPLIANCE NOT REQUIRED.
   - POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.
   - NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.
2. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACE THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.
3. NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
   - BUILDING CODE: 2018 CONNECTICUT STATE BUILDING CODE
   - ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE
   - STRUCTURAL CODE: TIA/EIA-222-G STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

APPROVALS

PROJECT MANAGER:	DATE:	ZONING/SITE ACQ.:	DATE:
CONSTRUCTION:	DATE:	OPERATIONS:	DATE:
RF ENGINEERING:	DATE:	TOWER OWNER:	DATE:

T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS BY CERTIFIED CLIMBER
SECTOR B:	ACCESS BY CERTIFIED CLIMBER
SECTOR C:	ACCESS BY CERTIFIED CLIMBER
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NIU/T DEMARC:	UNRESTRICTED
OTHER/SPECIAL:	NONE

GENERAL NOTES

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

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 811

811 DigSafe
MA,ME,NH,RI,VT

VICINITY MAP

SCALE: 1" = 1000'-0"

DIRECTIONS

TURN LEFT ONTO S WASHINGTON ST. TURN RIGHT ONTO MA-123 E. TURN LEFT TO MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. MERGE ONTO I-495 NORTH. TAKE EXIT 13B TO MERGE ONTO I-95 SOUTH TOWARD PROVIDENCE RI. TAKE EXIT 6 FOR I-295 SOUTH. TAKE EXIT 9C-A FOR US-6 WEST. KEEP RIGHT AT THE FORK TO MERGE ONTO US-6 WEST. FOLLOW SIGNS INTO CT. TAKE EXIT ON LEFT FOR I-395 SOUTH. TAKE EXIT 32 TO MERGE ONTO CT-14 WEST. TURN RIGHT ONTO CT-12 NORTH/CT-14 WEST SLIGHT LEFT ONTO CT-14 WEST. TURN RIGHT TO STAY ON CT-14 WEST. TURN LEFT ONTO CT-203 SOUTH. SITE WILL BE ON THE RIGHT.

SHEET INDEX

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GN-1	GENERAL NOTES	2
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A-3	SITE DETAILS	2
E-1	ELECTRIC & GROUNDING DETAILS	2

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

PROJECT SUMMARY

SITE NUMBER:	CTHA705A
SBA SITE NUMBER:	CT02721-S
SBA SITE NAME:	SOUTH WINDHAM
SITE ADDRESS:	193 WINDHAM CENTER ROAD WINDHAM, CT 06280
PROPERTY OWNER:	TOWN OF WINDHAM 979 MAIN STREET WILLIMANTIC, CT 06226
TOWER OWNER:	SBA PROPERTIES, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	WINDHAM
ZONING DISTRICT:	RESIDENTIAL RURAL
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	180'
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
SBA RSM:	STEPHEN ROTH PHONE: 860-539-4920 EMAIL: SRoth@sbasite.com
ARCHITECT:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
STRUCTURAL ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
SITE CONTROL POINT:	LATITUDE: 41.690056° N41°41'24.20" LONGITUDE: -72.162528° W72°09'45.10"

SPECIAL ZONING NOTE:
BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW, AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW, OR ADMINISTRATIVE REVIEW).

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25997
LICENSED
PROFESSIONAL CIVIL ENGINEER
9/15/2021

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	09/15/21	REVISED CONSTRUCTION	JRV
1	04/20/21	ISSUED FOR CONSTRUCTION	JRV
0	04/19/21	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTHA705A

SITE ADDRESS:
187 WINDHAM CENTER ROAD
WINDHAM, CT 06280

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

1815.228

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – T–MOBILE
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – T–MOBILE
   OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR 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 CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR 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, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED 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 SUBCONTRACTOR 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 SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.

10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.

12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.

13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.

15. CONSTRUCTION SHALL COMPLY WITH ALL T–MOBILE STANDARDS AND SPECIFICATIONS.

16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR 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.

18. IF THE EXISTING 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 TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR 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 ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR 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 AND EXCAVATION.

3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.

6. 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.

7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

8. 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 ENGINEERING, OWNER AND/OR LOCAL UTILITIES.

9. THE AREAS OF THE OWNERS 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 AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T–MOBILE SPECIFICATION FOR SITE SIGNAGE.

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 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 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. 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 .....1½ IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER
   OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....¾ IN.
   BEAMS AND COLUMNS .....1½ IN.

5. A CHAMFER ¾" 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 ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS 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 SIMPSON OR APPROVED EQUAL.

7. CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS 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 AND T–MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM–A–36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE 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 AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (⅞"ø) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.

4. NON–STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ⅝" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.

5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL

6. 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 AND TOPSOIL TO EXPOSE 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 ALTERNATE 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 AND 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 ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND–OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND 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 DRUN, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T–MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.

2. COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.

3. CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.

3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

4. CABLES SHALL NOT BE ROUTED THROUGH LADDER–STYLE CABLE TRAY RUNGS.

5. EACH END OF EVERY POWER, 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 AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.

6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.

7. 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).

8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, 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.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, 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.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, 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.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. 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.

18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

20. 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.

21. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

23. CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

24. CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

25. 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.

26. 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.

27. 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.

28. 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.

29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

30. THE SUBCONTRACTOR 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.

31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

32. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

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STATE OF CONNECTICUT
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No. 25937
LICENSED
PROFESSIONAL CIVIL ENGINEER
9/15/2021

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SUBMITTALS

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0	04/19/21	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTHA705A

SITE ADDRESS:
187 WINDHAM CENTER ROAD
WINDHAM, CT 06280

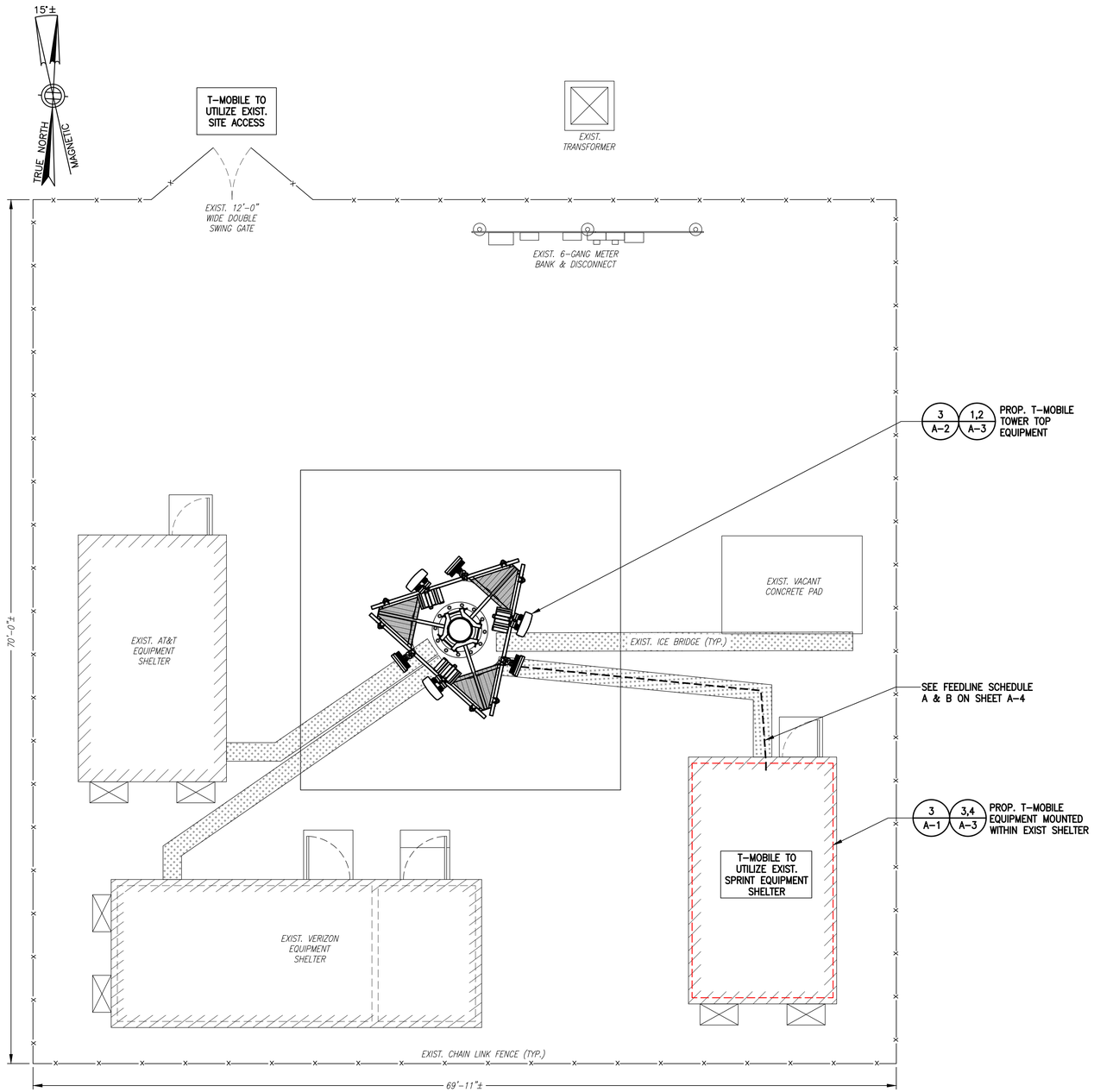
SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

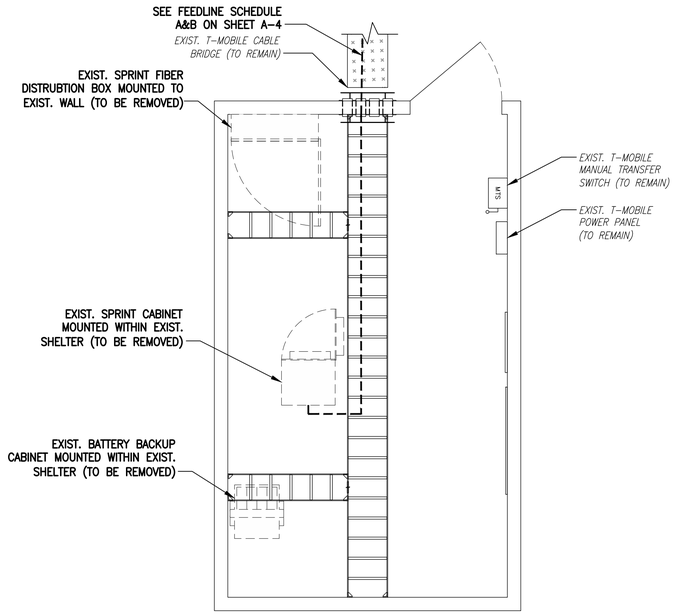
1815.228

SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.

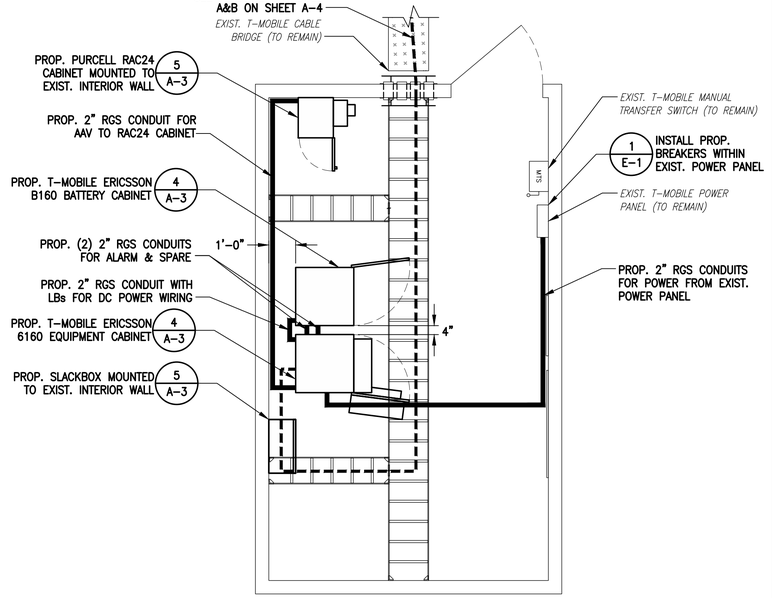
SPECIAL CONSTRUCTION NOTE:
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT T-MOBILE'S RAD/VERTICAL EQUIPMENT SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).



COMPOUND PLAN
SCALE: 1" = 5'-0"
1 A-1
0 5'-0" 10'-0 15'-0"



EXISTING EQUIPMENT PLAN
SCALE: 3/8" = 1'-0"
2 A-1
0 2'-8" 5'-4" 8'-0"



PROPOSED EQUIPMENT PLAN
SCALE: 3/8" = 1'-0"
3 A-1
0 2'-8" 5'-4" 8'-0"

T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
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www.chappellengineering.com

STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25937
LICENSED PROFESSIONAL CIVIL ENGINEER
9/15/2021

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

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0	04/19/21	ISSUED FOR REVIEW	JRV

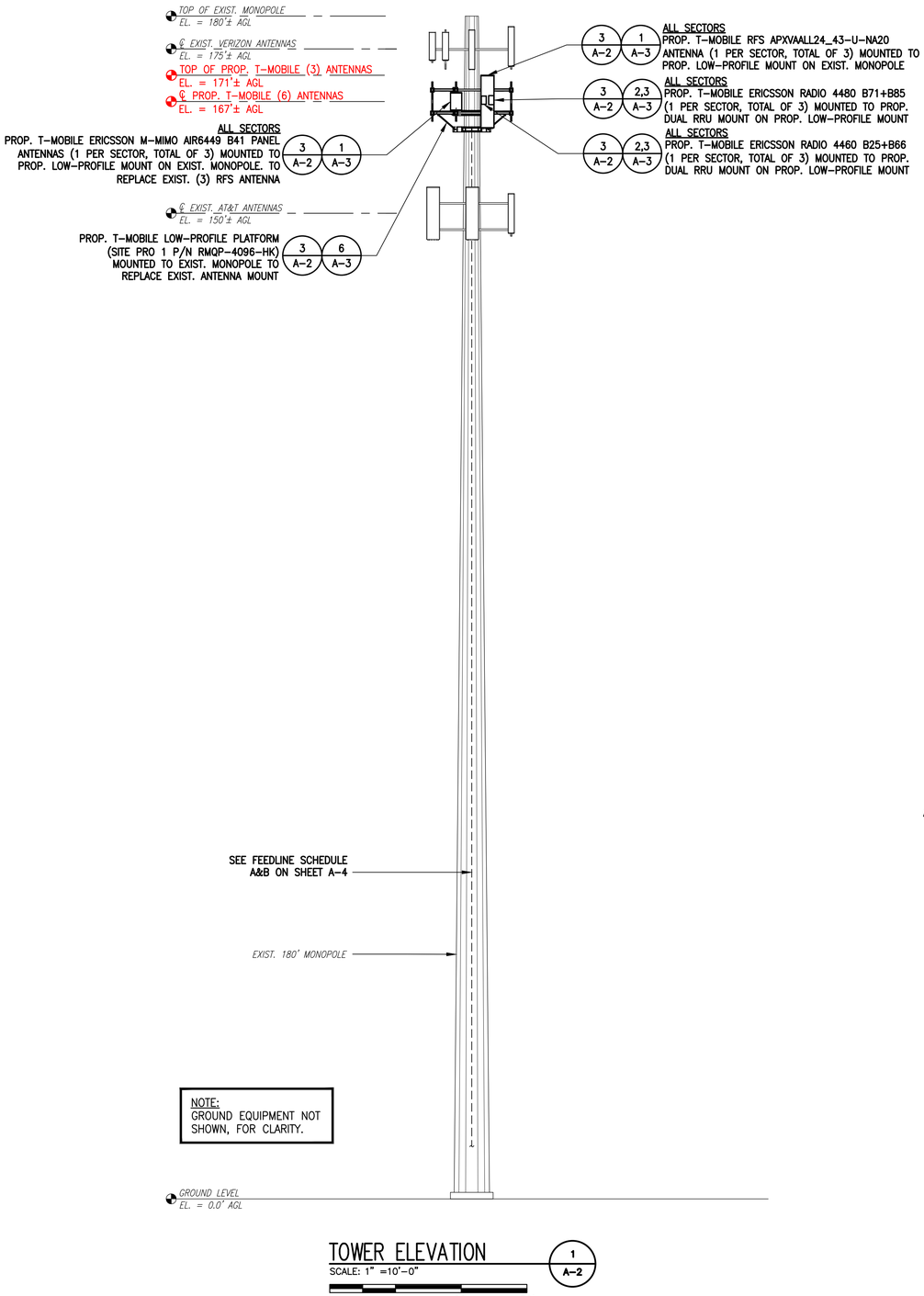
SITE NUMBER:
CTHA705A

SITE ADDRESS:
187 WINDHAM CENTER ROAD
WINDHAM, CT 06280

SHEET TITLE
COMPOUND & EQUIPMENT PLANS

SHEET NUMBER
A-1

1815.228



NOTE:
GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.

TOWER ELEVATION 1 A-2
SCALE: 1" =10'-0"
0 10' 20' 30'

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RAD CENTER NOTE:
T-MOBILE RAD CENTER SHOWN IN RED TEXT BASED ON SBA-PROVIDED CO-LOCATION APPLICATION, EQUIPMENT DATABASE, AND STRUCTURAL ANALYSIS. THE SBA-PROVIDED ANTENNA RAD CENTER SHALL SUPERSEDE ANY CONFLICTING INFORMATION DERIVED FROM THE T-MOBILE RFDS.

SPECIAL CONSTRUCTION NOTE:
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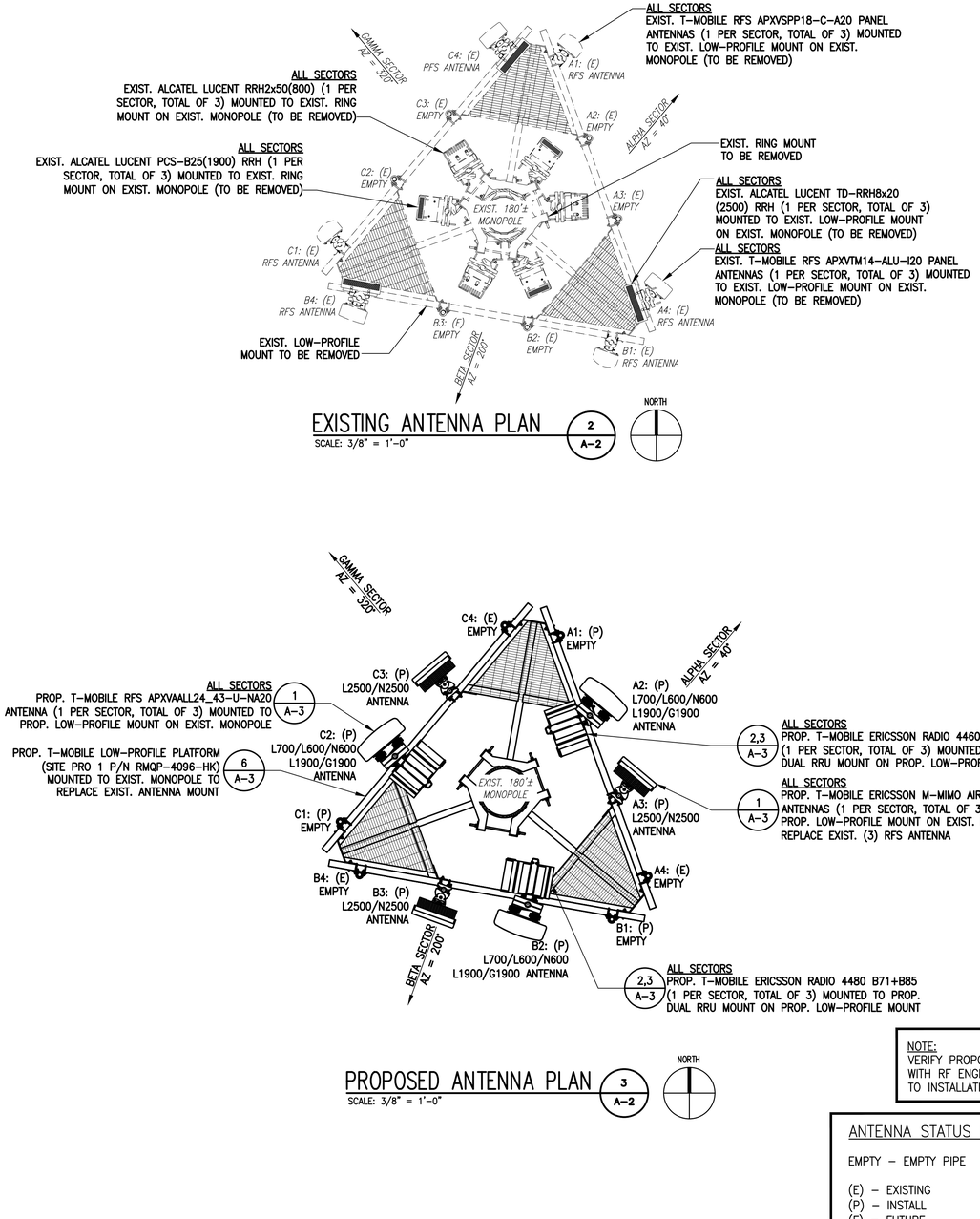
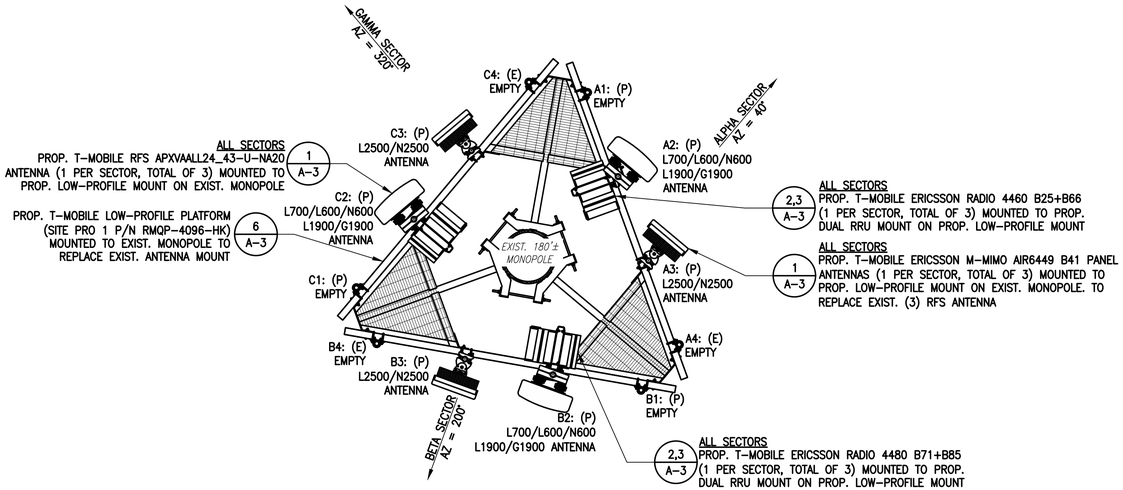


EXISTING ANTENNA PLAN 2 A-2
SCALE: 3/8" = 1'-0"



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

NOTE:
VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

ANTENNA STATUS LEGEND:

EMPTY – EMPTY PIPE

(E) – EXISTING
(P) – INSTALL
(F) – FUTURE

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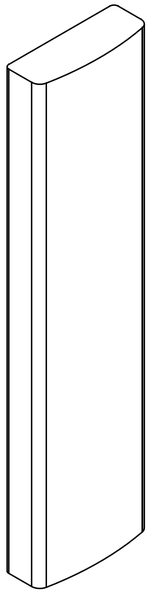
SHEET TITLE
TOWER ELEVATIONS & ANTENNA PLANS

SHEET NUMBER
A-2

1815.228



RFS APXVAALL24_43-U-NA20 ANTENNA

DIMENSIONS: 95.9"H x 24.0"W x 8.7"D
WEIGHT: 128.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

ERICSSON M-MIMO AIR6449 B41 ANTENNA

DIMENSIONS: 33.1"H x 20.5"W x 8.3"D
WEIGHT: 103.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

ANTENNA DETAILS
SCALE: N.T.S.
1 / A-3

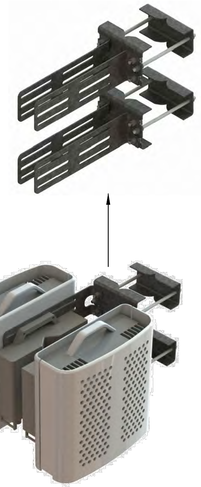
ERICSSON RADIO 4460 B25+B66

DIMENSIONS: 17.0"H x 15.1"W x 11.9"D
WEIGHT: 104.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

ERICSSON RADIO 4480 B71+B85

DIMENSIONS: 19.2"H x 15.1"W x 7.5"D
WEIGHT: 92.6 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

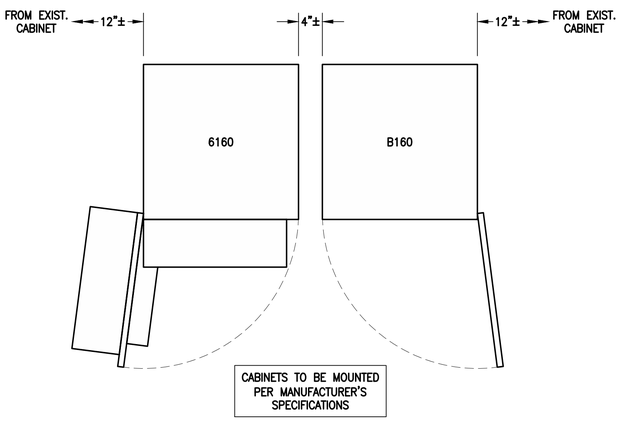
RADIO DETAILS
SCALE: N.T.S.
2 / A-3



COMMSCOPE RR-FA2 FAST ACCESS DUAL RRU MOUNT KIT

DIMENSIONS: 16.4"H x 8.6"W x 18"L
WEIGHT: 36.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

RADIO MOUNT DETAIL
SCALE: N.T.S.
3 / A-3



ERICSSON 6160 SITE SUPPORT CABINET

DIMENSIONS: 63.25"H x 26.0"W x 34.0"D
QUANTITY: TOTAL OF 1

ERICSSON B160 BATTERY CABINET

DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
QUANTITY: TOTAL OF 1

EQUIPMENT DETAIL
SCALE: N.T.S.
4 / A-3

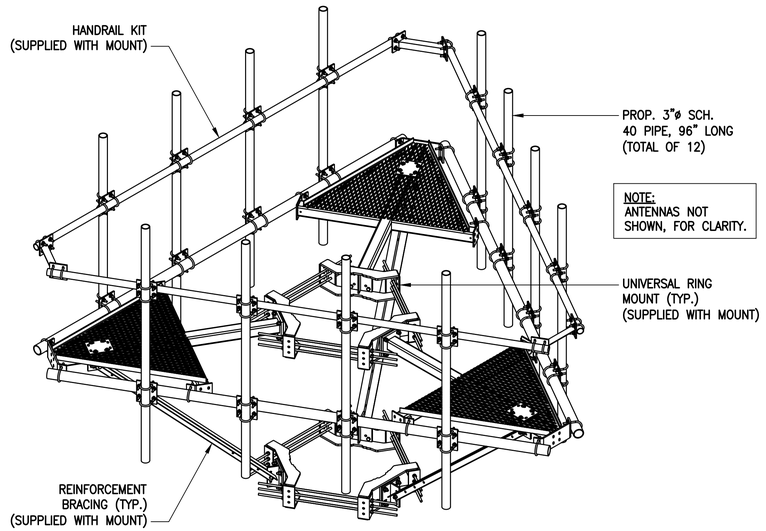
PURCELL SITE SUPPORT CABINET RAC24

DIMENSIONS: 24.0"H x 15.7"W x 20.0"D
QUANTITY: TOTAL OF 1

SLACKBOX

MODEL: 32FH91 OR EQUAL
QUANTITY: TOTAL OF 1

SSC DETAILS
SCALE: N.T.S.
5 / A-3



SITE-PRO 1 12'-6" LOW-PROFILE CO-LOCATION PLATFORM W/HANDRAIL KIT
PART NUMBERS: RMQP-4096-HK
(TOTAL OF 1 REQUIRED)

TYPICAL SITE PRO 1 12'-6" PLATFORM MOUNT
SCALE: N.T.S.
6 / A-3

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WINDHAM, CT 06280

SHEET TITLE
SITE DETAILS

SHEET NUMBER
A-3

1815.228

FINAL ANTENNA CONFIGURATION

SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	SIGNAL CABLES
ALPHA	A1 EMPTY PIPE	–	–	–	–	–	–	(3) 2" (6x24) HCS FIBER CABLES
	A2 RFS APXVAALL24_43-U-NA20	167'± AGL	40°	0°	2°	L700/L600/N600	RADIO 4480 B71+B85	
						L1900/G1900	RADIO 4460 B25+B66	
	A3 ERICSSON M-MIMO AIR6449 B41	167'± AGL	40°	0°	2°	L2500/N2500	–	
	A4 EMPTY PIPE	–	–	–	–	–	–	
BETA	B1 EMPTY PIPE	–	–	–	–	–	–	
	B2 RFS APXVAALL24_43-U-NA20	167'± AGL	200°	0°	2°	L700/L600/N600	RADIO 4480 B71+B85	
						L1900/G1900	RADIO 4460 B25+B66	
	B3 ERICSSON M-MIMO AIR6449 B41	167'± AGL	200°	0°	2°	L2500/N2500	–	
	B4 EMPTY PIPE	–	–	–	–	–	–	
GAMMA	C1 EMPTY PIPE	–	–	–	–	–	–	
	C2 RFS APXVAALL24_43-U-NA20	167'± AGL	320°	0°	2°	L700/L600/N600	RADIO 4480 B71+B85	
						L1900/G1900	RADIO 4460 B25+B66	
	C3 ERICSSON M-MIMO AIR6449 B41	167'± AGL	320°	0°	2°	L2500/N2500	–	
	C4 EMPTY PIPE	–	–	–	–	–	–	

CABLE NOTE: ALL SPRINT CABLES & ASSOCIATED HARDWARE TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV1 – 07/20/21

FEEDLINE SCHEDULE

SCHEDULE	FEEDLINES	LOCATION
A	*EXISTING TO REMAIN:* *(1) ½" COAX CABLE FOR GPS ANTENNA*	ROUTED PER STRUCTURAL ANALYSIS
	EXISTING TO BE REMOVED: *SPRINT CABLES AND ASSOCIATED HARDWARE TO BE REMOVED*	
B	PROPOSED: (3) 2" (6x24) HCS FIBER CABLES	

NOTE:
EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.

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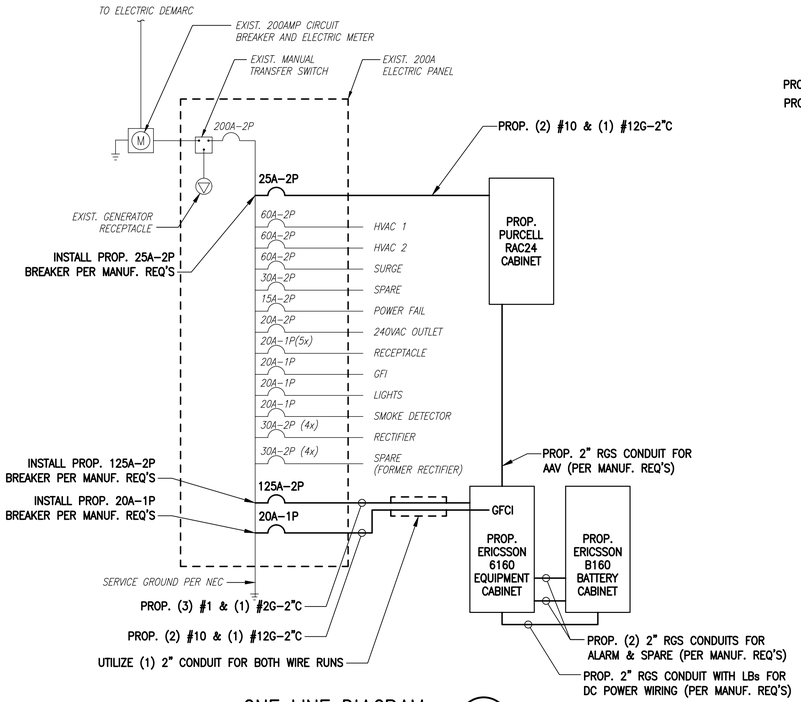
SHEET TITLE
ANTENNA & FEEDLINE CHARTS

SHEET NUMBER
A-4

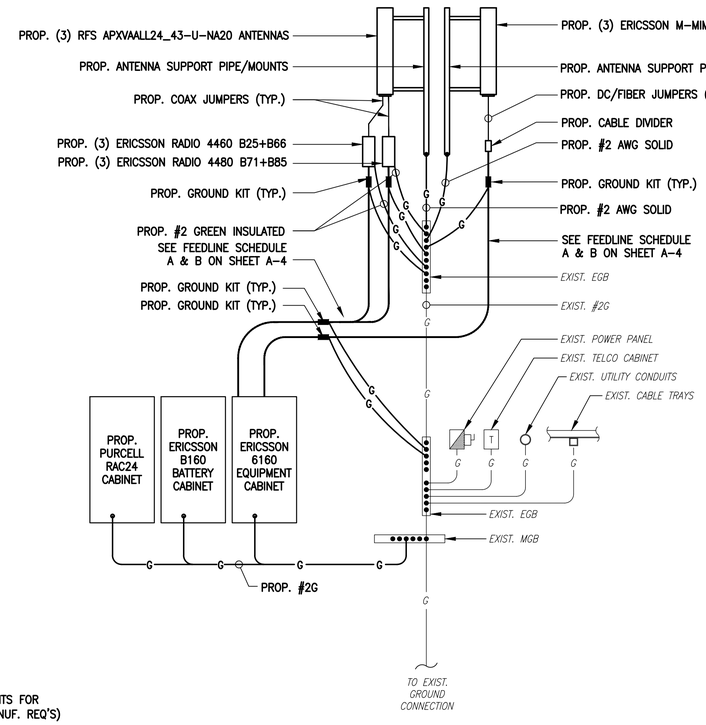
1815.228



ONE LINE DIAGRAM

SCALE: NOT TO SCALE

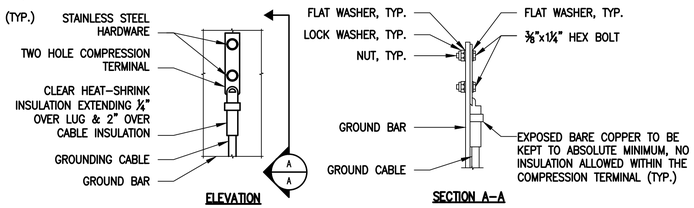
1 / E-1



GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

2 / E-1



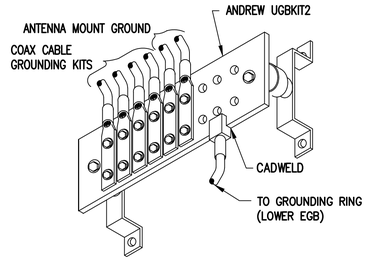
NOTES:

1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELL DOWNLEADS FROM UPPER EGB, LOWER EGB AND MGB.

TYPICAL GROUND BAR CONNECTIONS DETAIL

SCALE: NOT TO SCALE

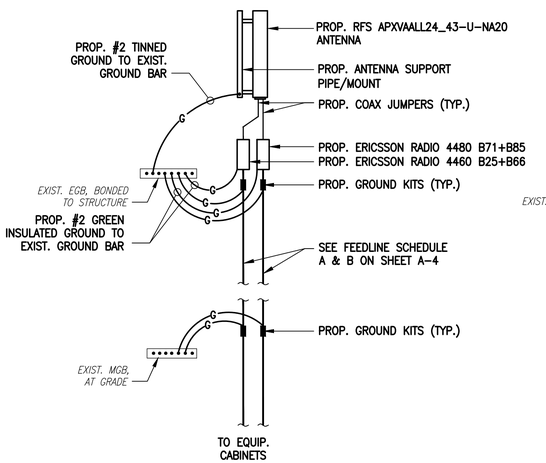
3 / E-1



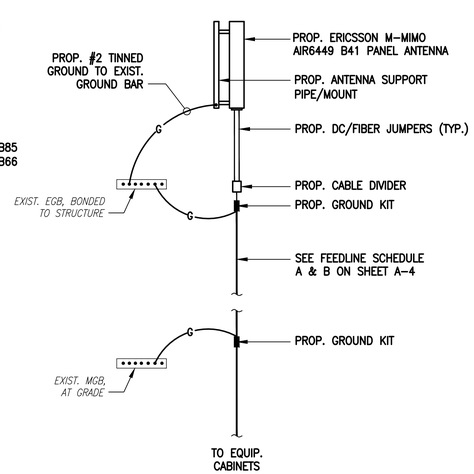
GROUND BAR (EGB)

SCALE: NOT TO SCALE

5 / E-1



L700/L600/N600/L1900/G1900 ANTENNA



L2500/N2500 ANTENNA

COAX CABLE CONNECTION AND GROUNDING DETAIL

SCALE: NOT TO SCALE

4 / E-1

ELECTRICAL AND GROUNDING NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THININSULATION.
8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
12. PPC SUPPLIED BY PROJECT OWNER.
13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".
14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 8" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
20. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXIST. TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
21. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMNS MINIMUM RESISTANCE REQUIRED.
22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.

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SHEET TITLE
ELECTRIC & GROUNDING DETAILS

SHEET NUMBER
E-1

1815.228

EXHIBIT 7

Structural Ananlysis

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 180 ft Valmont Monopole
Customer Name: SBA Communications Corp
Customer Site Number: CT02721-S
Customer Site Name: South Windham
Carrier Name: T-Mobile Sprint (App#: 154214-3)
Carrier Site ID / Name: CT72XC043 / _
Site Location: 193 Windham Center Road
Windham, Connecticut
Windham County
Latitude: 41.690055
Longitude: -72.162536

Analysis Result:

Max Structural Usage: 99.8% [Pass]
Max Foundation Usage: 86.0% [Pass]
Additional Usage Caused by New Mount/Mount Modification: +2.8%

Report Prepared By: Mohammed Al Rubaye

Introduction

The purpose of this report is to summarize the analysis results on the 180 ft Valmont Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Valmont#: 11872-00. dated 06/23/2000.
Foundation Drawing	Valmont#: 11872-00. dated 06/23/2000.
Geotechnical Report	FDH Project Number 1202237EG1 Revision 1, dated 08/16/2012
Modification Drawings	N/A
Mount Analysis	TES Project# 120085. Dated 12/02/2021

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA-222-G-2**.** In accordance with this standard, the structure was analyzed using **TESPoles,** a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed V_{ult} = 130.0 mph (3-Sec. Gust)/ Nominal Design Wind Speed V_{asd} = 101.0 mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	S_S = 0.173, S_1 = 0.062

This structural analysis is based upon the tower being classified as a Structure Class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	178.0	6	JMA Wireless MX06FR0660-03 - Panel	Modified 13.83-Ft Platform w/ P2.5 STD SUPPORT RAIL & Kicker kit (3) JMA 919003314 Side by side Mounting Kit.	(10) 1-5/8" Coax (2) 1- 5/8" Hybrid (1) 1/2" Coax	Verizon
2		3	Samsung MT6407-77A - Panel			
3		6	Antel - LPA-80080-4CF - Panel			
4		3	Samsung B5/B13 RRH-BR04C (RFV01U-D2A)			
5		3	Samsung B2/B66A RRH-BR049 (RFV01U-D1A)			
6		1	Raycap RVZDC-6627-PF-48			
-	167.0	3	RFS - APX16DWV-16DWVS-E-A20 - Panel	(1) Platform w/Rail [SitePro1 RMQP-4096-HK]	(3) 1.99" Hybrid - 6x24	T-Mobile Sprint
-		3	RFS - APXVAALL24_43-U-NA20 - Panel			
-		3	Ericsson - AIR6449 B41 - Panel			
-		4	RFS ACU-A20-N RET			
-		3	Ericsson 4424 B25			
-		3	Ericsson 4449 B71 + B85			
-		3	Ericsson 4415 B66A			
-		3	Alcatel Lucent 800 MHz Filter			
14	147.0	3	Power wave- 7770- Panel	(1) Platform w/Rail [SitePro1 RMQP-4096-HK]	(12) 1-5/8" (1)3" conduit housing (2) 3/4"DC & (1) 1/2" Fiber (2)3" conduit housing (4) 3/4"DC & (1) 1/2" Fiber	AT&T
15		6	Cci- DMP65R-BU8DA- Panel			
16		3	Cci - DTMABP7819VG12A- Panel			
17		4	TT08-19DB111-001 TMA			
18		3	RRUS 4478 B14			
19		3	RRUS 8843 B2 B66A			
20		3	RRUS 4449 B5/B12			
21		3	DC6-48-60-18-8F			
22	122.0	1	Nokia CS72188.01	Direct Mount	-	
23	75.0	1	Lucent KS-24019 - GPS	(2) Side Arms	-	Verizon

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
7	167.0	3	Ericsson AIR6449 B41 - Panel	Platform w/ Handrail SitePro1 RMQP-4096-HK	(3) 1.9" Hybrid	T-Mobile Sprint
8		3	RFS APXVAALL24_43-U-NA20 - Panel			
9		4	RFS ACU-A20-N RET			
10		3	Alcatel Lucent TD-RRH8x20-25			
11		3	Ericsson 4480 B71 + B85			
12		3	Ericsson 4460 B25 + B66			
13		3	Alcatel Lucent 800 MHz Filter			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	**99.8%**	**91.4%**	**67.8%**
Pass/Fail	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)
Original Design Reactions	5047.0	40.1
Analysis Reactions	6488.6	50.9
Factored Reactions*	6813.5	54.1
% of Design Reactions	95.2%	94.0%

* Per section 15.5.1 of the TIA-222-G standard, factored reactions were obtained by multiplying a 1.35 factor to the original design reactions.

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.8529 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC.** Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.

2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.

3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.

4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.

6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 99.78% at 98.5ft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham	**Exposure:**	C	
Height:	180.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

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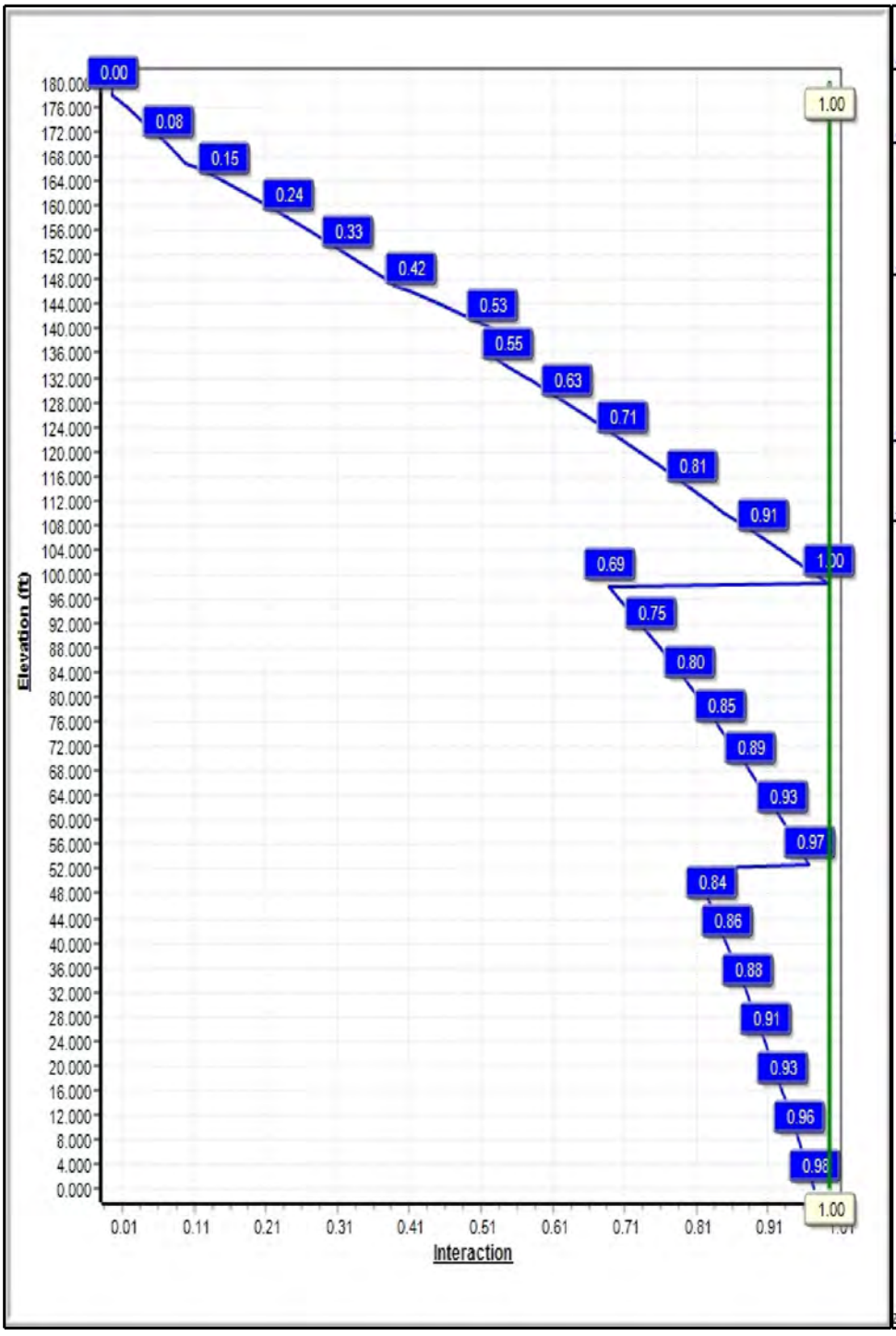
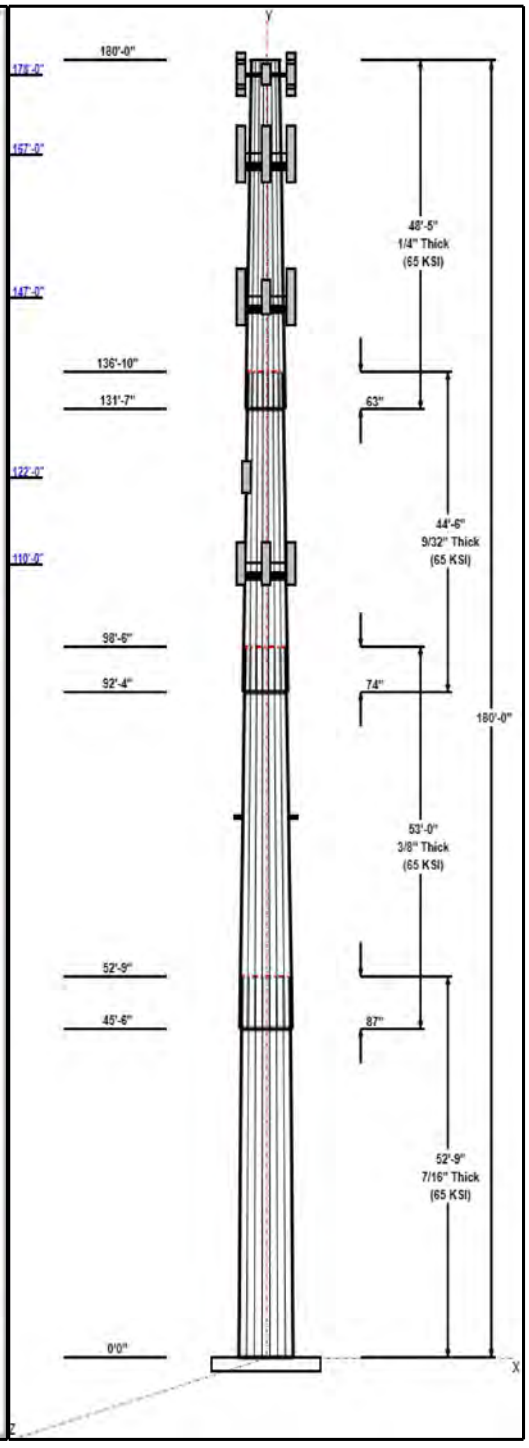
Dead Load Factor:	1.20	**Iterations:**	30
Wind Load Factor:	1.60		

Load Case : 1.2D + 1.6W 101 mph Wind





Structure: CT02721-S-SBA

Type: Tapered
Site Name: South Windham
Height: 180.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 16 Sided
Taper: 0.19501

12/16/2021

Tower Engineering Solutions

Shaft Properties

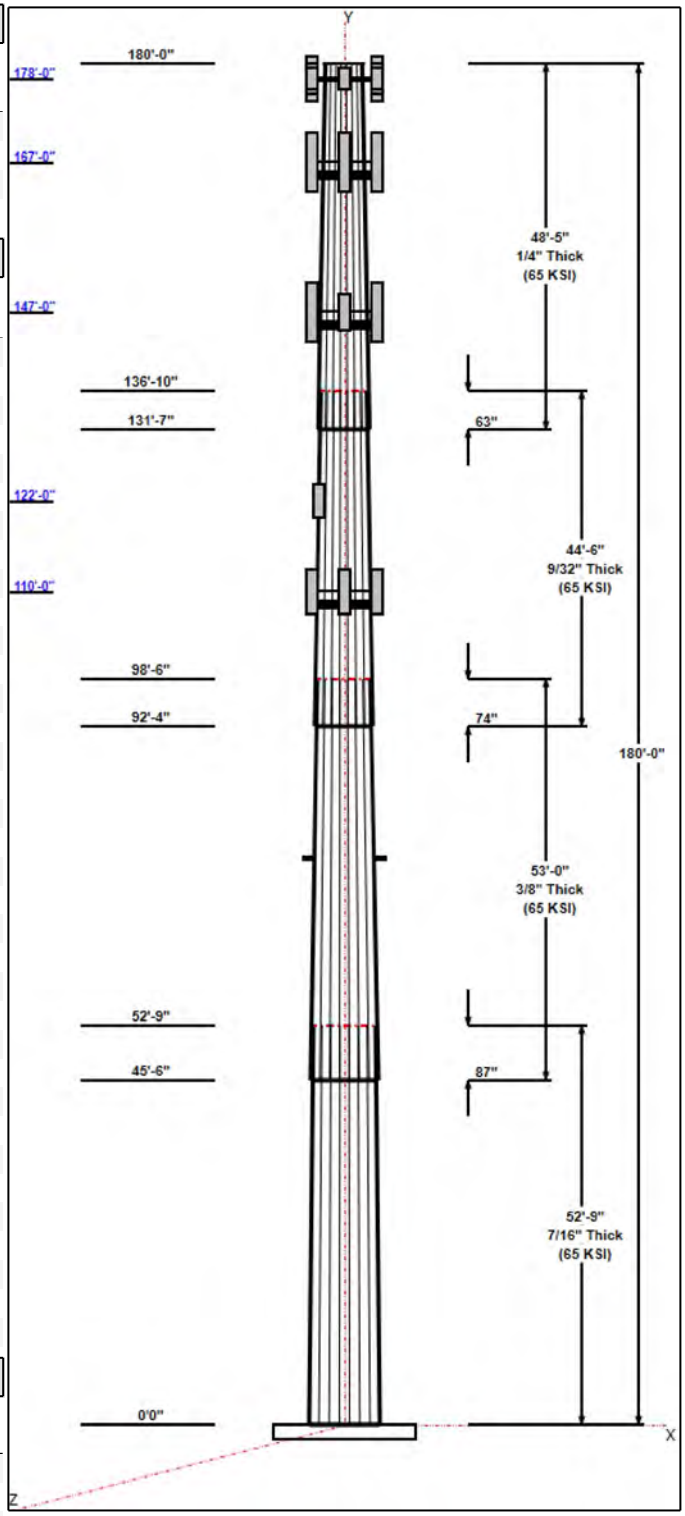
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	52.75	49.71	60.00	0.438		0.19501	65
2	53.00	41.54	51.88	0.375	Slip	0.19501	65
3	44.50	34.63	43.31	0.281	Slip	0.19501	65
4	48.42	26.71	36.15	0.250	Slip	0.19501	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
178.00	178.00	1	MS-HR35	Verizon
178.00	178.00	1	MS-KI22-5 (Kickers w/o	Verizon
178.00	178.00	6	LPA-80080-4CF	Verizon
178.00	178.00	1	Low Profile Platform	Verizon
178.00	178.00	6	JMA Wireless	Verizon
178.00	178.00	3	Samsung MT6407-77A	Verizon
178.00	178.00	3	Samsung B5/B13	Verizon
178.00	178.00	3	Samsung B2/B66A	Verizon
178.00	178.00	1	Raycap	Verizon
178.00	178.00	3	JMA 919003314 SBS	Verizon
167.00	167.00	3	AIR6449 B41	T-Mobile Sprint
167.00	167.00	3	APXVAALL24_43-U-NA20	T-Mobile Sprint
167.00	167.00	4	RFS ACU-A20-N RET	T-Mobile Sprint
167.00	167.00	3	Alcatel Lucent	T-Mobile Sprint
167.00	167.00	3	Ericsson 4480 B71 + B85	T-Mobile Sprint
167.00	167.00	3	Ericsson 4460 B25 + B66	T-Mobile Sprint
167.00	167.00	3	Alcatel Lucent 800 MHz	T-Mobile Sprint
167.00	167.00	1	RMQP-4096-HK Plat. +	T-Mobile Sprint
147.00	147.00	1	RMQP-496-HK	AT&T
147.00	147.00	3	7770	AT&T
147.00	147.00	6	Cci DMP65R-BU8DA	AT&T
147.00	147.00	3	Cci DTMABP7819VG12A	AT&T
147.00	147.00	3	Powerwave	AT&T
147.00	147.00	3	Ericsson RRUS 4478 B14	AT&T
147.00	147.00	3	Ericsson RRUS 8843 B2	AT&T
147.00	147.00	3	Ericsson RRUS 4449	AT&T
147.00	147.00	3	Raycap DC6-48-60-18-8F	AT&T
122.00	122.00	1	Nokia CS72188.01	AT&T
110.00	110.00	3	JMA Wireless	Dish Wireless
110.00	110.00	3	Fujitsu TA08025-B605	Dish Wireless
110.00	110.00	3	Fujitsu TA08025-B604	Dish Wireless
110.00	110.00	1	Raycap	Dish Wireless
110.00	110.00	1	MC-PK8-C	Dish Wireless
75.00	75.00	1	Lucent KS-24019	Verizon
75.00	75.00	2	Side Arms	Verizon

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	178.00	Inside	1 5/8" Coax	Verizon
0.00	178.00	Inside	1-5/8" Hybrid	Verizon
0.00	178.00	Inside	1/2" Coax	Verizon
0.00	167.00	Inside	1.9" Hybrid	T-Mobile Sprint
0.00	147.00	Inside	1 5/8" Coax	AT&T
0.00	147.00	Inside	3" conduit	AT&T
0.00	110.00	Outside	1.6" Hybrid	Dish Wireless



Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
20	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
3.0000	74.6	50.0	Polygon

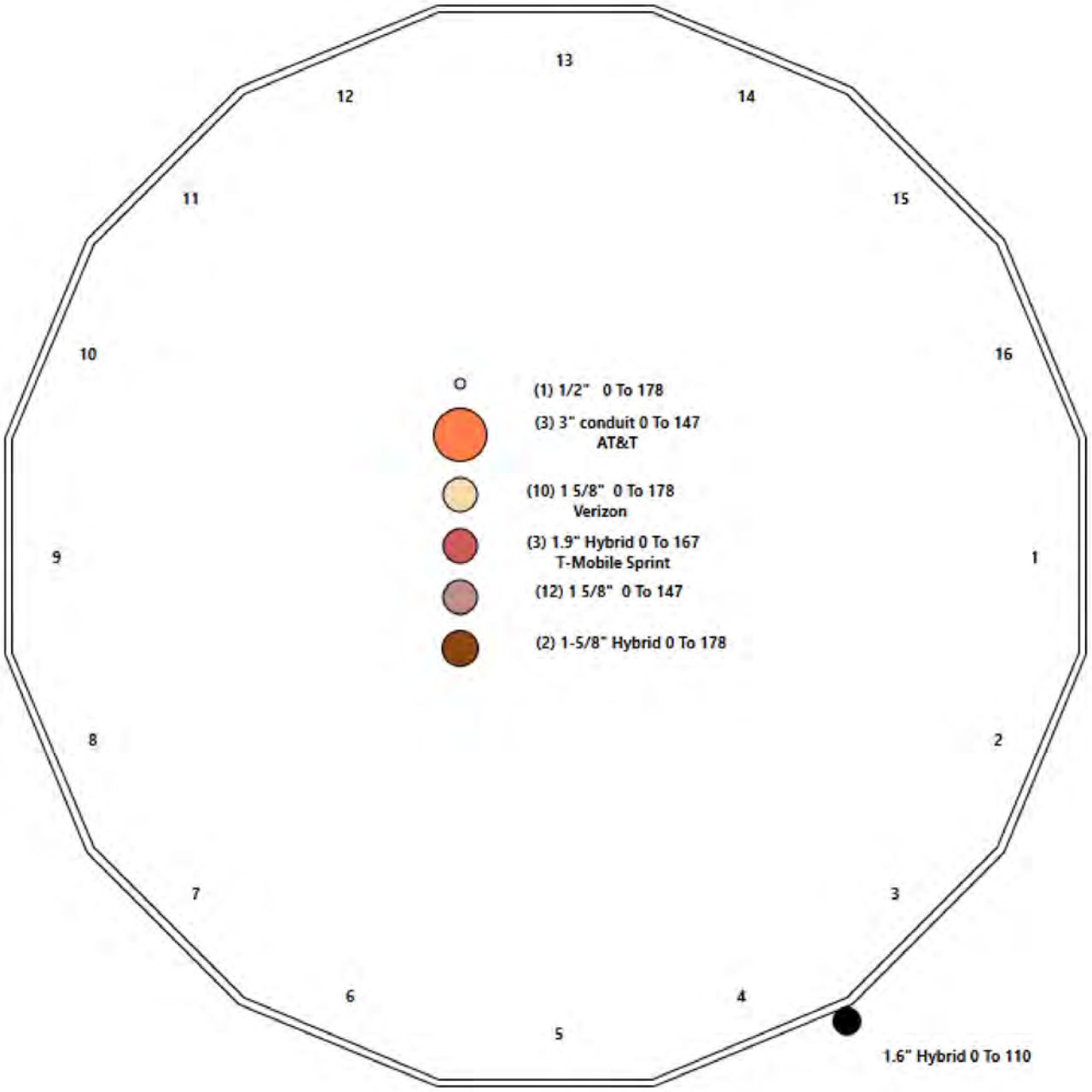
Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 101 mph Wind	6488.6	50.9	63.3
0.9D + 1.6W 101 mph Wind	6398.2	50.8	47.5
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1777.3	13.2	111.1
1.2D + 1.0E	327.5	2.3	63.4
0.9D + 1.0E	322.4	2.3	47.5
1.0D + 1.0W 60 mph Wind	1422.0	11.2	52.8

Structure: CT02721-S-SBA - Coax Line Placement

Type: Monopole
Site Name: South Windham
Height: 180.00 (ft)

12/16/2021



Shaft Properties

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 5

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Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	16	52.750	0.4375	65		0.00	13,633
2	16	53.000	0.3750	65	Slip	87.00	9,996
3	16	44.500	0.2813	65	Slip	74.00	5,256
4	16	48.417	0.2500	65	Slip	63.00	4,097
					Total Shaft Weight:		**32,982**

	Bottom						Top						
Sec. No.	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (in^4)**	**W/t Ratio**	**D/t Ratio**	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (in^4)**	**W/t Ratio**	**D/t Ratio**	**Taper**
1	60.00	0.00	83.13	37256.48	25.69	137.14	49.71	52.75	68.77	21095.3	21.01	113.6	0.195007
2	51.88	45.50	61.61	20644.91	25.93	138.34	41.54	98.50	49.25	10543.3	20.44	110.7	0.195007
3	43.31	92.33	38.60	9027.72	29.04	153.98	34.63	136.83	30.82	4592.96	22.90	123.1	0.195007
4	36.15	131.5	28.63	4662.62	27.17	144.61	26.71	180.00	21.10	1866.70	19.66	106.8	0.195007

Load Summary

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 6	

Discrete Appurtenances

				No Ice			Ice				
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	178.00	MS-HR35	1	430.00	8.75	1.00	1122.15	20.349	1.00	0.00	0.00
2	178.00	MS-KI22-5 (Kickers w/o Collar)	1	146.00	5.33	1.00	422.48	12.900	1.00	0.00	0.00
3	178.00	LPA-80080-4CF	6	12.00	2.61	1.70	168.82	3.828	1.70	0.00	0.00
4	178.00	Low Profile Platform	1	1500.00	24.92	1.00	3275.34	52.055	1.00	0.00	0.00
5	178.00	JMA Wireless MX06FR0660-03	6	46.00	9.87	0.87	430.98	11.772	0.87	0.00	0.00
6	178.00	Samsung MT6407-77A	3	79.40	4.69	0.70	253.93	5.997	0.70	0.00	0.00
7	178.00	Samsung B5/B13 RRH-BR04C	3	70.30	1.87	0.67	173.22	2.674	0.67	0.00	0.00
8	178.00	Samsung B2/B66A RRH-BR049	3	84.40	1.87	0.67	197.44	2.674	0.67	0.00	0.00
9	178.00	Raycap RVZDC-6627-PF-48	1	32.00	4.06	1.00	186.53	5.175	1.00	0.00	0.00
10	178.00	JMA 919003314 SBS	3	25.35	0.00	1.00	49.35	0.000	1.00	0.00	0.00
11	167.00	AIR6449 B41	3	103.00	5.65	0.71	287.80	6.931	0.71	0.00	0.00
12	167.00	APXVAALL24_43-U-NA20	3	122.80	20.24	0.73	724.50	22.834	0.73	0.00	0.00
13	167.00	RFS ACU-A20-N RET	4	1.00	0.14	0.67	6.79	0.540	0.67	0.00	0.00
14	167.00	Alcatel Lucent TD-RRH8x20-25	3	70.00	4.05	0.67	229.90	5.175	0.67	0.00	0.00
15	167.00	Ericsson 4480 B71 + B85	3	93.00	2.42	0.67	189.95	3.192	0.67	0.00	0.00
16	167.00	Ericsson 4460 B25 + B66	3	109.00	2.14	0.67	205.91	2.822	0.67	0.00	0.00
17	167.00	Alcatel Lucent 800 MHz Filter	3	8.80	0.78	0.67	32.58	1.652	0.67	0.00	0.00
18	167.00	RMQP-4096-HK Plat. + HR/Kicker	1	2645.00	51.70	1.00	6377.74	03.259	1.00	0.00	0.00
19	147.00	RMQP-496-HK	1	2449.00	46.00	1.00	5861.32	88.730	1.00	0.00	0.00
20	147.00	7770	3	35.00	5.50	0.73	228.61	6.948	0.73	0.00	0.00
21	147.00	Cci DMP65R-BU8DA	6	95.70	17.87	0.73	624.19	20.260	0.73	0.00	0.00
22	147.00	Cci DTMABP7819VG12A	3	19.20	1.14	0.67	53.16	2.164	0.67	0.00	0.00
23	147.00	Powerwave TT08-19DB111-001 TMA	3	22.00	0.92	0.90	57.42	1.904	0.90	0.00	0.00
24	147.00	Ericsson RRUS 4478 B14	3	59.40	1.65	0.67	114.58	2.340	0.67	0.00	0.00
25	147.00	Ericsson RRUS 8843 B2 B66A	3	75.00	1.65	0.67	182.64	2.392	0.67	0.00	0.00
26	147.00	Ericsson RRUS 4449 B5/B12	3	71.00	1.97	0.67	142.03	2.698	0.67	0.00	0.00
27	147.00	Raycap DC6-48-60-18-8F	3	31.80	0.92	1.00	114.07	1.503	1.00	0.00	0.00
28	122.00	Nokia CS72188.01	1	16.50	3.15	1.00	94.61	5.419	1.00	0.00	0.00
29	110.00	JMA Wireless MX08FRO665-21	3	64.50	12.49	0.74	440.48	14.383	0.74	0.00	0.00
30	110.00	Fujitsu TA08025-B605	3	75.00	1.96	0.67	142.61	2.685	0.67	0.00	0.00
31	110.00	Fujitsu TA08025-B604	3	63.90	1.96	0.67	129.34	2.685	0.67	0.00	0.00
32	110.00	Raycap RDIDC-9181-PF-48	1	21.90	2.01	1.00	90.73	2.745	1.00	0.00	0.00
33	110.00	MC-PK8-C	1	1411.00	33.60	1.00	3957.45	79.079	1.00	0.00	0.00
34	75.00	Lucent KS-24019	1	4.00	0.91	1.00	35.38	2.160	1.00	0.00	0.00
35	75.00	Side Arms	2	40.00	2.63	1.00	139.87	10.055	1.00	0.00	0.00
		Totals:	**94**	**13,510.15**			**40,923.05**				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	178.00	(10) 1 5/8" Coax	0.00	Inside
0.00	178.00	(2) 1-5/8" Hybrid	0.00	Inside
0.00	178.00	(1) 1/2" Coax	0.00	Inside
0.00	167.00	(3) 1.9" Hybrid	0.00	Inside
0.00	147.00	(12) 1 5/8" Coax	0.00	Inside
0.00	147.00	(3) 3" conduit	0.00	Inside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
0.00	110.00	(1) 1.6" Hybrid			1.60	Outside					

Shaft Section Properties

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 8	

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
0.00		0.4375	60.000	83.127	37256.5	25.69	137.14	73.5	1218.	0.0
2.00		0.4375	59.610	82.583	36529.4	25.51	136.25	73.7	1202.	563.9
4.00		0.4375	59.220	82.038	35811.8	25.33	135.36	73.9	1186.	560.2
6.00		0.4375	58.830	81.494	35103.7	25.16	134.47	74.1	1170.	556.5
8.00		0.4375	58.440	80.950	34405.0	24.98	133.58	74.3	1154.	552.8
10.00		0.4375	58.050	80.405	33715.7	24.80	132.69	74.5	1139.	549.1
12.00		0.4375	57.660	79.861	33035.6	24.62	131.79	74.7	1123.	545.4
14.00		0.4375	57.270	79.317	32364.7	24.45	130.90	74.9	1108.	541.6
16.00		0.4375	56.880	78.772	31702.9	24.27	130.01	75.1	1093.	537.9
18.00		0.4375	56.490	78.228	31050.2	24.09	129.12	75.3	1078.	534.2
20.00		0.4375	56.100	77.684	30406.6	23.91	128.23	75.5	1063.	530.5
22.00		0.4375	55.710	77.139	29771.9	23.74	127.34	75.7	1048.	526.8
24.00		0.4375	55.320	76.595	29146.1	23.56	126.45	75.9	1033.	523.1
26.00		0.4375	54.930	76.051	28529.1	23.38	125.55	76.1	1018.	519.4
28.00		0.4375	54.540	75.507	27921.0	23.21	124.66	76.3	1004.	515.7
30.00		0.4375	54.150	74.962	27321.5	23.03	123.77	76.5	989.7	512.0
32.00		0.4375	53.760	74.418	26730.6	22.85	122.88	76.7	975.3	508.3
34.00		0.4375	53.370	73.874	26148.3	22.67	121.99	76.9	961.1	504.6
36.00		0.4375	52.980	73.329	25574.6	22.50	121.10	77.1	946.9	500.9
38.00		0.4375	52.590	72.785	25009.3	22.32	120.21	77.3	932.8	497.2
40.00		0.4375	52.200	72.241	24452.4	22.14	119.31	77.5	918.9	493.5
42.00		0.4375	51.810	71.696	23903.8	21.96	118.42	77.7	905.0	489.8
44.00		0.4375	51.420	71.152	23363.5	21.79	117.53	77.9	891.3	486.1
45.50	Bot - Section 2	0.4375	51.127	70.744	22963.7	21.65	116.86	78.1	881.0	362.1
46.00		0.4375	51.030	70.608	22831.4	21.61	116.64	78.1	877.6	225.0
48.00		0.4375	50.640	70.063	22307.5	21.43	115.75	78.3	864.1	895.6
50.00		0.4375	50.250	69.519	21791.6	21.26	114.86	78.5	850.7	888.7
52.00		0.4375	49.860	68.975	21283.7	21.08	113.96	78.7	837.3	881.8
52.75	Top - Section 1	0.3750	50.463	59.918	18991.0	25.18	134.57	0.0	0.0	328.9
54.00		0.3750	50.220	59.627	18715.0	25.05	133.92	74.2	731.0	254.2
56.00		0.3750	49.830	59.160	18279.2	24.84	132.88	74.5	719.6	404.2
58.00		0.3750	49.440	58.694	17850.1	24.63	131.84	74.7	708.2	401.0
60.00		0.3750	49.050	58.227	17427.8	24.43	130.80	74.9	697.0	397.9
62.00		0.3750	48.660	57.760	17012.2	24.22	129.76	75.2	685.8	394.7
64.00		0.3750	48.270	57.294	16603.3	24.01	128.72	75.4	674.7	391.5
66.00		0.3750	47.880	56.827	16201.0	23.81	127.68	75.6	663.7	388.3
68.00		0.3750	47.490	56.361	15805.2	23.60	126.64	75.9	652.8	385.2
70.00		0.3750	47.099	55.894	15415.9	23.39	125.60	76.1	642.0	382.0
72.00		0.3750	46.709	55.428	15033.1	23.18	124.56	76.3	631.3	378.8
74.00		0.3750	46.319	54.961	14656.7	22.98	123.52	76.6	620.7	375.6
75.00		0.3750	46.124	54.728	14470.9	22.87	123.00	76.7	615.4	186.6
76.00		0.3750	45.929	54.495	14286.6	22.77	122.48	76.8	610.2	185.8
78.00		0.3750	45.539	54.028	13922.8	22.56	121.44	77.0	599.7	369.3
80.00		0.3750	45.149	53.561	13565.2	22.36	120.40	77.3	589.4	366.1
82.00		0.3750	44.759	53.095	13213.8	22.15	119.36	77.5	579.1	362.9
84.00		0.3750	44.369	52.628	12868.5	21.94	118.32	77.7	568.9	359.8
86.00		0.3750	43.979	52.162	12529.3	21.74	117.28	78.0	558.8	356.6
88.00		0.3750	43.589	51.695	12196.1	21.53	116.24	78.2	548.8	353.4
90.00		0.3750	43.199	51.229	11868.9	21.32	115.20	78.4	538.9	350.2
92.00		0.3750	42.809	50.762	11547.5	21.12	114.16	78.7	529.1	347.1

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
92.33	Bot - Section 3	0.3750	42.744	50.684	11494.5	21.08	113.98	78.7	527.5	57.5
94.00		0.3750	42.419	50.296	11232.0	20.91	113.12	78.9	519.4	504.4
96.00		0.3750	42.029	49.829	10922.3	20.70	112.08	79.1	509.8	600.2
98.00		0.3750	41.639	49.362	10618.4	20.50	111.04	79.4	500.2	594.7
98.50	Top - Section 2	0.2813	42.104	37.523	8291.7	28.19	149.70	0.0	0.0	147.8
100.00		0.2813	41.812	37.261	8119.0	27.98	148.66	70.9	380.9	190.9
102.00		0.2813	41.422	36.911	7892.4	27.70	147.28	71.2	373.8	252.4
104.00		0.2813	41.032	36.561	7670.0	27.43	145.89	71.5	366.7	250.0
106.00		0.2813	40.642	36.211	7451.9	27.15	144.50	71.8	359.7	247.6
108.00		0.2813	40.252	35.861	7237.9	26.88	143.12	72.2	352.7	245.2
110.00		0.2813	39.862	35.511	7028.1	26.60	141.73	72.5	345.9	242.9
112.00		0.2813	39.472	35.161	6822.4	26.32	140.34	72.8	339.0	240.5
114.00		0.2813	39.082	34.811	6620.7	26.05	138.96	73.1	332.3	238.1
116.00		0.2813	38.692	34.461	6423.1	25.77	137.57	73.4	325.6	235.7
118.00		0.2813	38.302	34.111	6229.4	25.50	136.18	73.7	319.0	233.3
120.00		0.2813	37.912	33.762	6039.7	25.22	134.80	74.0	312.5	231.0
122.00		0.2813	37.522	33.412	5853.8	24.95	133.41	74.3	306.0	228.6
124.00		0.2813	37.132	33.062	5671.8	24.67	132.02	74.7	299.6	226.2
126.00		0.2813	36.742	32.712	5493.6	24.39	130.64	75.0	293.3	223.8
128.00		0.2813	36.352	32.362	5319.2	24.12	129.25	75.3	287.0	221.4
130.00		0.2813	35.962	32.012	5148.5	23.84	127.86	75.6	280.8	219.0
131.58	Bot - Section 4	0.2813	35.653	31.735	5016.0	23.62	126.77	75.8	276.0	171.7
132.00		0.2813	35.572	31.662	4981.5	23.57	126.48	75.9	274.7	85.5
134.00		0.2813	35.182	31.312	4818.2	23.29	125.09	76.2	268.6	407.6
136.00		0.2813	34.792	30.962	4658.5	23.01	123.70	76.5	262.6	403.1
136.83	Top - Section 3	0.2500	35.129	27.816	4275.0	26.36	140.52	0.0	0.0	166.7
138.00		0.2500	34.902	27.635	4191.9	26.18	139.61	73.0	235.6	110.1
140.00		0.2500	34.511	27.324	4051.9	25.87	138.05	73.3	230.3	187.0
142.00		0.2500	34.121	27.013	3915.1	25.56	136.49	73.7	225.1	184.9
144.00		0.2500	33.731	26.701	3781.4	25.25	134.93	74.0	219.9	182.8
146.00		0.2500	33.341	26.390	3650.8	24.94	133.37	74.4	214.8	180.7
147.00		0.2500	33.146	26.235	3586.7	24.78	132.59	74.5	212.3	89.5
148.00		0.2500	32.951	26.079	3523.3	24.63	131.81	74.7	209.7	89.0
150.00		0.2500	32.561	25.768	3398.7	24.32	130.25	75.1	204.7	176.4
152.00		0.2500	32.171	25.457	3277.1	24.01	128.69	75.4	199.8	174.3
154.00		0.2500	31.781	25.146	3158.5	23.70	127.13	75.8	194.9	172.2
156.00		0.2500	31.391	24.835	3042.7	23.39	125.57	76.1	190.1	170.1
158.00		0.2500	31.001	24.524	2929.8	23.07	124.01	76.5	185.4	168.0
160.00		0.2500	30.611	24.213	2819.7	22.76	122.45	76.8	180.7	165.8
162.00		0.2500	30.221	23.902	2712.5	22.45	120.89	77.2	176.1	163.7
164.00		0.2500	29.831	23.591	2607.9	22.14	119.33	77.5	171.5	161.6
166.00		0.2500	29.441	23.280	2506.1	21.83	117.77	77.9	167.0	159.5
167.00		0.2500	29.246	23.125	2456.2	21.68	116.99	78.0	164.7	79.0
168.00		0.2500	29.051	22.969	2407.0	21.52	116.21	78.2	162.5	78.4
170.00		0.2500	28.661	22.658	2310.6	21.21	114.65	78.6	158.1	155.3
172.00		0.2500	28.271	22.347	2216.7	20.90	113.09	78.9	153.8	153.1
174.00		0.2500	27.881	22.036	2125.4	20.59	111.52	79.3	149.5	151.0
176.00		0.2500	27.491	21.725	2036.7	20.28	109.96	79.6	145.3	148.9
178.00		0.2500	27.101	21.414	1950.5	19.97	108.40	80.0	141.2	146.8
180.00		0.2500	26.711	21.103	1866.7	19.66	106.84	80.3	137.1	144.7
										32981.5

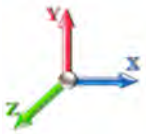
Wind Loading - Shaft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 10	

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	21.088	23.20	474.71	0.750	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	21.088	23.20	471.62	0.750	0.000	2.00	10.163	7.62	282.9	0.0	676.6
4.00		1.00	0.85	21.088	23.20	468.54	0.750	0.000	2.00	10.096	7.57	281.0	0.0	672.2
6.00		1.00	0.85	21.088	23.20	465.45	0.750	0.000	2.00	10.030	7.52	279.2	0.0	667.8
8.00		1.00	0.85	21.088	23.20	462.37	0.750	0.000	2.00	9.964	7.47	277.4	0.0	663.3
10.00		1.00	0.85	21.088	23.20	459.28	0.750	0.000	2.00	9.898	7.42	275.5	0.0	658.9
12.00		1.00	0.85	21.088	23.20	456.19	0.750	0.000	2.00	9.831	7.37	273.7	0.0	654.4
14.00		1.00	0.85	21.088	23.20	453.11	0.750	0.000	2.00	9.765	7.32	271.8	0.0	650.0
16.00		1.00	0.86	21.348	23.48	452.79	0.750	0.000	2.00	9.699	7.27	273.3	0.0	645.5
18.00		1.00	0.88	21.884	24.07	455.30	0.750	0.000	2.00	9.633	7.22	278.3	0.0	641.1
20.00		1.00	0.90	22.375	24.61	457.20	0.750	0.000	2.00	9.566	7.17	282.5	0.0	636.6
22.00		1.00	0.92	22.828	25.11	458.60	0.750	0.000	2.00	9.500	7.13	286.3	0.0	632.2
24.00		1.00	0.94	23.250	25.58	459.58	0.750	0.000	2.00	9.434	7.08	289.5	0.0	627.7
26.00		1.00	0.95	23.645	26.01	460.20	0.750	0.000	2.00	9.367	7.03	292.4	0.0	623.3
28.00		1.00	0.97	24.017	26.42	460.51	0.750	0.000	2.00	9.301	6.98	294.9	0.0	618.9
30.00		1.00	0.98	24.369	26.81	460.55	0.750	0.000	2.00	9.235	6.93	297.1	0.0	614.4
32.00		1.00	1.00	24.702	27.17	460.35	0.750	0.000	2.00	9.169	6.88	299.0	0.0	610.0
34.00		1.00	1.01	25.019	27.52	459.93	0.750	0.000	2.00	9.102	6.83	300.6	0.0	605.5
36.00		1.00	1.02	25.322	27.85	459.33	0.750	0.000	2.00	9.036	6.78	302.0	0.0	601.1
38.00		1.00	1.03	25.612	28.17	458.55	0.750	0.000	2.00	8.970	6.73	303.2	0.0	596.6
40.00		1.00	1.04	25.890	28.48	457.61	0.750	0.000	2.00	8.904	6.68	304.3	0.0	592.2
42.00		1.00	1.05	26.157	28.77	456.53	0.750	0.000	2.00	8.837	6.63	305.1	0.0	587.7
44.00		1.00	1.06	26.415	29.06	455.32	0.750	0.000	2.00	8.771	6.58	305.8	0.0	583.3
45.50	Bot - Section 2	1.00	1.07	26.602	29.26	454.33	0.750	0.000	1.50	6.535	4.90	229.5	0.0	434.6
46.00		1.00	1.07	26.663	29.33	453.98	0.750	0.000	0.50	2.202	1.65	77.5	0.0	270.0
48.00		1.00	1.08	26.903	29.59	452.54	0.750	0.000	2.00	8.766	6.57	311.3	0.0	1074.7
50.00		1.00	1.09	27.135	29.85	450.99	0.750	0.000	2.00	8.700	6.52	311.6	0.0	1066.4
52.00		1.00	1.10	27.360	30.10	449.34	0.750	0.000	2.00	8.633	6.47	311.8	0.0	1058.2
52.75	Top - Section 1	1.00	1.11	27.443	30.19	448.69	0.750	0.000	0.75	3.220	2.42	116.7	0.0	394.7
54.00		1.00	1.11	27.579	30.34	454.38	0.750	0.000	1.25	5.347	4.01	194.6	0.0	305.1
56.00		1.00	1.12	27.790	30.57	452.58	0.750	0.000	2.00	8.501	6.38	311.8	0.0	485.0
58.00		1.00	1.13	27.997	30.80	450.70	0.750	0.000	2.00	8.434	6.33	311.7	0.0	481.2
60.00		1.00	1.14	28.197	31.02	448.75	0.750	0.000	2.00	8.368	6.28	311.5	0.0	477.4
62.00		1.00	1.14	28.392	31.23	446.72	0.750	0.000	2.00	8.302	6.23	311.1	0.0	473.6
64.00		1.00	1.15	28.583	31.44	444.62	0.750	0.000	2.00	8.236	6.18	310.7	0.0	469.8
66.00		1.00	1.16	28.769	31.65	442.46	0.750	0.000	2.00	8.169	6.13	310.2	0.0	466.0
68.00		1.00	1.17	28.950	31.84	440.24	0.750	0.000	2.00	8.103	6.08	309.7	0.0	462.2
70.00		1.00	1.17	29.127	32.04	437.95	0.750	0.000	2.00	8.037	6.03	309.0	0.0	458.4
72.00		1.00	1.18	29.300	32.23	435.62	0.750	0.000	2.00	7.971	5.98	308.3	0.0	454.6
74.00		1.00	1.19	29.470	32.42	433.23	0.750	0.000	2.00	7.904	5.93	307.5	0.0	450.8
75.00	Appurtenance(s)	1.00	1.19	29.553	32.51	432.01	0.750	0.000	1.00	3.927	2.95	153.2	0.0	223.9
76.00		1.00	1.19	29.636	32.60	430.79	0.750	0.000	1.00	3.911	2.93	153.0	0.0	223.0
78.00		1.00	1.20	29.798	32.78	428.30	0.750	0.000	2.00	7.772	5.83	305.7	0.0	443.1
80.00		1.00	1.21	29.958	32.95	425.76	0.750	0.000	2.00	7.705	5.78	304.7	0.0	439.3
82.00		1.00	1.21	30.114	33.13	423.18	0.750	0.000	2.00	7.639	5.73	303.7	0.0	435.5
84.00		1.00	1.22	30.267	33.29	420.56	0.750	0.000	2.00	7.573	5.68	302.6	0.0	431.7
86.00		1.00	1.23	30.417	33.46	417.90	0.750	0.000	2.00	7.507	5.63	301.4	0.0	427.9

Wind Loading - Shaft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 11

88.00	1.00	1.23	30.565	33.62	415.20	0.750	0.000	2.00	7.440	5.58	300.2	0.0	424.1
90.00	1.00	1.24	30.710	33.78	412.46	0.750	0.000	2.00	7.374	5.53	298.9	0.0	420.3
92.00	1.00	1.24	30.852	33.94	409.68	0.750	0.000	2.00	7.308	5.48	297.6	0.0	416.5
92.33 Bot - Section 3	1.00	1.24	30.876	33.96	409.21	0.750	0.000	0.33	1.212	0.91	49.4	0.0	69.0
94.00	1.00	1.25	30.992	34.09	406.87	0.750	0.000	1.67	6.110	4.58	249.9	0.0	605.3
96.00	1.00	1.25	31.130	34.24	404.02	0.750	0.000	2.00	7.271	5.45	298.8	0.0	720.3
98.00	1.00	1.26	31.265	34.39	401.14	0.750	0.000	2.00	7.205	5.40	297.3	0.0	713.6
98.50 Top - Section 2	1.00	1.26	31.299	34.43	400.42	0.750	0.000	0.50	1.791	1.34	74.0	0.0	177.4
100.00	1.00	1.27	31.399	34.54	403.66	0.750	0.000	1.50	5.348	4.01	221.6	0.0	229.0
102.00	1.00	1.27	31.530	34.68	400.73	0.750	0.000	2.00	7.072	5.30	294.3	0.0	302.9
104.00	1.00	1.28	31.659	34.82	397.77	0.750	0.000	2.00	7.006	5.25	292.8	0.0	300.0
106.00	1.00	1.28	31.786	34.96	394.78	0.750	0.000	2.00	6.939	5.20	291.2	0.0	297.2
108.00	1.00	1.29	31.911	35.10	391.76	0.750	0.000	2.00	6.873	5.15	289.5	0.0	294.3
110.00 Appurtenance(s)	1.00	1.29	32.035	35.24	388.71	0.750	0.000	2.00	6.807	5.11	287.8	0.0	291.4
112.00	1.00	1.30	32.157	35.37	385.64	0.750	0.000	2.00	6.741	5.06	286.1	0.0	288.6
114.00	1.00	1.30	32.277	35.50	382.54	0.750	0.000	2.00	6.674	5.01	284.4	0.0	285.7
116.00	1.00	1.31	32.395	35.63	379.42	0.750	0.000	2.00	6.608	4.96	282.6	0.0	282.9
118.00	1.00	1.31	32.512	35.76	376.27	0.750	0.000	2.00	6.542	4.91	280.7	0.0	280.0
120.00	1.00	1.32	32.627	35.89	373.10	0.750	0.000	2.00	6.476	4.86	278.9	0.0	277.1
122.00 Appurtenance(s)	1.00	1.32	32.741	36.01	369.90	0.750	0.000	2.00	6.409	4.81	277.0	0.0	274.3
124.00	1.00	1.32	32.853	36.14	366.69	0.750	0.000	2.00	6.343	4.76	275.1	0.0	271.4
126.00	1.00	1.33	32.964	36.26	363.45	0.750	0.000	2.00	6.277	4.71	273.1	0.0	268.6
128.00	1.00	1.33	33.073	36.38	360.19	0.750	0.000	2.00	6.210	4.66	271.1	0.0	265.7
130.00	1.00	1.34	33.182	36.50	356.90	0.750	0.000	2.00	6.144	4.61	269.1	0.0	262.9
131.58 Bot - Section 4	1.00	1.34	33.266	36.59	354.29	0.750	0.000	1.58	4.817	3.61	211.5	0.0	206.1
132.00	1.00	1.34	33.288	36.62	353.60	0.750	0.000	0.42	1.278	0.96	56.2	0.0	102.6
134.00	1.00	1.35	33.394	36.73	350.28	0.750	0.000	2.00	6.097	4.57	268.7	0.0	489.2
136.00	1.00	1.35	33.498	36.85	346.93	0.750	0.000	2.00	6.030	4.52	266.6	0.0	483.8
136.83 Top - Section 3	1.00	1.35	33.541	36.90	345.54	0.750	0.000	0.83	2.493	1.87	110.4	0.0	200.0
138.00	1.00	1.35	33.601	36.96	348.57	0.750	0.000	1.17	3.471	2.60	154.0	0.0	132.1
140.00	1.00	1.36	33.703	37.07	345.19	0.750	0.000	2.00	5.898	4.42	262.4	0.0	224.4
142.00	1.00	1.36	33.804	37.18	341.80	0.750	0.000	2.00	5.831	4.37	260.2	0.0	221.9
144.00	1.00	1.37	33.904	37.29	338.39	0.750	0.000	2.00	5.765	4.32	258.0	0.0	219.3
146.00	1.00	1.37	34.002	37.40	334.97	0.750	0.000	2.00	5.699	4.27	255.8	0.0	216.8
147.00 Appurtenance(s)	1.00	1.37	34.051	37.46	333.25	0.750	0.000	1.00	2.825	2.12	127.0	0.0	107.4
148.00	1.00	1.37	34.100	37.51	331.52	0.750	0.000	1.00	2.808	2.11	126.4	0.0	106.8
150.00	1.00	1.38	34.196	37.62	328.06	0.750	0.000	2.00	5.566	4.17	251.3	0.0	211.7
152.00	1.00	1.38	34.292	37.72	324.59	0.750	0.000	2.00	5.500	4.13	249.0	0.0	209.2
154.00	1.00	1.39	34.386	37.83	321.09	0.750	0.000	2.00	5.434	4.08	246.6	0.0	206.6
156.00	1.00	1.39	34.480	37.93	317.58	0.750	0.000	2.00	5.368	4.03	244.3	0.0	204.1
158.00	1.00	1.39	34.573	38.03	314.06	0.750	0.000	2.00	5.301	3.98	241.9	0.0	201.6
160.00	1.00	1.40	34.664	38.13	310.52	0.750	0.000	2.00	5.235	3.93	239.5	0.0	199.0
162.00	1.00	1.40	34.755	38.23	306.96	0.750	0.000	2.00	5.169	3.88	237.1	0.0	196.5
164.00	1.00	1.40	34.845	38.33	303.39	0.750	0.000	2.00	5.102	3.83	234.7	0.0	193.9
166.00	1.00	1.41	34.934	38.43	299.81	0.750	0.000	2.00	5.036	3.78	232.2	0.0	191.4
167.00 Appurtenance(s)	1.00	1.41	34.978	38.48	298.01	0.750	0.000	1.00	2.493	1.87	115.1	0.0	94.7
168.00	1.00	1.41	35.022	38.52	296.21	0.750	0.000	1.00	2.477	1.86	114.5	0.0	94.1
170.00	1.00	1.42	35.110	38.62	292.60	0.750	0.000	2.00	4.904	3.68	227.3	0.0	186.3
172.00	1.00	1.42	35.196	38.72	288.97	0.750	0.000	2.00	4.837	3.63	224.7	0.0	183.8
174.00	1.00	1.42	35.282	38.81	285.33	0.750	0.000	2.00	4.771	3.58	222.2	0.0	181.2
176.00	1.00	1.43	35.367	38.90	281.68	0.750	0.000	2.00	4.705	3.53	219.6	0.0	178.7
178.00 Appurtenance(s)	1.00	1.43	35.451	39.00	278.01	0.750	0.000	2.00	4.638	3.48	217.1	0.0	176.1
180.00	1.00	1.43	35.535	39.09	274.34	0.750	0.000	2.00	4.572	3.43	214.5	0.0	173.6
							Totals:	**180.00**			**25,244.6**		**39,577.8**

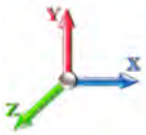
Discrete Appurtenance Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 12	

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	178.00	Samsung B5/B13	3	35.451	38.996	0.50	0.75	2.82	253.08	0.000	0.000	175.89	0.00	0.00
2	178.00	MS-HR35	1	35.451	38.996	1.00	1.00	8.75	516.00	0.000	0.000	545.95	0.00	0.00
3	178.00	MS-KI22-5 (Kickers w/o	1	35.451	38.996	1.00	1.00	5.33	175.20	0.000	0.000	332.56	0.00	0.00
4	178.00	JMA Wireless	6	35.451	38.996	0.65	0.75	38.64	331.20	0.000	0.000	2410.96	0.00	0.00
5	178.00	Samsung MT6407-77A	3	35.451	38.996	0.52	0.75	7.39	285.84	0.000	0.000	460.89	0.00	0.00
6	178.00	Low Profile Platform	1	35.451	38.996	1.00	1.00	24.92	1800.00	0.000	0.000	1554.86	0.00	0.00
7	178.00	Raycap	1	35.451	38.996	1.00	1.00	4.06	38.40	0.000	0.000	253.32	0.00	0.00
8	178.00	JMA 919003314 SBS	3	35.451	38.996	1.00	1.00	0.00	91.26	0.000	0.000	0.00	0.00	0.00
9	178.00	LPA-80080-4CF	6	35.451	38.996	1.36	0.80	21.30	86.40	0.000	0.000	1328.84	0.00	0.00
10	178.00	Samsung B2/B66A	3	35.451	38.996	0.50	0.75	2.82	303.84	0.000	0.000	175.89	0.00	0.00
11	167.00	RFS ACU-A20-N RET	4	34.978	38.476	0.50	0.75	0.28	4.80	0.000	0.000	17.32	0.00	0.00
12	167.00	AIR6449 B41	3	34.978	38.476	0.53	0.75	9.03	370.80	0.000	0.000	555.65	0.00	0.00
13	167.00	APXVAALL24_43-U-NA20	3	34.978	38.476	0.55	0.75	33.24	442.08	0.000	0.000	2046.56	0.00	0.00
14	167.00	Ericsson 4460 B25 + B66	3	34.978	38.476	0.50	0.75	3.23	392.40	0.000	0.000	198.60	0.00	0.00
15	167.00	Alcatel Lucent	3	34.978	38.476	0.50	0.75	6.11	252.00	0.000	0.000	375.86	0.00	0.00
16	167.00	Ericsson 4480 B71 + B85	3	34.978	38.476	0.50	0.75	3.65	334.80	0.000	0.000	224.59	0.00	0.00
17	167.00	Alcatel Lucent 800 MHz	3	34.978	38.476	0.50	0.75	1.18	31.68	0.000	0.000	72.39	0.00	0.00
18	167.00	RMQP-4096-HK Plat. +	1	34.978	38.476	1.00	1.00	51.70	3174.00	0.000	0.000	3182.73	0.00	0.00
19	147.00	Powerwave	3	34.051	37.456	0.68	0.75	1.86	79.20	0.000	0.000	111.65	0.00	0.00
20	147.00	7770	3	34.051	37.456	0.55	0.75	9.03	126.00	0.000	0.000	541.40	0.00	0.00
21	147.00	Cci DMP65R-BU8DA	6	34.051	37.456	0.55	0.75	58.70	689.04	0.000	0.000	3518.09	0.00	0.00
22	147.00	Cci DTMABP7819VG12A	3	34.051	37.456	0.50	0.75	1.72	69.12	0.000	0.000	102.99	0.00	0.00
23	147.00	RMQP-496-HK	1	34.051	37.456	1.00	1.00	46.00	2938.80	0.000	0.000	2756.79	0.00	0.00
24	147.00	Ericsson RRUS 8843 B2	3	34.051	37.456	0.50	0.75	2.49	270.00	0.000	0.000	149.07	0.00	0.00
25	147.00	Ericsson RRUS 4449	3	34.051	37.456	0.50	0.75	2.97	255.60	0.000	0.000	177.98	0.00	0.00
26	147.00	Raycap DC6-48-60-18-8F	3	34.051	37.456	0.75	0.75	2.07	114.48	0.000	0.000	124.06	0.00	0.00
27	147.00	Ericsson RRUS 4478 B14	3	34.051	37.456	0.50	0.75	2.49	213.84	0.000	0.000	149.07	0.00	0.00
28	122.00	Nokia CS72188.01	1	32.741	36.015	1.00	1.00	3.15	19.80	0.000	0.000	181.52	0.00	0.00
29	110.00	Fujitsu TA08025-B605	3	32.035	35.238	0.50	0.75	2.95	270.00	0.000	0.000	166.59	0.00	0.00
30	110.00	JMA Wireless	3	32.035	35.238	0.55	0.75	20.80	232.20	0.000	0.000	1172.50	0.00	0.00
31	110.00	MC-PK8-C	1	32.035	35.238	1.00	1.00	33.60	1693.20	0.000	0.000	1894.42	0.00	0.00
32	110.00	Fujitsu TA08025-B604	3	32.035	35.238	0.50	0.75	2.95	230.04	0.000	0.000	166.59	0.00	0.00
33	110.00	Raycap	1	32.035	35.238	1.00	1.00	2.01	26.28	0.000	0.000	113.33	0.00	0.00
34	75.00	Side Arms	2	29.553	32.509	1.00	1.00	5.26	96.00	0.000	0.000	273.59	0.00	0.00
35	75.00	Lucent KS-24019	1	29.553	32.509	1.00	1.00	0.91	4.80	0.000	0.000	47.33	0.00	0.00
							Totals:		**16,212.18**			**25,559.81**		

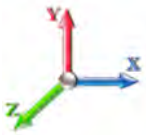
Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 13

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		282.89	772.26	0.00	0.00
4.00		281.04	767.82	0.00	0.00
6.00		279.20	763.37	0.00	0.00
8.00		277.35	758.93	0.00	0.00
10.00		275.51	754.48	0.00	0.00
12.00		273.66	750.04	0.00	0.00
14.00		271.82	745.59	0.00	0.00
16.00		273.31	741.15	0.00	0.00
18.00		278.25	736.70	0.00	0.00
20.00		282.54	732.26	0.00	0.00
22.00		286.27	727.81	0.00	0.00
24.00		289.52	723.37	0.00	0.00
26.00		292.38	718.92	0.00	0.00
28.00		294.87	714.48	0.00	0.00
30.00		297.05	710.03	0.00	0.00
32.00		298.96	705.58	0.00	0.00
34.00		300.61	701.14	0.00	0.00
36.00		302.03	696.69	0.00	0.00
38.00		303.25	692.25	0.00	0.00
40.00		304.28	687.80	0.00	0.00
42.00		305.13	683.36	0.00	0.00
44.00		305.82	678.91	0.00	0.00
45.50		229.46	506.27	0.00	0.00
46.00		77.49	293.87	0.00	0.00
48.00		311.29	1170.31	0.00	0.00
50.00		311.61	1162.05	0.00	0.00
52.00		311.80	1153.80	0.00	0.00
52.75		116.66	430.55	0.00	0.00
54.00		194.64	364.85	0.00	0.00
56.00		311.84	580.66	0.00	0.00
58.00		311.70	576.85	0.00	0.00
60.00		311.47	573.04	0.00	0.00
62.00		311.14	569.23	0.00	0.00
64.00		310.73	565.42	0.00	0.00
66.00		310.23	561.61	0.00	0.00
68.00		309.65	557.80	0.00	0.00
70.00		309.00	553.99	0.00	0.00
72.00		308.27	550.18	0.00	0.00
74.00		307.48	546.37	0.00	0.00
75.00	(3) attachments	474.13	372.56	0.00	0.00
76.00		152.98	270.80	0.00	0.00
78.00		305.69	538.75	0.00	0.00
80.00		304.71	534.94	0.00	0.00
82.00		303.66	531.13	0.00	0.00
84.00		302.56	527.32	0.00	0.00
86.00		301.40	523.51	0.00	0.00

Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 14

88.00		300.19	519.70	0.00	0.00
90.00		298.92	515.89	0.00	0.00
92.00		297.61	512.08	0.00	0.00
92.33		49.38	84.98	0.00	0.00
94.00		249.94	685.01	0.00	0.00
96.00		298.77	815.90	0.00	0.00
98.00		297.33	809.23	0.00	0.00
98.50		73.99	201.27	0.00	0.00
100.00		221.63	300.74	0.00	0.00
102.00		294.33	398.48	0.00	0.00
104.00		292.77	395.63	0.00	0.00
106.00		291.16	392.77	0.00	0.00
108.00		289.52	389.91	0.00	0.00
110.00	(11) attachments	3801.26	2838.77	0.00	0.00
112.00		286.12	379.83	0.00	0.00
114.00		284.36	376.97	0.00	0.00
116.00		282.57	374.11	0.00	0.00
118.00		280.75	371.25	0.00	0.00
120.00		278.89	368.40	0.00	0.00
122.00	(1) attachments	458.51	385.34	0.00	0.00
124.00		275.07	362.68	0.00	0.00
126.00		273.11	359.82	0.00	0.00
128.00		271.13	356.97	0.00	0.00
130.00		269.11	354.11	0.00	0.00
131.58		211.53	278.31	0.00	0.00
132.00		56.18	121.60	0.00	0.00
134.00		268.74	580.42	0.00	0.00
136.00		266.65	575.03	0.00	0.00
136.83		110.38	238.00	0.00	0.00
138.00		153.95	185.31	0.00	0.00
140.00		262.38	315.66	0.00	0.00
142.00		260.21	313.12	0.00	0.00
144.00		258.01	310.58	0.00	0.00
146.00		255.79	308.04	0.00	0.00
147.00	(28) attachments	7758.05	4909.15	0.00	0.00
148.00		126.40	131.05	0.00	0.00
150.00		251.26	260.19	0.00	0.00
152.00		248.96	257.65	0.00	0.00
154.00		246.64	255.11	0.00	0.00
156.00		244.30	252.57	0.00	0.00
158.00		241.93	250.03	0.00	0.00
160.00		239.54	247.49	0.00	0.00
162.00		237.12	244.95	0.00	0.00
164.00		234.69	242.41	0.00	0.00
166.00		232.23	239.87	0.00	0.00
167.00	(23) attachments	6788.81	5121.54	0.00	0.00
168.00		114.49	109.42	0.00	0.00
170.00		227.26	216.93	0.00	0.00
172.00		224.74	214.39	0.00	0.00
174.00		222.20	211.85	0.00	0.00
176.00		219.64	209.31	0.00	0.00
178.00	(28) attachments	7456.21	4087.99	0.00	0.00
180.00		214.46	173.61	0.00	0.00
	Totals:	**50,804.45**	**63,390.21**	**0.00**	**0.00**

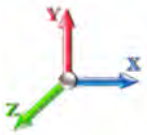
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 15	

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.026	0.000	21.088	0.00	4.37
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.026	0.000	21.088	0.00	4.37
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	4.37
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	4.37
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	4.37
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	4.37
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	4.37
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.348	0.00	4.37
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	21.884	0.00	4.37
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	22.375	0.00	4.37
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	22.828	0.00	4.37
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	23.250	0.00	4.37
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	23.645	0.00	4.37
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	24.017	0.00	4.37
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	24.369	0.00	4.37
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	24.702	0.00	4.37
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	25.019	0.00	4.37
36.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	25.322	0.00	4.37
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	25.612	0.00	4.37
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	25.890	0.00	4.37
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	26.157	0.00	4.37
44.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	26.415	0.00	4.37
45.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.031	0.000	26.602	0.00	3.28
46.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.031	0.000	26.663	0.00	1.09
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	26.903	0.00	4.37
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	27.135	0.00	4.37
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	27.360	0.00	4.37
52.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.10	0.00	0.032	0.000	27.443	0.00	1.64
54.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.17	0.00	0.031	0.000	27.579	0.00	2.73
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	27.790	0.00	4.37
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	27.997	0.00	4.37
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	28.197	0.00	4.37
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	28.392	0.00	4.37
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	28.583	0.00	4.37
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	28.769	0.00	4.37
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	28.950	0.00	4.37
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	29.127	0.00	4.37
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	29.300	0.00	4.37
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.034	0.000	29.470	0.00	4.37
75.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.034	0.000	29.553	0.00	2.18
76.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.034	0.000	29.636	0.00	2.18
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.034	0.000	29.798	0.00	4.37
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	29.958	0.00	4.37
82.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	30.114	0.00	4.37
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	30.267	0.00	4.37
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.417	0.00	4.37
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.565	0.00	4.37

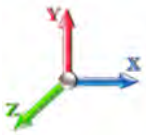
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 16	

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.710	0.00	4.37
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.852	0.00	4.37
92.33	1.6" Hybrid	Yes	0.33	0.000	1.60	0.04	0.00	0.037	0.000	30.876	0.00	0.73
94.00	1.6" Hybrid	Yes	1.67	0.000	1.60	0.22	0.00	0.037	0.000	30.992	0.00	3.64
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.037	0.000	31.130	0.00	4.37
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.265	0.00	4.37
98.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.038	0.000	31.299	0.00	1.09
100.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.037	0.000	31.399	0.00	3.28
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.530	0.00	4.37
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.659	0.00	4.37
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.786	0.00	4.37
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.039	0.000	31.911	0.00	4.37
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.039	0.000	32.035	0.00	4.37
										Totals:	**0.0**	**240.2**

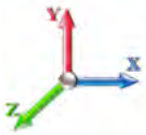
Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 17	

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-63.34	-50.86	0.00	-6488.5	0.00	6488.57	5499.24	2749.62	13525.8	6714.82	0.00	0.000	0.000	0.978
2.00	-62.49	-50.68	0.00	-6386.8	0.00	6386.85	5478.14	2739.07	13385.1	6644.94	0.02	-0.098	0.000	0.973
4.00	-61.63	-50.51	0.00	-6285.4	0.00	6285.49	5456.85	2728.42	13244.5	6575.16	0.08	-0.197	0.000	0.968
6.00	-60.78	-50.33	0.00	-6184.4	0.00	6184.47	5435.36	2717.68	13104.2	6505.49	0.19	-0.296	0.000	0.962
8.00	-59.94	-50.15	0.00	-6083.8	0.00	6083.81	5413.67	2706.84	12964.1	6435.94	0.33	-0.396	0.000	0.957
10.00	-59.10	-49.98	0.00	-5983.5	0.00	5983.51	5391.79	2695.89	12824.2	6366.50	0.52	-0.495	0.000	0.951
12.00	-58.26	-49.80	0.00	-5883.5	0.00	5883.56	5369.71	2684.85	12684.6	6297.18	0.75	-0.595	0.000	0.946
14.00	-57.43	-49.62	0.00	-5783.9	0.00	5783.97	5347.43	2673.72	12545.2	6227.99	1.02	-0.696	0.000	0.940
16.00	-56.61	-49.43	0.00	-5684.7	0.00	5684.74	5324.96	2662.48	12406.1	6158.93	1.34	-0.797	0.000	0.934
18.00	-55.79	-49.24	0.00	-5585.8	0.00	5585.87	5302.29	2651.14	12267.3	6090.01	1.69	-0.898	0.000	0.928
20.00	-54.98	-49.05	0.00	-5487.3	0.00	5487.39	5279.42	2639.71	12128.7	6021.23	2.09	-0.999	0.000	0.922
22.00	-54.17	-48.84	0.00	-5389.3	0.00	5389.30	5256.36	2628.18	11990.5	5952.59	2.53	-1.101	0.000	0.916
24.00	-53.36	-48.63	0.00	-5291.6	0.00	5291.61	5233.10	2616.55	11852.5	5884.10	3.02	-1.203	0.000	0.910
26.00	-52.56	-48.42	0.00	-5194.3	0.00	5194.35	5209.64	2604.82	11714.9	5815.77	3.54	-1.306	0.000	0.904
28.00	-51.77	-48.20	0.00	-5097.5	0.00	5097.51	5185.99	2593.00	11577.5	5747.60	4.11	-1.408	0.000	0.897
30.00	-50.98	-47.98	0.00	-5001.1	0.00	5001.11	5162.14	2581.07	11440.6	5679.60	4.72	-1.511	0.000	0.891
32.00	-50.20	-47.75	0.00	-4905.1	0.00	4905.15	5138.10	2569.05	11303.9	5611.76	5.38	-1.614	0.000	0.884
34.00	-49.42	-47.52	0.00	-4809.6	0.00	4809.65	5113.85	2556.93	11167.6	5544.10	6.08	-1.718	0.000	0.878
36.00	-48.65	-47.28	0.00	-4714.6	0.00	4714.62	5089.42	2544.71	11031.7	5476.62	6.82	-1.821	0.000	0.871
38.00	-47.88	-47.05	0.00	-4620.0	0.00	4620.05	5064.78	2532.39	10896.1	5409.32	7.61	-1.925	0.000	0.864
40.00	-47.12	-46.80	0.00	-4525.9	0.00	4525.96	5039.95	2519.97	10760.9	5342.21	8.44	-2.029	0.000	0.857
42.00	-46.36	-46.56	0.00	-4432.3	0.00	4432.36	5014.92	2507.46	10626.1	5275.29	9.31	-2.133	0.000	0.850
44.00	-45.62	-46.30	0.00	-4339.2	0.00	4339.24	4989.69	2494.85	10491.8	5208.57	10.23	-2.238	0.000	0.843
45.50	-45.08	-46.09	0.00	-4269.8	0.00	4269.80	4970.65	2485.32	10391.2	5158.66	10.94	-2.316	0.000	0.837
46.00	-44.74	-46.05	0.00	-4246.7	0.00	4246.75	4964.27	2482.14	10357.8	5142.05	11.19	-2.343	0.000	0.835
48.00	-43.50	-45.77	0.00	-4154.6	0.00	4154.65	4938.65	2469.33	10224.2	5075.74	12.19	-2.447	0.000	0.828
50.00	-42.27	-45.49	0.00	-4063.1	0.00	4063.10	4912.84	2456.42	10091.1	5009.65	13.24	-2.552	0.000	0.820
52.00	-41.07	-45.18	0.00	-3972.1	0.00	3972.13	4886.83	2443.41	9958.39	4943.77	14.33	-2.657	0.000	0.812
52.75	-40.61	-45.08	0.00	-3938.2	0.00	3938.25	3995.11	1997.56	8262.19	4101.70	14.75	-2.697	0.000	0.971
54.00	-40.18	-44.93	0.00	-3881.9	0.00	3881.90	3983.52	1991.76	8197.82	4069.74	15.47	-2.763	0.000	0.964
56.00	-39.53	-44.67	0.00	-3792.0	0.00	3792.05	3964.81	1982.41	8095.01	4018.70	16.65	-2.879	0.000	0.954
58.00	-38.87	-44.41	0.00	-3702.7	0.00	3702.71	3945.91	1972.96	7992.40	3967.76	17.88	-2.996	0.000	0.944
60.00	-38.23	-44.14	0.00	-3613.9	0.00	3613.90	3926.81	1963.41	7890.01	3916.93	19.16	-3.113	0.000	0.933
62.00	-37.59	-43.88	0.00	-3525.6	0.00	3525.61	3907.51	1953.76	7787.85	3866.21	20.49	-3.229	0.000	0.922
64.00	-36.95	-43.61	0.00	-3437.8	0.00	3437.85	3888.02	1944.01	7685.92	3815.62	21.87	-3.346	0.000	0.911
66.00	-36.32	-43.34	0.00	-3350.6	0.00	3350.63	3868.33	1934.17	7584.24	3765.14	23.29	-3.462	0.000	0.900
68.00	-35.70	-43.07	0.00	-3263.9	0.00	3263.95	3848.45	1924.22	7482.82	3714.79	24.77	-3.578	0.000	0.888
70.00	-35.08	-42.80	0.00	-3177.8	0.00	3177.81	3828.36	1914.18	7381.67	3664.57	26.29	-3.694	0.000	0.877
72.00	-34.46	-42.52	0.00	-3092.2	0.00	3092.21	3808.08	1904.04	7280.79	3614.49	27.86	-3.810	0.000	0.865
74.00	-33.88	-42.23	0.00	-3007.1	0.00	3007.17	3787.61	1893.80	7180.20	3564.55	29.48	-3.925	0.000	0.853
75.00	-33.50	-41.77	0.00	-2964.9	0.00	2964.94	3777.30	1888.65	7130.01	3539.64	30.31	-3.983	0.000	0.847
76.00	-33.17	-41.65	0.00	-2923.1	0.00	2923.17	3766.94	1883.47	7079.90	3514.76	31.15	-4.041	0.000	0.841
78.00	-32.58	-41.37	0.00	-2839.8	0.00	2839.88	3746.07	1873.03	6979.91	3465.12	32.87	-4.156	0.000	0.829
80.00	-31.98	-41.09	0.00	-2757.1	0.00	2757.15	3725.00	1862.50	6880.23	3415.63	34.63	-4.270	0.000	0.816
82.00	-31.39	-40.81	0.00	-2674.9	0.00	2674.97	3703.74	1851.87	6780.87	3366.31	36.44	-4.384	0.000	0.804
84.00	-30.81	-40.53	0.00	-2593.3	0.00	2593.36	3682.28	1841.14	6681.85	3317.15	38.30	-4.498	0.000	0.791
86.00	-30.24	-40.24	0.00	-2512.3	0.00	2512.31	3660.63	1830.31	6583.17	3268.16	40.21	-4.610	0.000	0.777
88.00	-29.66	-39.96	0.00	-2431.8	0.00	2431.82	3638.77	1819.39	6484.84	3219.35	42.16	-4.723	0.000	0.764

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 18

90.00	-29.10	-39.68	0.00	-2351.9	0.00	2351.90	3616.73	1808.36	6386.87	3170.71	44.17	-4.834	0.000	0.750
92.00	-28.57	-39.37	0.00	-2272.5	0.00	2272.55	3594.48	1797.24	6289.28	3122.26	46.21	-4.945	0.000	0.736
92.33	-28.45	-39.34	0.00	-2259.4	0.00	2259.43	3590.75	1795.38	6273.05	3114.21	46.56	-4.964	0.000	0.734
94.00	-27.72	-39.08	0.00	-2193.8	0.00	2193.87	3572.04	1786.02	6192.07	3074.00	48.31	-5.056	0.000	0.722
96.00	-26.86	-38.76	0.00	-2115.7	0.00	2115.71	3549.40	1774.70	6095.24	3025.94	50.44	-5.165	0.000	0.707
98.00	-26.04	-38.42	0.00	-2038.1	0.00	2038.19	3526.57	1763.28	5998.82	2978.07	52.63	-5.273	0.000	0.692
98.50	-25.81	-38.35	0.00	-2018.9	0.00	2018.98	2386.86	1193.43	4124.78	2047.71	53.18	-5.300	0.000	0.998
100.00	-25.46	-38.15	0.00	-1961.4	0.00	1961.46	2378.02	1189.01	4080.56	2025.76	54.86	-5.381	0.000	0.980
102.00	-25.00	-37.88	0.00	-1885.1	0.00	1885.15	2366.05	1183.03	4021.64	1996.51	57.14	-5.516	0.000	0.956
104.00	-24.55	-37.61	0.00	-1809.3	0.00	1809.39	2353.89	1176.95	3962.79	1967.29	59.48	-5.649	0.000	0.931
106.00	-24.10	-37.33	0.00	-1734.1	0.00	1734.18	2341.53	1170.77	3904.00	1938.11	61.87	-5.780	0.000	0.906
108.00	-23.66	-37.06	0.00	-1659.5	0.00	1659.52	2328.98	1164.49	3845.28	1908.96	64.31	-5.910	0.000	0.881
110.00	-21.16	-33.03	0.00	-1585.4	0.00	1585.40	2316.23	1158.11	3786.65	1879.85	66.81	-6.037	0.000	0.853
112.00	-20.74	-32.75	0.00	-1519.3	0.00	1519.35	2303.28	1151.64	3728.12	1850.80	69.36	-6.163	0.000	0.831
114.00	-20.33	-32.47	0.00	-1453.8	0.00	1453.85	2290.14	1145.07	3669.69	1821.79	71.97	-6.287	0.000	0.808
116.00	-19.92	-32.19	0.00	-1388.9	0.00	1388.91	2276.80	1138.40	3611.38	1792.84	74.62	-6.409	0.000	0.784
118.00	-19.51	-31.91	0.00	-1324.5	0.00	1324.53	2263.26	1131.63	3553.19	1763.95	77.33	-6.529	0.000	0.760
120.00	-19.12	-31.63	0.00	-1260.7	0.00	1260.72	2249.53	1124.76	3495.14	1735.13	80.08	-6.647	0.000	0.736
122.00	-18.72	-31.17	0.00	-1197.4	0.00	1197.46	2235.60	1117.80	3437.23	1706.38	82.89	-6.763	0.000	0.711
124.00	-18.34	-30.89	0.00	-1135.1	0.00	1135.13	2221.47	1110.74	3379.47	1677.71	85.74	-6.877	0.000	0.686
126.00	-17.95	-30.61	0.00	-1073.3	0.00	1073.36	2207.15	1103.57	3321.87	1649.12	88.64	-6.987	0.000	0.660
128.00	-17.58	-30.33	0.00	-1012.1	0.00	1012.15	2192.63	1096.31	3264.45	1620.61	91.58	-7.095	0.000	0.633
130.00	-17.21	-30.04	0.00	-951.50	0.00	951.50	2177.91	1088.96	3207.21	1592.19	94.57	-7.200	0.000	0.606
131.58	-16.93	-29.81	0.00	-903.93	0.00	903.93	2166.12	1083.06	3162.03	1569.76	96.97	-7.281	0.000	0.584
132.00	-16.79	-29.76	0.00	-891.51	0.00	891.51	2163.00	1081.50	3150.16	1563.87	97.60	-7.303	0.000	0.579
134.00	-16.20	-29.45	0.00	-831.99	0.00	831.99	2147.89	1073.94	3093.31	1535.65	100.67	-7.401	0.000	0.550
136.00	-15.63	-29.12	0.00	-773.10	0.00	773.10	2132.58	1066.29	3036.67	1507.53	103.79	-7.496	0.000	0.521
136.83	-15.38	-29.00	0.00	-748.83	0.00	748.83	1821.16	910.58	2623.48	1302.41	105.10	-7.535	0.000	0.584
138.00	-15.18	-28.84	0.00	-715.00	0.00	715.00	1814.37	907.19	2596.54	1289.03	106.94	-7.588	0.000	0.564
140.00	-14.86	-28.56	0.00	-657.33	0.00	657.33	1802.58	901.29	2550.43	1266.14	110.13	-7.681	0.000	0.528
142.00	-14.54	-28.28	0.00	-600.21	0.00	600.21	1790.60	895.30	2504.42	1243.30	113.36	-7.769	0.000	0.492
144.00	-14.23	-28.00	0.00	-543.64	0.00	543.64	1778.42	889.21	2458.53	1220.52	116.62	-7.852	0.000	0.454
146.00	-13.93	-27.72	0.00	-487.63	0.00	487.63	1766.04	883.02	2412.77	1197.80	119.92	-7.930	0.000	0.416
147.00	-10.13	-19.37	0.00	-459.91	0.00	459.91	1759.78	879.89	2389.94	1186.47	121.58	-7.967	0.000	0.394
148.00	-10.00	-19.23	0.00	-440.54	0.00	440.54	1753.47	876.73	2367.15	1175.15	123.24	-8.002	0.000	0.381
150.00	-9.76	-18.96	0.00	-402.08	0.00	402.08	1740.70	870.35	2321.67	1152.58	126.60	-8.070	0.000	0.355
152.00	-9.52	-18.69	0.00	-364.16	0.00	364.16	1727.73	863.87	2276.35	1130.08	129.99	-8.135	0.000	0.328
154.00	-9.28	-18.41	0.00	-326.79	0.00	326.79	1714.57	857.28	2231.19	1107.66	133.40	-8.194	0.000	0.301
156.00	-9.05	-18.15	0.00	-289.96	0.00	289.96	1701.21	850.60	2186.21	1085.33	136.83	-8.250	0.000	0.273
158.00	-8.82	-17.88	0.00	-253.67	0.00	253.67	1687.65	843.83	2141.41	1063.08	140.28	-8.301	0.000	0.244
160.00	-8.60	-17.61	0.00	-217.92	0.00	217.92	1673.90	836.95	2096.80	1040.94	143.76	-8.347	0.000	0.215
162.00	-8.38	-17.35	0.00	-182.70	0.00	182.70	1659.95	829.97	2052.40	1018.90	147.25	-8.387	0.000	0.185
164.00	-8.17	-17.08	0.00	-148.00	0.00	148.00	1645.80	822.90	2008.21	996.96	150.76	-8.422	0.000	0.154
166.00	-7.96	-16.82	0.00	-113.84	0.00	113.84	1631.46	815.73	1964.24	975.13	154.29	-8.450	0.000	0.122
167.00	-3.89	-9.35	0.00	-97.02	0.00	97.02	1624.22	812.11	1942.34	964.26	156.05	-8.462	0.000	0.103
168.00	-3.79	-9.23	0.00	-87.66	0.00	87.66	1616.92	808.46	1920.51	953.42	157.82	-8.473	0.000	0.094
170.00	-3.61	-8.97	0.00	-69.21	0.00	69.21	1602.19	801.09	1877.01	931.83	161.36	-8.492	0.000	0.077
172.00	-3.43	-8.72	0.00	-51.27	0.00	51.27	1587.25	793.63	1833.77	910.36	164.91	-8.506	0.000	0.059
174.00	-3.25	-8.47	0.00	-33.84	0.00	33.84	1572.12	786.06	1790.79	889.02	168.46	-8.517	0.000	0.040
176.00	-3.08	-8.22	0.00	-16.91	0.00	16.91	1556.80	778.40	1748.08	867.82	172.02	-8.524	0.000	0.022
178.00	-0.14	-0.24	0.00	-0.48	0.00	0.48	1541.28	770.64	1705.64	846.75	175.58	-8.527	0.000	0.001
180.00	0.00	-0.21	0.00	0.00	0.00	0.00	1525.56	762.78	1663.50	825.83	179.13	-8.527	0.000	0.000

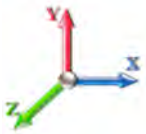
Wind Loading - Shaft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 19	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	21.088	23.20	474.71	0.750	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	21.088	23.20	471.62	0.750	0.000	2.00	10.163	7.62	282.9	0.0	507.5
4.00		1.00	0.85	21.088	23.20	468.54	0.750	0.000	2.00	10.096	7.57	281.0	0.0	504.2
6.00		1.00	0.85	21.088	23.20	465.45	0.750	0.000	2.00	10.030	7.52	279.2	0.0	500.8
8.00		1.00	0.85	21.088	23.20	462.37	0.750	0.000	2.00	9.964	7.47	277.4	0.0	497.5
10.00		1.00	0.85	21.088	23.20	459.28	0.750	0.000	2.00	9.898	7.42	275.5	0.0	494.1
12.00		1.00	0.85	21.088	23.20	456.19	0.750	0.000	2.00	9.831	7.37	273.7	0.0	490.8
14.00		1.00	0.85	21.088	23.20	453.11	0.750	0.000	2.00	9.765	7.32	271.8	0.0	487.5
16.00		1.00	0.86	21.348	23.48	452.79	0.750	0.000	2.00	9.699	7.27	273.3	0.0	484.1
18.00		1.00	0.88	21.884	24.07	455.30	0.750	0.000	2.00	9.633	7.22	278.3	0.0	480.8
20.00		1.00	0.90	22.375	24.61	457.20	0.750	0.000	2.00	9.566	7.17	282.5	0.0	477.5
22.00		1.00	0.92	22.828	25.11	458.60	0.750	0.000	2.00	9.500	7.13	286.3	0.0	474.1
24.00		1.00	0.94	23.250	25.58	459.58	0.750	0.000	2.00	9.434	7.08	289.5	0.0	470.8
26.00		1.00	0.95	23.645	26.01	460.20	0.750	0.000	2.00	9.367	7.03	292.4	0.0	467.5
28.00		1.00	0.97	24.017	26.42	460.51	0.750	0.000	2.00	9.301	6.98	294.9	0.0	464.1
30.00		1.00	0.98	24.369	26.81	460.55	0.750	0.000	2.00	9.235	6.93	297.1	0.0	460.8
32.00		1.00	1.00	24.702	27.17	460.35	0.750	0.000	2.00	9.169	6.88	299.0	0.0	457.5
34.00		1.00	1.01	25.019	27.52	459.93	0.750	0.000	2.00	9.102	6.83	300.6	0.0	454.1
36.00		1.00	1.02	25.322	27.85	459.33	0.750	0.000	2.00	9.036	6.78	302.0	0.0	450.8
38.00		1.00	1.03	25.612	28.17	458.55	0.750	0.000	2.00	8.970	6.73	303.2	0.0	447.5
40.00		1.00	1.04	25.890	28.48	457.61	0.750	0.000	2.00	8.904	6.68	304.3	0.0	444.1
42.00		1.00	1.05	26.157	28.77	456.53	0.750	0.000	2.00	8.837	6.63	305.1	0.0	440.8
44.00		1.00	1.06	26.415	29.06	455.32	0.750	0.000	2.00	8.771	6.58	305.8	0.0	437.5
45.50	Bot - Section 2	1.00	1.07	26.602	29.26	454.33	0.750	0.000	1.50	6.535	4.90	229.5	0.0	325.9
46.00		1.00	1.07	26.663	29.33	453.98	0.750	0.000	0.50	2.202	1.65	77.5	0.0	202.5
48.00		1.00	1.08	26.903	29.59	452.54	0.750	0.000	2.00	8.766	6.57	311.3	0.0	806.0
50.00		1.00	1.09	27.135	29.85	450.99	0.750	0.000	2.00	8.700	6.52	311.6	0.0	799.8
52.00		1.00	1.10	27.360	30.10	449.34	0.750	0.000	2.00	8.633	6.47	311.8	0.0	793.6
52.75	Top - Section 1	1.00	1.11	27.443	30.19	448.69	0.750	0.000	0.75	3.220	2.42	116.7	0.0	296.0
54.00		1.00	1.11	27.579	30.34	454.38	0.750	0.000	1.25	5.347	4.01	194.6	0.0	228.8
56.00		1.00	1.12	27.790	30.57	452.58	0.750	0.000	2.00	8.501	6.38	311.8	0.0	363.8
58.00		1.00	1.13	27.997	30.80	450.70	0.750	0.000	2.00	8.434	6.33	311.7	0.0	360.9
60.00		1.00	1.14	28.197	31.02	448.75	0.750	0.000	2.00	8.368	6.28	311.5	0.0	358.1
62.00		1.00	1.14	28.392	31.23	446.72	0.750	0.000	2.00	8.302	6.23	311.1	0.0	355.2
64.00		1.00	1.15	28.583	31.44	444.62	0.750	0.000	2.00	8.236	6.18	310.7	0.0	352.4
66.00		1.00	1.16	28.769	31.65	442.46	0.750	0.000	2.00	8.169	6.13	310.2	0.0	349.5
68.00		1.00	1.17	28.950	31.84	440.24	0.750	0.000	2.00	8.103	6.08	309.7	0.0	346.6
70.00		1.00	1.17	29.127	32.04	437.95	0.750	0.000	2.00	8.037	6.03	309.0	0.0	343.8
72.00		1.00	1.18	29.300	32.23	435.62	0.750	0.000	2.00	7.971	5.98	308.3	0.0	340.9
74.00		1.00	1.19	29.470	32.42	433.23	0.750	0.000	2.00	7.904	5.93	307.5	0.0	338.1
75.00	Appurtenance(s)	1.00	1.19	29.553	32.51	432.01	0.750	0.000	1.00	3.927	2.95	153.2	0.0	168.0
76.00		1.00	1.19	29.636	32.60	430.79	0.750	0.000	1.00	3.911	2.93	153.0	0.0	167.2
78.00		1.00	1.20	29.798	32.78	428.30	0.750	0.000	2.00	7.772	5.83	305.7	0.0	332.4
80.00		1.00	1.21	29.958	32.95	425.76	0.750	0.000	2.00	7.705	5.78	304.7	0.0	329.5
82.00		1.00	1.21	30.114	33.13	423.18	0.750	0.000	2.00	7.639	5.73	303.7	0.0	326.6
84.00		1.00	1.22	30.267	33.29	420.56	0.750	0.000	2.00	7.573	5.68	302.6	0.0	323.8
86.00		1.00	1.23	30.417	33.46	417.90	0.750	0.000	2.00	7.507	5.63	301.4	0.0	320.9

Wind Loading - Shaft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 20

88.00	1.00	1.23	30.565	33.62	415.20	0.750	0.000	2.00	7.440	5.58	300.2	0.0	318.1
90.00	1.00	1.24	30.710	33.78	412.46	0.750	0.000	2.00	7.374	5.53	298.9	0.0	315.2
92.00	1.00	1.24	30.852	33.94	409.68	0.750	0.000	2.00	7.308	5.48	297.6	0.0	312.3
92.33 Bot - Section 3	1.00	1.24	30.876	33.96	409.21	0.750	0.000	0.33	1.212	0.91	49.4	0.0	51.8
94.00	1.00	1.25	30.992	34.09	406.87	0.750	0.000	1.67	6.110	4.58	249.9	0.0	454.0
96.00	1.00	1.25	31.130	34.24	404.02	0.750	0.000	2.00	7.271	5.45	298.8	0.0	540.2
98.00	1.00	1.26	31.265	34.39	401.14	0.750	0.000	2.00	7.205	5.40	297.3	0.0	535.2
98.50 Top - Section 2	1.00	1.26	31.299	34.43	400.42	0.750	0.000	0.50	1.791	1.34	74.0	0.0	133.0
100.00	1.00	1.27	31.399	34.54	403.66	0.750	0.000	1.50	5.348	4.01	221.6	0.0	171.8
102.00	1.00	1.27	31.530	34.68	400.73	0.750	0.000	2.00	7.072	5.30	294.3	0.0	227.1
104.00	1.00	1.28	31.659	34.82	397.77	0.750	0.000	2.00	7.006	5.25	292.8	0.0	225.0
106.00	1.00	1.28	31.786	34.96	394.78	0.750	0.000	2.00	6.939	5.20	291.2	0.0	222.9
108.00	1.00	1.29	31.911	35.10	391.76	0.750	0.000	2.00	6.873	5.15	289.5	0.0	220.7
110.00 Appurtenance(s)	1.00	1.29	32.035	35.24	388.71	0.750	0.000	2.00	6.807	5.11	287.8	0.0	218.6
112.00	1.00	1.30	32.157	35.37	385.64	0.750	0.000	2.00	6.741	5.06	286.1	0.0	216.4
114.00	1.00	1.30	32.277	35.50	382.54	0.750	0.000	2.00	6.674	5.01	284.4	0.0	214.3
116.00	1.00	1.31	32.395	35.63	379.42	0.750	0.000	2.00	6.608	4.96	282.6	0.0	212.1
118.00	1.00	1.31	32.512	35.76	376.27	0.750	0.000	2.00	6.542	4.91	280.7	0.0	210.0
120.00	1.00	1.32	32.627	35.89	373.10	0.750	0.000	2.00	6.476	4.86	278.9	0.0	207.9
122.00 Appurtenance(s)	1.00	1.32	32.741	36.01	369.90	0.750	0.000	2.00	6.409	4.81	277.0	0.0	205.7
124.00	1.00	1.32	32.853	36.14	366.69	0.750	0.000	2.00	6.343	4.76	275.1	0.0	203.6
126.00	1.00	1.33	32.964	36.26	363.45	0.750	0.000	2.00	6.277	4.71	273.1	0.0	201.4
128.00	1.00	1.33	33.073	36.38	360.19	0.750	0.000	2.00	6.210	4.66	271.1	0.0	199.3
130.00	1.00	1.34	33.182	36.50	356.90	0.750	0.000	2.00	6.144	4.61	269.1	0.0	197.1
131.58 Bot - Section 4	1.00	1.34	33.266	36.59	354.29	0.750	0.000	1.58	4.817	3.61	211.5	0.0	154.6
132.00	1.00	1.34	33.288	36.62	353.60	0.750	0.000	0.42	1.278	0.96	56.2	0.0	76.9
134.00	1.00	1.35	33.394	36.73	350.28	0.750	0.000	2.00	6.097	4.57	268.7	0.0	366.9
136.00	1.00	1.35	33.498	36.85	346.93	0.750	0.000	2.00	6.030	4.52	266.6	0.0	362.8
136.83 Top - Section 3	1.00	1.35	33.541	36.90	345.54	0.750	0.000	0.83	2.493	1.87	110.4	0.0	150.0
138.00	1.00	1.35	33.601	36.96	348.57	0.750	0.000	1.17	3.471	2.60	154.0	0.0	99.1
140.00	1.00	1.36	33.703	37.07	345.19	0.750	0.000	2.00	5.898	4.42	262.4	0.0	168.3
142.00	1.00	1.36	33.804	37.18	341.80	0.750	0.000	2.00	5.831	4.37	260.2	0.0	166.4
144.00	1.00	1.37	33.904	37.29	338.39	0.750	0.000	2.00	5.765	4.32	258.0	0.0	164.5
146.00	1.00	1.37	34.002	37.40	334.97	0.750	0.000	2.00	5.699	4.27	255.8	0.0	162.6
147.00 Appurtenance(s)	1.00	1.37	34.051	37.46	333.25	0.750	0.000	1.00	2.825	2.12	127.0	0.0	80.6
148.00	1.00	1.37	34.100	37.51	331.52	0.750	0.000	1.00	2.808	2.11	126.4	0.0	80.1
150.00	1.00	1.38	34.196	37.62	328.06	0.750	0.000	2.00	5.566	4.17	251.3	0.0	158.8
152.00	1.00	1.38	34.292	37.72	324.59	0.750	0.000	2.00	5.500	4.13	249.0	0.0	156.9
154.00	1.00	1.39	34.386	37.83	321.09	0.750	0.000	2.00	5.434	4.08	246.6	0.0	155.0
156.00	1.00	1.39	34.480	37.93	317.58	0.750	0.000	2.00	5.368	4.03	244.3	0.0	153.1
158.00	1.00	1.39	34.573	38.03	314.06	0.750	0.000	2.00	5.301	3.98	241.9	0.0	151.2
160.00	1.00	1.40	34.664	38.13	310.52	0.750	0.000	2.00	5.235	3.93	239.5	0.0	149.3
162.00	1.00	1.40	34.755	38.23	306.96	0.750	0.000	2.00	5.169	3.88	237.1	0.0	147.4
164.00	1.00	1.40	34.845	38.33	303.39	0.750	0.000	2.00	5.102	3.83	234.7	0.0	145.4
166.00	1.00	1.41	34.934	38.43	299.81	0.750	0.000	2.00	5.036	3.78	232.2	0.0	143.5
167.00 Appurtenance(s)	1.00	1.41	34.978	38.48	298.01	0.750	0.000	1.00	2.493	1.87	115.1	0.0	71.1
168.00	1.00	1.41	35.022	38.52	296.21	0.750	0.000	1.00	2.477	1.86	114.5	0.0	70.6
170.00	1.00	1.42	35.110	38.62	292.60	0.750	0.000	2.00	4.904	3.68	227.3	0.0	139.7
172.00	1.00	1.42	35.196	38.72	288.97	0.750	0.000	2.00	4.837	3.63	224.7	0.0	137.8
174.00	1.00	1.42	35.282	38.81	285.33	0.750	0.000	2.00	4.771	3.58	222.2	0.0	135.9
176.00	1.00	1.43	35.367	38.90	281.68	0.750	0.000	2.00	4.705	3.53	219.6	0.0	134.0
178.00 Appurtenance(s)	1.00	1.43	35.451	39.00	278.01	0.750	0.000	2.00	4.638	3.48	217.1	0.0	132.1
180.00	1.00	1.43	35.535	39.09	274.34	0.750	0.000	2.00	4.572	3.43	214.5	0.0	130.2
							Totals:	**180.00**			**25,244.6**		**29,683.4**

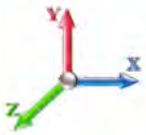
Discrete Appurtenance Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 21	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	178.00	Samsung B5/B13	3	35.451	38.996	0.50	0.75	2.82	189.81	0.000	0.000	175.89	0.00	0.00
2	178.00	MS-HR35	1	35.451	38.996	1.00	1.00	8.75	387.00	0.000	0.000	545.95	0.00	0.00
3	178.00	MS-KI22-5 (Kickers w/o	1	35.451	38.996	1.00	1.00	5.33	131.40	0.000	0.000	332.56	0.00	0.00
4	178.00	JMA Wireless	6	35.451	38.996	0.65	0.75	38.64	248.40	0.000	0.000	2410.96	0.00	0.00
5	178.00	Samsung MT6407-77A	3	35.451	38.996	0.52	0.75	7.39	214.38	0.000	0.000	460.89	0.00	0.00
6	178.00	Low Profile Platform	1	35.451	38.996	1.00	1.00	24.92	1350.00	0.000	0.000	1554.86	0.00	0.00
7	178.00	Raycap	1	35.451	38.996	1.00	1.00	4.06	28.80	0.000	0.000	253.32	0.00	0.00
8	178.00	JMA 919003314 SBS	3	35.451	38.996	1.00	1.00	0.00	68.45	0.000	0.000	0.00	0.00	0.00
9	178.00	LPA-80080-4CF	6	35.451	38.996	1.36	0.80	21.30	64.80	0.000	0.000	1328.84	0.00	0.00
10	178.00	Samsung B2/B66A	3	35.451	38.996	0.50	0.75	2.82	227.88	0.000	0.000	175.89	0.00	0.00
11	167.00	RFS ACU-A20-N RET	4	34.978	38.476	0.50	0.75	0.28	3.60	0.000	0.000	17.32	0.00	0.00
12	167.00	AIR6449 B41	3	34.978	38.476	0.53	0.75	9.03	278.10	0.000	0.000	555.65	0.00	0.00
13	167.00	APXVAALL24_43-U-NA20	3	34.978	38.476	0.55	0.75	33.24	331.56	0.000	0.000	2046.56	0.00	0.00
14	167.00	Ericsson 4460 B25 + B66	3	34.978	38.476	0.50	0.75	3.23	294.30	0.000	0.000	198.60	0.00	0.00
15	167.00	Alcatel Lucent	3	34.978	38.476	0.50	0.75	6.11	189.00	0.000	0.000	375.86	0.00	0.00
16	167.00	Ericsson 4480 B71 + B85	3	34.978	38.476	0.50	0.75	3.65	251.10	0.000	0.000	224.59	0.00	0.00
17	167.00	Alcatel Lucent 800 MHz	3	34.978	38.476	0.50	0.75	1.18	23.76	0.000	0.000	72.39	0.00	0.00
18	167.00	RMQP-4096-HK Plat. +	1	34.978	38.476	1.00	1.00	51.70	2380.50	0.000	0.000	3182.73	0.00	0.00
19	147.00	Powerwave	3	34.051	37.456	0.68	0.75	1.86	59.40	0.000	0.000	111.65	0.00	0.00
20	147.00	7770	3	34.051	37.456	0.55	0.75	9.03	94.50	0.000	0.000	541.40	0.00	0.00
21	147.00	Cci DMP65R-BU8DA	6	34.051	37.456	0.55	0.75	58.70	516.78	0.000	0.000	3518.09	0.00	0.00
22	147.00	Cci DTMABP7819VG12A	3	34.051	37.456	0.50	0.75	1.72	51.84	0.000	0.000	102.99	0.00	0.00
23	147.00	RMQP-496-HK	1	34.051	37.456	1.00	1.00	46.00	2204.10	0.000	0.000	2756.79	0.00	0.00
24	147.00	Ericsson RRUS 8843 B2	3	34.051	37.456	0.50	0.75	2.49	202.50	0.000	0.000	149.07	0.00	0.00
25	147.00	Ericsson RRUS 4449	3	34.051	37.456	0.50	0.75	2.97	191.70	0.000	0.000	177.98	0.00	0.00
26	147.00	Raycap DC6-48-60-18-8F	3	34.051	37.456	0.75	0.75	2.07	85.86	0.000	0.000	124.06	0.00	0.00
27	147.00	Ericsson RRUS 4478 B14	3	34.051	37.456	0.50	0.75	2.49	160.38	0.000	0.000	149.07	0.00	0.00
28	122.00	Nokia CS72188.01	1	32.741	36.015	1.00	1.00	3.15	14.85	0.000	0.000	181.52	0.00	0.00
29	110.00	Fujitsu TA08025-B605	3	32.035	35.238	0.50	0.75	2.95	202.50	0.000	0.000	166.59	0.00	0.00
30	110.00	JMA Wireless	3	32.035	35.238	0.55	0.75	20.80	174.15	0.000	0.000	1172.50	0.00	0.00
31	110.00	MC-PK8-C	1	32.035	35.238	1.00	1.00	33.60	1269.90	0.000	0.000	1894.42	0.00	0.00
32	110.00	Fujitsu TA08025-B604	3	32.035	35.238	0.50	0.75	2.95	172.53	0.000	0.000	166.59	0.00	0.00
33	110.00	Raycap	1	32.035	35.238	1.00	1.00	2.01	19.71	0.000	0.000	113.33	0.00	0.00
34	75.00	Side Arms	2	29.553	32.509	1.00	1.00	5.26	72.00	0.000	0.000	273.59	0.00	0.00
35	75.00	Lucent KS-24019	1	29.553	32.509	1.00	1.00	0.91	3.60	0.000	0.000	47.33	0.00	0.00
							Totals:		**12,159.14**			**25,559.81**		

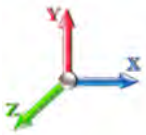
Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 22

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		282.89	579.20	0.00	0.00
4.00		281.04	575.86	0.00	0.00
6.00		279.20	572.53	0.00	0.00
8.00		277.35	569.20	0.00	0.00
10.00		275.51	565.86	0.00	0.00
12.00		273.66	562.53	0.00	0.00
14.00		271.82	559.19	0.00	0.00
16.00		273.31	555.86	0.00	0.00
18.00		278.25	552.53	0.00	0.00
20.00		282.54	549.19	0.00	0.00
22.00		286.27	545.86	0.00	0.00
24.00		289.52	542.52	0.00	0.00
26.00		292.38	539.19	0.00	0.00
28.00		294.87	535.86	0.00	0.00
30.00		297.05	532.52	0.00	0.00
32.00		298.96	529.19	0.00	0.00
34.00		300.61	525.85	0.00	0.00
36.00		302.03	522.52	0.00	0.00
38.00		303.25	519.19	0.00	0.00
40.00		304.28	515.85	0.00	0.00
42.00		305.13	512.52	0.00	0.00
44.00		305.82	509.19	0.00	0.00
45.50		229.46	379.70	0.00	0.00
46.00		77.49	220.40	0.00	0.00
48.00		311.29	877.73	0.00	0.00
50.00		311.61	871.54	0.00	0.00
52.00		311.80	865.35	0.00	0.00
52.75		116.66	322.91	0.00	0.00
54.00		194.64	273.64	0.00	0.00
56.00		311.84	435.50	0.00	0.00
58.00		311.70	432.64	0.00	0.00
60.00		311.47	429.78	0.00	0.00
62.00		311.14	426.92	0.00	0.00
64.00		310.73	424.07	0.00	0.00
66.00		310.23	421.21	0.00	0.00
68.00		309.65	418.35	0.00	0.00
70.00		309.00	415.49	0.00	0.00
72.00		308.27	412.64	0.00	0.00
74.00		307.48	409.78	0.00	0.00
75.00	(3) attachments	474.13	279.42	0.00	0.00
76.00		152.98	203.10	0.00	0.00
78.00		305.69	404.06	0.00	0.00
80.00		304.71	401.20	0.00	0.00
82.00		303.66	398.35	0.00	0.00
84.00		302.56	395.49	0.00	0.00
86.00		301.40	392.63	0.00	0.00

Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 23

Tower Engineering Solutions

88.00		300.19	389.77	0.00	0.00
90.00		298.92	386.92	0.00	0.00
92.00		297.61	384.06	0.00	0.00
92.33		49.38	63.73	0.00	0.00
94.00		249.94	513.76	0.00	0.00
96.00		298.77	611.92	0.00	0.00
98.00		297.33	606.92	0.00	0.00
98.50		73.99	150.95	0.00	0.00
100.00		221.63	225.55	0.00	0.00
102.00		294.33	298.86	0.00	0.00
104.00		292.77	296.72	0.00	0.00
106.00		291.16	294.58	0.00	0.00
108.00		289.52	292.43	0.00	0.00
110.00	(11) attachments	3801.26	2129.08	0.00	0.00
112.00		286.12	284.87	0.00	0.00
114.00		284.36	282.73	0.00	0.00
116.00		282.57	280.58	0.00	0.00
118.00		280.75	278.44	0.00	0.00
120.00		278.89	276.30	0.00	0.00
122.00	(1) attachments	458.51	289.00	0.00	0.00
124.00		275.07	272.01	0.00	0.00
126.00		273.11	269.87	0.00	0.00
128.00		271.13	267.72	0.00	0.00
130.00		269.11	265.58	0.00	0.00
131.58		211.53	208.73	0.00	0.00
132.00		56.18	91.20	0.00	0.00
134.00		268.74	435.32	0.00	0.00
136.00		266.65	431.27	0.00	0.00
136.83		110.38	178.50	0.00	0.00
138.00		153.95	138.98	0.00	0.00
140.00		262.38	236.75	0.00	0.00
142.00		260.21	234.84	0.00	0.00
144.00		258.01	232.94	0.00	0.00
146.00		255.79	231.03	0.00	0.00
147.00	(28) attachments	7758.05	3681.86	0.00	0.00
148.00		126.40	98.29	0.00	0.00
150.00		251.26	195.14	0.00	0.00
152.00		248.96	193.24	0.00	0.00
154.00		246.64	191.33	0.00	0.00
156.00		244.30	189.43	0.00	0.00
158.00		241.93	187.52	0.00	0.00
160.00		239.54	185.62	0.00	0.00
162.00		237.12	183.71	0.00	0.00
164.00		234.69	181.81	0.00	0.00
166.00		232.23	179.90	0.00	0.00
167.00	(23) attachments	6788.81	3841.16	0.00	0.00
168.00		114.49	82.06	0.00	0.00
170.00		227.26	162.70	0.00	0.00
172.00		224.74	160.80	0.00	0.00
174.00		222.20	158.89	0.00	0.00
176.00		219.64	156.99	0.00	0.00
178.00	(28) attachments	7456.21	3066.00	0.00	0.00
180.00		214.46	130.21	0.00	0.00
	Totals:	**50,804.45**	**47,542.66**	**0.00**	**0.00**

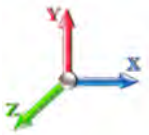
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.026	0.000	21.088	0.00	3.28
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.026	0.000	21.088	0.00	3.28
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	3.28
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	3.28
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	3.28
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	3.28
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.088	0.00	3.28
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	21.348	0.00	3.28
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	21.884	0.00	3.28
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	22.375	0.00	3.28
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	22.828	0.00	3.28
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	23.250	0.00	3.28
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	23.645	0.00	3.28
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	24.017	0.00	3.28
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	24.369	0.00	3.28
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	24.702	0.00	3.28
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	25.019	0.00	3.28
36.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	25.322	0.00	3.28
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	25.612	0.00	3.28
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	25.890	0.00	3.28
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	26.157	0.00	3.28
44.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	26.415	0.00	3.28
45.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.031	0.000	26.602	0.00	2.46
46.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.031	0.000	26.663	0.00	0.82
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	26.903	0.00	3.28
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	27.135	0.00	3.28
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	27.360	0.00	3.28
52.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.10	0.00	0.032	0.000	27.443	0.00	1.23
54.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.17	0.00	0.031	0.000	27.579	0.00	2.05
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	27.790	0.00	3.28
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	27.997	0.00	3.28
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	28.197	0.00	3.28
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	28.392	0.00	3.28
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	28.583	0.00	3.28
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	28.769	0.00	3.28
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	28.950	0.00	3.28
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	29.127	0.00	3.28
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	29.300	0.00	3.28
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.034	0.000	29.470	0.00	3.28
75.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.034	0.000	29.553	0.00	1.64
76.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.034	0.000	29.636	0.00	1.64
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.034	0.000	29.798	0.00	3.28
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	29.958	0.00	3.28
82.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	30.114	0.00	3.28
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	30.267	0.00	3.28
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.417	0.00	3.28
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.565	0.00	3.28

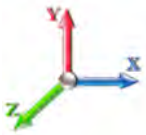
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 25	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.710	0.00	3.28
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	30.852	0.00	3.28
92.33	1.6" Hybrid	Yes	0.33	0.000	1.60	0.04	0.00	0.037	0.000	30.876	0.00	0.55
94.00	1.6" Hybrid	Yes	1.67	0.000	1.60	0.22	0.00	0.037	0.000	30.992	0.00	2.73
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.037	0.000	31.130	0.00	3.28
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.265	0.00	3.28
98.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.038	0.000	31.299	0.00	0.82
100.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.037	0.000	31.399	0.00	2.46
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.530	0.00	3.28
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.659	0.00	3.28
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	31.786	0.00	3.28
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.039	0.000	31.911	0.00	3.28
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.039	0.000	32.035	0.00	3.28
										Totals:	**0.0**	**180.2**

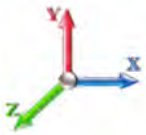
Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 26	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-47.50	-50.85	0.00	-6398.2	0.00	6398.20	5499.24	2749.62	13525.8	6714.82	0.00	0.000	0.000	0.962
2.00	-46.83	-50.64	0.00	-6296.5	0.00	6296.51	5478.14	2739.07	13385.1	6644.94	0.02	-0.097	0.000	0.956
4.00	-46.17	-50.44	0.00	-6195.2	0.00	6195.23	5456.85	2728.42	13244.5	6575.16	0.08	-0.194	0.000	0.951
6.00	-45.51	-50.23	0.00	-6094.3	0.00	6094.35	5435.36	2717.68	13104.2	6505.49	0.19	-0.292	0.000	0.946
8.00	-44.86	-50.03	0.00	-5993.8	0.00	5993.88	5413.67	2706.84	12964.1	6435.94	0.33	-0.390	0.000	0.940
10.00	-44.21	-49.83	0.00	-5893.8	0.00	5893.83	5391.79	2695.89	12824.2	6366.50	0.52	-0.488	0.000	0.934
12.00	-43.57	-49.62	0.00	-5794.1	0.00	5794.17	5369.71	2684.85	12684.6	6297.18	0.74	-0.587	0.000	0.929
14.00	-42.93	-49.42	0.00	-5694.9	0.00	5694.93	5347.43	2673.72	12545.2	6227.99	1.01	-0.686	0.000	0.923
16.00	-42.29	-49.21	0.00	-5596.0	0.00	5596.09	5324.96	2662.48	12406.1	6158.93	1.32	-0.785	0.000	0.917
18.00	-41.65	-49.00	0.00	-5497.6	0.00	5497.67	5302.29	2651.14	12267.3	6090.01	1.67	-0.885	0.000	0.911
20.00	-41.02	-48.78	0.00	-5399.6	0.00	5399.68	5279.42	2639.71	12128.7	6021.23	2.06	-0.984	0.000	0.905
22.00	-40.40	-48.55	0.00	-5302.1	0.00	5302.12	5256.36	2628.18	11990.5	5952.59	2.50	-1.085	0.000	0.899
24.00	-39.78	-48.32	0.00	-5205.0	0.00	5205.02	5233.10	2616.55	11852.5	5884.10	2.97	-1.185	0.000	0.893
26.00	-39.16	-48.09	0.00	-5108.3	0.00	5108.37	5209.64	2604.82	11714.9	5815.77	3.49	-1.286	0.000	0.886
28.00	-38.55	-47.85	0.00	-5012.2	0.00	5012.20	5185.99	2593.00	11577.5	5747.60	4.05	-1.387	0.000	0.880
30.00	-37.94	-47.61	0.00	-4916.5	0.00	4916.50	5162.14	2581.07	11440.6	5679.60	4.65	-1.488	0.000	0.873
32.00	-37.33	-47.36	0.00	-4821.2	0.00	4821.29	5138.10	2569.05	11303.9	5611.76	5.30	-1.589	0.000	0.867
34.00	-36.73	-47.11	0.00	-4726.5	0.00	4726.58	5113.85	2556.93	11167.6	5544.10	5.99	-1.691	0.000	0.860
36.00	-36.14	-46.86	0.00	-4632.3	0.00	4632.36	5089.42	2544.71	11031.7	5476.62	6.72	-1.793	0.000	0.853
38.00	-35.54	-46.60	0.00	-4538.6	0.00	4538.65	5064.78	2532.39	10896.1	5409.32	7.49	-1.895	0.000	0.846
40.00	-34.96	-46.34	0.00	-4445.4	0.00	4445.46	5039.95	2519.97	10760.9	5342.21	8.31	-1.997	0.000	0.839
42.00	-34.37	-46.08	0.00	-4352.7	0.00	4352.78	5014.92	2507.46	10626.1	5275.29	9.17	-2.099	0.000	0.832
44.00	-33.80	-45.81	0.00	-4260.6	0.00	4260.63	4989.69	2494.85	10491.8	5208.57	10.07	-2.202	0.000	0.825
45.50	-33.39	-45.59	0.00	-4191.9	0.00	4191.92	4970.65	2485.32	10391.2	5158.66	10.77	-2.279	0.000	0.820
46.00	-33.12	-45.54	0.00	-4169.1	0.00	4169.12	4964.27	2482.14	10357.8	5142.05	11.01	-2.305	0.000	0.818
48.00	-32.18	-45.25	0.00	-4078.0	0.00	4078.04	4938.65	2469.33	10224.2	5075.74	12.00	-2.407	0.000	0.810
50.00	-31.24	-44.96	0.00	-3987.5	0.00	3987.53	4912.84	2456.42	10091.1	5009.65	13.03	-2.510	0.000	0.803
52.00	-30.33	-44.65	0.00	-3897.6	0.00	3897.61	4886.83	2443.41	9958.39	4943.77	14.10	-2.613	0.000	0.795
52.75	-29.98	-44.54	0.00	-3864.1	0.00	3864.13	3995.11	1997.56	8262.19	4101.70	14.52	-2.652	0.000	0.950
54.00	-29.64	-44.38	0.00	-3808.4	0.00	3808.45	3983.52	1991.76	8197.82	4069.74	15.22	-2.717	0.000	0.944
56.00	-29.14	-44.11	0.00	-3719.6	0.00	3719.68	3964.81	1982.41	8095.01	4018.70	16.38	-2.831	0.000	0.933
58.00	-28.63	-43.83	0.00	-3631.4	0.00	3631.46	3945.91	1972.96	7992.40	3967.76	17.60	-2.946	0.000	0.923
60.00	-28.13	-43.56	0.00	-3543.8	0.00	3543.80	3926.81	1963.41	7890.01	3916.93	18.85	-3.060	0.000	0.912
62.00	-27.64	-43.28	0.00	-3456.6	0.00	3456.69	3907.51	1953.76	7787.85	3866.21	20.16	-3.174	0.000	0.902
64.00	-27.15	-43.00	0.00	-3370.1	0.00	3370.13	3888.02	1944.01	7685.92	3815.62	21.51	-3.289	0.000	0.891
66.00	-26.66	-42.72	0.00	-3284.1	0.00	3284.14	3868.33	1934.17	7584.24	3765.14	22.92	-3.403	0.000	0.880
68.00	-26.17	-42.43	0.00	-3198.7	0.00	3198.71	3848.45	1924.22	7482.82	3714.79	24.37	-3.516	0.000	0.868
70.00	-25.70	-42.15	0.00	-3113.8	0.00	3113.84	3828.36	1914.18	7381.67	3664.57	25.86	-3.630	0.000	0.857
72.00	-25.22	-41.87	0.00	-3029.5	0.00	3029.54	3808.08	1904.04	7280.79	3614.49	27.41	-3.743	0.000	0.845
74.00	-24.77	-41.57	0.00	-2945.8	0.00	2945.81	3787.61	1893.80	7180.20	3564.55	29.00	-3.857	0.000	0.833
75.00	-24.48	-41.10	0.00	-2904.2	0.00	2904.25	3777.30	1888.65	7130.01	3539.64	29.81	-3.913	0.000	0.827
76.00	-24.23	-40.97	0.00	-2863.1	0.00	2863.15	3766.94	1883.47	7079.90	3514.76	30.64	-3.970	0.000	0.822
78.00	-23.77	-40.68	0.00	-2781.2	0.00	2781.21	3746.07	1873.03	6979.91	3465.12	32.33	-4.082	0.000	0.809
80.00	-23.31	-40.40	0.00	-2699.8	0.00	2699.84	3725.00	1862.50	6880.23	3415.63	34.06	-4.194	0.000	0.797
82.00	-22.86	-40.11	0.00	-2619.0	0.00	2619.05	3703.74	1851.87	6780.87	3366.31	35.84	-4.306	0.000	0.785
84.00	-22.41	-39.82	0.00	-2538.8	0.00	2538.83	3682.28	1841.14	6681.85	3317.15	37.67	-4.417	0.000	0.772
86.00	-21.97	-39.53	0.00	-2459.1	0.00	2459.19	3660.63	1830.31	6583.17	3268.16	39.54	-4.527	0.000	0.759
88.00	-21.53	-39.24	0.00	-2380.1	0.00	2380.13	3638.77	1819.39	6484.84	3219.35	41.46	-4.637	0.000	0.746

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 27

90.00	-21.09	-38.95	0.00	-2301.6	0.00	2301.65	3616.73	1808.36	6386.87	3170.71	43.42	-4.747	0.000	0.732
92.00	-20.69	-38.65	0.00	-2223.7	0.00	2223.74	3594.48	1797.24	6289.28	3122.26	45.43	-4.855	0.000	0.718
92.33	-20.60	-38.61	0.00	-2210.8	0.00	2210.86	3590.75	1795.38	6273.05	3114.21	45.77	-4.873	0.000	0.716
94.00	-20.04	-38.35	0.00	-2146.5	0.00	2146.51	3572.04	1786.02	6192.07	3074.00	47.49	-4.963	0.000	0.704
96.00	-19.39	-38.04	0.00	-2069.8	0.00	2069.80	3549.40	1774.70	6095.24	3025.94	49.59	-5.070	0.000	0.690
98.00	-18.77	-37.71	0.00	-1993.7	0.00	1993.73	3526.57	1763.28	5998.82	2978.07	51.73	-5.176	0.000	0.675
98.50	-18.59	-37.64	0.00	-1974.8	0.00	1974.87	2386.86	1193.43	4124.78	2047.71	52.27	-5.202	0.000	0.973
100.00	-18.31	-37.43	0.00	-1918.4	0.00	1918.42	2378.02	1189.01	4080.56	2025.76	53.92	-5.281	0.000	0.956
102.00	-17.96	-37.15	0.00	-1843.5	0.00	1843.55	2366.05	1183.03	4021.64	1996.51	56.16	-5.413	0.000	0.932
104.00	-17.61	-36.87	0.00	-1769.2	0.00	1769.25	2353.89	1176.95	3962.79	1967.29	58.45	-5.543	0.000	0.908
106.00	-17.26	-36.59	0.00	-1695.5	0.00	1695.51	2341.53	1170.77	3904.00	1938.11	60.80	-5.672	0.000	0.883
108.00	-16.92	-36.31	0.00	-1622.3	0.00	1622.32	2328.98	1164.49	3845.28	1908.96	63.20	-5.798	0.000	0.858
110.00	-15.12	-32.35	0.00	-1549.7	0.00	1549.70	2316.23	1158.11	3786.65	1879.85	65.65	-5.923	0.000	0.832
112.00	-14.80	-32.06	0.00	-1485.0	0.00	1485.01	2303.28	1151.64	3728.12	1850.80	68.15	-6.046	0.000	0.810
114.00	-14.48	-31.78	0.00	-1420.8	0.00	1420.88	2290.14	1145.07	3669.69	1821.79	70.71	-6.167	0.000	0.787
116.00	-14.17	-31.50	0.00	-1357.3	0.00	1357.32	2276.80	1138.40	3611.38	1792.84	73.31	-6.287	0.000	0.764
118.00	-13.86	-31.22	0.00	-1294.3	0.00	1294.33	2263.26	1131.63	3553.19	1763.95	75.97	-6.404	0.000	0.741
120.00	-13.55	-30.94	0.00	-1231.8	0.00	1231.89	2249.53	1124.76	3495.14	1735.13	78.67	-6.519	0.000	0.717
122.00	-13.26	-30.47	0.00	-1170.0	0.00	1170.02	2235.60	1117.80	3437.23	1706.38	81.42	-6.632	0.000	0.692
124.00	-12.96	-30.19	0.00	-1109.0	0.00	1109.07	2221.47	1110.74	3379.47	1677.71	84.22	-6.743	0.000	0.668
126.00	-12.67	-29.91	0.00	-1048.6	0.00	1048.69	2207.15	1103.57	3321.87	1649.12	87.06	-6.851	0.000	0.642
128.00	-12.39	-29.64	0.00	-988.86	0.00	988.86	2192.63	1096.31	3264.45	1620.61	89.95	-6.957	0.000	0.617
130.00	-12.11	-29.35	0.00	-929.59	0.00	929.59	2177.91	1088.96	3207.21	1592.19	92.88	-7.060	0.000	0.590
131.58	-11.90	-29.13	0.00	-883.11	0.00	883.11	2166.12	1083.06	3162.03	1569.76	95.23	-7.139	0.000	0.569
132.00	-11.79	-29.07	0.00	-870.98	0.00	870.98	2163.00	1081.50	3150.16	1563.87	95.85	-7.160	0.000	0.563
134.00	-11.34	-28.77	0.00	-812.83	0.00	812.83	2147.89	1073.94	3093.31	1535.65	98.86	-7.256	0.000	0.535
136.00	-10.92	-28.47	0.00	-755.28	0.00	755.28	2132.58	1066.29	3036.67	1507.53	101.91	-7.348	0.000	0.507
136.83	-10.73	-28.34	0.00	-731.56	0.00	731.56	1821.16	910.58	2623.48	1302.41	103.20	-7.386	0.000	0.569
138.00	-10.58	-28.18	0.00	-698.50	0.00	698.50	1814.37	907.19	2596.54	1289.03	105.00	-7.438	0.000	0.549
140.00	-10.34	-27.91	0.00	-642.13	0.00	642.13	1802.58	901.29	2550.43	1266.14	108.13	-7.529	0.000	0.514
142.00	-10.10	-27.63	0.00	-586.31	0.00	586.31	1790.60	895.30	2504.42	1243.30	111.29	-7.615	0.000	0.478
144.00	-9.86	-27.36	0.00	-531.05	0.00	531.05	1778.42	889.21	2458.53	1220.52	114.49	-7.696	0.000	0.442
146.00	-9.64	-27.09	0.00	-476.32	0.00	476.32	1766.04	883.02	2412.77	1197.80	117.73	-7.772	0.000	0.404
147.00	-7.04	-18.91	0.00	-449.24	0.00	449.24	1759.78	879.89	2389.94	1186.47	119.35	-7.808	0.000	0.383
148.00	-6.94	-18.77	0.00	-430.33	0.00	430.33	1753.47	876.73	2367.15	1175.15	120.99	-7.843	0.000	0.371
150.00	-6.76	-18.50	0.00	-392.79	0.00	392.79	1740.70	870.35	2321.67	1152.58	124.28	-7.910	0.000	0.345
152.00	-6.58	-18.24	0.00	-355.78	0.00	355.78	1727.73	863.87	2276.35	1130.08	127.60	-7.972	0.000	0.319
154.00	-6.41	-17.97	0.00	-319.30	0.00	319.30	1714.57	857.28	2231.19	1107.66	130.94	-8.031	0.000	0.292
156.00	-6.24	-17.71	0.00	-283.35	0.00	283.35	1701.21	850.60	2186.21	1085.33	134.30	-8.085	0.000	0.265
158.00	-6.07	-17.45	0.00	-247.93	0.00	247.93	1687.65	843.83	2141.41	1063.08	137.69	-8.135	0.000	0.237
160.00	-5.91	-17.19	0.00	-213.03	0.00	213.03	1673.90	836.95	2096.80	1040.94	141.10	-8.180	0.000	0.209
162.00	-5.75	-16.93	0.00	-178.65	0.00	178.65	1659.95	829.97	2052.40	1018.90	144.52	-8.219	0.000	0.179
164.00	-5.60	-16.68	0.00	-144.78	0.00	144.78	1645.80	822.90	2008.21	996.96	147.96	-8.253	0.000	0.149
166.00	-5.45	-16.42	0.00	-111.43	0.00	111.43	1631.46	815.73	1964.24	975.13	151.41	-8.281	0.000	0.118
167.00	-2.62	-9.15	0.00	-95.00	0.00	95.00	1624.22	812.11	1942.34	964.26	153.14	-8.293	0.000	0.100
168.00	-2.56	-9.03	0.00	-85.85	0.00	85.85	1616.92	808.46	1920.51	953.42	154.87	-8.303	0.000	0.092
170.00	-2.43	-8.78	0.00	-67.79	0.00	67.79	1602.19	801.09	1877.01	931.83	158.35	-8.321	0.000	0.074
172.00	-2.30	-8.54	0.00	-50.23	0.00	50.23	1587.25	793.63	1833.77	910.36	161.82	-8.336	0.000	0.057
174.00	-2.17	-8.29	0.00	-33.16	0.00	33.16	1572.12	786.06	1790.79	889.02	165.30	-8.347	0.000	0.039
176.00	-2.05	-8.05	0.00	-16.57	0.00	16.57	1556.80	778.40	1748.08	867.82	168.79	-8.353	0.000	0.021
178.00	-0.10	-0.23	0.00	-0.46	0.00	0.46	1541.28	770.64	1705.64	846.75	172.28	-8.356	0.000	0.001
180.00	0.00	-0.21	0.00	0.00	0.00	0.00	1525.56	762.78	1663.50	825.83	175.77	-8.356	0.000	0.000

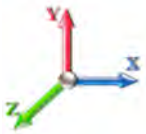
Wind Loading - Shaft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 28	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	5.168	5.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.168	5.68	0.00	1.200	1.511	2.00	10.666	12.80	72.8	233.5	910.2
4.00		1.00	0.85	5.168	5.68	0.00	1.200	1.620	2.00	10.636	12.76	72.6	249.1	921.3
6.00		1.00	0.85	5.168	5.68	0.00	1.200	1.687	2.00	10.592	12.71	72.3	258.1	925.8
8.00		1.00	0.85	5.168	5.68	0.00	1.200	1.736	2.00	10.543	12.65	71.9	264.1	927.4
10.00		1.00	0.85	5.168	5.68	0.00	1.200	1.775	2.00	10.489	12.59	71.6	268.5	927.3
12.00		1.00	0.85	5.168	5.68	0.00	1.200	1.808	2.00	10.434	12.52	71.2	271.8	926.2
14.00		1.00	0.85	5.168	5.68	0.00	1.200	1.836	2.00	10.377	12.45	70.8	274.3	924.3
16.00		1.00	0.86	5.232	5.76	0.00	1.200	1.860	2.00	10.319	12.38	71.3	276.3	921.8
18.00		1.00	0.88	5.363	5.90	0.00	1.200	1.882	2.00	10.260	12.31	72.6	277.8	918.9
20.00		1.00	0.90	5.483	6.03	0.00	1.200	1.902	2.00	10.200	12.24	73.8	278.9	915.6
22.00		1.00	0.92	5.595	6.15	0.00	1.200	1.921	2.00	10.140	12.17	74.9	279.8	912.0
24.00		1.00	0.94	5.698	6.27	0.00	1.200	1.937	2.00	10.080	12.10	75.8	280.4	908.2
26.00		1.00	0.95	5.795	6.37	0.00	1.200	1.953	2.00	10.018	12.02	76.6	280.8	904.1
28.00		1.00	0.97	5.886	6.47	0.00	1.200	1.967	2.00	9.957	11.95	77.4	281.0	899.9
30.00		1.00	0.98	5.972	6.57	0.00	1.200	1.981	2.00	9.895	11.87	78.0	281.1	895.5
32.00		1.00	1.00	6.054	6.66	0.00	1.200	1.994	2.00	9.833	11.80	78.6	281.0	891.0
34.00		1.00	1.01	6.132	6.74	0.00	1.200	2.006	2.00	9.771	11.73	79.1	280.8	886.3
36.00		1.00	1.02	6.206	6.83	0.00	1.200	2.017	2.00	9.709	11.65	79.5	280.5	881.6
38.00		1.00	1.03	6.277	6.90	0.00	1.200	2.028	2.00	9.646	11.58	79.9	280.1	876.7
40.00		1.00	1.04	6.345	6.98	0.00	1.200	2.039	2.00	9.583	11.50	80.3	279.5	871.7
42.00		1.00	1.05	6.410	7.05	0.00	1.200	2.049	2.00	9.520	11.42	80.6	278.9	866.7
44.00		1.00	1.06	6.474	7.12	0.00	1.200	2.058	2.00	9.457	11.35	80.8	278.3	861.6
45.50	Bot - Section 2	1.00	1.07	6.519	7.17	0.00	1.200	2.065	1.50	7.051	8.46	60.7	208.3	642.8
46.00		1.00	1.07	6.534	7.19	0.00	1.200	2.068	0.50	2.374	2.85	20.5	70.4	340.3
48.00		1.00	1.08	6.593	7.25	0.00	1.200	2.076	2.00	9.458	11.35	82.3	280.6	1355.3
50.00		1.00	1.09	6.650	7.32	0.00	1.200	2.085	2.00	9.395	11.27	82.5	279.8	1346.2
52.00		1.00	1.10	6.705	7.38	0.00	1.200	2.093	2.00	9.331	11.20	82.6	278.8	1337.0
52.75	Top - Section 1	1.00	1.11	6.726	7.40	0.00	1.200	2.096	0.75	3.482	4.18	30.9	104.4	499.1
54.00		1.00	1.11	6.759	7.43	0.00	1.200	2.101	1.25	5.784	6.94	51.6	173.7	478.8
56.00		1.00	1.12	6.811	7.49	0.00	1.200	2.109	2.00	9.204	11.04	82.7	276.8	761.9
58.00		1.00	1.13	6.861	7.55	0.00	1.200	2.116	2.00	9.140	10.97	82.8	275.8	757.0
60.00		1.00	1.14	6.910	7.60	0.00	1.200	2.123	2.00	9.076	10.89	82.8	274.6	752.1
62.00		1.00	1.14	6.958	7.65	0.00	1.200	2.130	2.00	9.012	10.81	82.8	273.5	747.1
64.00		1.00	1.15	7.005	7.71	0.00	1.200	2.137	2.00	8.948	10.74	82.7	272.3	742.1
66.00		1.00	1.16	7.050	7.76	0.00	1.200	2.144	2.00	8.884	10.66	82.7	271.0	737.0
68.00		1.00	1.17	7.095	7.80	0.00	1.200	2.150	2.00	8.820	10.58	82.6	269.8	731.9
70.00		1.00	1.17	7.138	7.85	0.00	1.200	2.156	2.00	8.756	10.51	82.5	268.4	726.8
72.00		1.00	1.18	7.181	7.90	0.00	1.200	2.162	2.00	8.691	10.43	82.4	267.1	721.7
74.00		1.00	1.19	7.222	7.94	0.00	1.200	2.168	2.00	8.627	10.35	82.2	265.7	716.5
75.00	Appurtenance(s)	1.00	1.19	7.243	7.97	0.00	1.200	2.171	1.00	4.289	5.15	41.0	132.5	356.5
76.00		1.00	1.19	7.263	7.99	0.00	1.200	2.174	1.00	4.273	5.13	41.0	132.2	355.2
78.00		1.00	1.20	7.303	8.03	0.00	1.200	2.180	2.00	8.498	10.20	81.9	262.9	706.0
80.00		1.00	1.21	7.342	8.08	0.00	1.200	2.185	2.00	8.434	10.12	81.7	261.4	700.8
82.00		1.00	1.21	7.380	8.12	0.00	1.200	2.191	2.00	8.369	10.04	81.5	259.9	695.5
84.00		1.00	1.22	7.418	8.16	0.00	1.200	2.196	2.00	8.305	9.97	81.3	258.4	690.1
86.00		1.00	1.23	7.454	8.20	0.00	1.200	2.201	2.00	8.240	9.89	81.1	256.9	684.8

Wind Loading - Shaft

Structure: CT02721-S-SBA | **Code:** EIA/TIA-222-G | 12/16/2021

Site Name: South Windham | **Exposure:** C

Height: 180.00 (ft) | **Crest Height:** 0.00

Base Elev: 0.000 (ft) | **Site Class:** D - Stiff Soil

Gh: 1.1 | **Topography:** 1 | **Struct Class:** II | Page: 29

88.00	1.00	1.23	7.491	8.24	0.00	1.200	2.206	2.00	8.176	9.81	80.8	255.3	679.4
90.00	1.00	1.24	7.526	8.28	0.00	1.200	2.211	2.00	8.111	9.73	80.6	253.8	674.0
92.00	1.00	1.24	7.561	8.32	0.00	1.200	2.216	2.00	8.046	9.66	80.3	252.2	668.6
92.33 Bot - Section 3	1.00	1.24	7.567	8.32	0.00	1.200	2.217	0.33	1.335	1.60	13.3	42.0	111.0
94.00	1.00	1.25	7.595	8.35	0.00	1.200	2.221	1.67	6.727	8.07	67.4	211.4	816.7
96.00	1.00	1.25	7.629	8.39	0.00	1.200	2.225	2.00	8.013	9.62	80.7	252.1	972.3
98.00	1.00	1.26	7.662	8.43	0.00	1.200	2.230	2.00	7.948	9.54	80.4	250.4	964.0
98.50 Top - Section 2	1.00	1.26	7.671	8.44	0.00	1.200	2.231	0.50	1.977	2.37	20.0	62.5	239.9
100.00	1.00	1.27	7.695	8.46	0.00	1.200	2.234	1.50	5.906	7.09	60.0	186.6	415.6
102.00	1.00	1.27	7.727	8.50	0.00	1.200	2.239	2.00	7.818	9.38	79.7	247.0	549.9
104.00	1.00	1.28	7.759	8.53	0.00	1.200	2.243	2.00	7.753	9.30	79.4	245.3	545.3
106.00	1.00	1.28	7.790	8.57	0.00	1.200	2.248	2.00	7.689	9.23	79.1	243.6	540.8
108.00	1.00	1.29	7.821	8.60	0.00	1.200	2.252	2.00	7.624	9.15	78.7	241.9	536.2
110.00 Appurtenance(s)	1.00	1.29	7.851	8.64	0.00	1.200	2.256	2.00	7.559	9.07	78.3	240.1	531.5
112.00	1.00	1.30	7.881	8.67	0.00	1.200	2.260	2.00	7.494	8.99	78.0	238.3	526.9
114.00	1.00	1.30	7.910	8.70	0.00	1.200	2.264	2.00	7.429	8.91	77.6	236.5	522.3
116.00	1.00	1.31	7.939	8.73	0.00	1.200	2.268	2.00	7.364	8.84	77.2	234.7	517.6
118.00	1.00	1.31	7.968	8.76	0.00	1.200	2.272	2.00	7.299	8.76	76.8	232.9	512.9
120.00	1.00	1.32	7.996	8.80	0.00	1.200	2.276	2.00	7.234	8.68	76.4	231.1	508.2
122.00 Appurtenance(s)	1.00	1.32	8.024	8.83	0.00	1.200	2.279	2.00	7.169	8.60	75.9	229.2	503.5
124.00	1.00	1.32	8.051	8.86	0.00	1.200	2.283	2.00	7.104	8.52	75.5	227.4	498.8
126.00	1.00	1.33	8.079	8.89	0.00	1.200	2.287	2.00	7.039	8.45	75.1	225.5	494.1
128.00	1.00	1.33	8.105	8.92	0.00	1.200	2.290	2.00	6.974	8.37	74.6	223.6	489.4
130.00	1.00	1.34	8.132	8.95	0.00	1.200	2.294	2.00	6.909	8.29	74.2	221.7	484.6
131.58 Bot - Section 4	1.00	1.34	8.153	8.97	0.00	1.200	2.297	1.58	5.423	6.51	58.4	174.3	380.4
132.00	1.00	1.34	8.158	8.97	0.00	1.200	2.297	0.42	1.438	1.73	15.5	46.4	149.0
134.00	1.00	1.35	8.184	9.00	0.00	1.200	2.301	2.00	6.864	8.24	74.1	220.8	710.0
136.00	1.00	1.35	8.210	9.03	0.00	1.200	2.304	2.00	6.798	8.16	73.7	218.9	702.7
136.83 Top - Section 3	1.00	1.35	8.220	9.04	0.00	1.200	2.306	0.83	2.813	3.38	30.5	90.9	290.9
138.00	1.00	1.35	8.235	9.06	0.00	1.200	2.308	1.17	3.920	4.70	42.6	126.6	258.6
140.00	1.00	1.36	8.260	9.09	0.00	1.200	2.311	2.00	6.668	8.00	72.7	215.0	439.4
142.00	1.00	1.36	8.285	9.11	0.00	1.200	2.314	2.00	6.603	7.92	72.2	213.0	434.9
144.00	1.00	1.37	8.309	9.14	0.00	1.200	2.317	2.00	6.538	7.85	71.7	211.1	430.4
146.00	1.00	1.37	8.333	9.17	0.00	1.200	2.321	2.00	6.472	7.77	71.2	209.1	425.9
147.00 Appurtenance(s)	1.00	1.37	8.345	9.18	0.00	1.200	2.322	1.00	3.212	3.85	35.4	104.1	211.5
148.00	1.00	1.37	8.357	9.19	0.00	1.200	2.324	1.00	3.195	3.83	35.2	103.6	210.4
150.00	1.00	1.38	8.381	9.22	0.00	1.200	2.327	2.00	6.342	7.61	70.2	205.1	416.8
152.00	1.00	1.38	8.404	9.24	0.00	1.200	2.330	2.00	6.277	7.53	69.6	203.1	412.3
154.00	1.00	1.39	8.427	9.27	0.00	1.200	2.333	2.00	6.212	7.45	69.1	201.1	407.7
156.00	1.00	1.39	8.450	9.30	0.00	1.200	2.336	2.00	6.146	7.38	68.6	199.1	403.1
158.00	1.00	1.39	8.473	9.32	0.00	1.200	2.339	2.00	6.081	7.30	68.0	197.0	398.6
160.00	1.00	1.40	8.495	9.34	0.00	1.200	2.342	2.00	6.016	7.22	67.5	195.0	394.0
162.00	1.00	1.40	8.518	9.37	0.00	1.200	2.345	2.00	5.950	7.14	66.9	192.9	389.4
164.00	1.00	1.40	8.540	9.39	0.00	1.200	2.348	2.00	5.885	7.06	66.3	190.9	384.8
166.00	1.00	1.41	8.561	9.42	0.00	1.200	2.351	2.00	5.820	6.98	65.8	188.8	380.2
167.00 Appurtenance(s)	1.00	1.41	8.572	9.43	0.00	1.200	2.352	1.00	2.885	3.46	32.6	93.9	188.6
168.00	1.00	1.41	8.583	9.44	0.00	1.200	2.353	1.00	2.869	3.44	32.5	93.4	187.5
170.00	1.00	1.42	8.604	9.46	0.00	1.200	2.356	2.00	5.689	6.83	64.6	184.6	370.9
172.00	1.00	1.42	8.626	9.49	0.00	1.200	2.359	2.00	5.624	6.75	64.0	182.5	366.3
174.00	1.00	1.42	8.647	9.51	0.00	1.200	2.362	2.00	5.558	6.67	63.4	180.4	361.6
176.00	1.00	1.43	8.667	9.53	0.00	1.200	2.364	2.00	5.493	6.59	62.8	178.3	357.0
178.00 Appurtenance(s)	1.00	1.43	8.688	9.56	0.00	1.200	2.367	2.00	5.428	6.51	62.2	176.2	352.3
180.00	1.00	1.43	8.709	9.58	0.00	1.200	2.370	2.00	5.362	6.43	61.6	174.1	347.7
							Totals:	**180.00**			**6,818.1**		**61,523.0**

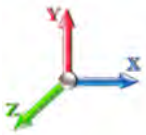
Discrete Appurtenance Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 30	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	178.00	Samsung B5/B13	3	8.688	9.557	0.50	0.75	4.03	561.83	0.000	0.000	38.53	0.00	0.00
2	178.00	MS-HR35	1	8.688	9.557	1.00	1.00	20.35	1638.15	0.000	0.000	194.47	0.00	0.00
3	178.00	MS-KI22-5 (Kickers w/o	1	8.688	9.557	1.00	1.00	12.90	387.68	0.000	0.000	123.29	0.00	0.00
4	178.00	JMA Wireless	6	8.688	9.557	0.65	0.75	46.09	2641.07	0.000	0.000	440.46	0.00	0.00
5	178.00	Samsung MT6407-77A	3	8.688	9.557	0.52	0.75	9.44	809.43	0.000	0.000	90.26	0.00	0.00
6	178.00	Low Profile Platform	1	8.688	9.557	1.00	1.00	52.05	3275.34	0.000	0.000	497.48	0.00	0.00
7	178.00	Raycap	1	8.688	9.557	1.00	1.00	5.17	167.73	0.000	0.000	49.46	0.00	0.00
8	178.00	JMA 919003314 SBS	3	8.688	9.557	1.00	1.00	0.00	159.82	0.000	0.000	0.00	0.00	0.00
9	178.00	LPA-80080-4CF	6	8.688	9.557	1.36	0.80	31.24	828.73	0.000	0.000	298.55	0.00	0.00
10	178.00	Samsung B2/B66A	3	8.688	9.557	0.50	0.75	4.03	642.96	0.000	0.000	38.53	0.00	0.00
11	167.00	RFS ACU-A20-N RET	4	8.572	9.429	0.50	0.75	1.09	22.76	0.000	0.000	10.23	0.00	0.00
12	167.00	AIR6449 B41	3	8.572	9.429	0.53	0.75	11.07	830.10	0.000	0.000	104.41	0.00	0.00
13	167.00	APXVAALL24_43-U-NA20	3	8.572	9.429	0.55	0.75	37.50	2247.18	0.000	0.000	353.65	0.00	0.00
14	167.00	Ericsson 4460 B25 + B66	3	8.572	9.429	0.50	0.75	4.25	632.13	0.000	0.000	40.12	0.00	0.00
15	167.00	Alcatel Lucent	3	8.572	9.429	0.50	0.75	7.80	731.70	0.000	0.000	73.57	0.00	0.00
16	167.00	Ericsson 4480 B71 + B85	3	8.572	9.429	0.50	0.75	4.81	574.64	0.000	0.000	45.37	0.00	0.00
17	167.00	Alcatel Lucent 800 MHz	3	8.572	9.429	0.50	0.75	2.49	88.01	0.000	0.000	23.48	0.00	0.00
18	167.00	RMQP-4096-HK Plat. +	1	8.572	9.429	1.00	1.00	103.26	6151.74	0.000	0.000	973.68	0.00	0.00
19	147.00	Powerwave	3	8.345	9.180	0.68	0.75	3.85	162.65	0.000	0.000	35.39	0.00	0.00
20	147.00	7770	3	8.345	9.180	0.55	0.75	11.41	706.84	0.000	0.000	104.76	0.00	0.00
21	147.00	Cci DMP65R-BU8DA	6	8.345	9.180	0.55	0.75	66.56	4434.16	0.000	0.000	610.95	0.00	0.00
22	147.00	Cci DTMABP7819VG12A	3	8.345	9.180	0.50	0.75	3.26	149.09	0.000	0.000	29.95	0.00	0.00
23	147.00	RMQP-496-HK	1	8.345	9.180	1.00	1.00	88.73	5561.12	0.000	0.000	814.50	0.00	0.00
24	147.00	Ericsson RRUS 8843 B2	3	8.345	9.180	0.50	0.75	3.61	592.91	0.000	0.000	33.09	0.00	0.00
25	147.00	Ericsson RRUS 4449	3	8.345	9.180	0.50	0.75	4.07	427.89	0.000	0.000	37.34	0.00	0.00
26	147.00	Raycap DC6-48-60-18-8F	3	8.345	9.180	0.75	0.75	3.38	308.18	0.000	0.000	31.04	0.00	0.00
27	147.00	Ericsson RRUS 4478 B14	3	8.345	9.180	0.50	0.75	3.53	351.17	0.000	0.000	32.38	0.00	0.00
28	122.00	Nokia CS72188.01	1	8.024	8.826	1.00	1.00	5.42	80.71	0.000	0.000	47.83	0.00	0.00
29	110.00	Fujitsu TA08025-B605	3	7.851	8.636	0.50	0.75	4.05	435.03	0.000	0.000	34.96	0.00	0.00
30	110.00	JMA Wireless	3	7.851	8.636	0.55	0.75	23.95	1158.55	0.000	0.000	206.82	0.00	0.00
31	110.00	MC-PK8-C	1	7.851	8.636	1.00	1.00	79.08	3618.65	0.000	0.000	682.93	0.00	0.00
32	110.00	Fujitsu TA08025-B604	3	7.851	8.636	0.50	0.75	4.05	390.07	0.000	0.000	34.96	0.00	0.00
33	110.00	Raycap	1	7.851	8.636	1.00	1.00	2.74	82.41	0.000	0.000	23.70	0.00	0.00
34	75.00	Side Arms	2	7.243	7.967	1.00	1.00	20.11	249.74	0.000	0.000	160.22	0.00	0.00
35	75.00	Lucent KS-24019	1	7.243	7.967	1.00	1.00	2.16	28.98	0.000	0.000	17.21	0.00	0.00
							Totals:		**41,129.14**			**6,333.56**		

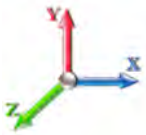
Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 31

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		72.76	1015.56	0.00	0.00
4.00		72.56	1027.81	0.00	0.00
6.00		72.26	1033.00	0.00	0.00
8.00		71.92	1035.12	0.00	0.00
10.00		71.56	1035.49	0.00	0.00
12.00		71.18	1034.71	0.00	0.00
14.00		70.79	1033.13	0.00	0.00
16.00		71.26	1030.93	0.00	0.00
18.00		72.63	1028.26	0.00	0.00
20.00		73.83	1025.21	0.00	0.00
22.00		74.88	1021.84	0.00	0.00
24.00		75.81	1018.21	0.00	0.00
26.00		76.63	1014.36	0.00	0.00
28.00		77.36	1010.30	0.00	0.00
30.00		78.01	1006.08	0.00	0.00
32.00		78.58	1001.71	0.00	0.00
34.00		79.08	997.20	0.00	0.00
36.00		79.53	992.58	0.00	0.00
38.00		79.92	987.84	0.00	0.00
40.00		80.26	983.01	0.00	0.00
42.00		80.56	978.08	0.00	0.00
44.00		80.81	973.08	0.00	0.00
45.50		60.68	726.54	0.00	0.00
46.00		20.48	368.23	0.00	0.00
48.00		82.31	1467.07	0.00	0.00
50.00		82.47	1458.05	0.00	0.00
52.00		82.59	1448.98	0.00	0.00
52.75		30.92	541.12	0.00	0.00
54.00		51.61	548.79	0.00	0.00
56.00		82.74	874.03	0.00	0.00
58.00		82.78	869.24	0.00	0.00
60.00		82.79	864.40	0.00	0.00
62.00		82.77	859.52	0.00	0.00
64.00		82.74	854.60	0.00	0.00
66.00		82.68	849.63	0.00	0.00
68.00		82.60	844.63	0.00	0.00
70.00		82.50	839.59	0.00	0.00
72.00		82.38	834.51	0.00	0.00
74.00		82.25	829.41	0.00	0.00
75.00	(3) attachments	218.44	691.66	0.00	0.00
76.00		40.97	411.66	0.00	0.00
78.00		81.92	819.10	0.00	0.00
80.00		81.73	813.90	0.00	0.00
82.00		81.53	808.68	0.00	0.00
84.00		81.32	803.43	0.00	0.00
86.00		81.08	798.15	0.00	0.00

Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 32

88.00		80.84	792.85	0.00	0.00
90.00		80.58	787.52	0.00	0.00
92.00		80.31	782.18	0.00	0.00
92.33		13.33	129.95	0.00	0.00
94.00		67.44	911.43	0.00	0.00
96.00		80.69	1086.03	0.00	0.00
98.00		80.39	1077.77	0.00	0.00
98.50		20.01	268.30	0.00	0.00
100.00		59.99	500.93	0.00	0.00
102.00		79.75	663.77	0.00	0.00
104.00		79.41	659.27	0.00	0.00
106.00		79.06	654.74	0.00	0.00
108.00		78.70	650.20	0.00	0.00
110.00	(11) attachments	1061.69	6330.35	0.00	0.00
112.00		77.96	618.16	0.00	0.00
114.00		77.57	613.51	0.00	0.00
116.00		77.17	608.85	0.00	0.00
118.00		76.77	604.18	0.00	0.00
120.00		76.35	599.49	0.00	0.00
122.00	(1) attachments	123.76	675.49	0.00	0.00
124.00		75.50	590.07	0.00	0.00
126.00		75.06	585.34	0.00	0.00
128.00		74.61	580.60	0.00	0.00
130.00		74.16	575.84	0.00	0.00
131.58		58.36	452.66	0.00	0.00
132.00		15.49	168.00	0.00	0.00
134.00		74.15	801.24	0.00	0.00
136.00		73.67	793.92	0.00	0.00
136.83		30.53	328.87	0.00	0.00
138.00		42.61	311.87	0.00	0.00
140.00		72.70	530.67	0.00	0.00
142.00		72.21	526.17	0.00	0.00
144.00		71.70	521.66	0.00	0.00
146.00		71.20	517.14	0.00	0.00
147.00	(28) attachments	1764.77	12951.14	0.00	0.00
148.00		35.25	234.60	0.00	0.00
150.00		70.16	465.30	0.00	0.00
152.00		69.63	460.75	0.00	0.00
154.00		69.10	456.19	0.00	0.00
156.00		68.56	451.62	0.00	0.00
158.00		68.01	447.05	0.00	0.00
160.00		67.46	442.46	0.00	0.00
162.00		66.90	437.87	0.00	0.00
164.00		66.34	433.26	0.00	0.00
166.00		65.77	428.65	0.00	0.00
167.00	(23) attachments	1657.16	11491.11	0.00	0.00
168.00		32.50	202.77	0.00	0.00
170.00		64.62	401.55	0.00	0.00
172.00		64.03	396.91	0.00	0.00
174.00		63.44	392.27	0.00	0.00
176.00		62.85	387.62	0.00	0.00
178.00	(28) attachments	1833.28	11495.69	0.00	0.00
180.00		61.64	347.67	0.00	0.00
	Totals:	**13,151.62**	**111,131.91**	**0.00**	**0.00**

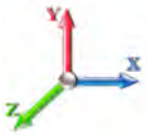
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 33	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.77	0.00	0.026	0.000	5.168	0.00	14.14
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.81	0.00	0.026	0.000	5.168	0.00	15.23
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.83	0.00	0.027	0.000	5.168	0.00	15.94
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.85	0.00	0.027	0.000	5.168	0.00	16.48
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.86	0.00	0.027	0.000	5.168	0.00	16.91
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.87	0.00	0.027	0.000	5.168	0.00	17.28
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.88	0.00	0.027	0.000	5.168	0.00	17.60
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.89	0.00	0.027	0.000	5.232	0.00	17.88
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.89	0.00	0.028	0.000	5.363	0.00	18.14
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.90	0.00	0.028	0.000	5.483	0.00	18.37
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.91	0.00	0.028	0.000	5.595	0.00	18.59
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.91	0.00	0.028	0.000	5.698	0.00	18.79
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.92	0.00	0.028	0.000	5.795	0.00	18.97
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.92	0.00	0.029	0.000	5.886	0.00	19.15
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.93	0.00	0.029	0.000	5.972	0.00	19.32
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.93	0.00	0.029	0.000	6.054	0.00	19.47
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.94	0.00	0.029	0.000	6.132	0.00	19.62
36.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.94	0.00	0.030	0.000	6.206	0.00	19.76
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.94	0.00	0.030	0.000	6.277	0.00	19.90
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.95	0.00	0.030	0.000	6.345	0.00	20.03
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.95	0.00	0.030	0.000	6.410	0.00	20.15
44.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.95	0.00	0.030	0.000	6.474	0.00	20.27
45.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.72	0.00	0.031	0.000	6.519	0.00	15.27
46.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.24	0.00	0.031	0.000	6.534	0.00	5.10
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.96	0.00	0.031	0.000	6.593	0.00	20.50
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.96	0.00	0.031	0.000	6.650	0.00	20.61
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.96	0.00	0.031	0.000	6.705	0.00	20.71
52.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.36	0.00	0.032	0.000	6.726	0.00	7.78
54.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.60	0.00	0.031	0.000	6.759	0.00	13.01
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.97	0.00	0.031	0.000	6.811	0.00	20.91
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.97	0.00	0.032	0.000	6.861	0.00	21.00
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.97	0.00	0.032	0.000	6.910	0.00	21.09
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.98	0.00	0.032	0.000	6.958	0.00	21.18
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.98	0.00	0.032	0.000	7.005	0.00	21.27
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.98	0.00	0.033	0.000	7.050	0.00	21.36
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.98	0.00	0.033	0.000	7.095	0.00	21.44
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.99	0.00	0.033	0.000	7.138	0.00	21.52
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.99	0.00	0.033	0.000	7.181	0.00	21.60
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.99	0.00	0.034	0.000	7.222	0.00	21.68
75.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.50	0.00	0.034	0.000	7.243	0.00	10.86
76.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.50	0.00	0.034	0.000	7.263	0.00	10.88
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.99	0.00	0.034	0.000	7.303	0.00	21.83
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.00	0.00	0.035	0.000	7.342	0.00	21.90
82.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.00	0.00	0.035	0.000	7.380	0.00	21.97
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.00	0.00	0.035	0.000	7.418	0.00	22.04
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.00	0.00	0.036	0.000	7.454	0.00	22.11
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.00	0.00	0.036	0.000	7.491	0.00	22.18

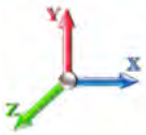
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 34	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.00	0.00	0.036	0.000	7.526	0.00	22.24
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.01	0.00	0.036	0.000	7.561	0.00	22.31
92.33	1.6" Hybrid	Yes	0.33	0.000	1.60	0.17	0.00	0.037	0.000	7.567	0.00	3.72
94.00	1.6" Hybrid	Yes	1.67	0.000	1.60	0.84	0.00	0.037	0.000	7.595	0.00	18.64
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.01	0.00	0.037	0.000	7.629	0.00	22.43
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.01	0.00	0.038	0.000	7.662	0.00	22.50
98.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.25	0.00	0.038	0.000	7.671	0.00	5.63
100.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.76	0.00	0.037	0.000	7.695	0.00	16.92
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.01	0.00	0.038	0.000	7.727	0.00	22.62
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.01	0.00	0.038	0.000	7.759	0.00	22.67
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.02	0.00	0.038	0.000	7.790	0.00	22.73
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.02	0.00	0.039	0.000	7.821	0.00	22.79
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	1.02	0.00	0.039	0.000	7.851	0.00	22.84
										Totals:	**0.0**	**1,119.8**

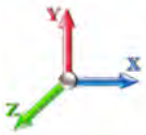
Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 35	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-111.1	-13.18	0.00	-1777.3	0.00	1777.32	5499.24	2749.62	13525.8	6714.82	0.00	0.000	0.000	0.285
2.00	-110.1	-13.16	0.00	-1750.9	0.00	1750.97	5478.14	2739.07	13385.1	6644.94	0.01	-0.027	0.000	0.284
4.00	-109.0	-13.14	0.00	-1724.6	0.00	1724.65	5456.85	2728.42	13244.5	6575.16	0.02	-0.054	0.000	0.282
6.00	-108.0	-13.11	0.00	-1698.3	0.00	1698.38	5435.36	2717.68	13104.2	6505.49	0.05	-0.081	0.000	0.281
8.00	-106.9	-13.09	0.00	-1672.1	0.00	1672.16	5413.67	2706.84	12964.1	6435.94	0.09	-0.109	0.000	0.280
10.00	-105.9	-13.07	0.00	-1645.9	0.00	1645.98	5391.79	2695.89	12824.2	6366.50	0.14	-0.136	0.000	0.278
12.00	-104.9	-13.04	0.00	-1619.8	0.00	1619.85	5369.71	2684.85	12684.6	6297.18	0.21	-0.164	0.000	0.277
14.00	-103.8	-13.02	0.00	-1593.7	0.00	1593.76	5347.43	2673.72	12545.2	6227.99	0.28	-0.191	0.000	0.275
16.00	-102.8	-13.00	0.00	-1567.7	0.00	1567.72	5324.96	2662.48	12406.1	6158.93	0.37	-0.219	0.000	0.274
18.00	-101.8	-12.97	0.00	-1541.7	0.00	1541.73	5302.29	2651.14	12267.3	6090.01	0.46	-0.247	0.000	0.272
20.00	-100.7	-12.94	0.00	-1515.7	0.00	1515.79	5279.42	2639.71	12128.7	6021.23	0.57	-0.275	0.000	0.271
22.00	-99.74	-12.91	0.00	-1489.9	0.00	1489.92	5256.36	2628.18	11990.5	5952.59	0.70	-0.303	0.000	0.269
24.00	-98.72	-12.88	0.00	-1464.1	0.00	1464.10	5233.10	2616.55	11852.5	5884.10	0.83	-0.331	0.000	0.268
26.00	-97.70	-12.84	0.00	-1438.3	0.00	1438.35	5209.64	2604.82	11714.9	5815.77	0.97	-0.360	0.000	0.266
28.00	-96.68	-12.81	0.00	-1412.6	0.00	1412.67	5185.99	2593.00	11577.5	5747.60	1.13	-0.388	0.000	0.264
30.00	-95.67	-12.77	0.00	-1387.0	0.00	1387.06	5162.14	2581.07	11440.6	5679.60	1.30	-0.417	0.000	0.263
32.00	-94.66	-12.73	0.00	-1361.5	0.00	1361.53	5138.10	2569.05	11303.9	5611.76	1.48	-0.445	0.000	0.261
34.00	-93.66	-12.69	0.00	-1336.0	0.00	1336.07	5113.85	2556.93	11167.6	5544.10	1.67	-0.474	0.000	0.259
36.00	-92.66	-12.65	0.00	-1310.6	0.00	1310.69	5089.42	2544.71	11031.7	5476.62	1.88	-0.503	0.000	0.258
38.00	-91.67	-12.61	0.00	-1285.4	0.00	1285.40	5064.78	2532.39	10896.1	5409.32	2.09	-0.532	0.000	0.256
40.00	-90.68	-12.56	0.00	-1260.1	0.00	1260.19	5039.95	2519.97	10760.9	5342.21	2.32	-0.561	0.000	0.254
42.00	-89.69	-12.52	0.00	-1235.0	0.00	1235.07	5014.92	2507.46	10626.1	5275.29	2.57	-0.590	0.000	0.252
44.00	-88.72	-12.47	0.00	-1210.0	0.00	1210.03	4989.69	2494.85	10491.8	5208.57	2.82	-0.619	0.000	0.250
45.50	-87.99	-12.42	0.00	-1191.3	0.00	1191.34	4970.65	2485.32	10391.2	5158.66	3.02	-0.641	0.000	0.249
46.00	-87.62	-12.42	0.00	-1185.1	0.00	1185.13	4964.27	2482.14	10357.8	5142.05	3.08	-0.648	0.000	0.248
48.00	-86.14	-12.37	0.00	-1160.2	0.00	1160.29	4938.65	2469.33	10224.2	5075.74	3.36	-0.677	0.000	0.246
50.00	-84.68	-12.31	0.00	-1135.5	0.00	1135.55	4912.84	2456.42	10091.1	5009.65	3.65	-0.706	0.000	0.244
52.00	-83.23	-12.24	0.00	-1110.9	0.00	1110.93	4886.83	2443.41	9958.39	4943.77	3.95	-0.736	0.000	0.242
52.75	-82.68	-12.22	0.00	-1101.7	0.00	1101.75	3995.11	1997.56	8262.19	4101.70	4.07	-0.747	0.000	0.289
54.00	-82.13	-12.20	0.00	-1086.4	0.00	1086.48	3983.52	1991.76	8197.82	4069.74	4.27	-0.765	0.000	0.288
56.00	-81.25	-12.15	0.00	-1062.0	0.00	1062.08	3964.81	1982.41	8095.01	4018.70	4.60	-0.798	0.000	0.285
58.00	-80.38	-12.10	0.00	-1037.7	0.00	1037.78	3945.91	1972.96	7992.40	3967.76	4.94	-0.831	0.000	0.282
60.00	-79.51	-12.05	0.00	-1013.5	0.00	1013.57	3926.81	1963.41	7890.01	3916.93	5.29	-0.863	0.000	0.279
62.00	-78.64	-12.00	0.00	-989.47	0.00	989.47	3907.51	1953.76	7787.85	3866.21	5.66	-0.896	0.000	0.276
64.00	-77.78	-11.95	0.00	-965.47	0.00	965.47	3888.02	1944.01	7685.92	3815.62	6.04	-0.929	0.000	0.273
66.00	-76.93	-11.90	0.00	-941.57	0.00	941.57	3868.33	1934.17	7584.24	3765.14	6.44	-0.961	0.000	0.270
68.00	-76.08	-11.84	0.00	-917.78	0.00	917.78	3848.45	1924.22	7482.82	3714.79	6.85	-0.994	0.000	0.267
70.00	-75.23	-11.79	0.00	-894.10	0.00	894.10	3828.36	1914.18	7381.67	3664.57	7.27	-1.027	0.000	0.264
72.00	-74.39	-11.73	0.00	-870.52	0.00	870.52	3808.08	1904.04	7280.79	3614.49	7.71	-1.059	0.000	0.260
74.00	-73.56	-11.67	0.00	-847.06	0.00	847.06	3787.61	1893.80	7180.20	3564.55	8.16	-1.092	0.000	0.257
75.00	-72.87	-11.46	0.00	-835.39	0.00	835.39	3777.30	1888.65	7130.01	3539.64	8.39	-1.108	0.000	0.255
76.00	-72.45	-11.44	0.00	-823.94	0.00	823.94	3766.94	1883.47	7079.90	3514.76	8.63	-1.124	0.000	0.254
78.00	-71.63	-11.38	0.00	-801.06	0.00	801.06	3746.07	1873.03	6979.91	3465.12	9.10	-1.157	0.000	0.250
80.00	-70.81	-11.32	0.00	-778.30	0.00	778.30	3725.00	1862.50	6880.23	3415.63	9.60	-1.189	0.000	0.247
82.00	-70.00	-11.26	0.00	-755.66	0.00	755.66	3703.74	1851.87	6780.87	3366.31	10.10	-1.221	0.000	0.243
84.00	-69.19	-11.20	0.00	-733.14	0.00	733.14	3682.28	1841.14	6681.85	3317.15	10.62	-1.253	0.000	0.240
86.00	-68.39	-11.14	0.00	-710.74	0.00	710.74	3660.63	1830.31	6583.17	3268.16	11.15	-1.285	0.000	0.236
88.00	-67.59	-11.08	0.00	-688.46	0.00	688.46	3638.77	1819.39	6484.84	3219.35	11.70	-1.317	0.000	0.232

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 36

90.00	-66.80	-11.02	0.00	-666.30	0.00	666.30	3616.73	1808.36	6386.87	3170.71	12.26	-1.349	0.000	0.229
92.00	-66.02	-10.94	0.00	-644.27	0.00	644.27	3594.48	1797.24	6289.28	3122.26	12.83	-1.380	0.000	0.225
92.33	-65.88	-10.94	0.00	-640.62	0.00	640.62	3590.75	1795.38	6273.05	3114.21	12.92	-1.385	0.000	0.224
94.00	-64.97	-10.88	0.00	-622.39	0.00	622.39	3572.04	1786.02	6192.07	3074.00	13.41	-1.411	0.000	0.221
96.00	-63.88	-10.81	0.00	-600.62	0.00	600.62	3549.40	1774.70	6095.24	3025.94	14.01	-1.442	0.000	0.217
98.00	-62.80	-10.72	0.00	-579.00	0.00	579.00	3526.57	1763.28	5998.82	2978.07	14.62	-1.473	0.000	0.212
98.50	-62.53	-10.71	0.00	-573.64	0.00	573.64	2386.86	1193.43	4124.78	2047.71	14.78	-1.481	0.000	0.306
100.00	-62.02	-10.67	0.00	-557.57	0.00	557.57	2378.02	1189.01	4080.56	2025.76	15.25	-1.504	0.000	0.301
102.00	-61.36	-10.62	0.00	-536.22	0.00	536.22	2366.05	1183.03	4021.64	1996.51	15.88	-1.542	0.000	0.295
104.00	-60.69	-10.56	0.00	-514.99	0.00	514.99	2353.89	1176.95	3962.79	1967.29	16.54	-1.580	0.000	0.288
106.00	-60.03	-10.50	0.00	-493.87	0.00	493.87	2341.53	1170.77	3904.00	1938.11	17.21	-1.617	0.000	0.281
108.00	-59.38	-10.44	0.00	-472.87	0.00	472.87	2328.98	1164.49	3845.28	1908.96	17.89	-1.654	0.000	0.273
110.00	-53.08	-9.23	0.00	-451.98	0.00	451.98	2316.23	1158.11	3786.65	1879.85	18.59	-1.691	0.000	0.263
112.00	-52.46	-9.17	0.00	-433.53	0.00	433.53	2303.28	1151.64	3728.12	1850.80	19.31	-1.726	0.000	0.257
114.00	-51.84	-9.10	0.00	-415.20	0.00	415.20	2290.14	1145.07	3669.69	1821.79	20.04	-1.762	0.000	0.251
116.00	-51.23	-9.04	0.00	-396.99	0.00	396.99	2276.80	1138.40	3611.38	1792.84	20.79	-1.797	0.000	0.244
118.00	-50.62	-8.97	0.00	-378.92	0.00	378.92	2263.26	1131.63	3553.19	1763.95	21.55	-1.831	0.000	0.237
120.00	-50.02	-8.90	0.00	-360.98	0.00	360.98	2249.53	1124.76	3495.14	1735.13	22.32	-1.865	0.000	0.230
122.00	-49.34	-8.79	0.00	-343.17	0.00	343.17	2235.60	1117.80	3437.23	1706.38	23.11	-1.898	0.000	0.223
124.00	-48.75	-8.72	0.00	-325.60	0.00	325.60	2221.47	1110.74	3379.47	1677.71	23.91	-1.931	0.000	0.216
126.00	-48.16	-8.65	0.00	-308.16	0.00	308.16	2207.15	1103.57	3321.87	1649.12	24.73	-1.962	0.000	0.209
128.00	-47.58	-8.58	0.00	-290.86	0.00	290.86	2192.63	1096.31	3264.45	1620.61	25.56	-1.993	0.000	0.201
130.00	-47.00	-8.51	0.00	-273.70	0.00	273.70	2177.91	1088.96	3207.21	1592.19	26.40	-2.024	0.000	0.194
131.58	-46.55	-8.45	0.00	-260.23	0.00	260.23	2166.12	1083.06	3162.03	1569.76	27.07	-2.047	0.000	0.187
132.00	-46.38	-8.44	0.00	-256.71	0.00	256.71	2163.00	1081.50	3150.16	1563.87	27.25	-2.053	0.000	0.186
134.00	-45.58	-8.36	0.00	-239.83	0.00	239.83	2147.89	1073.94	3093.31	1535.65	28.12	-2.081	0.000	0.177
136.00	-44.79	-8.27	0.00	-223.12	0.00	223.12	2132.58	1066.29	3036.67	1507.53	29.00	-2.109	0.000	0.169
136.83	-44.46	-8.24	0.00	-216.23	0.00	216.23	1821.16	910.58	2623.48	1302.41	29.36	-2.120	0.000	0.191
138.00	-44.14	-8.20	0.00	-206.62	0.00	206.62	1814.37	907.19	2596.54	1289.03	29.88	-2.135	0.000	0.185
140.00	-43.61	-8.13	0.00	-190.22	0.00	190.22	1802.58	901.29	2550.43	1266.14	30.79	-2.162	0.000	0.175
142.00	-43.09	-8.05	0.00	-173.96	0.00	173.96	1790.60	895.30	2504.42	1243.30	31.70	-2.188	0.000	0.164
144.00	-42.56	-7.98	0.00	-157.85	0.00	157.85	1778.42	889.21	2458.53	1220.52	32.62	-2.212	0.000	0.153
146.00	-42.05	-7.90	0.00	-141.90	0.00	141.90	1766.04	883.02	2412.77	1197.80	33.55	-2.234	0.000	0.142
147.00	-29.17	-5.64	0.00	-133.99	0.00	133.99	1759.78	879.89	2389.94	1186.47	34.02	-2.245	0.000	0.130
148.00	-28.94	-5.60	0.00	-128.36	0.00	128.36	1753.47	876.73	2367.15	1175.15	34.49	-2.255	0.000	0.126
150.00	-28.48	-5.52	0.00	-117.16	0.00	117.16	1740.70	870.35	2321.67	1152.58	35.44	-2.275	0.000	0.118
152.00	-28.02	-5.44	0.00	-106.12	0.00	106.12	1727.73	863.87	2276.35	1130.08	36.40	-2.294	0.000	0.110
154.00	-27.56	-5.36	0.00	-95.23	0.00	95.23	1714.57	857.28	2231.19	1107.66	37.36	-2.311	0.000	0.102
156.00	-27.11	-5.28	0.00	-84.51	0.00	84.51	1701.21	850.60	2186.21	1085.33	38.33	-2.328	0.000	0.094
158.00	-26.67	-5.20	0.00	-73.94	0.00	73.94	1687.65	843.83	2141.41	1063.08	39.31	-2.342	0.000	0.085
160.00	-26.23	-5.12	0.00	-63.54	0.00	63.54	1673.90	836.95	2096.80	1040.94	40.30	-2.356	0.000	0.077
162.00	-25.79	-5.04	0.00	-53.29	0.00	53.29	1659.95	829.97	2052.40	1018.90	41.28	-2.368	0.000	0.068
164.00	-25.36	-4.96	0.00	-43.20	0.00	43.20	1645.80	822.90	2008.21	996.96	42.28	-2.378	0.000	0.059
166.00	-24.93	-4.88	0.00	-33.28	0.00	33.28	1631.46	815.73	1964.24	975.13	43.28	-2.386	0.000	0.049
167.00	-13.52	-2.75	0.00	-28.39	0.00	28.39	1624.22	812.11	1942.34	964.26	43.78	-2.390	0.000	0.038
168.00	-13.32	-2.71	0.00	-25.65	0.00	25.65	1616.92	808.46	1920.51	953.42	44.28	-2.393	0.000	0.035
170.00	-12.92	-2.63	0.00	-20.23	0.00	20.23	1602.19	801.09	1877.01	931.83	45.28	-2.398	0.000	0.030
172.00	-12.53	-2.55	0.00	-14.97	0.00	14.97	1587.25	793.63	1833.77	910.36	46.29	-2.402	0.000	0.024
174.00	-12.14	-2.47	0.00	-9.87	0.00	9.87	1572.12	786.06	1790.79	889.02	47.29	-2.406	0.000	0.019
176.00	-11.75	-2.39	0.00	-4.93	0.00	4.93	1556.80	778.40	1748.08	867.82	48.30	-2.408	0.000	0.013
178.00	-0.34	-0.08	0.00	-0.15	0.00	0.15	1541.28	770.64	1705.64	846.75	49.31	-2.408	0.000	0.000
180.00	0.00	-0.06	0.00	0.00	0.00	0.00	1525.56	762.78	1663.50	825.83	50.32	-2.408	0.000	0.000

Seismic Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 37	

Load Case:	1.2D + 1.0E							**Iterations**	26
Gust Response Factor	1.10				**Sds**	0.18		**Ss**	0.17
Dead Load Factor	1.20	**Seismic Load Factor**	1.00		**Sd1**	0.10		**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29		**SA**	0.03	**Seismic Importance Factor**		1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
2.00		563.87	0.00	0.01	0.01	4.97	
4.00		560.17	0.00	0.02	0.01	8.40	
6.00		556.46	0.00	0.03	0.02	10.88	
8.00		552.76	0.00	0.04	0.02	12.72	
10.00		549.06	0.01	0.05	0.03	14.10	
12.00		545.35	0.01	0.05	0.03	15.13	
14.00		541.65	0.01	0.06	0.03	15.91	
16.00		537.94	0.01	0.06	0.04	16.49	
18.00		534.24	0.02	0.06	0.04	16.92	
20.00		530.53	0.02	0.07	0.04	17.23	
22.00		526.83	0.03	0.07	0.04	17.45	
24.00		523.12	0.03	0.07	0.04	17.60	
26.00		519.42	0.04	0.07	0.04	17.70	
28.00		515.72	0.05	0.07	0.04	17.77	
30.00		512.01	0.05	0.07	0.04	17.81	
32.00		508.31	0.06	0.07	0.04	17.84	
34.00		504.60	0.07	0.07	0.04	17.86	
36.00		500.90	0.08	0.07	0.04	17.87	
38.00		497.19	0.08	0.07	0.04	17.88	
40.00		493.49	0.09	0.07	0.04	17.89	
42.00		489.79	0.10	0.07	0.04	17.90	
44.00		486.08	0.11	0.07	0.04	17.91	
45.50	Bot - Section 2	362.13	0.12	0.07	0.03	13.42	
46.00		224.97	0.12	0.07	0.03	8.36	
48.00		895.58	0.13	0.07	0.03	33.51	
50.00		888.70	0.15	0.07	0.03	33.49	
52.00		881.82	0.16	0.07	0.03	33.44	
52.75	Top - Section 1	328.91	0.16	0.07	0.03	12.50	
54.00		254.24	0.17	0.07	0.03	9.69	
56.00		404.20	0.18	0.06	0.03	15.45	
58.00		401.03	0.20	0.06	0.02	15.34	
60.00		397.85	0.21	0.06	0.02	15.18	
62.00		394.68	0.22	0.06	0.02	14.97	
64.00		391.50	0.24	0.06	0.02	14.70	
66.00		388.33	0.25	0.05	0.02	14.36	
68.00		385.15	0.27	0.05	0.02	13.92	
70.00		381.98	0.29	0.05	0.01	13.39	
72.00		378.80	0.30	0.04	0.01	12.75	
74.00		375.63	0.32	0.04	0.01	11.99	
75.00	Appurtenance(s)	270.62	0.33	0.04	0.01	8.37	
76.00		185.83	0.34	0.04	0.01	5.54	
78.00		369.28	0.35	0.03	0.01	10.08	
80.00		366.10	0.37	0.03	0.01	8.92	
82.00		362.93	0.39	0.02	0.01	7.61	
84.00		359.75	0.41	0.01	0.01	6.18	

Seismic Segment Forces (Factored)

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 38

86.00		356.58	0.43	0.01	0.01	4.63	
88.00		353.40	0.45	0.00	0.01	2.99	
90.00		350.23	0.47	-0.01	0.01	1.27	
92.00		347.05	0.49	-0.01	0.01	-0.47	
92.33	Bot - Section 3	57.53	0.50	-0.02	0.01	-0.13	
94.00		504.44	0.52	-0.02	0.01	-3.25	
96.00		600.23	0.54	-0.03	0.01	-6.89	
98.00		594.68	0.56	-0.04	0.01	-9.73	
98.50	Top - Section 2	147.80	0.57	-0.04	0.01	-2.59	
100.00		190.85	0.58	-0.05	0.01	-4.01	
102.00		252.39	0.61	-0.06	0.02	-6.38	
104.00		250.01	0.63	-0.06	0.02	-7.28	
106.00		247.63	0.66	-0.07	0.02	-8.04	
108.00		245.24	0.68	-0.08	0.03	-8.65	
110.00	Appurtenance(s)	2285.9	0.71	-0.09	0.03	-85.77	
112.00		240.48	0.73	-0.10	0.04	-9.43	
114.00		238.10	0.76	-0.10	0.04	-9.59	
116.00		235.72	0.78	-0.11	0.05	-9.61	
118.00		233.34	0.81	-0.11	0.06	-9.50	
120.00		230.96	0.84	-0.12	0.07	-9.25	
122.00	Appurtenance(s)	245.08	0.87	-0.12	0.08	-9.52	
124.00		226.19	0.90	-0.12	0.09	-8.39	
126.00		223.81	0.93	-0.12	0.10	-7.78	
128.00		221.43	0.96	-0.12	0.11	-7.07	
130.00		219.05	0.99	-0.11	0.12	-6.25	
131.58	Bot - Section 4	171.73	1.01	-0.11	0.14	-4.37	
132.00		85.49	1.02	-0.11	0.14	-2.10	
134.00		407.65	1.05	-0.09	0.16	-8.22	
136.00		403.15	1.08	-0.08	0.17	-6.12	
136.83	Top - Section 3	166.65	1.09	-0.07	0.18	-2.16	
138.00		110.07	1.11	-0.06	0.19	-1.07	
140.00		187.01	1.14	-0.04	0.21	-0.69	
142.00		184.89	1.18	-0.02	0.24	0.53	
144.00		182.78	1.21	0.01	0.26	1.81	
146.00		180.66	1.24	0.05	0.29	3.16	
147.00	Appurtenance(s)	4052.9	1.26	0.07	0.30	87.18	
148.00		89.01	1.28	0.09	0.32	2.28	
150.00		176.43	1.31	0.14	0.35	6.05	
152.00		174.31	1.35	0.19	0.38	7.58	
154.00		172.19	1.38	0.25	0.41	9.16	
156.00		170.08	1.42	0.32	0.45	10.80	
158.00		167.96	1.46	0.40	0.49	12.48	
160.00		165.84	1.49	0.48	0.53	14.21	
162.00		163.73	1.53	0.58	0.58	15.99	
164.00		161.61	1.57	0.69	0.63	17.80	
166.00		159.49	1.61	0.80	0.68	19.65	
167.00	Appurtenance(s)	4247.7	1.63	0.86	0.71	552.00	
168.00		78.42	1.65	0.93	0.73	10.73	
170.00		155.26	1.69	1.07	0.79	23.45	
172.00		153.14	1.73	1.22	0.85	25.40	
174.00		151.03	1.77	1.39	0.92	27.37	
176.00		148.91	1.81	1.57	0.99	29.37	
178.00	Appurtenance(s)	3381.1	1.85	1.77	1.06	722.85	
180.00		144.67	1.89	1.98	1.14	33.41	
	Totals:	**46,491.7**				**2,067.3**	**Total Wind:** **50,804.5**

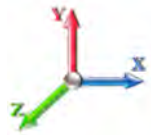
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 39	

Tower Engineering Solutions

Load Case: 1.2D + 1.0E



Gust Response Factor	1.10			**Sds**	0.18			**Iterations**	26
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.10			**Ss**	0.17
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29	**SA**	0.03			**S1**	0.06
								Seismic Importance Factor	1.00

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-63.39	-2.32	0.00	-327.48	0.00	327.48	5499.24	2749.62	13525.8	6714.82		0.00	0.00	0.060
2.00	-62.62	-2.32	0.00	-322.84	0.00	322.84	5478.14	2739.07	13385.1	6644.94		0.00	0.00	0.060
4.00	-61.85	-2.32	0.00	-318.19	0.00	318.19	5456.85	2728.42	13244.5	6575.16		0.00	-0.01	0.060
6.00	-61.09	-2.31	0.00	-313.56	0.00	313.56	5435.36	2717.68	13104.2	6505.49		0.01	-0.01	0.059
8.00	-60.33	-2.31	0.00	-308.93	0.00	308.93	5413.67	2706.84	12964.1	6435.94		0.02	-0.02	0.059
10.00	-59.57	-2.30	0.00	-304.32	0.00	304.32	5391.79	2695.89	12824.2	6366.50		0.03	-0.03	0.059
12.00	-58.82	-2.29	0.00	-299.73	0.00	299.73	5369.71	2684.85	12684.6	6297.18		0.04	-0.03	0.059
14.00	-58.08	-2.28	0.00	-295.15	0.00	295.15	5347.43	2673.72	12545.2	6227.99		0.05	-0.04	0.058
16.00	-57.33	-2.26	0.00	-290.60	0.00	290.60	5324.96	2662.48	12406.1	6158.93		0.07	-0.04	0.058
18.00	-56.60	-2.25	0.00	-286.08	0.00	286.08	5302.29	2651.14	12267.3	6090.01		0.09	-0.05	0.058
20.00	-55.87	-2.24	0.00	-281.57	0.00	281.57	5279.42	2639.71	12128.7	6021.23		0.11	-0.05	0.057
22.00	-55.14	-2.23	0.00	-277.10	0.00	277.10	5256.36	2628.18	11990.5	5952.59		0.13	-0.06	0.057
24.00	-54.41	-2.21	0.00	-272.65	0.00	272.65	5233.10	2616.55	11852.5	5884.10		0.15	-0.06	0.057
26.00	-53.69	-2.20	0.00	-268.22	0.00	268.22	5209.64	2604.82	11714.9	5815.77		0.18	-0.07	0.056
28.00	-52.98	-2.18	0.00	-263.83	0.00	263.83	5185.99	2593.00	11577.5	5747.60		0.21	-0.07	0.056
30.00	-52.27	-2.17	0.00	-259.46	0.00	259.46	5162.14	2581.07	11440.6	5679.60		0.24	-0.08	0.056
32.00	-51.56	-2.16	0.00	-255.12	0.00	255.12	5138.10	2569.05	11303.9	5611.76		0.27	-0.08	0.055
34.00	-50.86	-2.14	0.00	-250.80	0.00	250.80	5113.85	2556.93	11167.6	5544.10		0.31	-0.09	0.055
36.00	-50.17	-2.13	0.00	-246.52	0.00	246.52	5089.42	2544.71	11031.7	5476.62		0.35	-0.09	0.055
38.00	-49.47	-2.11	0.00	-242.26	0.00	242.26	5064.78	2532.39	10896.1	5409.32		0.39	-0.10	0.055
40.00	-48.79	-2.10	0.00	-238.03	0.00	238.03	5039.95	2519.97	10760.9	5342.21		0.43	-0.10	0.054
42.00	-48.10	-2.09	0.00	-233.83	0.00	233.83	5014.92	2507.46	10626.1	5275.29		0.48	-0.11	0.054
44.00	-47.42	-2.07	0.00	-229.66	0.00	229.66	4989.69	2494.85	10491.8	5208.57		0.52	-0.12	0.054
45.50	-46.92	-2.06	0.00	-226.56	0.00	226.56	4970.65	2485.32	10391.2	5158.66		0.56	-0.12	0.053
46.00	-46.62	-2.05	0.00	-225.53	0.00	225.53	4964.27	2482.14	10357.8	5142.05		0.57	-0.12	0.053
48.00	-45.45	-2.02	0.00	-221.43	0.00	221.43	4938.65	2469.33	10224.2	5075.74		0.62	-0.13	0.053
50.00	-44.29	-1.99	0.00	-217.39	0.00	217.39	4912.84	2456.42	10091.1	5009.65		0.68	-0.13	0.052
52.00	-43.14	-1.95	0.00	-213.41	0.00	213.41	4886.83	2443.41	9958.39	4943.77		0.73	-0.14	0.052
52.75	-42.71	-1.94	0.00	-211.95	0.00	211.95	3995.11	1997.56	8262.19	4101.70		0.76	-0.14	0.062
54.00	-42.34	-1.94	0.00	-209.52	0.00	209.52	3983.52	1991.76	8197.82	4069.74		0.79	-0.14	0.062
56.00	-41.76	-1.92	0.00	-205.64	0.00	205.64	3964.81	1982.41	8095.01	4018.70		0.86	-0.15	0.062
58.00	-41.18	-1.91	0.00	-201.79	0.00	201.79	3945.91	1972.96	7992.40	3967.76		0.92	-0.16	0.061
60.00	-40.61	-1.90	0.00	-197.97	0.00	197.97	3926.81	1963.41	7890.01	3916.93		0.99	-0.16	0.061
62.00	-40.04	-1.89	0.00	-194.17	0.00	194.17	3907.51	1953.76	7787.85	3866.21		1.06	-0.17	0.060
64.00	-39.47	-1.88	0.00	-190.40	0.00	190.40	3888.02	1944.01	7685.92	3815.62		1.13	-0.18	0.060
66.00	-38.91	-1.86	0.00	-186.65	0.00	186.65	3868.33	1934.17	7584.24	3765.14		1.20	-0.18	0.060
68.00	-38.35	-1.85	0.00	-182.92	0.00	182.92	3848.45	1924.22	7482.82	3714.79		1.28	-0.19	0.059
70.00	-37.80	-1.84	0.00	-179.21	0.00	179.21	3828.36	1914.18	7381.67	3664.57		1.36	-0.19	0.059
72.00	-37.25	-1.83	0.00	-175.53	0.00	175.53	3808.08	1904.04	7280.79	3614.49		1.44	-0.20	0.058
74.00	-36.70	-1.82	0.00	-171.87	0.00	171.87	3787.61	1893.80	7180.20	3564.55		1.53	-0.21	0.058
75.00	-36.33	-1.81	0.00	-170.05	0.00	170.05	3777.30	1888.65	7130.01	3539.64		1.57	-0.21	0.058
76.00	-36.06	-1.81	0.00	-168.23	0.00	168.23	3766.94	1883.47	7079.90	3514.76		1.62	-0.21	0.057
78.00	-35.52	-1.80	0.00	-164.61	0.00	164.61	3746.07	1873.03	6979.91	3465.12		1.71	-0.22	0.057
80.00	-34.99	-1.79	0.00	-161.01	0.00	161.01	3725.00	1862.50	6880.23	3415.63		1.80	-0.23	0.057
82.00	-34.46	-1.79	0.00	-157.42	0.00	157.42	3703.74	1851.87	6780.87	3366.31		1.90	-0.23	0.056
84.00	-33.93	-1.78	0.00	-153.84	0.00	153.84	3682.28	1841.14	6681.85	3317.15		2.00	-0.24	0.056
86.00	-33.40	-1.78	0.00	-150.28	0.00	150.28	3660.63	1830.31	6583.17	3268.16		2.10	-0.25	0.055

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 40

88.00	-32.88	-1.78	0.00	-146.71	0.00	146.71	3638.77	1819.39	6484.84	3219.35	2.21	-0.25	0.055
90.00	-32.37	-1.78	0.00	-143.15	0.00	143.15	3616.73	1808.36	6386.87	3170.71	2.31	-0.26	0.054
92.00	-31.86	-1.78	0.00	-139.59	0.00	139.59	3594.48	1797.24	6289.28	3122.26	2.43	-0.27	0.054
92.33	-31.77	-1.78	0.00	-139.00	0.00	139.00	3590.75	1795.38	6273.05	3114.21	2.44	-0.27	0.053
94.00	-31.09	-1.78	0.00	-136.03	0.00	136.03	3572.04	1786.02	6192.07	3074.00	2.54	-0.27	0.053
96.00	-30.27	-1.78	0.00	-132.46	0.00	132.46	3549.40	1774.70	6095.24	3025.94	2.66	-0.28	0.052
98.00	-29.46	-1.78	0.00	-128.90	0.00	128.90	3526.57	1763.28	5998.82	2978.07	2.78	-0.29	0.052
98.50	-29.26	-1.78	0.00	-128.01	0.00	128.01	2386.86	1193.43	4124.78	2047.71	2.81	-0.29	0.075
100.00	-28.96	-1.78	0.00	-125.34	0.00	125.34	2378.02	1189.01	4080.56	2025.76	2.90	-0.30	0.074
102.00	-28.56	-1.78	0.00	-121.78	0.00	121.78	2366.05	1183.03	4021.64	1996.51	3.02	-0.30	0.073
104.00	-28.16	-1.79	0.00	-118.21	0.00	118.21	2353.89	1176.95	3962.79	1967.29	3.15	-0.31	0.072
106.00	-27.77	-1.79	0.00	-114.63	0.00	114.63	2341.53	1170.77	3904.00	1938.11	3.29	-0.32	0.071
108.00	-27.38	-1.79	0.00	-111.05	0.00	111.05	2328.98	1164.49	3845.28	1908.96	3.42	-0.33	0.070
110.00	-24.54	-1.78	0.00	-107.47	0.00	107.47	2316.23	1158.11	3786.65	1879.85	3.56	-0.34	0.068
112.00	-24.16	-1.78	0.00	-103.92	0.00	103.92	2303.28	1151.64	3728.12	1850.80	3.71	-0.35	0.067
114.00	-23.78	-1.78	0.00	-100.36	0.00	100.36	2290.14	1145.07	3669.69	1821.79	3.85	-0.36	0.065
116.00	-23.41	-1.78	0.00	-96.80	0.00	96.80	2276.80	1138.40	3611.38	1792.84	4.00	-0.36	0.064
118.00	-23.04	-1.78	0.00	-93.23	0.00	93.23	2263.26	1131.63	3553.19	1763.95	4.16	-0.37	0.063
120.00	-22.67	-1.78	0.00	-89.67	0.00	89.67	2249.53	1124.76	3495.14	1735.13	4.32	-0.38	0.062
122.00	-22.28	-1.78	0.00	-86.10	0.00	86.10	2235.60	1117.80	3437.23	1706.38	4.48	-0.39	0.060
124.00	-21.92	-1.79	0.00	-82.53	0.00	82.53	2221.47	1110.74	3379.47	1677.71	4.64	-0.40	0.059
126.00	-21.56	-1.79	0.00	-78.96	0.00	78.96	2207.15	1103.57	3321.87	1649.12	4.81	-0.41	0.058
128.00	-21.20	-1.79	0.00	-75.39	0.00	75.39	2192.63	1096.31	3264.45	1620.61	4.98	-0.41	0.056
130.00	-20.85	-1.79	0.00	-71.82	0.00	71.82	2177.91	1088.96	3207.21	1592.19	5.16	-0.42	0.055
131.58	-20.57	-1.79	0.00	-68.99	0.00	68.99	2166.12	1083.06	3162.03	1569.76	5.30	-0.43	0.053
132.00	-20.45	-1.79	0.00	-68.25	0.00	68.25	2163.00	1081.50	3150.16	1563.87	5.34	-0.43	0.053
134.00	-19.87	-1.78	0.00	-64.67	0.00	64.67	2147.89	1073.94	3093.31	1535.65	5.52	-0.44	0.051
136.00	-19.29	-1.78	0.00	-61.10	0.00	61.10	2132.58	1066.29	3036.67	1507.53	5.70	-0.44	0.050
136.83	-19.05	-1.78	0.00	-59.62	0.00	59.62	1821.16	910.58	2623.48	1302.41	5.78	-0.45	0.056
138.00	-18.87	-1.78	0.00	-57.54	0.00	57.54	1814.37	907.19	2596.54	1289.03	5.89	-0.45	0.055
140.00	-18.55	-1.78	0.00	-53.98	0.00	53.98	1802.58	901.29	2550.43	1266.14	6.08	-0.46	0.053
142.00	-18.24	-1.78	0.00	-50.41	0.00	50.41	1790.60	895.30	2504.42	1243.30	6.27	-0.47	0.051
144.00	-17.93	-1.78	0.00	-46.85	0.00	46.85	1778.42	889.21	2458.53	1220.52	6.47	-0.47	0.048
146.00	-17.62	-1.77	0.00	-43.30	0.00	43.30	1766.04	883.02	2412.77	1197.80	6.67	-0.48	0.046
147.00	-12.71	-1.65	0.00	-41.52	0.00	41.52	1759.78	879.89	2389.94	1186.47	6.77	-0.48	0.042
148.00	-12.58	-1.64	0.00	-39.87	0.00	39.87	1753.47	876.73	2367.15	1175.15	6.87	-0.49	0.041
150.00	-12.32	-1.64	0.00	-36.58	0.00	36.58	1740.70	870.35	2321.67	1152.58	7.08	-0.49	0.039
152.00	-12.06	-1.63	0.00	-33.31	0.00	33.31	1727.73	863.87	2276.35	1130.08	7.29	-0.50	0.036
154.00	-11.81	-1.62	0.00	-30.05	0.00	30.05	1714.57	857.28	2231.19	1107.66	7.50	-0.50	0.034
156.00	-11.56	-1.61	0.00	-26.81	0.00	26.81	1701.21	850.60	2186.21	1085.33	7.71	-0.51	0.031
158.00	-11.31	-1.59	0.00	-23.60	0.00	23.60	1687.65	843.83	2141.41	1063.08	7.92	-0.51	0.029
160.00	-11.06	-1.58	0.00	-20.41	0.00	20.41	1673.90	836.95	2096.80	1040.94	8.14	-0.52	0.026
162.00	-10.81	-1.56	0.00	-17.26	0.00	17.26	1659.95	829.97	2052.40	1018.90	8.36	-0.52	0.023
164.00	-10.57	-1.54	0.00	-14.13	0.00	14.13	1645.80	822.90	2008.21	996.96	8.58	-0.53	0.021
166.00	-10.33	-1.52	0.00	-11.05	0.00	11.05	1631.46	815.73	1964.24	975.13	8.80	-0.53	0.018
167.00	-5.22	-0.92	0.00	-9.53	0.00	9.53	1624.22	812.11	1942.34	964.26	8.91	-0.53	0.013
168.00	-5.11	-0.91	0.00	-8.61	0.00	8.61	1616.92	808.46	1920.51	953.42	9.02	-0.53	0.012
170.00	-4.89	-0.88	0.00	-6.80	0.00	6.80	1602.19	801.09	1877.01	931.83	9.24	-0.53	0.010
172.00	-4.67	-0.86	0.00	-5.03	0.00	5.03	1587.25	793.63	1833.77	910.36	9.47	-0.53	0.008
174.00	-4.46	-0.83	0.00	-3.32	0.00	3.32	1572.12	786.06	1790.79	889.02	9.69	-0.53	0.007
176.00	-4.25	-0.80	0.00	-1.66	0.00	1.66	1556.80	778.40	1748.08	867.82	9.91	-0.54	0.005
178.00	-0.17	-0.03	0.00	-0.07	0.00	0.07	1541.28	770.64	1705.64	846.75	10.14	-0.54	0.000
180.00	0.00	-0.03	0.00	0.00	0.00	0.00	1525.56	762.78	1663.50	825.83	10.36	-0.54	0.000

Seismic Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 41	

Load Case:	0.9D + 1.0E					**Iterations**	26
Gust Response Factor	1.10			**Sds**	0.18	**Ss**	0.17
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.10	**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29	**SA**	0.03	**Seismic Importance Factor**	1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
2.00		563.87	0.00	0.01	0.01	4.97	
4.00		560.17	0.00	0.02	0.01	8.40	
6.00		556.46	0.00	0.03	0.02	10.88	
8.00		552.76	0.00	0.04	0.02	12.72	
10.00		549.06	0.01	0.05	0.03	14.10	
12.00		545.35	0.01	0.05	0.03	15.13	
14.00		541.65	0.01	0.06	0.03	15.91	
16.00		537.94	0.01	0.06	0.04	16.49	
18.00		534.24	0.02	0.06	0.04	16.92	
20.00		530.53	0.02	0.07	0.04	17.23	
22.00		526.83	0.03	0.07	0.04	17.45	
24.00		523.12	0.03	0.07	0.04	17.60	
26.00		519.42	0.04	0.07	0.04	17.70	
28.00		515.72	0.05	0.07	0.04	17.77	
30.00		512.01	0.05	0.07	0.04	17.81	
32.00		508.31	0.06	0.07	0.04	17.84	
34.00		504.60	0.07	0.07	0.04	17.86	
36.00		500.90	0.08	0.07	0.04	17.87	
38.00		497.19	0.08	0.07	0.04	17.88	
40.00		493.49	0.09	0.07	0.04	17.89	
42.00		489.79	0.10	0.07	0.04	17.90	
44.00		486.08	0.11	0.07	0.04	17.91	
45.50	Bot - Section 2	362.13	0.12	0.07	0.03	13.42	
46.00		224.97	0.12	0.07	0.03	8.36	
48.00		895.58	0.13	0.07	0.03	33.51	
50.00		888.70	0.15	0.07	0.03	33.49	
52.00		881.82	0.16	0.07	0.03	33.44	
52.75	Top - Section 1	328.91	0.16	0.07	0.03	12.50	
54.00		254.24	0.17	0.07	0.03	9.69	
56.00		404.20	0.18	0.06	0.03	15.45	
58.00		401.03	0.20	0.06	0.02	15.34	
60.00		397.85	0.21	0.06	0.02	15.18	
62.00		394.68	0.22	0.06	0.02	14.97	
64.00		391.50	0.24	0.06	0.02	14.70	
66.00		388.33	0.25	0.05	0.02	14.36	
68.00		385.15	0.27	0.05	0.02	13.92	
70.00		381.98	0.29	0.05	0.01	13.39	
72.00		378.80	0.30	0.04	0.01	12.75	
74.00		375.63	0.32	0.04	0.01	11.99	
75.00	Appurtenance(s)	270.62	0.33	0.04	0.01	8.37	
76.00		185.83	0.34	0.04	0.01	5.54	
78.00		369.28	0.35	0.03	0.01	10.08	
80.00		366.10	0.37	0.03	0.01	8.92	
82.00		362.93	0.39	0.02	0.01	7.61	
84.00		359.75	0.41	0.01	0.01	6.18	

Seismic Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 42	

86.00		356.58	0.43	0.01	0.01	4.63	
88.00		353.40	0.45	0.00	0.01	2.99	
90.00		350.23	0.47	-0.01	0.01	1.27	
92.00		347.05	0.49	-0.01	0.01	-0.47	
92.33	Bot - Section 3	57.53	0.50	-0.02	0.01	-0.13	
94.00		504.44	0.52	-0.02	0.01	-3.25	
96.00		600.23	0.54	-0.03	0.01	-6.89	
98.00		594.68	0.56	-0.04	0.01	-9.73	
98.50	Top - Section 2	147.80	0.57	-0.04	0.01	-2.59	
100.00		190.85	0.58	-0.05	0.01	-4.01	
102.00		252.39	0.61	-0.06	0.02	-6.38	
104.00		250.01	0.63	-0.06	0.02	-7.28	
106.00		247.63	0.66	-0.07	0.02	-8.04	
108.00		245.24	0.68	-0.08	0.03	-8.65	
110.00	Appurtenance(s)	2285.9	0.71	-0.09	0.03	-85.77	
112.00		240.48	0.73	-0.10	0.04	-9.43	
114.00		238.10	0.76	-0.10	0.04	-9.59	
116.00		235.72	0.78	-0.11	0.05	-9.61	
118.00		233.34	0.81	-0.11	0.06	-9.50	
120.00		230.96	0.84	-0.12	0.07	-9.25	
122.00	Appurtenance(s)	245.08	0.87	-0.12	0.08	-9.52	
124.00		226.19	0.90	-0.12	0.09	-8.39	
126.00		223.81	0.93	-0.12	0.10	-7.78	
128.00		221.43	0.96	-0.12	0.11	-7.07	
130.00		219.05	0.99	-0.11	0.12	-6.25	
131.58	Bot - Section 4	171.73	1.01	-0.11	0.14	-4.37	
132.00		85.49	1.02	-0.11	0.14	-2.10	
134.00		407.65	1.05	-0.09	0.16	-8.22	
136.00		403.15	1.08	-0.08	0.17	-6.12	
136.83	Top - Section 3	166.65	1.09	-0.07	0.18	-2.16	
138.00		110.07	1.11	-0.06	0.19	-1.07	
140.00		187.01	1.14	-0.04	0.21	-0.69	
142.00		184.89	1.18	-0.02	0.24	0.53	
144.00		182.78	1.21	0.01	0.26	1.81	
146.00		180.66	1.24	0.05	0.29	3.16	
147.00	Appurtenance(s)	4052.9	1.26	0.07	0.30	87.18	
148.00		89.01	1.28	0.09	0.32	2.28	
150.00		176.43	1.31	0.14	0.35	6.05	
152.00		174.31	1.35	0.19	0.38	7.58	
154.00		172.19	1.38	0.25	0.41	9.16	
156.00		170.08	1.42	0.32	0.45	10.80	
158.00		167.96	1.46	0.40	0.49	12.48	
160.00		165.84	1.49	0.48	0.53	14.21	
162.00		163.73	1.53	0.58	0.58	15.99	
164.00		161.61	1.57	0.69	0.63	17.80	
166.00		159.49	1.61	0.80	0.68	19.65	
167.00	Appurtenance(s)	4247.7	1.63	0.86	0.71	552.00	
168.00		78.42	1.65	0.93	0.73	10.73	
170.00		155.26	1.69	1.07	0.79	23.45	
172.00		153.14	1.73	1.22	0.85	25.40	
174.00		151.03	1.77	1.39	0.92	27.37	
176.00		148.91	1.81	1.57	0.99	29.37	
178.00	Appurtenance(s)	3381.1	1.85	1.77	1.06	722.85	
180.00		144.67	1.89	1.98	1.14	33.41	
	Totals:	**46,491.7**				**2,067.3**	**Total Wind:** **50,804.5**

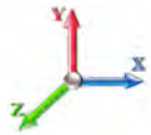
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 43	

Tower Engineering Solutions

Load Case: 0.9D + 1.0E



Gust Response Factor	1.10			**Sds**	0.18			**Iterations**	26
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.10			**Ss**	0.17
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29	**SA**	0.03			**S1**	0.06
								Seismic Importance Factor	1.00

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-47.54	-2.32	0.00	-322.44	0.00	322.44	5499.24	2749.62	13525.8	6714.82		0.00	0.00	0.057
2.00	-46.96	-2.32	0.00	-317.80	0.00	317.80	5478.14	2739.07	13385.1	6644.94		0.00	0.00	0.056
4.00	-46.39	-2.32	0.00	-313.16	0.00	313.16	5456.85	2728.42	13244.5	6575.16		0.00	-0.01	0.056
6.00	-45.81	-2.31	0.00	-308.53	0.00	308.53	5435.36	2717.68	13104.2	6505.49		0.01	-0.01	0.056
8.00	-45.24	-2.30	0.00	-303.91	0.00	303.91	5413.67	2706.84	12964.1	6435.94		0.02	-0.02	0.056
10.00	-44.68	-2.29	0.00	-299.31	0.00	299.31	5391.79	2695.89	12824.2	6366.50		0.03	-0.02	0.055
12.00	-44.12	-2.28	0.00	-294.73	0.00	294.73	5369.71	2684.85	12684.6	6297.18		0.04	-0.03	0.055
14.00	-43.56	-2.27	0.00	-290.18	0.00	290.18	5347.43	2673.72	12545.2	6227.99		0.05	-0.03	0.055
16.00	-43.00	-2.25	0.00	-285.65	0.00	285.65	5324.96	2662.48	12406.1	6158.93		0.07	-0.04	0.054
18.00	-42.45	-2.24	0.00	-281.14	0.00	281.14	5302.29	2651.14	12267.3	6090.01		0.08	-0.04	0.054
20.00	-41.90	-2.22	0.00	-276.66	0.00	276.66	5279.42	2639.71	12128.7	6021.23		0.10	-0.05	0.054
22.00	-41.35	-2.21	0.00	-272.21	0.00	272.21	5256.36	2628.18	11990.5	5952.59		0.13	-0.06	0.054
24.00	-40.81	-2.20	0.00	-267.79	0.00	267.79	5233.10	2616.55	11852.5	5884.10		0.15	-0.06	0.053
26.00	-40.27	-2.18	0.00	-263.40	0.00	263.40	5209.64	2604.82	11714.9	5815.77		0.18	-0.07	0.053
28.00	-39.73	-2.17	0.00	-259.04	0.00	259.04	5185.99	2593.00	11577.5	5747.60		0.21	-0.07	0.053
30.00	-39.20	-2.15	0.00	-254.71	0.00	254.71	5162.14	2581.07	11440.6	5679.60		0.24	-0.08	0.052
32.00	-38.67	-2.14	0.00	-250.40	0.00	250.40	5138.10	2569.05	11303.9	5611.76		0.27	-0.08	0.052
34.00	-38.15	-2.12	0.00	-246.13	0.00	246.13	5113.85	2556.93	11167.6	5544.10		0.30	-0.09	0.052
36.00	-37.62	-2.11	0.00	-241.88	0.00	241.88	5089.42	2544.71	11031.7	5476.62		0.34	-0.09	0.052
38.00	-37.10	-2.09	0.00	-237.67	0.00	237.67	5064.78	2532.39	10896.1	5409.32		0.38	-0.10	0.051
40.00	-36.59	-2.08	0.00	-233.49	0.00	233.49	5039.95	2519.97	10760.9	5342.21		0.42	-0.10	0.051
42.00	-36.08	-2.06	0.00	-229.34	0.00	229.34	5014.92	2507.46	10626.1	5275.29		0.47	-0.11	0.051
44.00	-35.57	-2.04	0.00	-225.22	0.00	225.22	4989.69	2494.85	10491.8	5208.57		0.51	-0.11	0.050
45.50	-35.19	-2.03	0.00	-222.15	0.00	222.15	4970.65	2485.32	10391.2	5158.66		0.55	-0.12	0.050
46.00	-34.97	-2.03	0.00	-221.13	0.00	221.13	4964.27	2482.14	10357.8	5142.05		0.56	-0.12	0.050
48.00	-34.09	-1.99	0.00	-217.08	0.00	217.08	4938.65	2469.33	10224.2	5075.74		0.61	-0.12	0.050
50.00	-33.22	-1.96	0.00	-213.10	0.00	213.10	4912.84	2456.42	10091.1	5009.65		0.67	-0.13	0.049
52.00	-32.35	-1.93	0.00	-209.18	0.00	209.18	4886.83	2443.41	9958.39	4943.77		0.72	-0.14	0.049
52.75	-32.03	-1.92	0.00	-207.73	0.00	207.73	3995.11	1997.56	8262.19	4101.70		0.74	-0.14	0.059
54.00	-31.75	-1.91	0.00	-205.34	0.00	205.34	3983.52	1991.76	8197.82	4069.74		0.78	-0.14	0.058
56.00	-31.32	-1.90	0.00	-201.52	0.00	201.52	3964.81	1982.41	8095.01	4018.70		0.84	-0.15	0.058
58.00	-30.89	-1.88	0.00	-197.73	0.00	197.73	3945.91	1972.96	7992.40	3967.76		0.90	-0.15	0.058
60.00	-30.46	-1.87	0.00	-193.96	0.00	193.96	3926.81	1963.41	7890.01	3916.93		0.97	-0.16	0.057
62.00	-30.03	-1.86	0.00	-190.23	0.00	190.23	3907.51	1953.76	7787.85	3866.21		1.04	-0.17	0.057
64.00	-29.60	-1.84	0.00	-186.51	0.00	186.51	3888.02	1944.01	7685.92	3815.62		1.11	-0.17	0.056
66.00	-29.18	-1.83	0.00	-182.83	0.00	182.83	3868.33	1934.17	7584.24	3765.14		1.18	-0.18	0.056
68.00	-28.76	-1.82	0.00	-179.17	0.00	179.17	3848.45	1924.22	7482.82	3714.79		1.26	-0.18	0.056
70.00	-28.35	-1.81	0.00	-175.53	0.00	175.53	3828.36	1914.18	7381.67	3664.57		1.34	-0.19	0.055
72.00	-27.94	-1.80	0.00	-171.91	0.00	171.91	3808.08	1904.04	7280.79	3614.49		1.42	-0.20	0.055
74.00	-27.53	-1.79	0.00	-168.32	0.00	168.32	3787.61	1893.80	7180.20	3564.55		1.50	-0.20	0.054
75.00	-27.25	-1.78	0.00	-166.54	0.00	166.54	3777.30	1888.65	7130.01	3539.64		1.54	-0.21	0.054
76.00	-27.04	-1.77	0.00	-164.76	0.00	164.76	3766.94	1883.47	7079.90	3514.76		1.59	-0.21	0.054
78.00	-26.64	-1.77	0.00	-161.21	0.00	161.21	3746.07	1873.03	6979.91	3465.12		1.68	-0.22	0.054
80.00	-26.24	-1.76	0.00	-157.68	0.00	157.68	3725.00	1862.50	6880.23	3415.63		1.77	-0.22	0.053
82.00	-25.84	-1.75	0.00	-154.17	0.00	154.17	3703.74	1851.87	6780.87	3366.31		1.87	-0.23	0.053
84.00	-25.44	-1.75	0.00	-150.66	0.00	150.66	3682.28	1841.14	6681.85	3317.15		1.96	-0.24	0.052
86.00	-25.05	-1.74	0.00	-147.17	0.00	147.17	3660.63	1830.31	6583.17	3268.16		2.06	-0.24	0.052

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 44

88.00	-24.66	-1.74	0.00	-143.68	0.00	143.68	3638.77	1819.39	6484.84	3219.35	2.17	-0.25	0.051
90.00	-24.27	-1.74	0.00	-140.20	0.00	140.20	3616.73	1808.36	6386.87	3170.71	2.27	-0.26	0.051
92.00	-23.89	-1.74	0.00	-136.72	0.00	136.72	3594.48	1797.24	6289.28	3122.26	2.38	-0.26	0.050
92.33	-23.83	-1.74	0.00	-136.14	0.00	136.14	3590.75	1795.38	6273.05	3114.21	2.40	-0.26	0.050
94.00	-23.31	-1.74	0.00	-133.24	0.00	133.24	3572.04	1786.02	6192.07	3074.00	2.49	-0.27	0.050
96.00	-22.70	-1.74	0.00	-129.75	0.00	129.75	3549.40	1774.70	6095.24	3025.94	2.61	-0.28	0.049
98.00	-22.09	-1.74	0.00	-126.27	0.00	126.27	3526.57	1763.28	5998.82	2978.07	2.72	-0.28	0.049
98.50	-21.94	-1.74	0.00	-125.40	0.00	125.40	2386.86	1193.43	4124.78	2047.71	2.75	-0.28	0.070
100.00	-21.72	-1.74	0.00	-122.79	0.00	122.79	2378.02	1189.01	4080.56	2025.76	2.84	-0.29	0.070
102.00	-21.42	-1.74	0.00	-119.30	0.00	119.30	2366.05	1183.03	4021.64	1996.51	2.97	-0.30	0.069
104.00	-21.12	-1.75	0.00	-115.81	0.00	115.81	2353.89	1176.95	3962.79	1967.29	3.09	-0.31	0.068
106.00	-20.83	-1.75	0.00	-112.32	0.00	112.32	2341.53	1170.77	3904.00	1938.11	3.22	-0.32	0.067
108.00	-20.53	-1.75	0.00	-108.82	0.00	108.82	2328.98	1164.49	3845.28	1908.96	3.36	-0.32	0.066
110.00	-18.40	-1.74	0.00	-105.33	0.00	105.33	2316.23	1158.11	3786.65	1879.85	3.50	-0.33	0.064
112.00	-18.12	-1.74	0.00	-101.85	0.00	101.85	2303.28	1151.64	3728.12	1850.80	3.64	-0.34	0.063
114.00	-17.84	-1.74	0.00	-98.37	0.00	98.37	2290.14	1145.07	3669.69	1821.79	3.78	-0.35	0.062
116.00	-17.55	-1.74	0.00	-94.88	0.00	94.88	2276.80	1138.40	3611.38	1792.84	3.93	-0.36	0.061
118.00	-17.28	-1.74	0.00	-91.40	0.00	91.40	2263.26	1131.63	3553.19	1763.95	4.08	-0.37	0.059
120.00	-17.00	-1.74	0.00	-87.91	0.00	87.91	2249.53	1124.76	3495.14	1735.13	4.24	-0.37	0.058
122.00	-16.71	-1.74	0.00	-84.43	0.00	84.43	2235.60	1117.80	3437.23	1706.38	4.39	-0.38	0.057
124.00	-16.44	-1.74	0.00	-80.94	0.00	80.94	2221.47	1110.74	3379.47	1677.71	4.56	-0.39	0.056
126.00	-16.17	-1.75	0.00	-77.45	0.00	77.45	2207.15	1103.57	3321.87	1649.12	4.72	-0.40	0.054
128.00	-15.90	-1.75	0.00	-73.96	0.00	73.96	2192.63	1096.31	3264.45	1620.61	4.89	-0.41	0.053
130.00	-15.63	-1.75	0.00	-70.47	0.00	70.47	2177.91	1088.96	3207.21	1592.19	5.06	-0.41	0.051
131.58	-15.43	-1.74	0.00	-67.71	0.00	67.71	2166.12	1083.06	3162.03	1569.76	5.20	-0.42	0.050
132.00	-15.33	-1.75	0.00	-66.98	0.00	66.98	2163.00	1081.50	3150.16	1563.87	5.23	-0.42	0.050
134.00	-14.90	-1.74	0.00	-63.49	0.00	63.49	2147.89	1073.94	3093.31	1535.65	5.41	-0.43	0.048
136.00	-14.47	-1.74	0.00	-60.00	0.00	60.00	2132.58	1066.29	3036.67	1507.53	5.59	-0.44	0.047
136.83	-14.29	-1.74	0.00	-58.55	0.00	58.55	1821.16	910.58	2623.48	1302.41	5.67	-0.44	0.053
138.00	-14.15	-1.74	0.00	-56.52	0.00	56.52	1814.37	907.19	2596.54	1289.03	5.78	-0.44	0.052
140.00	-13.91	-1.74	0.00	-53.03	0.00	53.03	1802.58	901.29	2550.43	1266.14	5.96	-0.45	0.050
142.00	-13.68	-1.74	0.00	-49.55	0.00	49.55	1790.60	895.30	2504.42	1243.30	6.16	-0.46	0.047
144.00	-13.44	-1.74	0.00	-46.06	0.00	46.06	1778.42	889.21	2458.53	1220.52	6.35	-0.46	0.045
146.00	-13.21	-1.74	0.00	-42.59	0.00	42.59	1766.04	883.02	2412.77	1197.80	6.54	-0.47	0.043
147.00	-9.53	-1.62	0.00	-40.85	0.00	40.85	1759.78	879.89	2389.94	1186.47	6.64	-0.47	0.040
148.00	-9.43	-1.62	0.00	-39.23	0.00	39.23	1753.47	876.73	2367.15	1175.15	6.74	-0.48	0.039
150.00	-9.24	-1.61	0.00	-36.00	0.00	36.00	1740.70	870.35	2321.67	1152.58	6.94	-0.48	0.037
152.00	-9.04	-1.60	0.00	-32.78	0.00	32.78	1727.73	863.87	2276.35	1130.08	7.15	-0.49	0.034
154.00	-8.85	-1.59	0.00	-29.58	0.00	29.58	1714.57	857.28	2231.19	1107.66	7.35	-0.49	0.032
156.00	-8.66	-1.58	0.00	-26.39	0.00	26.39	1701.21	850.60	2186.21	1085.33	7.56	-0.50	0.029
158.00	-8.48	-1.57	0.00	-23.23	0.00	23.23	1687.65	843.83	2141.41	1063.08	7.77	-0.50	0.027
160.00	-8.29	-1.55	0.00	-20.10	0.00	20.10	1673.90	836.95	2096.80	1040.94	7.99	-0.51	0.024
162.00	-8.11	-1.53	0.00	-17.00	0.00	17.00	1659.95	829.97	2052.40	1018.90	8.20	-0.51	0.022
164.00	-7.93	-1.52	0.00	-13.93	0.00	13.93	1645.80	822.90	2008.21	996.96	8.41	-0.52	0.019
166.00	-7.75	-1.49	0.00	-10.90	0.00	10.90	1631.46	815.73	1964.24	975.13	8.63	-0.52	0.016
167.00	-3.91	-0.91	0.00	-9.40	0.00	9.40	1624.22	812.11	1942.34	964.26	8.74	-0.52	0.012
168.00	-3.83	-0.90	0.00	-8.50	0.00	8.50	1616.92	808.46	1920.51	953.42	8.85	-0.52	0.011
170.00	-3.67	-0.87	0.00	-6.70	0.00	6.70	1602.19	801.09	1877.01	931.83	9.07	-0.52	0.009
172.00	-3.50	-0.84	0.00	-4.96	0.00	4.96	1587.25	793.63	1833.77	910.36	9.29	-0.52	0.008
174.00	-3.35	-0.82	0.00	-3.27	0.00	3.27	1572.12	786.06	1790.79	889.02	9.51	-0.52	0.006
176.00	-3.19	-0.79	0.00	-1.64	0.00	1.64	1556.80	778.40	1748.08	867.82	9.73	-0.53	0.004
178.00	-0.13	-0.03	0.00	-0.07	0.00	0.07	1541.28	770.64	1705.64	846.75	9.95	-0.53	0.000
180.00	0.00	-0.03	0.00	0.00	0.00	0.00	1525.56	762.78	1663.50	825.83	10.17	-0.53	0.000

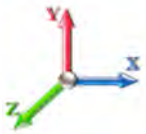
Wind Loading - Shaft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 45	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	7.442	8.19	282.00	0.750	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	7.442	8.19	280.17	0.750	0.000	2.00	10.163	7.62	62.4	0.0	563.9
4.00		1.00	0.85	7.442	8.19	278.34	0.750	0.000	2.00	10.096	7.57	62.0	0.0	560.2
6.00		1.00	0.85	7.442	8.19	276.51	0.750	0.000	2.00	10.030	7.52	61.6	0.0	556.5
8.00		1.00	0.85	7.442	8.19	274.67	0.750	0.000	2.00	9.964	7.47	61.2	0.0	552.8
10.00		1.00	0.85	7.442	8.19	272.84	0.750	0.000	2.00	9.898	7.42	60.8	0.0	549.1
12.00		1.00	0.85	7.442	8.19	271.01	0.750	0.000	2.00	9.831	7.37	60.4	0.0	545.4
14.00		1.00	0.85	7.442	8.19	269.17	0.750	0.000	2.00	9.765	7.32	60.0	0.0	541.6
16.00		1.00	0.86	7.534	8.29	268.99	0.750	0.000	2.00	9.699	7.27	60.3	0.0	537.9
18.00		1.00	0.88	7.723	8.50	270.47	0.750	0.000	2.00	9.633	7.22	61.4	0.0	534.2
20.00		1.00	0.90	7.896	8.69	271.60	0.750	0.000	2.00	9.566	7.17	62.3	0.0	530.5
22.00		1.00	0.92	8.056	8.86	272.43	0.750	0.000	2.00	9.500	7.13	63.1	0.0	526.8
24.00		1.00	0.94	8.205	9.03	273.02	0.750	0.000	2.00	9.434	7.08	63.9	0.0	523.1
26.00		1.00	0.95	8.345	9.18	273.38	0.750	0.000	2.00	9.367	7.03	64.5	0.0	519.4
28.00		1.00	0.97	8.476	9.32	273.57	0.750	0.000	2.00	9.301	6.98	65.0	0.0	515.7
30.00		1.00	0.98	8.600	9.46	273.59	0.750	0.000	2.00	9.235	6.93	65.5	0.0	512.0
32.00		1.00	1.00	8.717	9.59	273.47	0.750	0.000	2.00	9.169	6.88	65.9	0.0	508.3
34.00		1.00	1.01	8.829	9.71	273.23	0.750	0.000	2.00	9.102	6.83	66.3	0.0	504.6
36.00		1.00	1.02	8.936	9.83	272.87	0.750	0.000	2.00	9.036	6.78	66.6	0.0	500.9
38.00		1.00	1.03	9.039	9.94	272.41	0.750	0.000	2.00	8.970	6.73	66.9	0.0	497.2
40.00		1.00	1.04	9.137	10.05	271.85	0.750	0.000	2.00	8.904	6.68	67.1	0.0	493.5
42.00		1.00	1.05	9.231	10.15	271.21	0.750	0.000	2.00	8.837	6.63	67.3	0.0	489.8
44.00		1.00	1.06	9.322	10.25	270.49	0.750	0.000	2.00	8.771	6.58	67.5	0.0	486.1
45.50	Bot - Section 2	1.00	1.07	9.388	10.33	269.90	0.750	0.000	1.50	6.535	4.90	50.6	0.0	362.1
46.00		1.00	1.07	9.410	10.35	269.69	0.750	0.000	0.50	2.202	1.65	17.1	0.0	225.0
48.00		1.00	1.08	9.494	10.44	268.83	0.750	0.000	2.00	8.766	6.57	68.7	0.0	895.6
50.00		1.00	1.09	9.576	10.53	267.91	0.750	0.000	2.00	8.700	6.52	68.7	0.0	888.7
52.00		1.00	1.10	9.656	10.62	266.93	0.750	0.000	2.00	8.633	6.47	68.8	0.0	881.8
52.75	Top - Section 1	1.00	1.11	9.685	10.65	266.55	0.750	0.000	0.75	3.220	2.42	25.7	0.0	328.9
54.00		1.00	1.11	9.733	10.71	269.93	0.750	0.000	1.25	5.347	4.01	42.9	0.0	254.2
56.00		1.00	1.12	9.807	10.79	268.86	0.750	0.000	2.00	8.501	6.38	68.8	0.0	404.2
58.00		1.00	1.13	9.880	10.87	267.74	0.750	0.000	2.00	8.434	6.33	68.8	0.0	401.0
60.00		1.00	1.14	9.951	10.95	266.58	0.750	0.000	2.00	8.368	6.28	68.7	0.0	397.9
62.00		1.00	1.14	10.020	11.02	265.38	0.750	0.000	2.00	8.302	6.23	68.6	0.0	394.7
64.00		1.00	1.15	10.087	11.10	264.13	0.750	0.000	2.00	8.236	6.18	68.5	0.0	391.5
66.00		1.00	1.16	10.153	11.17	262.85	0.750	0.000	2.00	8.169	6.13	68.4	0.0	388.3
68.00		1.00	1.17	10.217	11.24	261.53	0.750	0.000	2.00	8.103	6.08	68.3	0.0	385.2
70.00		1.00	1.17	10.279	11.31	260.17	0.750	0.000	2.00	8.037	6.03	68.2	0.0	382.0
72.00		1.00	1.18	10.340	11.37	258.78	0.750	0.000	2.00	7.971	5.98	68.0	0.0	378.8
74.00		1.00	1.19	10.400	11.44	257.36	0.750	0.000	2.00	7.904	5.93	67.8	0.0	375.6
75.00	Appurtenance(s)	1.00	1.19	10.430	11.47	256.64	0.750	0.000	1.00	3.927	2.95	33.8	0.0	186.6
76.00		1.00	1.19	10.459	11.50	255.91	0.750	0.000	1.00	3.911	2.93	33.7	0.0	185.8
78.00		1.00	1.20	10.516	11.57	254.43	0.750	0.000	2.00	7.772	5.83	67.4	0.0	369.3
80.00		1.00	1.21	10.572	11.63	252.93	0.750	0.000	2.00	7.705	5.78	67.2	0.0	366.1
82.00		1.00	1.21	10.627	11.69	251.40	0.750	0.000	2.00	7.639	5.73	67.0	0.0	362.9
84.00		1.00	1.22	10.681	11.75	249.84	0.750	0.000	2.00	7.573	5.68	66.7	0.0	359.8
86.00		1.00	1.23	10.734	11.81	248.26	0.750	0.000	2.00	7.507	5.63	66.5	0.0	356.6

Wind Loading - Shaft

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 46

88.00	1.00	1.23	10.787	11.87	246.65	0.750	0.000	2.00	7.440	5.58	66.2	0.0	353.4
90.00	1.00	1.24	10.838	11.92	245.02	0.750	0.000	2.00	7.374	5.53	65.9	0.0	350.2
92.00	1.00	1.24	10.888	11.98	243.37	0.750	0.000	2.00	7.308	5.48	65.6	0.0	347.1
92.33 Bot - Section 3	1.00	1.24	10.896	11.99	243.10	0.750	0.000	0.33	1.212	0.91	10.9	0.0	57.5
94.00	1.00	1.25	10.937	12.03	241.70	0.750	0.000	1.67	6.110	4.58	55.1	0.0	504.4
96.00	1.00	1.25	10.986	12.08	240.01	0.750	0.000	2.00	7.271	5.45	65.9	0.0	600.2
98.00	1.00	1.26	11.034	12.14	238.30	0.750	0.000	2.00	7.205	5.40	65.6	0.0	594.7
98.50 Top - Section 2	1.00	1.26	11.046	12.15	237.87	0.750	0.000	0.50	1.791	1.34	16.3	0.0	147.8
100.00	1.00	1.27	11.081	12.19	239.80	0.750	0.000	1.50	5.348	4.01	48.9	0.0	190.9
102.00	1.00	1.27	11.127	12.24	238.06	0.750	0.000	2.00	7.072	5.30	64.9	0.0	252.4
104.00	1.00	1.28	11.173	12.29	236.30	0.750	0.000	2.00	7.006	5.25	64.6	0.0	250.0
106.00	1.00	1.28	11.218	12.34	234.52	0.750	0.000	2.00	6.939	5.20	64.2	0.0	247.6
108.00	1.00	1.29	11.262	12.39	232.73	0.750	0.000	2.00	6.873	5.15	63.9	0.0	245.2
110.00 Appurtenance(s)	1.00	1.29	11.305	12.44	230.92	0.750	0.000	2.00	6.807	5.11	63.5	0.0	242.9
112.00	1.00	1.30	11.348	12.48	229.09	0.750	0.000	2.00	6.741	5.06	63.1	0.0	240.5
114.00	1.00	1.30	11.391	12.53	227.25	0.750	0.000	2.00	6.674	5.01	62.7	0.0	238.1
116.00	1.00	1.31	11.432	12.58	225.40	0.750	0.000	2.00	6.608	4.96	62.3	0.0	235.7
118.00	1.00	1.31	11.474	12.62	223.53	0.750	0.000	2.00	6.542	4.91	61.9	0.0	233.3
120.00	1.00	1.32	11.514	12.67	221.64	0.750	0.000	2.00	6.476	4.86	61.5	0.0	231.0
122.00 Appurtenance(s)	1.00	1.32	11.554	12.71	219.75	0.750	0.000	2.00	6.409	4.81	61.1	0.0	228.6
124.00	1.00	1.32	11.594	12.75	217.83	0.750	0.000	2.00	6.343	4.76	60.7	0.0	226.2
126.00	1.00	1.33	11.633	12.80	215.91	0.750	0.000	2.00	6.277	4.71	60.2	0.0	223.8
128.00	1.00	1.33	11.672	12.84	213.97	0.750	0.000	2.00	6.210	4.66	59.8	0.0	221.4
130.00	1.00	1.34	11.710	12.88	212.02	0.750	0.000	2.00	6.144	4.61	59.4	0.0	219.0
131.58 Bot - Section 4	1.00	1.34	11.740	12.91	210.47	0.750	0.000	1.58	4.817	3.61	46.7	0.0	171.7
132.00	1.00	1.34	11.748	12.92	210.06	0.750	0.000	0.42	1.278	0.96	12.4	0.0	85.5
134.00	1.00	1.35	11.785	12.96	208.09	0.750	0.000	2.00	6.097	4.57	59.3	0.0	407.6
136.00	1.00	1.35	11.822	13.00	206.10	0.750	0.000	2.00	6.030	4.52	58.8	0.0	403.1
136.83 Top - Section 3	1.00	1.35	11.837	13.02	205.27	0.750	0.000	0.83	2.493	1.87	24.3	0.0	166.7
138.00	1.00	1.35	11.858	13.04	207.07	0.750	0.000	1.17	3.471	2.60	34.0	0.0	110.1
140.00	1.00	1.36	11.894	13.08	205.07	0.750	0.000	2.00	5.898	4.42	57.9	0.0	187.0
142.00	1.00	1.36	11.930	13.12	203.05	0.750	0.000	2.00	5.831	4.37	57.4	0.0	184.9
144.00	1.00	1.37	11.965	13.16	201.03	0.750	0.000	2.00	5.765	4.32	56.9	0.0	182.8
146.00	1.00	1.37	12.000	13.20	198.99	0.750	0.000	2.00	5.699	4.27	56.4	0.0	180.7
147.00 Appurtenance(s)	1.00	1.37	12.017	13.22	197.97	0.750	0.000	1.00	2.825	2.12	28.0	0.0	89.5
148.00	1.00	1.37	12.034	13.24	196.94	0.750	0.000	1.00	2.808	2.11	27.9	0.0	89.0
150.00	1.00	1.38	12.068	13.27	194.89	0.750	0.000	2.00	5.566	4.17	55.4	0.0	176.4
152.00	1.00	1.38	12.102	13.31	192.82	0.750	0.000	2.00	5.500	4.13	54.9	0.0	174.3
154.00	1.00	1.39	12.135	13.35	190.75	0.750	0.000	2.00	5.434	4.08	54.4	0.0	172.2
156.00	1.00	1.39	12.168	13.39	188.66	0.750	0.000	2.00	5.368	4.03	53.9	0.0	170.1
158.00	1.00	1.39	12.201	13.42	186.57	0.750	0.000	2.00	5.301	3.98	53.4	0.0	168.0
160.00	1.00	1.40	12.233	13.46	184.47	0.750	0.000	2.00	5.235	3.93	52.8	0.0	165.8
162.00	1.00	1.40	12.265	13.49	182.35	0.750	0.000	2.00	5.169	3.88	52.3	0.0	163.7
164.00	1.00	1.40	12.297	13.53	180.23	0.750	0.000	2.00	5.102	3.83	51.8	0.0	161.6
166.00	1.00	1.41	12.328	13.56	178.10	0.750	0.000	2.00	5.036	3.78	51.2	0.0	159.5
167.00 Appurtenance(s)	1.00	1.41	12.344	13.58	177.04	0.750	0.000	1.00	2.493	1.87	25.4	0.0	79.0
168.00	1.00	1.41	12.360	13.60	175.97	0.750	0.000	1.00	2.477	1.86	25.3	0.0	78.4
170.00	1.00	1.42	12.390	13.63	173.82	0.750	0.000	2.00	4.904	3.68	50.1	0.0	155.3
172.00	1.00	1.42	12.421	13.66	171.67	0.750	0.000	2.00	4.837	3.63	49.6	0.0	153.1
174.00	1.00	1.42	12.451	13.70	169.50	0.750	0.000	2.00	4.771	3.58	49.0	0.0	151.0
176.00	1.00	1.43	12.481	13.73	167.33	0.750	0.000	2.00	4.705	3.53	48.4	0.0	148.9
178.00 Appurtenance(s)	1.00	1.43	12.511	13.76	165.16	0.750	0.000	2.00	4.638	3.48	47.9	0.0	146.8
180.00	1.00	1.43	12.540	13.79	162.97	0.750	0.000	2.00	4.572	3.43	47.3	0.0	144.7
							Totals:	**180.00**			**5,568.1**		**32,981.5**

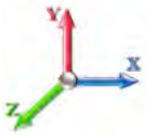
Discrete Appurtenance Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 47	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	178.00	Samsung B5/B13	3	12.511	13.762	0.50	0.75	2.82	210.90	0.000	0.000	38.80	0.00	0.00
2	178.00	MS-HR35	1	12.511	13.762	1.00	1.00	8.75	430.00	0.000	0.000	120.42	0.00	0.00
3	178.00	MS-KI22-5 (Kickers w/o	1	12.511	13.762	1.00	1.00	5.33	146.00	0.000	0.000	73.35	0.00	0.00
4	178.00	JMA Wireless	6	12.511	13.762	0.65	0.75	38.64	276.00	0.000	0.000	531.78	0.00	0.00
5	178.00	Samsung MT6407-77A	3	12.511	13.762	0.52	0.75	7.39	238.20	0.000	0.000	101.66	0.00	0.00
6	178.00	Low Profile Platform	1	12.511	13.762	1.00	1.00	24.92	1500.00	0.000	0.000	342.95	0.00	0.00
7	178.00	Raycap	1	12.511	13.762	1.00	1.00	4.06	32.00	0.000	0.000	55.87	0.00	0.00
8	178.00	JMA 919003314 SBS	3	12.511	13.762	1.00	1.00	0.00	76.05	0.000	0.000	0.00	0.00	0.00
9	178.00	LPA-80080-4CF	6	12.511	13.762	1.36	0.80	21.30	72.00	0.000	0.000	293.10	0.00	0.00
10	178.00	Samsung B2/B66A	3	12.511	13.762	0.50	0.75	2.82	253.20	0.000	0.000	38.80	0.00	0.00
11	167.00	RFS ACU-A20-N RET	4	12.344	13.578	0.50	0.75	0.28	4.00	0.000	0.000	3.82	0.00	0.00
12	167.00	AIR6449 B41	3	12.344	13.578	0.53	0.75	9.03	309.00	0.000	0.000	122.56	0.00	0.00
13	167.00	APXVAALL24_43-U-NA20	3	12.344	13.578	0.55	0.75	33.24	368.40	0.000	0.000	451.40	0.00	0.00
14	167.00	Ericsson 4460 B25 + B66	3	12.344	13.578	0.50	0.75	3.23	327.00	0.000	0.000	43.80	0.00	0.00
15	167.00	Alcatel Lucent	3	12.344	13.578	0.50	0.75	6.11	210.00	0.000	0.000	82.90	0.00	0.00
16	167.00	Ericsson 4480 B71 + B85	3	12.344	13.578	0.50	0.75	3.65	279.00	0.000	0.000	49.54	0.00	0.00
17	167.00	Alcatel Lucent 800 MHz	3	12.344	13.578	0.50	0.75	1.18	26.40	0.000	0.000	15.97	0.00	0.00
18	167.00	RMQP-4096-HK Plat. +	1	12.344	13.578	1.00	1.00	51.70	2645.00	0.000	0.000	702.00	0.00	0.00
19	147.00	Powerwave	3	12.017	13.219	0.68	0.75	1.86	66.00	0.000	0.000	24.63	0.00	0.00
20	147.00	7770	3	12.017	13.219	0.55	0.75	9.03	105.00	0.000	0.000	119.41	0.00	0.00
21	147.00	Cci DMP65R-BU8DA	6	12.017	13.219	0.55	0.75	58.70	574.20	0.000	0.000	775.97	0.00	0.00
22	147.00	Cci DTMABP7819VG12A	3	12.017	13.219	0.50	0.75	1.72	57.60	0.000	0.000	22.72	0.00	0.00
23	147.00	RMQP-496-HK	1	12.017	13.219	1.00	1.00	46.00	2449.00	0.000	0.000	608.06	0.00	0.00
24	147.00	Ericsson RRUS 8843 B2	3	12.017	13.219	0.50	0.75	2.49	225.00	0.000	0.000	32.88	0.00	0.00
25	147.00	Ericsson RRUS 4449	3	12.017	13.219	0.50	0.75	2.97	213.00	0.000	0.000	39.26	0.00	0.00
26	147.00	Raycap DC6-48-60-18-8F	3	12.017	13.219	0.75	0.75	2.07	95.40	0.000	0.000	27.36	0.00	0.00
27	147.00	Ericsson RRUS 4478 B14	3	12.017	13.219	0.50	0.75	2.49	178.20	0.000	0.000	32.88	0.00	0.00
28	122.00	Nokia CS72188.01	1	11.554	12.710	1.00	1.00	3.15	16.50	0.000	0.000	40.04	0.00	0.00
29	110.00	Fujitsu TA08025-B605	3	11.305	12.436	0.50	0.75	2.95	225.00	0.000	0.000	36.74	0.00	0.00
30	110.00	JMA Wireless	3	11.305	12.436	0.55	0.75	20.80	193.50	0.000	0.000	258.61	0.00	0.00
31	110.00	MC-PK8-C	1	11.305	12.436	1.00	1.00	33.60	1411.00	0.000	0.000	417.84	0.00	0.00
32	110.00	Fujitsu TA08025-B604	3	11.305	12.436	0.50	0.75	2.95	191.70	0.000	0.000	36.74	0.00	0.00
33	110.00	Raycap	1	11.305	12.436	1.00	1.00	2.01	21.90	0.000	0.000	25.00	0.00	0.00
34	75.00	Side Arms	2	10.430	11.473	1.00	1.00	5.26	80.00	0.000	0.000	60.35	0.00	0.00
35	75.00	Lucent KS-24019	1	10.430	11.473	1.00	1.00	0.91	4.00	0.000	0.000	10.44	0.00	0.00
							Totals:		**13,510.15**			**5,637.64**		

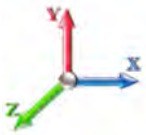
Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 48

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		62.40	643.55	0.00	0.00
4.00		61.99	639.85	0.00	0.00
6.00		61.58	636.14	0.00	0.00
8.00		61.17	632.44	0.00	0.00
10.00		60.77	628.74	0.00	0.00
12.00		60.36	625.03	0.00	0.00
14.00		59.95	621.33	0.00	0.00
16.00		60.28	617.62	0.00	0.00
18.00		61.37	613.92	0.00	0.00
20.00		62.32	610.21	0.00	0.00
22.00		63.14	606.51	0.00	0.00
24.00		63.86	602.80	0.00	0.00
26.00		64.49	599.10	0.00	0.00
28.00		65.04	595.40	0.00	0.00
30.00		65.52	591.69	0.00	0.00
32.00		65.94	587.99	0.00	0.00
34.00		66.30	584.28	0.00	0.00
36.00		66.62	580.58	0.00	0.00
38.00		66.89	576.87	0.00	0.00
40.00		67.11	573.17	0.00	0.00
42.00		67.30	569.47	0.00	0.00
44.00		67.45	565.76	0.00	0.00
45.50		50.61	421.89	0.00	0.00
46.00		17.09	244.89	0.00	0.00
48.00		68.66	975.26	0.00	0.00
50.00		68.73	968.38	0.00	0.00
52.00		68.77	961.50	0.00	0.00
52.75		25.73	358.79	0.00	0.00
54.00		42.93	304.04	0.00	0.00
56.00		68.78	483.88	0.00	0.00
58.00		68.75	480.71	0.00	0.00
60.00		68.70	477.53	0.00	0.00
62.00		68.63	474.36	0.00	0.00
64.00		68.54	471.18	0.00	0.00
66.00		68.43	468.01	0.00	0.00
68.00		68.30	464.83	0.00	0.00
70.00		68.15	461.66	0.00	0.00
72.00		67.99	458.48	0.00	0.00
74.00		67.82	455.31	0.00	0.00
75.00	(3) attachments	104.58	310.46	0.00	0.00
76.00		33.74	225.67	0.00	0.00
78.00		67.43	448.96	0.00	0.00
80.00		67.21	445.78	0.00	0.00
82.00		66.98	442.61	0.00	0.00
84.00		66.73	439.43	0.00	0.00
86.00		66.48	436.26	0.00	0.00

Total Applied Force Summary

Structure:	CT02721-S-SBA		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 49

88.00		66.21	433.08	0.00	0.00
90.00		65.93	429.91	0.00	0.00
92.00		65.64	426.73	0.00	0.00
92.33		10.89	70.81	0.00	0.00
94.00		55.13	570.84	0.00	0.00
96.00		65.90	679.91	0.00	0.00
98.00		65.58	674.36	0.00	0.00
98.50		16.32	167.72	0.00	0.00
100.00		48.88	250.61	0.00	0.00
102.00		64.92	332.07	0.00	0.00
104.00		64.57	329.69	0.00	0.00
106.00		64.22	327.31	0.00	0.00
108.00		63.86	324.92	0.00	0.00
110.00	(11) attachments	838.43	2365.64	0.00	0.00
112.00		63.11	316.52	0.00	0.00
114.00		62.72	314.14	0.00	0.00
116.00		62.33	311.76	0.00	0.00
118.00		61.92	309.38	0.00	0.00
120.00		61.51	307.00	0.00	0.00
122.00	(1) attachments	101.13	321.12	0.00	0.00
124.00		60.67	302.23	0.00	0.00
126.00		60.24	299.85	0.00	0.00
128.00		59.80	297.47	0.00	0.00
130.00		59.36	295.09	0.00	0.00
131.58		46.66	231.92	0.00	0.00
132.00		12.39	101.33	0.00	0.00
134.00		59.27	483.69	0.00	0.00
136.00		58.81	479.19	0.00	0.00
136.83		24.35	198.33	0.00	0.00
138.00		33.96	154.42	0.00	0.00
140.00		57.87	263.05	0.00	0.00
142.00		57.39	260.93	0.00	0.00
144.00		56.91	258.82	0.00	0.00
146.00		56.42	256.70	0.00	0.00
147.00	(28) attachments	1711.17	4090.96	0.00	0.00
148.00		27.88	109.21	0.00	0.00
150.00		55.42	216.83	0.00	0.00
152.00		54.91	214.71	0.00	0.00
154.00		54.40	212.59	0.00	0.00
156.00		53.88	210.48	0.00	0.00
158.00		53.36	208.36	0.00	0.00
160.00		52.83	206.24	0.00	0.00
162.00		52.30	204.13	0.00	0.00
164.00		51.76	202.01	0.00	0.00
166.00		51.22	199.89	0.00	0.00
167.00	(23) attachments	1497.39	4267.95	0.00	0.00
168.00		25.25	91.18	0.00	0.00
170.00		50.12	180.78	0.00	0.00
172.00		49.57	178.66	0.00	0.00
174.00		49.01	176.55	0.00	0.00
176.00		48.44	174.43	0.00	0.00
178.00	(28) attachments	1644.59	3406.66	0.00	0.00
180.00		47.30	144.67	0.00	0.00
	Totals:	**11,205.77**	**52,825.17**	**0.00**	**0.00**

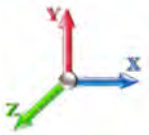
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 50	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.026	0.000	7.442	0.00	3.64
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.026	0.000	7.442	0.00	3.64
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	7.442	0.00	3.64
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	7.442	0.00	3.64
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	7.442	0.00	3.64
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	7.442	0.00	3.64
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	7.442	0.00	3.64
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.027	0.000	7.534	0.00	3.64
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	7.723	0.00	3.64
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	7.896	0.00	3.64
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	8.056	0.00	3.64
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	8.205	0.00	3.64
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.028	0.000	8.345	0.00	3.64
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	8.476	0.00	3.64
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	8.600	0.00	3.64
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	8.717	0.00	3.64
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.029	0.000	8.829	0.00	3.64
36.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	8.936	0.00	3.64
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	9.039	0.00	3.64
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	9.137	0.00	3.64
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	9.231	0.00	3.64
44.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.030	0.000	9.322	0.00	3.64
45.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.031	0.000	9.388	0.00	2.73
46.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.031	0.000	9.410	0.00	0.91
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	9.494	0.00	3.64
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	9.576	0.00	3.64
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	9.656	0.00	3.64
52.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.10	0.00	0.032	0.000	9.685	0.00	1.36
54.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.17	0.00	0.031	0.000	9.733	0.00	2.27
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.031	0.000	9.807	0.00	3.64
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	9.880	0.00	3.64
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	9.951	0.00	3.64
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	10.020	0.00	3.64
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.032	0.000	10.087	0.00	3.64
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	10.153	0.00	3.64
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	10.217	0.00	3.64
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	10.279	0.00	3.64
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.033	0.000	10.340	0.00	3.64
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.034	0.000	10.400	0.00	3.64
75.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.034	0.000	10.430	0.00	1.82
76.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.034	0.000	10.459	0.00	1.82
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.034	0.000	10.516	0.00	3.64
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	10.572	0.00	3.64
82.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	10.627	0.00	3.64
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.035	0.000	10.681	0.00	3.64
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	10.734	0.00	3.64
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	10.787	0.00	3.64

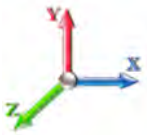
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 51	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	10.838	0.00	3.64
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.036	0.000	10.888	0.00	3.64
92.33	1.6" Hybrid	Yes	0.33	0.000	1.60	0.04	0.00	0.037	0.000	10.896	0.00	0.61
94.00	1.6" Hybrid	Yes	1.67	0.000	1.60	0.22	0.00	0.037	0.000	10.937	0.00	3.03
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.037	0.000	10.986	0.00	3.64
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	11.034	0.00	3.64
98.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.038	0.000	11.046	0.00	0.91
100.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.037	0.000	11.081	0.00	2.73
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	11.127	0.00	3.64
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	11.173	0.00	3.64
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.038	0.000	11.218	0.00	3.64
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.039	0.000	11.262	0.00	3.64
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.039	0.000	11.305	0.00	3.64
										Totals:	**0.0**	**200.2**

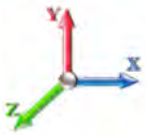
Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 52	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-52.82	-11.21	0.00	-1422.0	0.00	1422.02	5499.24	2749.62	13525.8	6714.82	0.00	0.000	0.000	0.221
2.00	-52.18	-11.17	0.00	-1399.5	0.00	1399.59	5478.14	2739.07	13385.1	6644.94	0.00	-0.022	0.000	0.220
4.00	-51.53	-11.13	0.00	-1377.2	0.00	1377.25	5456.85	2728.42	13244.5	6575.16	0.02	-0.043	0.000	0.219
6.00	-50.89	-11.09	0.00	-1354.9	0.00	1354.99	5435.36	2717.68	13104.2	6505.49	0.04	-0.065	0.000	0.218
8.00	-50.25	-11.04	0.00	-1332.8	0.00	1332.82	5413.67	2706.84	12964.1	6435.94	0.07	-0.087	0.000	0.216
10.00	-49.62	-11.00	0.00	-1310.7	0.00	1310.74	5391.79	2695.89	12824.2	6366.50	0.11	-0.109	0.000	0.215
12.00	-48.99	-10.96	0.00	-1288.7	0.00	1288.74	5369.71	2684.85	12684.6	6297.18	0.16	-0.130	0.000	0.214
14.00	-48.37	-10.91	0.00	-1266.8	0.00	1266.82	5347.43	2673.72	12545.2	6227.99	0.22	-0.152	0.000	0.212
16.00	-47.75	-10.87	0.00	-1244.9	0.00	1244.99	5324.96	2662.48	12406.1	6158.93	0.29	-0.175	0.000	0.211
18.00	-47.13	-10.83	0.00	-1223.2	0.00	1223.25	5302.29	2651.14	12267.3	6090.01	0.37	-0.197	0.000	0.210
20.00	-46.51	-10.78	0.00	-1201.6	0.00	1201.60	5279.42	2639.71	12128.7	6021.23	0.46	-0.219	0.000	0.208
22.00	-45.90	-10.73	0.00	-1180.0	0.00	1180.04	5256.36	2628.18	11990.5	5952.59	0.55	-0.241	0.000	0.207
24.00	-45.30	-10.68	0.00	-1158.5	0.00	1158.58	5233.10	2616.55	11852.5	5884.10	0.66	-0.264	0.000	0.206
26.00	-44.69	-10.63	0.00	-1137.2	0.00	1137.21	5209.64	2604.82	11714.9	5815.77	0.78	-0.286	0.000	0.204
28.00	-44.09	-10.58	0.00	-1115.9	0.00	1115.95	5185.99	2593.00	11577.5	5747.60	0.90	-0.308	0.000	0.203
30.00	-43.50	-10.53	0.00	-1094.7	0.00	1094.79	5162.14	2581.07	11440.6	5679.60	1.04	-0.331	0.000	0.201
32.00	-42.91	-10.48	0.00	-1073.7	0.00	1073.72	5138.10	2569.05	11303.9	5611.76	1.18	-0.354	0.000	0.200
34.00	-42.32	-10.42	0.00	-1052.7	0.00	1052.77	5113.85	2556.93	11167.6	5544.10	1.33	-0.376	0.000	0.198
36.00	-41.73	-10.37	0.00	-1031.9	0.00	1031.92	5089.42	2544.71	11031.7	5476.62	1.49	-0.399	0.000	0.197
38.00	-41.15	-10.32	0.00	-1011.1	0.00	1011.18	5064.78	2532.39	10896.1	5409.32	1.67	-0.422	0.000	0.195
40.00	-40.58	-10.26	0.00	-990.55	0.00	990.55	5039.95	2519.97	10760.9	5342.21	1.85	-0.444	0.000	0.193
42.00	-40.00	-10.20	0.00	-970.03	0.00	970.03	5014.92	2507.46	10626.1	5275.29	2.04	-0.467	0.000	0.192
44.00	-39.44	-10.15	0.00	-949.62	0.00	949.62	4989.69	2494.85	10491.8	5208.57	2.24	-0.490	0.000	0.190
45.50	-39.01	-10.10	0.00	-934.40	0.00	934.40	4970.65	2485.32	10391.2	5158.66	2.40	-0.507	0.000	0.189
46.00	-38.77	-10.09	0.00	-929.35	0.00	929.35	4964.27	2482.14	10357.8	5142.05	2.45	-0.513	0.000	0.189
48.00	-37.79	-10.03	0.00	-909.17	0.00	909.17	4938.65	2469.33	10224.2	5075.74	2.67	-0.536	0.000	0.187
50.00	-36.81	-9.96	0.00	-889.11	0.00	889.11	4912.84	2456.42	10091.1	5009.65	2.90	-0.559	0.000	0.185
52.00	-35.85	-9.90	0.00	-869.18	0.00	869.18	4886.83	2443.41	9958.39	4943.77	3.14	-0.582	0.000	0.183
52.75	-35.49	-9.87	0.00	-861.76	0.00	861.76	3995.11	1997.56	8262.19	4101.70	3.23	-0.590	0.000	0.219
54.00	-35.18	-9.84	0.00	-849.42	0.00	849.42	3983.52	1991.76	8197.82	4069.74	3.39	-0.605	0.000	0.218
56.00	-34.70	-9.78	0.00	-829.74	0.00	829.74	3964.81	1982.41	8095.01	4018.70	3.65	-0.630	0.000	0.215
58.00	-34.21	-9.72	0.00	-810.18	0.00	810.18	3945.91	1972.96	7992.40	3967.76	3.92	-0.656	0.000	0.213
60.00	-33.73	-9.66	0.00	-790.73	0.00	790.73	3926.81	1963.41	7890.01	3916.93	4.20	-0.681	0.000	0.210
62.00	-33.25	-9.60	0.00	-771.41	0.00	771.41	3907.51	1953.76	7787.85	3866.21	4.49	-0.707	0.000	0.208
64.00	-32.78	-9.54	0.00	-752.20	0.00	752.20	3888.02	1944.01	7685.92	3815.62	4.79	-0.732	0.000	0.206
66.00	-32.31	-9.48	0.00	-733.11	0.00	733.11	3868.33	1934.17	7584.24	3765.14	5.10	-0.758	0.000	0.203
68.00	-31.84	-9.42	0.00	-714.14	0.00	714.14	3848.45	1924.22	7482.82	3714.79	5.42	-0.783	0.000	0.201
70.00	-31.37	-9.36	0.00	-695.30	0.00	695.30	3828.36	1914.18	7381.67	3664.57	5.76	-0.809	0.000	0.198
72.00	-30.91	-9.30	0.00	-676.57	0.00	676.57	3808.08	1904.04	7280.79	3614.49	6.10	-0.834	0.000	0.195
74.00	-30.46	-9.24	0.00	-657.97	0.00	657.97	3787.61	1893.80	7180.20	3564.55	6.46	-0.859	0.000	0.193
75.00	-30.14	-9.13	0.00	-648.73	0.00	648.73	3777.30	1888.65	7130.01	3539.64	6.64	-0.872	0.000	0.191
76.00	-29.92	-9.11	0.00	-639.60	0.00	639.60	3766.94	1883.47	7079.90	3514.76	6.82	-0.885	0.000	0.190
78.00	-29.47	-9.05	0.00	-621.38	0.00	621.38	3746.07	1873.03	6979.91	3465.12	7.20	-0.910	0.000	0.187
80.00	-29.02	-8.98	0.00	-603.29	0.00	603.29	3725.00	1862.50	6880.23	3415.63	7.59	-0.935	0.000	0.184
82.00	-28.57	-8.92	0.00	-585.32	0.00	585.32	3703.74	1851.87	6780.87	3366.31	7.98	-0.960	0.000	0.182
84.00	-28.13	-8.86	0.00	-567.48	0.00	567.48	3682.28	1841.14	6681.85	3317.15	8.39	-0.984	0.000	0.179
86.00	-27.69	-8.80	0.00	-549.76	0.00	549.76	3660.63	1830.31	6583.17	3268.16	8.81	-1.009	0.000	0.176
88.00	-27.25	-8.74	0.00	-532.16	0.00	532.16	3638.77	1819.39	6484.84	3219.35	9.24	-1.034	0.000	0.173

Calculated Forces

Structure:	CT02721-S-SBA	**Code:**	EIA/TIA-222-G	12/16/2021	
Site Name:	South Windham	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 53

90.00	-26.82	-8.67	0.00	-514.69	0.00	514.69	3616.73	1808.36	6386.87	3170.71	9.67	-1.058	0.000	0.170
92.00	-26.39	-8.61	0.00	-497.34	0.00	497.34	3594.48	1797.24	6289.28	3122.26	10.12	-1.082	0.000	0.167
92.33	-26.32	-8.60	0.00	-494.48	0.00	494.48	3590.75	1795.38	6273.05	3114.21	10.20	-1.087	0.000	0.166
94.00	-25.75	-8.54	0.00	-480.14	0.00	480.14	3572.04	1786.02	6192.07	3074.00	10.58	-1.107	0.000	0.163
96.00	-25.07	-8.47	0.00	-463.06	0.00	463.06	3549.40	1774.70	6095.24	3025.94	11.05	-1.130	0.000	0.160
98.00	-24.39	-8.40	0.00	-446.11	0.00	446.11	3526.57	1763.28	5998.82	2978.07	11.53	-1.154	0.000	0.157
98.50	-24.22	-8.39	0.00	-441.91	0.00	441.91	2386.86	1193.43	4124.78	2047.71	11.65	-1.160	0.000	0.226
100.00	-23.97	-8.34	0.00	-429.32	0.00	429.32	2378.02	1189.01	4080.56	2025.76	12.02	-1.178	0.000	0.222
102.00	-23.64	-8.28	0.00	-412.64	0.00	412.64	2366.05	1183.03	4021.64	1996.51	12.52	-1.207	0.000	0.217
104.00	-23.30	-8.22	0.00	-396.07	0.00	396.07	2353.89	1176.95	3962.79	1967.29	13.03	-1.236	0.000	0.211
106.00	-22.97	-8.16	0.00	-379.62	0.00	379.62	2341.53	1170.77	3904.00	1938.11	13.55	-1.265	0.000	0.206
108.00	-22.65	-8.10	0.00	-363.30	0.00	363.30	2328.98	1164.49	3845.28	1908.96	14.09	-1.294	0.000	0.200
110.00	-20.30	-7.22	0.00	-347.09	0.00	347.09	2316.23	1158.11	3786.65	1879.85	14.64	-1.321	0.000	0.193
112.00	-19.98	-7.16	0.00	-332.64	0.00	332.64	2303.28	1151.64	3728.12	1850.80	15.20	-1.349	0.000	0.188
114.00	-19.66	-7.10	0.00	-318.32	0.00	318.32	2290.14	1145.07	3669.69	1821.79	15.77	-1.376	0.000	0.183
116.00	-19.35	-7.04	0.00	-304.12	0.00	304.12	2276.80	1138.40	3611.38	1792.84	16.35	-1.403	0.000	0.178
118.00	-19.04	-6.98	0.00	-290.05	0.00	290.05	2263.26	1131.63	3553.19	1763.95	16.95	-1.429	0.000	0.173
120.00	-18.73	-6.92	0.00	-276.09	0.00	276.09	2249.53	1124.76	3495.14	1735.13	17.55	-1.455	0.000	0.167
122.00	-18.41	-6.82	0.00	-262.26	0.00	262.26	2235.60	1117.80	3437.23	1706.38	18.17	-1.480	0.000	0.162
124.00	-18.10	-6.76	0.00	-248.62	0.00	248.62	2221.47	1110.74	3379.47	1677.71	18.79	-1.505	0.000	0.156
126.00	-17.80	-6.69	0.00	-235.11	0.00	235.11	2207.15	1103.57	3321.87	1649.12	19.43	-1.530	0.000	0.151
128.00	-17.51	-6.63	0.00	-221.73	0.00	221.73	2192.63	1096.31	3264.45	1620.61	20.07	-1.553	0.000	0.145
130.00	-17.21	-6.57	0.00	-208.46	0.00	208.46	2177.91	1088.96	3207.21	1592.19	20.73	-1.576	0.000	0.139
131.58	-16.98	-6.52	0.00	-198.05	0.00	198.05	2166.12	1083.06	3162.03	1569.76	21.25	-1.594	0.000	0.134
132.00	-16.88	-6.51	0.00	-195.33	0.00	195.33	2163.00	1081.50	3150.16	1563.87	21.39	-1.599	0.000	0.133
134.00	-16.39	-6.44	0.00	-182.31	0.00	182.31	2147.89	1073.94	3093.31	1535.65	22.07	-1.620	0.000	0.126
136.00	-15.91	-6.38	0.00	-169.42	0.00	169.42	2132.58	1066.29	3036.67	1507.53	22.75	-1.641	0.000	0.120
136.83	-15.71	-6.35	0.00	-164.11	0.00	164.11	1821.16	910.58	2623.48	1302.41	23.04	-1.649	0.000	0.135
138.00	-15.56	-6.32	0.00	-156.70	0.00	156.70	1814.37	907.19	2596.54	1289.03	23.44	-1.661	0.000	0.130
140.00	-15.29	-6.26	0.00	-144.07	0.00	144.07	1802.58	901.29	2550.43	1266.14	24.14	-1.681	0.000	0.122
142.00	-15.03	-6.20	0.00	-131.56	0.00	131.56	1790.60	895.30	2504.42	1243.30	24.85	-1.701	0.000	0.114
144.00	-14.77	-6.14	0.00	-119.17	0.00	119.17	1778.42	889.21	2458.53	1220.52	25.57	-1.719	0.000	0.106
146.00	-14.52	-6.07	0.00	-106.90	0.00	106.90	1766.04	883.02	2412.77	1197.80	26.29	-1.736	0.000	0.098
147.00	-10.48	-4.24	0.00	-100.83	0.00	100.83	1759.78	879.89	2389.94	1186.47	26.66	-1.744	0.000	0.091
148.00	-10.37	-4.21	0.00	-96.59	0.00	96.59	1753.47	876.73	2367.15	1175.15	27.02	-1.752	0.000	0.088
150.00	-10.16	-4.15	0.00	-88.16	0.00	88.16	1740.70	870.35	2321.67	1152.58	27.76	-1.767	0.000	0.082
152.00	-9.94	-4.09	0.00	-79.86	0.00	79.86	1727.73	863.87	2276.35	1130.08	28.50	-1.781	0.000	0.076
154.00	-9.73	-4.03	0.00	-71.67	0.00	71.67	1714.57	857.28	2231.19	1107.66	29.25	-1.794	0.000	0.070
156.00	-9.52	-3.98	0.00	-63.60	0.00	63.60	1701.21	850.60	2186.21	1085.33	30.01	-1.806	0.000	0.064
158.00	-9.31	-3.92	0.00	-55.65	0.00	55.65	1687.65	843.83	2141.41	1063.08	30.77	-1.817	0.000	0.058
160.00	-9.11	-3.86	0.00	-47.82	0.00	47.82	1673.90	836.95	2096.80	1040.94	31.53	-1.827	0.000	0.051
162.00	-8.91	-3.80	0.00	-40.10	0.00	40.10	1659.95	829.97	2052.40	1018.90	32.30	-1.836	0.000	0.045
164.00	-8.70	-3.75	0.00	-32.49	0.00	32.49	1645.80	822.90	2008.21	996.96	33.07	-1.844	0.000	0.038
166.00	-8.51	-3.69	0.00	-25.00	0.00	25.00	1631.46	815.73	1964.24	975.13	33.84	-1.850	0.000	0.031
167.00	-4.29	-2.05	0.00	-21.31	0.00	21.31	1624.22	812.11	1942.34	964.26	34.23	-1.853	0.000	0.025
168.00	-4.20	-2.03	0.00	-19.26	0.00	19.26	1616.92	808.46	1920.51	953.42	34.62	-1.855	0.000	0.023
170.00	-4.02	-1.97	0.00	-15.21	0.00	15.21	1602.19	801.09	1877.01	931.83	35.40	-1.859	0.000	0.019
172.00	-3.84	-1.92	0.00	-11.27	0.00	11.27	1587.25	793.63	1833.77	910.36	36.18	-1.863	0.000	0.015
174.00	-3.67	-1.86	0.00	-7.44	0.00	7.44	1572.12	786.06	1790.79	889.02	36.96	-1.865	0.000	0.011
176.00	-3.49	-1.81	0.00	-3.72	0.00	3.72	1556.80	778.40	1748.08	867.82	37.74	-1.866	0.000	0.007
178.00	-0.14	-0.05	0.00	-0.10	0.00	0.10	1541.28	770.64	1705.64	846.75	38.52	-1.867	0.000	0.000
180.00	0.00	-0.05	0.00	0.00	0.00	0.00	1525.56	762.78	1663.50	825.83	39.30	-1.867	0.000	0.000

Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.6W 101 mph Wind	50.9	0.00	63.34	0.00	0.00	6488.57
0.9D + 1.6W 101 mph Wind	50.8	0.00	47.50	0.00	0.00	6398.20
1.2D + 1.0Di + 1.0Wi 50 mph Wind	13.2	0.00	111.13	0.00	0.00	1777.32
1.2D + 1.0E	2.3	0.00	63.39	0.00	0.00	327.48
0.9D + 1.0E	2.3	0.00	47.54	0.00	0.00	322.44
1.0D + 1.0W 60 mph Wind	11.2	0.00	52.82	0.00	0.00	1422.02

Max Stresses

Load Case	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)	Elev (ft)	Stress Ratio
1.2D + 1.6W 101 mph Wind	-25.81	-38.35	0.00	-2018.9	0.00	-2018.9	2386.86	1193.4	4124.78	2047.71	98.50	0.998
0.9D + 1.6W 101 mph Wind	-18.59	-37.64	0.00	-1974.8	0.00	-1974.8	2386.86	1193.4	4124.78	2047.71	98.50	0.973
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-62.53	-10.71	0.00	-573.64	0.00	-573.64	2386.86	1193.4	4124.78	2047.71	98.50	0.306
1.2D + 1.0E	-29.26	-1.78	0.00	-128.01	0.00	-128.01	2386.86	1193.4	4124.78	2047.71	98.50	0.075
0.9D + 1.0E	-21.94	-1.74	0.00	-125.40	0.00	-125.40	2386.86	1193.4	4124.78	2047.71	98.50	0.070
1.0D + 1.0W 60 mph Wind	-24.22	-8.39	0.00	-441.91	0.00	-441.91	2386.86	1193.4	4124.78	2047.71	98.50	0.226

Base Plate Summary

Structure:	CT02721-S-SB		**Code:**	EIA/TIA-222-G	12/16/2021
Site Name:	South Windham		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 55

Reactions	
Original Design	
Moment (kip-ft):	5047.00
Axial (kip):	57.10
Shear (kip):	40.10
Analysis (1.2D + 1.6W)	
Moment (kip-ft):	6488.57
Axial (kip):	63.34
Shear (kip):	50.86

Base Plate	
Yield (ksi):	50.00
Width (in):	74.62
Style:	Polygon
Polygon Sides:	16.00
Clip Length (in):	0.00
Effective Len (in):	14.60
Moment (kip-in):	1002.06
Allow Stress (ksi):	67.50
Applied Stress (ksi):	45.90
Stress Ratio:	0.68

Anchor Bolts	
Bolt Circle:	68.62
Number Bolts:	20.00
Bolt Type:	2.25" 18J
Bolt Diameter (in):	2.25
Yield (ksi):	75.00
Ultimate (ksi):	100.00
Arrangement:	Radial
Cluster Dist (in):	0.00
Start Angle (deg):	0.00
Compression	
Force (kip):	232.50
Allowable (kip):	260.00
Ratio:	0.91
Tension	
Force (kip):	221.38
Allowable (kip):	260.00
Ratio:	0.87

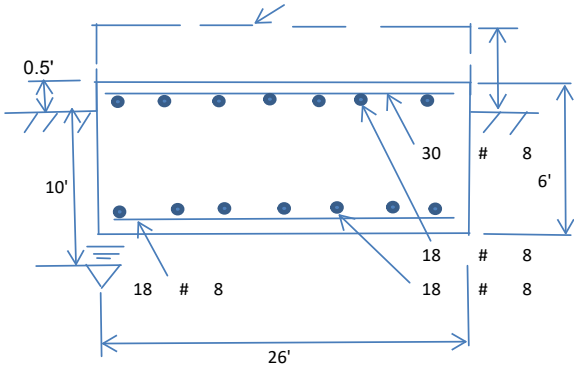
Monopole Mat Foundation Design

				Date
				7/30/2020
Customer Name:		**EIA/TIA Standard:**	EIA-222-G	
Site Name:		**Structure Height (Ft.):**	300	
Site Number:	CT02721-S	**Engineer Name:**	T. Alajaj	
Engr. Number:		**Engineer Login ID:**		

Foundation Info Obtained from: Mapping Operation

Structure Type: Monopole

Analysis or Design? Analysis

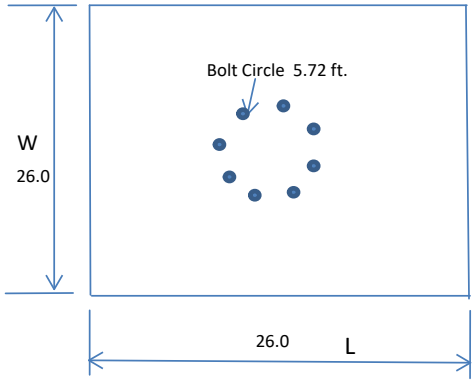


Base Reactions (Factored):

Axial Load (Kips):	63.3	Shear Force (Kips):	50.9
Uplift Force (Kips):	0.0	Moment (Kips-ft):	6488.6
Allowable overstress %:	5.0%		

Foundation Geometries:

		Mods required -Yes/No ?:	No
Anchor Bolt Circle (ft.):	5.72	Depth of Base BG (ft.):	5.50
Thickness of Pad (ft):	6.00		
Length of Pad (ft.):	26	Width of Pad (ft.):	26
Final Length of pad (ft)	26.0	Final width of pad (ft):	26.0



Material Properties and Reabr Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Pad Rebar Yield (Ksi):	60	Tie Spacing (in):	12.0	
Pad Steel Rebar Size (#):	8			
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf
Rebar at the bottom of the concrete pad:				
Qty. of Rebar in Pad (L):	30	Qty. of Rebar in Pad (W):	30	
Rebar at the top of the concrete pad:				
Qty. of Rebar in Pad (L):	18	Qty. of Rebar in Pad (W):	18	
Apply 1.35 factor for e/w Per G:	1.35			

Soil Design Parameters:

Water Table B.G.S. (ft):	10.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	30000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	No	Reduction factor on the maximum soil bearing pressure:	1.00			

Foundation Analysis and Design: Uplift Strength Reduction Factor: 0.75 — Compression Strength Reduction Factor: 0.75

Total Dry Soil Volume (cu. Ft.):	0.00	Total Dry Soil Weight (Kips):	0.00
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	0.00	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	4056.00	Total Dry Concrete Weight (Kips):	608.40
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	608.40	Total Vertical Load on Base (Kips):	671.74

Check Soil Capacities:

				Load/ Capacity Ratio	
Calculated Maxium Net Soil Pressure under the base (psf):	5254	<	Allowable Factored Soil Bearing (psf): 22500	0.23	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7941.7	>	Design Factored Momont (kips-ft): 6796	0.86	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.17	OK!			

Check the capacities of Reinforceing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75
Strength reduction factor (Axial compresion):	0.65	Wind Load Factor on Concrete Design:	1.00

Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	1755.9	>	One-Way Factored Shear (L-D. Kips):	344.4	0.20	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1755.9	>	One-Way Factored Shear (W-D., Kips)	344.4	0.20	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	2063.1	>	One-Way Factored Shear (C-C, Kips):	995.8	0.48	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0011	OK!	Lower Steel Pad Reinf. Ratio (W-Direc	0.0011		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	7210.2	>	Moment at Bottom (L-Direct. K-Ft):	720.2	0.10	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	7210.2	>	Moment at Bottom (W-Direct. K-Ft):	720.2	0.10	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	10169.3	>	Moment at Bottom (C-C Dir. K-Ft):	1018.5	0.10	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0007	OK!	Upper Steel Reinf. Ratio (W-Direct.):	0.0007		
Upper Steel Pad Moment Capacity (L-Direction. Kips-ft):	4349.0	>	Moment at the top (L-Dir Kips-Ft):	267.3	0.06	OK!
Upper Steel Pad Moment Capacity (W-Direction. Kips-ft):	4349.0	>	Moment at the top (W-Dir Kips-Ft):	267.3	0.06	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	6140.5	>	Moment at the top (C-C Direc. K-Ft):	915.2	0.15	OK!

EXHIBIT 8

Mount Analysis

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Antenna Mount Analysis Report

Existing Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT02721-S-SBA

Customer Site Name: South Windham

Carrier Name: T-Mobile Sprint (App#: 154214, V3)

Carrier Site ID / Name: CT72XC043 / _

Site Location: 193 Windham Center Road

Windham, Connecticut

Windham County

Latitude: 41.690055

Longitude: -72.162536

Analysis Result:

Max Structural Usage: 92.00% [Pass]

Report Prepared By: Sarath Basamsetti

NOTE: The proposed mount [(1) SitePro1 RMQP-4096-HK] was assumed to be installed properly to the existing tower per the manufacturer's instructions. Tower Engineering Solutions, LLC is not liable for any fit-up issues during installation

Introduction

The purpose of this report is to summarize the analysis results on the (1) Platform w/Handrail [SitePro1 RMQP-4096-HK] at 167.00' elevation to support the proposed antenna configuration. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Mount Drawings	Mount from SBA Application #: 154214, v3
Antenna Loading	SBA, Application #: 154214, v3 dated 12/01/2021
Modification Drawings	N/A

Analysis Criteria

Basic Wind Speed Used in the Analysis: V_{ULT} = 129 mph (3-Sec. Gust) / Equivalent to
V_{ASD} = 101 mph (3-Sec. Gust)
Basic Wind Speed with Ice: 50 mph (3-Sec. Gust) with 0.75" radial ice concurrent
Operational Wind Speed: 60 mph +0" Radial ice
Standard/Codes: ANSI/TIA/EIA 222-G/ IBC-2015
Exposure Category: C
Structure Class: II
Topographic Category: 1
Crest Height (Ft): 0

The site is a Risk Category II structure per IBC Table 1604.5. This site does not support emergency communication equipment for first responders such as fire departments, police, hospitals, ambulance services or any of the facilities listed for Risk Categories III and IV. The scope of work detailed in this structural analysis does not include items that are a part of emergency service as the 911 or essential facility service of an emergency response system.
.

Mount Information

(1) Platform w/Handrail [SitePro1 RMQP-4096-HK] at 167.00' elevation.

Final Antenna Configuration

3	RFS APXVAALL24_43-U-NA20
3	Ericsson AIR6449 B41
4	RFS ACU-A20-N RET
3	Alcatel-Lucent TD-RRH8x20-25
3	Ericsson 4480 B71 + B85
3	Ericsson 4460 B25 + B66
3	Alcatel-Lucent 800 MHz Filter

In addition to the proposed equipment loading, a 500 lb serviceability load was also considered in this analysis in accordance with TIA requirements.

Analysis Results

Our calculations have determined that under design wind load the proposed mounts will be structurally adequate to support the proposed antenna configuration. The maximum structural usage is 92.00%, which occurs in the bracing connection plate. The proposed equipment must be installed as stipulated in the Final Antenna Configuration section of this report. The analysis results are void if the proposed equipment is not installed in accordance with this report.

NOTE: The proposed mount [(1) SitePro1 RMQP-4096-HK] was assumed to be installed properly to the existing tower per the manufacturer's instructions. Tower Engineering Solutions, LLC is not liable for any fit-up issues during installation.

Attachments

1. Mount Diagram
2. Antenna Placement Diagram
3. Analysis Calculations

Standard Conditions

1. The loading configuration as analyzed in this report is as provided from the customer. Any deviation from this design shall be communicated to TES to verify deviation will not adversely impact the analysis.

2. The analysis is based on the presumption that the antenna mount members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.

3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion. The mount analysis is not a condition assessment of the mount.

4. The mount analysis was performed in accordance with the loading provided, and if applicable the modification required to support the additional loading.

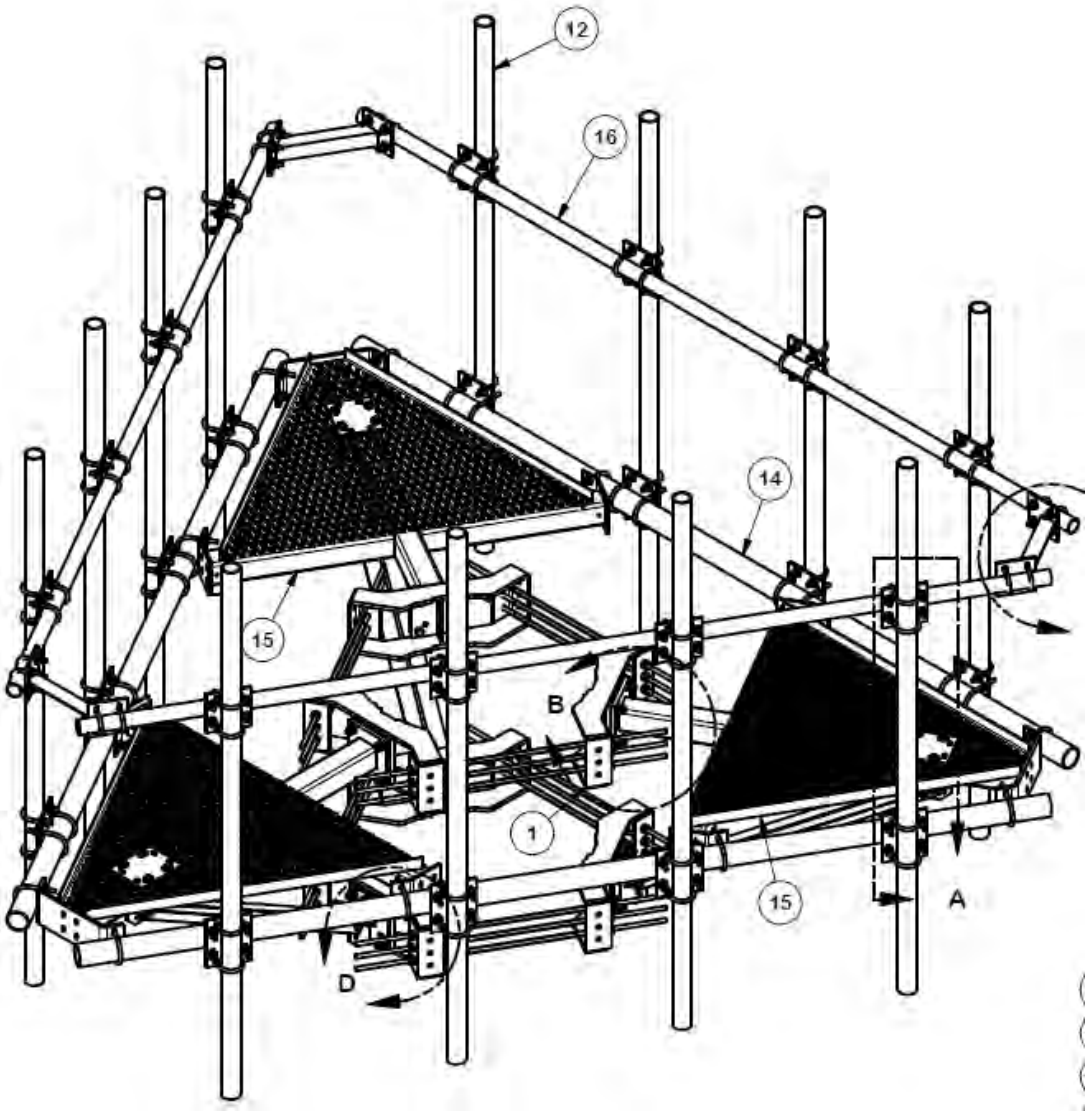
5. If the mount is modified, installation must adhere to the configuration communicated in the modification drawings.

6. The modification drawings are not intended to convey means or methods. These are the responsibility of the installing contractor.

7. Rigging plan review is available if the contractor requires for a construction class IV or other if required. Review fee would apply.

8. The mount modification package was created based upon information provided for the mount loading. The underlying tower is assumed to provide support and sufficient rigidity to support the mount loads as a tower analysis was not part of the mount analysis.

9. TES is not responsible for modifications to climbing facilities unless communicated to TES in writing.



Site Pro 1 RMQP-4096-HK

Structure: CT02721-S-SBA - South Windham

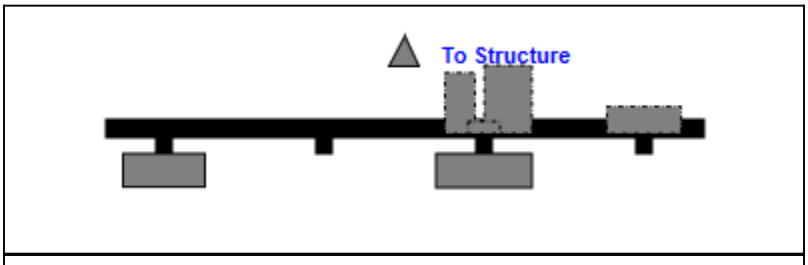
Sector: **A**

Structure Type: Monopole

Mount Elev: 167.00

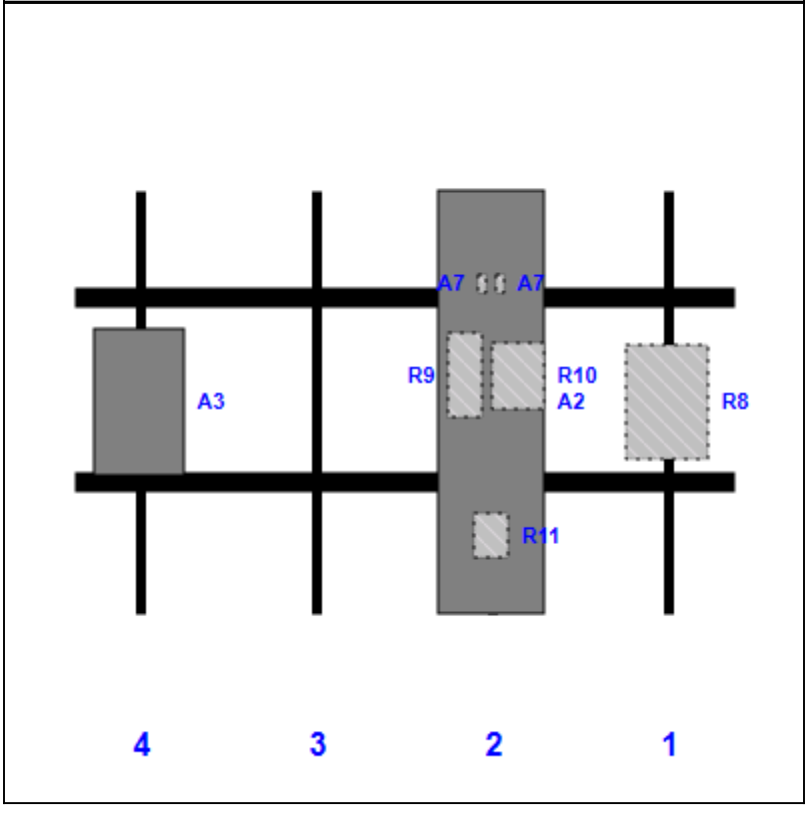
12/2/2021

Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
R8	TD-RRH8x20-25	26.10	18.60	135.00	1	a	Behind	48.00			
A2	APXVAALL24_43-U-NA20	95.90	24.00	95.00	2	a	Front	48.00			
A7	ACU-A20-N RET	4.00	2.00	95.00	2	a	Behind	21.00	-2.00		
R9	4480 B71 + B85	19.20	7.50	95.00	2	a	Behind	42.00	-6.00		
R10	4460 B25 + B66	15.10	11.90	95.00	2	a	Behind	42.00	6.00		
R11	800 MHz Filter	10.00	8.00	95.00	2	a	Behind	78.00			
A7	ACU-A20-N RET	4.00	2.00	95.00	2	b	Behind	21.00	2.00		
A3	AIR6449 B41	33.10	20.50	15.00	4	a	Front	48.00			

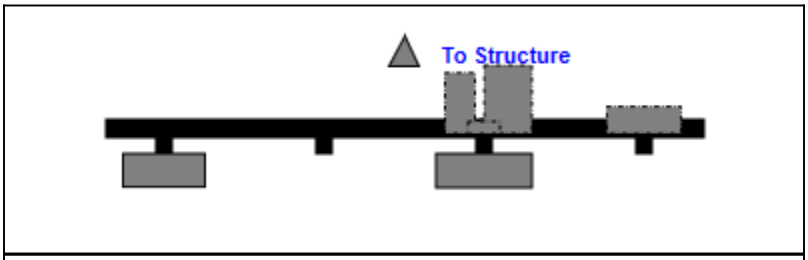
Sector: B

Structure Type: Monopole

Mount Elev: 167.00

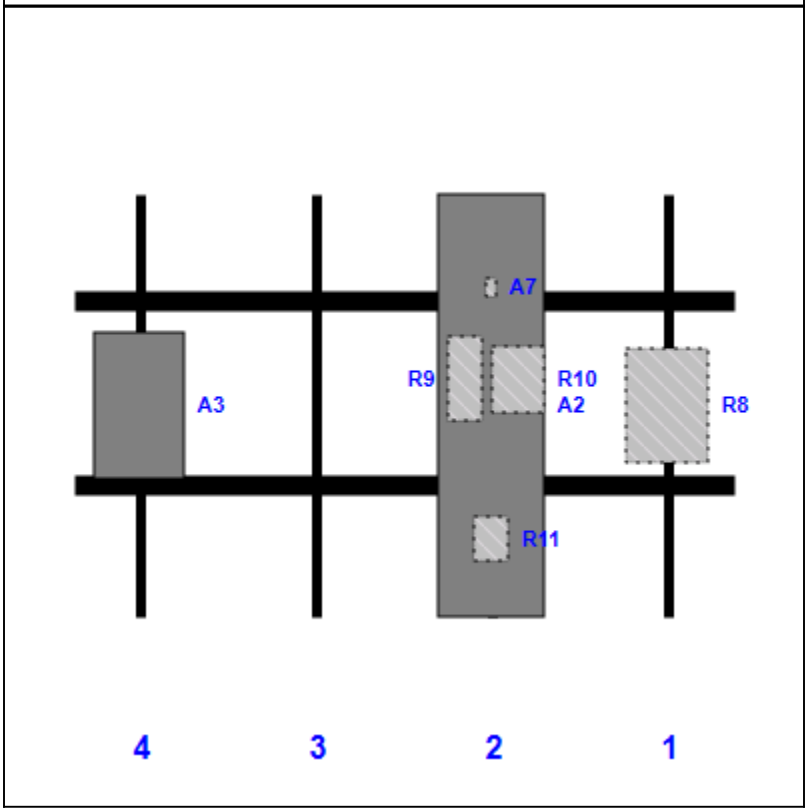
12/2/2021

Plan View



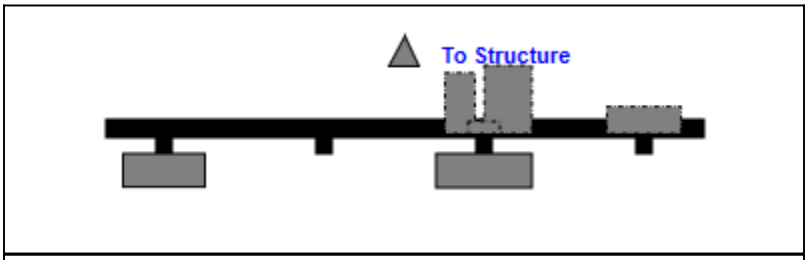
Front View

Looking Toward Structure



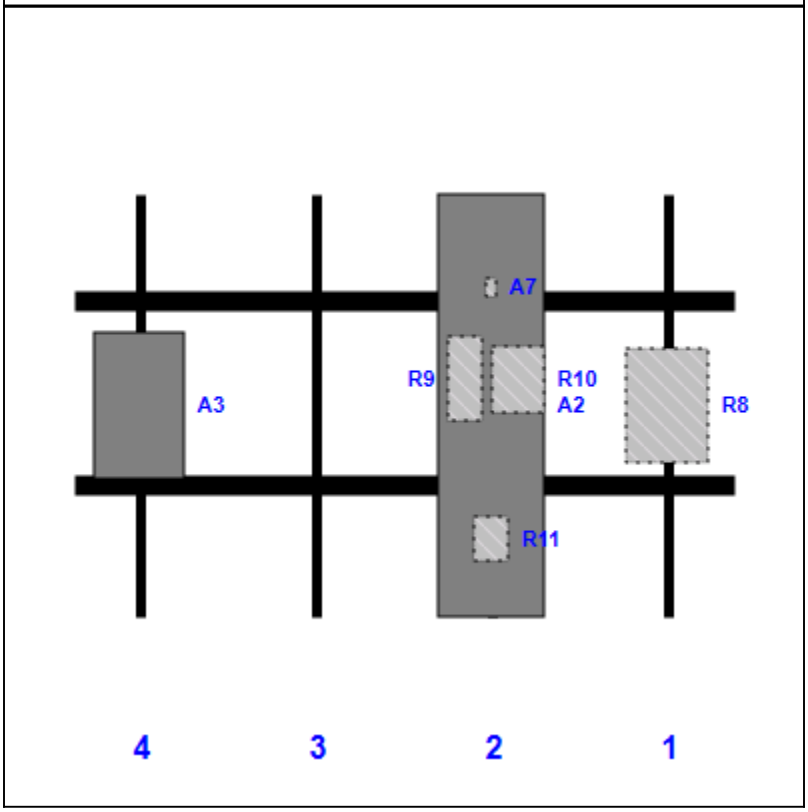
Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
R8	TD-RRH8x20-25	26.10	18.60	135.00	1	a	Behind	48.00			
A2	APXVAALL24_43-U-NA20	95.90	24.00	95.00	2	a	Front	48.00			
A7	ACU-A20-N RET	4.00	2.00	95.00	2	a	Behind	21.00			
R9	4480 B71 + B85	19.20	7.50	95.00	2	a	Behind	42.00	-6.00		
R10	4460 B25 + B66	15.10	11.90	95.00	2	a	Behind	42.00	6.00		
R11	800 MHz Filter	10.00	8.00	95.00	2	a	Behind	78.00			
A3	AIR6449 B41	33.10	20.50	15.00	4	a	Front	48.00			

Plan View

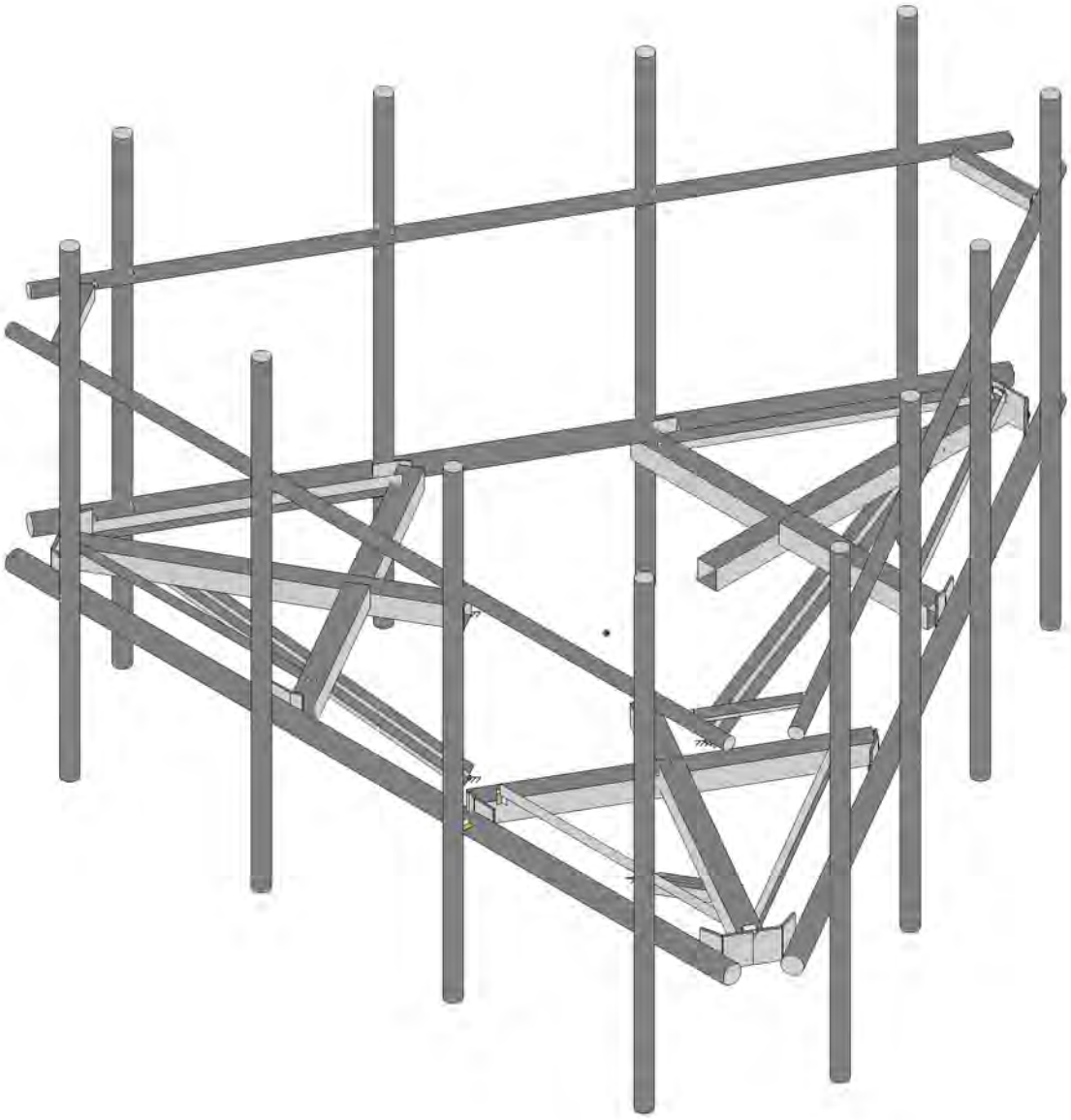


Front View

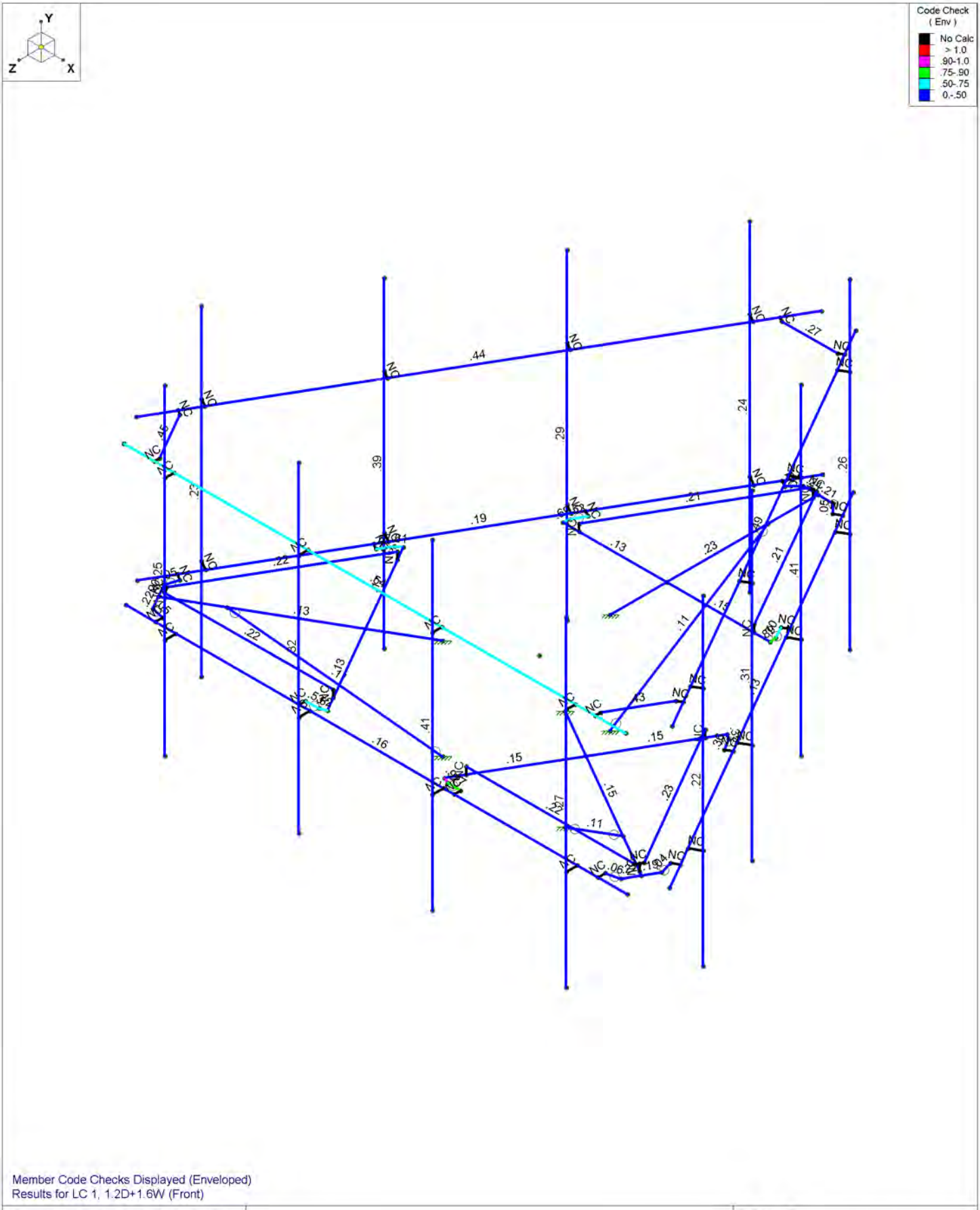
Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
R8	TD-RRH8x20-25	26.10	18.60	135.00	1	a	Behind	48.00			
A2	APXVAALL24_43-U-NA20	95.90	24.00	95.00	2	a	Front	48.00			
A7	ACU-A20-N RET	4.00	2.00	95.00	2	a	Behind	21.00			
R9	4480 B71 + B85	19.20	7.50	95.00	2	a	Behind	42.00	-6.00		
R10	4460 B25 + B66	15.10	11.90	95.00	2	a	Behind	42.00	6.00		
R11	800 MHz Filter	10.00	8.00	95.00	2	a	Behind	78.00			
A3	AIR6449 B41	33.10	20.50	15.00	4	a	Front	48.00			



Tower Engineering Solutio...	CT02721-S-SBA_MT_LO_ Loads Only_G	SK - 1
		Dec 2, 2021 at 3:57 PM
TES Project No. 120085		CT02721-S-SBA_120085_G_RISA_...



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

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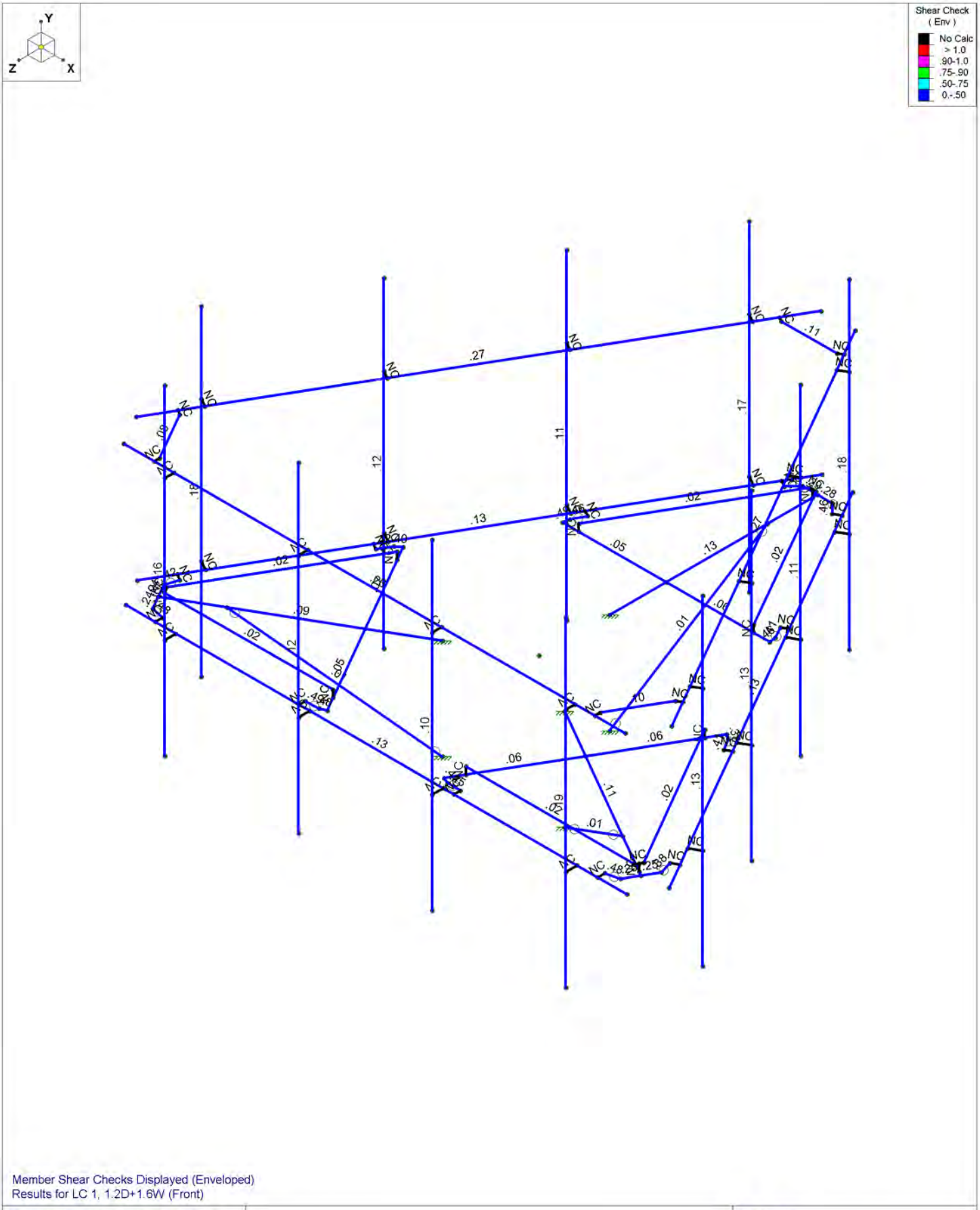
		Dec 2, 2021 at 3:57 PM
TES Project No. 120085		CT02721-S-SBA_120085_G_RISA_...



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

Tower Engineering Solutio...	CT02721-S-SBA_MT_LO_ Loads Only_G	SK - 3
		Dec 2, 2021 at 3:58 PM
TES Project No. 120085		CT02721-S-SBA_120085_G_RISA_...

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					28			
2	Antenna Di	None					28			
3	Antenna W Front	None					28			
4	Antenna Wi Front	None					28			
5	Antenna W Side	None					28			
6	Antenna Wi Side	None					28			
7	Service Lm1	None					1			
8	Service Lm2	None					1			
9	Structure D	None		-1					5	
10	Structure Di	None						63	3	
11	Structure W Front	None						63		
12	Structure Wi Front	None						63		
13	Structure W Side	None						63		
14	Structure Wi Side	None						63		
15	BLC 9 Transient Area...	None						33		
16	BLC 10 Transient Are...	None						33		

Load Combinations

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.2D+1.6W (Fr...	Yes	Y		1	1.2	9	1.2	3	1.6	11	1.6														
2	1.2D+1.6W (Ba...	Yes	Y		1	1.2	9	1.2	3	-1.6	11	-1.6														
3	1.2D+1.6W (Left)	Yes	Y		1	1.2	9	1.2	5	1.6	13	1.6														
4	1.2D+1.6W (Ri...	Yes	Y		1	1.2	9	1.2	5	-1.6	13	-1.6														
5	1.2D+1.0Di+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	1	12	1										
6	1.2D+1.0Di+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	-1	12	-1										
7	1.2D+1.0Di+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	1	14	1										
8	1.2D+1.0Di+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	-1	14	-1										
9	1.2D+1.5L1+.16...	Yes	Y		1	1.2	9	1.2	7	1.5	3	.16	11	.16												
10	1.2D+1.5L2+.16...	Yes	Y		1	1.2	9	1.2	8	1.5	3	.16	11	.16												
11	1.4D	Yes	Y		1	1.4	9	1.4																		

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-6.248693	0	4.052255	0	
2	N2	6.251307	0	4.052255	0	
3	N3	0	0	0	0	
4	N4	-1.525645	0	0.880833	0	
5	N5	0.001306	0	-1.760626	0	
6	N6	1.525423	0	0.879222	0	
7	N7	5.518027	0	4.052255	0	
8	N8	1.934693	0	4.052255	0	
9	N9	-1.932785	0	4.052255	0	
10	N10	-5.516118	0	4.052255	0	
11	N11	-6.267414	0	2.750973	0	
12	N12	-4.475747	0	-0.352284	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
13	N13	-2.542008	0	-3.701619	0	
14	N14	-0.750341	0	-6.804876	0	
15	N15	0.750819	0	-6.80406	0	
16	N16	2.542485	0	-3.700803	0	
17	N17	4.476224	0	-0.351469	0	
18	N18	6.267891	0	2.75179	0	
19	N19	-3e-14	0	-3.17336	0	
20	N20	2.180513	0	-3.17336	0	
21	N21	-2.178604	0	-3.17336	0	
22	N22	-3e-14	0	-6.948466	0	
23	N23	.375	0	-6.948466	0	
24	N24	-.375	0	-6.948466	0	
25	N25	2.58	0	-3.17336	0	
26	N26	-2.58	0	-3.17336	0	
27	N27	2.748854	0	1.585571	0	
28	N28	6.018192	0	3.473123	0	
29	N29	-2.74678	0	1.585856	0	
30	N30	-6.016118	0	3.473409	0	
31	N31	-1.525645	-2.5	0.880833	0	
32	N32	0.001306	-2.5	-1.760626	0	
33	N33	1.525423	-2.5	0.879222	0	
34	N34	-4.933586	0	2.848409	0	
35	N35	-2e-14	0	-5.698466	0	
36	N36	4.93566	0	2.848123	0	
37	N37	-6.248693	3.5	4.098255	0	
38	N38	6.251307	3.5	4.098255	0	
39	N39	5.491469	3.5	4.098255	0	
40	N40	-5.48956	3.5	4.098255	0	
41	N41	-4.998693	5.5	4.328256	0	
42	N42	-4.998693	-2.5	4.328256	0	
43	N43	5.001307	5.5	4.328256	0	
44	N44	5.001307	-2.5	4.328256	0	
45	N45	-1.665693	5.5	4.328256	0	
46	N46	-1.665693	-2.5	4.328256	0	
47	N47	1.668306	5.5	4.328256	0	
48	N48	1.668306	-2.5	4.328256	0	
49	N49	6.247726	5.5	2.164868	0	
50	N50	6.247726	-2.5	2.164868	0	
51	N51	1.247726	5.5	-6.495386	0	
52	N52	1.247726	-2.5	-6.495386	0	
53	N53	4.581226	5.5	-0.721595	0	
54	N54	4.581226	-2.5	-0.721595	0	
55	N55	2.914226	5.5	-3.608924	0	
56	N56	2.914226	-2.5	-3.608924	0	
57	N57	-1.249032	5.5	-6.493123	0	
58	N58	-1.249032	-2.5	-6.493123	0	
59	N59	-6.249032	5.5	2.167131	0	
60	N60	-6.249032	-2.5	2.167131	0	
61	N61	-2.915532	5.5	-3.606661	0	
62	N62	-2.915532	-2.5	-3.606661	0	
63	N63	-4.582532	5.5	-0.719332	0	
64	N64	-4.582532	-2.5	-0.719332	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
65	N65	6.009184	0	2.303696	0	
66	N66	1.009184	0	-6.356558	0	
67	N67	4.342684	0	-0.582766	0	
68	N68	2.675684	0	-3.470095	0	
69	N69	-1.010006	0	-6.355124	0	
70	N70	-6.010006	0	2.30513	0	
71	N71	-2.676506	0	-3.468661	0	
72	N72	-4.343506	0	-0.581332	0	
73	N73	-4.998693	0	4.052255	0	
74	N74	5.001307	0	4.052255	0	
75	N75	-1.665693	0	4.052255	0	
76	N76	1.668306	0	4.052255	0	
77	N77	6.633707	0	3.385402	0	
78	N78	0.383707	0	-7.439915	0	
79	N79	-0.385005	0	-7.437658	0	
80	N80	-6.635005	0	3.38766	0	
81	N81	6.673544	3.5	3.362403	0	
82	N82	0.423544	3.5	-7.462915	0	
83	N83	-0.424841	3.5	-7.460657	0	
84	N84	-6.674841	3.5	3.36466	0	
85	N85	-4.998693	3.5	4.328256	0	
86	N86	-4.998693	0	4.328256	0	
87	N87	5.001307	0	4.328256	0	
88	N88	-1.665693	0	4.328256	0	
89	N89	1.668306	0	4.328256	0	
90	N90	5.001307	3.5	4.328256	0	
91	N91	-1.665693	3.5	4.328256	0	
92	N92	1.668306	3.5	4.328256	0	
93	N93	6.247726	3.5	2.164868	0	
94	N94	6.247726	0	2.164868	0	
95	N95	1.247726	0	-6.495386	0	
96	N96	4.581226	0	-0.721595	0	
97	N97	2.914226	0	-3.608924	0	
98	N98	1.247726	3.5	-6.495386	0	
99	N99	4.581226	3.5	-0.721595	0	
100	N100	2.914226	3.5	-3.608924	0	
101	N101	-1.249032	3.5	-6.493123	0	
102	N102	-1.249032	0	-6.493123	0	
103	N103	-6.249032	0	2.167131	0	
104	N104	-2.915532	0	-3.606661	0	
105	N105	-4.582532	0	-0.719332	0	
106	N106	-6.249032	3.5	2.167131	0	
107	N107	-2.915532	3.5	-3.606661	0	
108	N108	-4.582532	3.5	-0.719332	0	
109	N109	-4.998693	3.5	4.098255	0	
110	N110	5.001307	3.5	4.098255	0	
111	N111	-1.665693	3.5	4.098255	0	
112	N112	1.668306	3.5	4.098255	0	
113	N113	6.048542	3.5	2.279867	0	
114	N114	1.048542	3.5	-6.380387	0	
115	N115	4.382042	3.5	-0.606596	0	
116	N116	2.715042	3.5	-3.493924	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
117	N117	-1.049844	3.5	-6.378122	0	
118	N118	-6.049844	3.5	2.282133	0	
119	N119	-2.716344	3.5	-3.491659	0	
120	N120	-4.383344	3.5	-0.60433	0	
121	N121	5.491469	3.5	3.968255	0	
122	N122	-5.48956	3.5	3.968255	0	
123	N123	0.80346	3.5	-6.80488	0	
124	N124	6.293975	3.5	2.70497	0	
125	N125	0.690875	3.5	-6.739879	0	
126	N126	6.181389	3.5	2.769971	0	
127	N127	-6.294925	3.5	2.706626	0	
128	N128	-0.80441	3.5	-6.803225	0	
129	N129	-6.182344	3.5	2.771625	0	
130	N130	-0.691829	3.5	-6.738226	0	
131	N131	5.518027	0	3.872255	0	
132	N132	-5.516118	0	3.872255	0	
133	N133	0.594458	0	-6.714879	0	
134	N134	6.111531	0	2.840971	0	
135	N135	-6.112485	0	2.842624	0	
136	N136	-0.595413	0	-6.713226	0	
137	N137	1.934693	0	3.892255	0	
138	N138	-1.932785	0	3.892255	0	
139	N139	2.403445	0	-3.621621	0	
140	N140	4.337184	0	-0.272287	0	
141	N141	-4.338139	0	-0.270634	0	
142	N142	-2.4044	0	-3.619968	0	
143	N143	2.561452	0	-3.327946	0	
144	N144	-2.561452	0	-3.327946	0	
145	N145	2.180513	0.1745	-3.17336	0	
146	N146	-2.178604	0.1745	-3.17336	0	
147	N147	-3e-14	0	-6.823466	0	
148	N148	-3e-14	0.1745	-6.823466	0	
149	N149	0.0835	0.1745	-6.823466	0	
150	N150	-0.0835	0.1745	-6.823466	0	
151	N151	-3.838172	0	-0.3017	0	
152	N152	-1.658612	0	3.473406	0	
153	N153	-6.205048	0	3.149473	0	
154	N154	-5.830048	0	3.798993	0	
155	N155	-4.03821	0	-0.647666	0	
156	N156	-1.45821	0	3.821026	0	
157	N157	-4.162812	0	-0.554309	0	
158	N158	-1.60136	0	3.882255	0	
159	N159	-3.838467	0.1745	-0.3017	0	
160	N160	-1.658908	0.1745	3.473406	0	
161	N161	-5.909291	0	3.411733	0	
162	N162	-5.909291	0.1745	3.411733	0	
163	N163	-5.951045	0.1745	3.33942	0	
164	N164	-5.867545	0.1745	3.484046	0	
165	N165	1.657955	0	3.475059	0	
166	N166	3.837513	0	-0.300047	0	
167	N167	5.830048	0	3.798993	0	
168	N168	6.205048	0	3.149473	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
169	N169	1.45821	0	3.821026	0	
170	N170	4.03821	0	-0.647666	0	
171	N171	1.60136	0	3.882255	0	
172	N172	4.162812	0	-0.554309	0	
173	N173	1.657954	0.1745	3.475059	0	
174	N174	3.837512	0.1745	-0.300047	0	
175	N175	5.91186	0	3.411733	0	
176	N176	5.909295	0.1745	3.411733	0	
177	N177	5.867545	0.1745	3.484046	0	
178	N178	5.951045	0.1745	3.33942	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Footrails	PIPE_3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
2	Grating Angles	L2x2x3	Beam	Single Angle	A36 Gr.36	Typical	.722	.271	.271	.009
3	Handrails	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Standoff Arm	HSS4X4X4	Beam	SquareTube	A500 Gr....	Typical	3.37	7.8	7.8	12.8
5	Plan Bracing	HSS4X4X4	Beam	SquareTube	A500 Gr....	Typical	3.37	7.8	7.8	12.8
6	Kickers	LL2.5x2.5x3x3	Beam	Double Angle (3/8 Gap)	A36 Gr.36	Typical	1.8	2.46	1.07	.023
7	Mount Pipes	PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
8	Footrail Connection ...	PL1/2x6	Beam	RECT	A36 Gr.36	Typical	3	.063	9	.237
9	Plan Bracing Conne...	PL3/8x6	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
10	Handrail Corner Bra...	L2.5x2.5x4	Beam	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	58	1.2
3	A992	29000	11154	.3	.65	.49	50	1.1	58	1.2
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.3	58	1.1
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.2	58	1.1
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.5	58	1.2
7	Q235	29000	11154	.3	.65	.49	34	1.5	58	1.2
8	J429-Gr5	29000	11154	.3	.65	.49	92	1.5	120	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	M1	N30	N4			Standoff Arm	Beam	SquareTube	A500 Gr....	Typical
2	M2	N28	N6			Standoff Arm	Beam	SquareTube	A500 Gr....	Typical
3	M3	N22	N24			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
4	M4	N22	N23			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
5	M5	N26	N144			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
6	M6	N144	N142			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
7	M7	N25	N143			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
8	M8	N143	N139			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
9	M9	N149	N145			Grating Angles	Beam	Single Angle	A36 Gr.36	Typical
10	M10	N150	N146		270	Grating Angles	Beam	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
11	M11	N24	N136			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
12	M12	N23	N133			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
13	M13	N22	N5			Standoff Arm	Beam	SquareTube	A500 Gr....	Typical
14	M14	N26	N19			Plan Bracing	Beam	SquareTube	A500 Gr....	Typical
15	M15	N19	N25			Plan Bracing	Beam	SquareTube	A500 Gr....	Typical
16	M16	N77	N78			Footrails	Beam	Pipe	A53 Gr.B	Typical
17	M17	N79	N80			Footrails	Beam	Pipe	A53 Gr.B	Typical
18	M18	N1	N2			Footrails	Beam	Pipe	A53 Gr.B	Typical
19	M19	N31	N34			Kickers	Beam	Double Angl...	A36 Gr.36	Typical
20	M20	N32	N35			Kickers	Beam	Double Angl...	A36 Gr.36	Typical
21	M21	N33	N36			Kickers	Beam	Double Angl...	A36 Gr.36	Typical
22	M22	N37	N38			Handrails	Beam	Pipe	A53 Gr.B	Typical
23	M23	N81	N82			Handrails	Beam	Pipe	A53 Gr.B	Typical
24	M24	N83	N84			Handrails	Beam	Pipe	A53 Gr.B	Typical
25	M25	N130	N125		180	Handrail Corner Braces	Beam	Single Angle	A36 Gr.36	Typical
26	MP4A	N41	N42			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
27	MP1A	N43	N44			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
28	MP3A	N45	N46			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
29	MP2A	N47	N48			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
30	MP4C	N49	N50			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
31	MP1C	N51	N52			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
32	MP3C	N53	N54			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
33	MP2C	N55	N56			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
34	MP4B	N57	N58			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
35	MP1B	N59	N60			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
36	MP3B	N61	N62			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
37	MP2B	N63	N64			Mount Pipes	Beam	Pipe	A53 Gr.B	Typical
38	M38	N74	N87			RIGID	None	None	RIGID	Typical
39	M39	N76	N89			RIGID	None	None	RIGID	Typical
40	M40	N75	N88			RIGID	None	None	RIGID	Typical
41	M41	N73	N86			RIGID	None	None	RIGID	Typical
42	M42	N66	N95			RIGID	None	None	RIGID	Typical
43	M43	N68	N97			RIGID	None	None	RIGID	Typical
44	M44	N67	N96			RIGID	None	None	RIGID	Typical
45	M45	N65	N94			RIGID	None	None	RIGID	Typical
46	M46	N70	N103			RIGID	None	None	RIGID	Typical
47	M47	N72	N105			RIGID	None	None	RIGID	Typical
48	M48	N71	N104			RIGID	None	None	RIGID	Typical
49	M49	N69	N102			RIGID	None	None	RIGID	Typical
50	M50	N110	N90			RIGID	None	None	RIGID	Typical
51	M51	N112	N92			RIGID	None	None	RIGID	Typical
52	M52	N111	N91			RIGID	None	None	RIGID	Typical
53	M53	N109	N85			RIGID	None	None	RIGID	Typical
54	M54	N114	N98			RIGID	None	None	RIGID	Typical
55	M55	N116	N100			RIGID	None	None	RIGID	Typical
56	M56	N115	N99			RIGID	None	None	RIGID	Typical
57	M57	N113	N93			RIGID	None	None	RIGID	Typical
58	M58	N118	N106			RIGID	None	None	RIGID	Typical
59	M59	N120	N108			RIGID	None	None	RIGID	Typical
60	M60	N119	N107			RIGID	None	None	RIGID	Typical
61	M61	N117	N101			RIGID	None	None	RIGID	Typical
62	M62	N39	N121			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
63	M63	N40	N122			RIGID	None	None	RIGID	Typical
64	M64	N123	N125			RIGID	None	None	RIGID	Typical
65	M65	N124	N126			RIGID	None	None	RIGID	Typical
66	M66	N127	N129			RIGID	None	None	RIGID	Typical
67	M67	N128	N130			RIGID	None	None	RIGID	Typical
68	M68	N122	N129		180	Handrail Corner Braces	Beam	Single Angle	A36 Gr.36	Typical
69	M69	N126	N121		180	Handrail Corner Braces	Beam	Single Angle	A36 Gr.36	Typical
70	M70	N10	N132			RIGID	None	None	RIGID	Typical
71	M71	N7	N131			RIGID	None	None	RIGID	Typical
72	M72	N18	N134			RIGID	None	None	RIGID	Typical
73	M73	N15	N133			RIGID	None	None	RIGID	Typical
74	M74	N14	N136			RIGID	None	None	RIGID	Typical
75	M75	N11	N135			RIGID	None	None	RIGID	Typical
76	M76	N8	N137			RIGID	None	None	RIGID	Typical
77	M77	N9	N138			RIGID	None	None	RIGID	Typical
78	M78	N16	N139			RIGID	None	None	RIGID	Typical
79	M79	N17	N140			RIGID	None	None	RIGID	Typical
80	M80	N12	N141			RIGID	None	None	RIGID	Typical
81	M81	N13	N142			RIGID	None	None	RIGID	Typical
82	M82	N21	N146			RIGID	None	None	RIGID	Typical
83	M83	N20	N145			RIGID	None	None	RIGID	Typical
84	M84	N147	N148			RIGID	None	None	RIGID	Typical
85	M85	N149	N150			RIGID	None	None	RIGID	Typical
86	M86	N30	N154			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
87	M87	N30	N153			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
88	M88	N156	N158			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
89	M89	N158	N138			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
90	M90	N155	N157			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
91	M91	N157	N141			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
92	M92	N163	N159			Grating Angles	Beam	Single Angle	A36 Gr.36	Typical
93	M93	N164	N160		270	Grating Angles	Beam	Single Angle	A36 Gr.36	Typical
94	M94	N154	N132			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
95	M95	N153	N135			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
96	M96	N156	N29			Plan Bracing	Beam	SquareTube	A500 Gr....	Typical
97	M97	N29	N155			Plan Bracing	Beam	SquareTube	A500 Gr....	Typical
98	M98	N152	N160			RIGID	None	None	RIGID	Typical
99	M99	N151	N159			RIGID	None	None	RIGID	Typical
100	M100	N161	N162			RIGID	None	None	RIGID	Typical
101	M101	N163	N164			RIGID	None	None	RIGID	Typical
102	M102	N28	N168			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
103	M103	N28	N167			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
104	M104	N170	N172			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
105	M105	N172	N140			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
106	M106	N169	N171			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
107	M107	N171	N137			Plan Bracing Connection Plates	Beam	RECT	A36 Gr.36	Typical
108	M108	N177	N173			Grating Angles	Beam	Single Angle	A36 Gr.36	Typical
109	M109	N178	N174		270	Grating Angles	Beam	Single Angle	A36 Gr.36	Typical
110	M110	N168	N134			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
111	M111	N167	N131			Footrail Connection Plates	Beam	RECT	A36 Gr.36	Typical
112	M112	N170	N27			Plan Bracing	Beam	SquareTube	A500 Gr....	Typical
113	M113	N27	N169			Plan Bracing	Beam	SquareTube	A500 Gr....	Typical
114	M114	N166	N174			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
115	M115	N165	N173			RIGID	None	None	RIGID	Typical
116	M116	N175	N176			RIGID	None	None	RIGID	Typical
117	M117	N177	N178			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes				None
4	M4						Yes				None
5	M5						Yes				None
6	M6		BenPIN				Yes				None
7	M7						Yes				None
8	M8		BenPIN				Yes				None
9	M9						Yes				None
10	M10						Yes				None
11	M11		BenPIN				Yes				None
12	M12		BenPIN				Yes				None
13	M13						Yes				None
14	M14						Yes				None
15	M15						Yes				None
16	M16						Yes				None
17	M17						Yes				None
18	M18						Yes				None
19	M19	BenPIN	BenPIN				Yes				None
20	M20	BenPIN	BenPIN				Yes				None
21	M21	BenPIN	BenPIN				Yes				None
22	M22						Yes				None
23	M23						Yes				None
24	M24						Yes				None
25	M25						Yes				None
26	MP4A						Yes				None
27	MP1A						Yes				None
28	MP3A						Yes				None
29	MP2A						Yes				None
30	MP4C						Yes				None
31	MP1C						Yes				None
32	MP3C						Yes				None
33	MP2C						Yes				None
34	MP4B						Yes				None
35	MP1B						Yes				None
36	MP3B						Yes				None
37	MP2B						Yes				None
38	M38						Yes	** NA **			None
39	M39						Yes	** NA **			None
40	M40						Yes	** NA **			None
41	M41						Yes	** NA **			None
42	M42						Yes	** NA **			None
43	M43						Yes	** NA **			None
44	M44						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
45	M45						Yes	** NA **			None
46	M46						Yes	** NA **			None
47	M47						Yes	** NA **			None
48	M48						Yes	** NA **			None
49	M49						Yes	** NA **			None
50	M50						Yes	** NA **			None
51	M51						Yes	** NA **			None
52	M52						Yes	** NA **			None
53	M53						Yes	** NA **			None
54	M54						Yes	** NA **			None
55	M55						Yes	** NA **			None
56	M56						Yes	** NA **			None
57	M57						Yes	** NA **			None
58	M58						Yes	** NA **			None
59	M59						Yes	** NA **			None
60	M60						Yes	** NA **			None
61	M61						Yes	** NA **			None
62	M62						Yes	** NA **			None
63	M63						Yes	** NA **			None
64	M64						Yes	** NA **			None
65	M65						Yes	** NA **			None
66	M66						Yes	** NA **			None
67	M67						Yes	** NA **			None
68	M68						Yes				None
69	M69						Yes				None
70	M70						Yes	** NA **			None
71	M71						Yes	** NA **			None
72	M72						Yes	** NA **			None
73	M73						Yes	** NA **			None
74	M74						Yes	** NA **			None
75	M75						Yes	** NA **			None
76	M76						Yes	** NA **			None
77	M77						Yes	** NA **			None
78	M78						Yes	** NA **			None
79	M79						Yes	** NA **			None
80	M80						Yes	** NA **			None
81	M81						Yes	** NA **			None
82	M82						Yes	** NA **			None
83	M83						Yes	** NA **			None
84	M84						Yes	** NA **			None
85	M85						Yes	** NA **			None
86	M86						Yes				None
87	M87						Yes				None
88	M88						Yes				None
89	M89		BenPIN				Yes				None
90	M90						Yes				None
91	M91		BenPIN				Yes				None
92	M92						Yes				None
93	M93						Yes				None
94	M94		BenPIN				Yes				None
95	M95		BenPIN				Yes				None
96	M96						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
97	M97						Yes				None
98	M98						Yes	** NA **			None
99	M99						Yes	** NA **			None
100	M100						Yes	** NA **			None
101	M101						Yes	** NA **			None
102	M102						Yes				None
103	M103						Yes				None
104	M104						Yes				None
105	M105		BenPIN				Yes				None
106	M106						Yes				None
107	M107		BenPIN				Yes				None
108	M108						Yes				None
109	M109						Yes				None
110	M110		BenPIN				Yes				None
111	M111		BenPIN				Yes				None
112	M112						Yes				None
113	M113						Yes				None
114	M114						Yes	** NA **			None
115	M115						Yes	** NA **			None
116	M116						Yes	** NA **			None
117	M117						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Standoff Arm	5.185			Lbyy			2.1	2.1		Lateral
2	M2	Standoff Arm	5.188			Lbyy			2.1	2.1		Lateral
3	M3	Footrail Con...	.375			Lbyy			.65	.65		Lateral
4	M4	Footrail Con...	.375			Lbyy			.65	.65		Lateral
5	M5	Plan Bracin...	.156			Lbyy			.65	.65		Lateral
6	M6	Plan Bracin...	.332			Lbyy			.8	.8		Lateral
7	M7	Plan Bracin...	.156			Lbyy			.65	.65		Lateral
8	M8	Plan Bracin...	.333			Lbyy			.8	.8		Lateral
9	M9	Grating Ang...	4.21			Lbyy			.65	.65		Lateral
10	M10	Grating Ang...	4.209			Lbyy			.65	.65		Lateral
11	M11	Footrail Con...	.322			Lbyy			.8	.8		Lateral
12	M12	Footrail Con...	.321			Lbyy			.8	.8		Lateral
13	M13	Standoff Arm	5.188			Lbyy			2.1	2.1		Lateral
14	M14	Plan Bracing	2.58			Lbyy			1	1		Lateral
15	M15	Plan Bracing	2.58			Lbyy			1	1		Lateral
16	M16	Footrails	12.5			Lbyy			1	1		Lateral
17	M17	Footrails	12.5			Lbyy			1	1		Lateral
18	M18	Footrails	12.5			Lbyy			1	1		Lateral
19	M19	Kickers	4.662			Lbyy			1	1		Lateral
20	M20	Kickers	4.664			Lbyy			1	1		Lateral
21	M21	Kickers	4.664			Lbyy			1	1		Lateral
22	M22	Handrails	12.5			Lbyy			1	1		Lateral
23	M23	Handrails	12.5			Lbyy			1	1		Lateral
24	M24	Handrails	12.5			Lbyy			1	1		Lateral
25	M25	Handrail Co...	1.383			Lbyy			.65	.65		Lateral
26	MP4A	Mount Pipes	8			Lbyy			1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
27	MP1A	Mount Pipes	8			Lbyy			1	1		Lateral
28	MP3A	Mount Pipes	8			Lbyy			1	1		Lateral
29	MP2A	Mount Pipes	8			Lbyy			1	1		Lateral
30	MP4C	Mount Pipes	8			Lbyy			1	1		Lateral
31	MP1C	Mount Pipes	8			Lbyy			1	1		Lateral
32	MP3C	Mount Pipes	8			Lbyy			1	1		Lateral
33	MP2C	Mount Pipes	8			Lbyy			1	1		Lateral
34	MP4B	Mount Pipes	8			Lbyy			1	1		Lateral
35	MP1B	Mount Pipes	8			Lbyy			1	1		Lateral
36	MP3B	Mount Pipes	8			Lbyy			1	1		Lateral
37	MP2B	Mount Pipes	8			Lbyy			1	1		Lateral
38	M68	Handrail Co...	1.383			Lbyy			.65	.65		Lateral
39	M69	Handrail Co...	1.383			Lbyy			.65	.65		Lateral
40	M86	Footrail Con...	.375			Lbyy			.65	.65		Lateral
41	M87	Footrail Con...	.375			Lbyy			.65	.65		Lateral
42	M88	Plan Bracin...	.156			Lbyy			.65	.65		Lateral
43	M89	Plan Bracin...	.332			Lbyy			.8	.8		Lateral
44	M90	Plan Bracin...	.156			Lbyy			.65	.65		Lateral
45	M91	Plan Bracin...	.333			Lbyy			.8	.8		Lateral
46	M92	Grating Ang...	4.21			Lbyy			.65	.65		Lateral
47	M93	Grating Ang...	4.209			Lbyy			.65	.65		Lateral
48	M94	Footrail Con...	.322			Lbyy			.8	.8		Lateral
49	M95	Footrail Con...	.321			Lbyy			.8	.8		Lateral
50	M96	Plan Bracing	2.58			Lbyy			1	1		Lateral
51	M97	Plan Bracing	2.58			Lbyy			1	1		Lateral
52	M102	Footrail Con...	.374			Lbyy			.65	.65		Lateral
53	M103	Footrail Con...	.376			Lbyy			.65	.65		Lateral
54	M104	Plan Bracin...	.156			Lbyy			.65	.65		Lateral
55	M105	Plan Bracin...	.332			Lbyy			.8	.8		Lateral
56	M106	Plan Bracin...	.156			Lbyy			.65	.65		Lateral
57	M107	Plan Bracin...	.333			Lbyy			.8	.8		Lateral
58	M108	Grating Ang...	4.21			Lbyy			.65	.65		Lateral
59	M109	Grating Ang...	4.209			Lbyy			.65	.65		Lateral
60	M110	Footrail Con...	.322			Lbyy			.8	.8		Lateral
61	M111	Footrail Con...	.321			Lbyy			.8	.8		Lateral
62	M112	Plan Bracing	2.579			Lbyy			1	1		Lateral
63	M113	Plan Bracing	2.581			Lbyy			1	1		Lateral

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N3						
2	N5	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N29						
4	N6	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N4	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N31	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
7	N32	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N33	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N5	max	2451.61	4	989.586	6	6947.799	1	1.195	6	3.126	3	.843	3
2		min	-2460.669	3	249.862	1	-4693.562	2	.271	1	-3.121	4	-.592	4
3	N6	max	3707.021	4	997.638	8	2736.214	1	.162	1	1.718	2	.939	5
4		min	-5746.751	3	234.895	10	-3929.97	2	-.988	6	-1.707	1	-.091	2
5	N4	max	6169.828	4	995.03	7	2236.962	1	.331	4	1.332	1	-.14	2
6		min	-4124.346	3	234.197	9	-3413.491	2	-.593	3	-1.335	2	-1.253	5
7	N31	max	295.26	3	2537.204	8	1956.789	8	0	4	0	3	0	3
8		min	-3376.453	8	-229.317	3	-193.611	3	0	3	0	4	0	4
9	N32	max	57.911	4	2547.607	5	602.202	2	0	11	0	4	0	3
10		min	-57.748	3	-385.637	2	-3922.472	5	0	1	0	3	0	4
11	N33	max	3376.249	7	2535.436	7	1956.748	7	0	1	0	1	0	1
12		min	-277.786	4	-216.343	4	-183.554	4	0	2	0	2	0	2
13	Totals:	max	9367.362	4	9697.745	7	9124.253	1						
14		min	-9367.329	3	3864.567	4	-9124.251	2						

Envelope Member Section Forces

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
1	M1	1	max	801.956	3	274.299	3	658.497	2	.5	2	.144	2	-.03	3
2			min	-872.268	4	-1231.84	8	-659.211	1	-.529	1	-.152	1	-.176	9
3		2	max	3863.537	3	968.064	8	107.035	4	.335	2	.091	4	1.615	4
4			min	-6052.066	4	-66.725	3	-105.131	3	-.362	1	-.089	3	-.767	3
5		3	max	3886.573	3	929.723	8	93.735	4	.335	2	.221	4	.629	4
6			min	-6075.103	4	-84.563	3	-91.831	3	-.362	1	-.216	3	-.669	3
7		4	max	4248.956	3	-216.01	9	1534.33	2	.385	2	1.392	4	.068	9
8			min	-6609.298	4	-955.884	7	-1532.894	1	-.635	1	-1.389	3	-.069	8
9		5	max	4271.993	3	-233.848	9	1574.231	2	.385	2	1.335	2	1.206	7
10			min	-6632.335	4	-994.226	7	-1572.795	1	-.635	1	-1.332	1	.292	4
11	M2	1	max	994.434	4	270.547	4	853.359	1	.601	1	.215	1	-.032	1
12			min	-1052.997	3	-1231.468	7	-805.665	2	-.619	2	-.213	2	-.174	10
13		2	max	3649.439	4	966.194	7	72.237	2	.392	1	.106	4	1.56	3
14			min	-5833.643	3	-57.225	4	-69.889	1	-.417	2	-.108	3	-.711	4
15		3	max	3672.487	4	927.833	7	57.726	4	.392	1	.189	4	.585	3
16			min	-5856.692	3	-75.072	4	-54.681	3	-.417	2	-.188	3	-.625	4
17		4	max	3987.832	4	-216.699	10	1880.376	1	.528	1	1.15	4	.071	10
18			min	-6343.395	3	-958.455	8	-1892.573	2	-.778	2	-1.149	3	-.069	6
19		5	max	4010.88	4	-234.546	10	1920.297	1	.528	1	1.707	1	1.205	8
20			min	-6366.444	3	-996.816	8	-1932.494	2	-.778	2	-1.718	2	.306	3
21	M3	1	max	650.316	1	583.012	5	584.805	2	.222	3	.203	1	.478	4
22			min	-561.289	2	-168.76	2	-615.756	1	-.174	4	-.205	2	-.192	3
23		2	max	650.316	1	580.573	5	579.034	2	.222	3	.146	1	.445	4
24			min	-561.289	2	-169.908	2	-609.985	1	-.174	4	-.15	2	-.197	3
25		3	max	650.316	1	578.135	5	573.263	2	.222	3	.089	1	.413	4
26			min	-561.289	2	-171.057	2	-604.213	1	-.174	4	-.096	2	-.203	3
27		4	max	650.316	1	575.697	5	567.491	2	.222	3	.032	1	.38	4
28			min	-561.289	2	-172.205	2	-598.442	1	-.174	4	-.043	2	-.208	3
29		5	max	650.316	1	573.258	5	561.72	2	.222	3	.01	2	.348	4
30			min	-561.289	2	-173.353	2	-592.671	1	-.174	4	-.023	1	-.213	3
31	M4	1	max	640.807	4	676.117	5	550.955	1	.143	3	.176	2	.498	1
32			min	-522.513	3	-188.104	2	-517.646	2	-.211	4	-.171	1	-.188	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
33		2	max	640.807	4	673.679	5	545.184	1	.143	3	.128	2	.451	3
34			min	-522.513	3	-189.253	2	-511.875	2	-.211	4	-.12	1	-.185	4
35		3	max	640.807	4	671.24	5	539.413	1	.143	3	.08	2	.413	3
36			min	-522.513	3	-190.401	2	-506.103	2	-.211	4	-.069	1	-.19	4
37		4	max	640.807	4	668.802	5	533.641	1	.143	3	.033	2	.376	3
38			min	-522.513	3	-191.55	2	-500.332	2	-.211	4	-.018	1	-.195	4
39		5	max	640.807	4	666.364	5	527.87	1	.143	3	.037	4	.339	3
40			min	-522.513	3	-192.698	2	-494.56	2	-.211	4	-.02	3	-.2	4
41	M5	1	max	1260.782	2	705.208	5	667.741	4	.162	4	.387	3	.34	5
42			min	-1005.257	1	98.986	2	-599.451	3	-.209	3	-.382	4	.021	2
43		2	max	1260.499	2	704.321	5	665.379	4	.162	4	.364	3	.312	5
44			min	-1004.974	1	98.628	2	-597.089	3	-.209	3	-.356	4	.017	2
45		3	max	1260.215	2	703.435	5	663.016	4	.162	4	.34	3	.285	5
46			min	-1004.691	1	98.27	2	-594.726	3	-.209	3	-.33	4	.014	2
47		4	max	1259.932	2	702.548	5	660.654	4	.162	4	.317	3	.258	5
48			min	-1004.407	1	97.913	2	-592.364	3	-.209	3	-.305	4	.01	2
49		5	max	1259.648	2	701.662	5	658.292	4	.162	4	.294	3	.23	5
50			min	-1004.124	1	97.555	2	-590.002	3	-.209	3	-.279	4	.006	2
51	M6	1	max	1238.576	2	701.675	5	849.226	4	.2	4	.294	3	.231	5
52			min	-971.557	1	98.106	2	-895.444	3	-.182	3	-.279	4	.032	2
53		2	max	1236.447	2	699.787	5	845.268	4	.2	4	.22	3	.173	5
54			min	-969.428	1	97.345	2	-891.486	3	-.182	3	-.209	4	.024	2
55		3	max	1234.318	2	697.899	5	841.31	4	.2	4	.146	3	.115	5
56			min	-967.299	1	96.583	2	-887.527	3	-.182	3	-.139	4	.016	2
57		4	max	1232.189	2	696.011	5	837.352	4	.2	4	.073	3	.058	5
58			min	-965.171	1	95.822	2	-883.569	3	-.182	3	-.069	4	.008	2
59		5	max	1230.061	2	694.124	5	833.393	4	.2	4	0	11	0	11
60			min	-963.042	1	95.06	2	-879.611	3	-.182	3	0	1	0	1
61	M7	1	max	1415.606	2	836.619	5	711.668	4	.197	4	.489	3	.402	5
62			min	-1126.522	1	132.569	2	-796.457	3	-.134	3	-.495	4	.031	2
63		2	max	1415.322	2	835.732	5	709.306	4	.197	4	.458	3	.369	5
64			min	-1126.238	1	132.211	2	-794.095	3	-.134	3	-.467	4	.026	2
65		3	max	1415.039	2	834.846	5	706.944	4	.197	4	.427	3	.336	5
66			min	-1125.955	1	131.853	2	-791.733	3	-.134	3	-.44	4	.02	2
67		4	max	1414.756	2	833.959	5	704.582	4	.197	4	.397	3	.304	5
68			min	-1125.671	1	131.496	2	-789.37	3	-.134	3	-.412	4	.015	2
69		5	max	1414.472	2	833.073	5	702.22	4	.197	4	.366	3	.272	5
70			min	-1125.388	1	131.138	2	-787.008	3	-.134	3	-.385	4	.01	2
71	M8	1	max	1351.269	2	833.068	5	1162.194	4	.162	4	.366	3	.277	5
72			min	-1047.407	1	131.859	2	-1105.408	3	-.177	3	-.385	4	.043	2
73		2	max	1349.127	2	831.169	5	1158.213	4	.162	4	.274	3	.207	5
74			min	-1045.266	1	131.093	2	-1101.427	3	-.177	3	-.288	4	.033	2
75		3	max	1346.986	2	829.27	5	1154.233	4	.162	4	.182	3	.138	5
76			min	-1043.124	1	130.327	2	-1097.447	3	-.177	3	-.192	4	.022	2
77		4	max	1344.844	2	827.371	5	1150.253	4	.162	4	.091	3	.069	5
78			min	-1040.983	1	129.561	2	-1093.467	3	-.177	3	-.096	4	.011	2
79		5	max	1342.703	2	825.473	5	1146.273	4	.162	4	0	11	0	11
80			min	-1038.841	1	128.795	2	-1089.487	3	-.177	3	0	1	0	1
81	M9	1	max	1147.794	1	85.539	8	34.467	3	0	8	-.007	2	.104	8
82			min	-1561.295	2	10.995	3	-43.778	4	0	3	-.054	5	-.022	3
83		2	max	1138.466	1	63.977	8	18.23	3	0	8	.005	3	.044	1
84			min	-1551.967	2	4.996	3	-27.541	4	0	3	-.011	4	-.021	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
85		3	max	1129.138	1	29.068	8	7.259	2	0	8	.021	7	.017	1
86			min	-1546.979	4	-4.816	3	-16.49	1	0	3	-.003	4	-.023	2
87		4	max	1132.071	3	12.627	4	12.618	2	0	8	.016	2	.002	3
88			min	-1556.307	4	-19.957	7	-21.849	1	0	3	-.007	1	-.028	8
89		5	max	1141.4	3	4.513	4	21.169	4	0	8	.024	4	.01	2
90			min	-1565.635	4	-48.923	7	-30.48	3	0	3	-.032	3	-.026	1
91	M10	1	max	1057.194	1	35.515	4	88.018	7	0	4	-.006	2	.025	4
92			min	-1431.261	2	-44.817	3	12.139	4	0	7	-.056	5	-.108	7
93		2	max	1047.872	1	19.274	4	66.309	7	0	4	.006	4	.024	2
94			min	-1421.939	2	-28.577	3	6.098	4	0	7	-.012	3	-.048	1
95		3	max	1038.551	1	7.942	2	30.847	7	0	4	.022	8	.025	2
96			min	-1412.618	2	-17.297	1	-3.872	4	0	7	-.005	3	-.018	1
97		4	max	1029.229	1	13.292	2	10.818	3	0	4	.016	6	.028	7
98			min	-1403.296	2	-22.647	1	-23.229	8	0	7	-.007	1	0	4
99		5	max	1019.907	1	20.145	3	2.121	3	0	4	.018	3	.027	1
100			min	-1393.974	2	-29.447	4	-54.234	8	0	7	-.032	8	-.014	2
101	M11	1	max	876.053	1	573.261	5	69.073	7	.307	3	.01	2	.183	5
102			min	-794.651	2	-174.373	2	-27.273	2	-.373	4	-.023	1	-.057	2
103		2	max	873.577	1	571.165	5	70.08	1	.307	3	.008	2	.137	5
104			min	-792.175	2	-175.36	2	-29.592	2	-.373	4	-.018	1	-.043	2
105		3	max	871.102	1	569.069	5	72.399	1	.307	3	.006	2	.091	5
106			min	-789.7	2	-176.347	2	-31.911	2	-.373	4	-.012	1	-.029	2
107		4	max	868.626	1	566.973	5	74.719	1	.307	3	.003	2	.046	5
108			min	-787.225	2	-177.334	2	-34.231	2	-.373	4	-.006	1	-.014	2
109		5	max	866.151	1	565.28	1	77.038	1	.307	3	0	11	0	11
110			min	-784.749	2	-178.322	2	-36.55	2	-.373	4	0	1	0	1
111	M12	1	max	811.853	1	666.409	5	66.099	3	.345	3	.037	4	.212	5
112			min	-712.963	2	-193.842	2	-122.116	4	-.29	4	-.02	3	-.063	2
113		2	max	809.391	1	664.325	5	63.479	3	.345	3	.028	4	.159	5
114			min	-710.501	2	-194.824	2	-119.496	4	-.29	4	-.014	3	-.047	2
115		3	max	806.93	1	662.241	5	60.859	3	.345	3	.018	4	.106	5
116			min	-708.039	2	-195.805	2	-116.875	4	-.29	4	-.009	3	-.032	2
117		4	max	804.468	1	660.157	5	58.239	3	.345	3	.009	4	.053	5
118			min	-705.578	2	-196.787	2	-114.255	4	-.29	4	-.005	3	-.016	2
119		5	max	802.007	1	658.073	5	55.619	3	.345	3	0	11	0	11
120			min	-703.116	2	-197.768	2	-111.635	4	-.29	4	0	1	0	1
121	M13	1	max	1104.925	2	358.844	2	903.503	4	.658	4	.244	4	-.026	2
122			min	-1163.954	1	-1258.561	5	-882.342	3	-.681	3	-.247	3	-.149	5
123		2	max	4369.53	2	972.841	5	24.592	3	.437	4	.014	3	1.693	1
124			min	-6451.226	1	-114.955	2	-22.22	4	-.463	3	-.014	8	-.868	2
125		3	max	4369.53	2	934.48	5	31.009	4	.437	4	.022	1	.67	1
126			min	-6451.226	1	-132.802	2	-28.637	3	-.463	3	-.02	2	-.707	2
127		4	max	4693.562	2	-231.311	1	2397.32	4	.592	4	.14	1	-.004	4
128			min	-6947.799	1	-950.535	6	-2405.708	3	-.843	3	-.141	2	-.07	7
129		5	max	4693.562	2	-249.159	1	2450.548	4	.592	4	3.121	4	1.195	6
130			min	-6947.799	1	-988.896	6	-2458.937	3	-.843	3	-3.126	3	.271	1
131	M14	1	max	477.254	3	-97.979	2	1230.005	2	-.013	2	.382	4	.141	4
132			min	-590.34	4	-705.094	5	-986.277	1	-.332	5	-.387	3	-.217	3
133		2	max	1053.426	3	-128.086	2	57.244	2	-.075	1	.42	2	.37	1
134			min	-979.565	4	-773.12	5	-141.821	1	-.405	6	-.324	1	-.127	2
135		3	max	1053.426	3	-136.961	2	83.716	2	-.075	1	.466	2	.873	5
136			min	-979.565	4	-792.198	5	-168.293	1	-.405	6	-.424	1	-.042	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
137		4	max	1053.426	3	-145.837	2	110.187	2	-.075	1	.528	2	1.39	5
138			min	-979.565	4	-811.276	5	-194.764	1	-.405	6	-.541	1	.049	2
139		5	max	1053.426	3	-154.713	2	136.659	2	-.075	1	.608	2	1.92	5
140			min	-979.565	4	-830.354	5	-221.236	1	-.405	6	-.675	1	.146	2
141	M15	1	max	1333.275	4	956.551	5	274.944	1	.474	8	.722	2	2.222	5
142			min	-1270.145	3	184.485	2	-187.831	2	.045	3	-.783	1	.194	2
143		2	max	1333.275	4	937.474	5	248.472	1	.474	8	.609	2	1.611	5
144			min	-1270.145	3	175.61	2	-161.359	2	.045	3	-.614	1	.078	2
145		3	max	1333.275	4	918.396	5	222.001	1	.474	8	.514	2	1.012	5
146			min	-1270.145	3	166.734	2	-134.888	2	.045	3	-.462	1	-.033	2
147		4	max	1333.275	4	899.318	5	195.53	1	.474	8	.435	2	.426	5
148			min	-1270.145	3	157.858	2	-108.417	2	.045	3	-.328	1	-.137	2
149		5	max	532.812	4	836.309	5	1133.2	3	.391	5	.489	3	.112	3
150			min	-676.644	3	131.345	2	-1420.091	4	.019	2	-.495	4	-.209	4
151	M16	1	max	0	11	.007	1	.009	4	0	11	0	11	0	11
152			min	0	1	0	7	-.004	1	0	1	0	1	0	1
153		2	max	187.78	3	240.11	2	291.165	3	.35	4	.086	2	.132	2
154			min	-147.967	4	-335.724	1	-286.163	4	-.413	3	-.099	1	-.09	1
155		3	max	1088.344	3	377.333	2	145.493	2	.223	1	.399	4	.075	3
156			min	-1422.651	4	-194.074	1	-132.155	1	-.28	2	-.384	3	-.157	4
157		4	max	314.394	4	138.589	3	192.875	2	.323	1	.287	4	.137	4
158			min	-330.673	3	-196.124	4	-199.306	1	-.238	2	-.303	3	-.268	3
159		5	max	0	11	.001	5	.008	3	0	11	0	11	0	11
160			min	0	1	-.007	3	-.004	1	0	1	0	1	0	1
161	M17	1	max	0	11	.006	4	.001	1	0	11	0	11	0	11
162			min	0	1	0	5	-.003	3	0	1	0	1	0	1
163		2	max	310.604	1	191.957	3	229.165	4	.246	2	.153	1	.123	3
164			min	-277.651	2	-290.4	4	-227.144	3	-.311	1	-.16	2	-.077	4
165		3	max	722.844	4	381.154	1	315.403	3	.192	4	.48	3	.062	1
166			min	-1054.932	3	-193.223	2	-298.143	4	-.249	3	-.464	4	-.144	2
167		4	max	274.531	2	181.757	1	171.043	3	.344	4	.254	3	.131	2
168			min	-311.549	1	-241.357	2	-181.689	4	-.26	3	-.264	4	-.265	1
169		5	max	0	11	.001	8	.006	1	0	11	0	11	0	11
170			min	0	1	-.007	1	-.015	3	0	1	0	1	0	1
171	M18	1	max	0	11	0	11	0	11	0	11	0	11	0	11
172			min	0	1	0	1	0	1	0	1	0	1	0	1
173		2	max	369.363	4	218.367	4	306.025	2	.283	1	.229	4	.12	9
174			min	-344.688	3	-313.567	3	-301.877	1	-.345	2	-.24	3	-.074	3
175		3	max	1043.543	2	442.247	4	217.335	1	.219	3	.543	1	.019	4
176			min	-1388.181	1	-256.401	3	-200.815	2	-.278	4	-.52	2	-.12	5
177		4	max	363.121	3	192.353	4	169.379	4	.251	3	.33	1	.082	3
178			min	-397.332	4	-252.625	3	-173.616	3	-.167	4	-.338	2	-.216	4
179		5	max	0	11	0	11	0	11	0	11	0	11	0	11
180			min	0	1	0	1	0	1	0	1	0	1	0	1
181	M19	1	max	4654.506	8	50.099	8	46.945	2	0	3	0	11	0	11
182			min	-420.509	3	-4.487	3	-46.945	1	0	4	0	1	0	1
183		2	max	4644.513	8	25.05	8	23.472	2	0	3	.041	2	.004	3
184			min	-440.016	3	-2.243	3	-23.472	1	0	4	-.041	1	-.044	8
185		3	max	4634.52	8	0	11	0	11	0	3	.055	2	.005	3
186			min	-459.522	3	0	1	0	1	0	4	-.055	1	-.058	8
187		4	max	4624.527	8	2.243	3	23.472	1	0	3	.041	2	.004	3
188			min	-479.029	3	-25.05	8	-23.472	2	0	4	-.041	1	-.044	8

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
189		5	max	4614.534	8	4.487	3	46.945	1	0	3	0	11	0	11
190			min	-498.536	3	-50.099	8	-46.945	2	0	4	0	1	0	1
191	M20	1	max	4676.938	5	49.631	5	59.822	4	0	4	0	11	0	11
192			min	-715.091	2	-2.714	2	-59.822	3	0	3	0	1	0	1
193		2	max	4666.555	5	24.815	5	29.911	4	0	4	.052	4	.002	2
194			min	-733.219	2	-1.357	2	-29.911	3	0	3	-.052	3	-.043	5
195		3	max	4656.172	5	0	11	0	11	0	4	.07	4	.003	2
196			min	-751.348	2	0	1	0	1	0	3	-.07	3	-.058	5
197		4	max	4645.789	5	1.357	2	29.911	3	0	4	.052	4	.002	2
198			min	-769.476	2	-24.815	5	-29.911	4	0	3	-.052	3	-.043	5
199		5	max	4635.406	5	2.714	2	59.822	3	0	4	0	11	0	11
200			min	-787.604	2	-49.631	5	-59.822	4	0	3	0	1	0	1
201	M21	1	max	4653.377	7	50.128	7	46.966	1	0	1	0	11	0	11
202			min	-396.533	4	-4.473	4	-46.966	2	0	2	0	1	0	1
203		2	max	4643.386	7	25.064	7	23.483	1	0	1	.041	1	.004	4
204			min	-416.046	4	-2.236	4	-23.483	2	0	2	-.041	2	-.044	7
205		3	max	4633.395	7	0	11	0	11	0	1	.055	1	.005	4
206			min	-435.56	4	0	1	0	1	0	2	-.055	2	-.058	7
207		4	max	4623.404	7	2.236	4	23.483	2	0	1	.041	1	.004	4
208			min	-455.073	4	-25.064	7	-23.483	1	0	2	-.041	2	-.044	7
209		5	max	4613.413	7	4.473	4	46.966	2	0	1	0	11	0	11
210			min	-474.587	4	-50.128	7	-46.966	1	0	2	0	1	0	1
211	M22	1	max	0	11	0	11	0	11	0	11	0	11	0	11
212			min	0	1	0	1	0	1	0	1	0	1	0	1
213		2	max	290.343	3	202.83	4	121.892	3	.265	1	.133	4	.042	3
214			min	-324.688	4	-180.188	3	-155.327	4	-.287	2	-.139	3	-.043	4
215		3	max	173.607	4	332.896	4	214.443	1	.137	1	.326	1	.007	3
216			min	-117.409	3	-268.862	3	-227.156	2	-.144	2	-.346	2	-.016	4
217		4	max	187.452	4	205.771	4	356.315	2	.361	2	.352	1	.048	4
218			min	-127.813	3	-265.063	3	-323.654	1	-.346	1	-.365	2	-.068	3
219		5	max	0	11	0	11	0	11	0	11	0	11	0	11
220			min	0	1	0	1	0	1	0	1	0	1	0	1
221	M23	1	max	0	11	.007	3	.02	3	0	11	0	11	0	11
222			min	0	1	0	1	-.021	1	0	1	0	1	0	1
223		2	max	341.289	1	160.122	2	137.587	4	.229	4	.148	2	.053	1
224			min	-375.92	2	-137.614	1	-171.821	3	-.252	3	-.155	1	-.053	2
225		3	max	320.732	3	321.104	2	202.634	4	.157	4	.239	4	.016	1
226			min	-262.782	4	-258.055	1	-216.798	3	-.166	3	-.261	3	-.025	2
227		4	max	195.877	3	210.451	2	223.719	3	.263	3	.332	4	.081	3
228			min	-134.19	4	-267.817	1	-191.395	4	-.249	4	-.347	3	-.1	4
229		5	max	0	11	.004	4	.028	3	0	11	0	11	0	11
230			min	0	1	-.007	2	-.009	1	0	1	0	1	0	1
231	M24	1	max	0	11	.006	1	.002	1	0	11	0	11	0	11
232			min	0	1	-.003	4	-.024	4	0	1	0	1	0	1
233		2	max	253.562	4	196.312	1	120.646	2	.207	3	.128	3	.049	4
234			min	-286.161	3	-175.905	2	-154.932	1	-.229	4	-.133	4	-.049	3
235		3	max	297.969	1	304.369	1	134.359	3	.114	2	.281	3	.021	4
236			min	-243.355	2	-239.547	2	-146.876	4	-.123	1	-.302	4	-.029	3
237		4	max	249.232	1	174.576	1	338.9	4	.324	4	.256	3	.074	1
238			min	-189.881	2	-233.493	2	-304.782	3	-.308	3	-.268	4	-.094	2
239		5	max	0	11	0	6	.02	1	0	11	0	11	0	11
240			min	0	1	-.008	3	-.029	4	0	1	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
241	M25	1	max	385.366	2	448.611	3	411.725	4	.015	3	.151	1	.527	3
242			min	-501.865	1	-484.264	4	-424.644	3	-.015	4	-.117	2	-.474	4
243		2	max	385.355	2	450.291	3	411.725	4	.015	3	.139	1	.313	3
244			min	-501.855	1	-482.585	4	-424.644	3	-.015	4	-.117	2	-.256	4
245		3	max	385.345	2	451.971	3	411.725	4	.015	3	.129	1	.277	1
246			min	-501.844	1	-480.905	4	-424.644	3	-.015	4	-.118	2	-.213	2
247		4	max	385.334	2	453.65	3	411.725	4	.015	3	.122	1	.265	1
248			min	-501.834	1	-479.225	4	-424.644	3	-.015	4	-.121	2	-.197	2
249		5	max	385.324	2	455.33	3	411.725	4	.015	3	.118	1	.398	4
250			min	-501.823	1	-477.546	4	-424.644	3	-.015	4	-.126	2	-.33	3
251	MP4A	1	max	0	11	.016	4	.054	1	0	11	0	11	0	11
252			min	0	1	-.015	3	-.051	2	0	1	0	1	0	1
253		2	max	430.733	2	287.395	4	242.772	2	.463	2	.283	3	.539	4
254			min	-324.15	1	-247.463	3	-186.338	1	-.438	1	-.294	4	-.5	3
255		3	max	505.681	2	397.146	4	193.164	4	.463	2	.336	2	.082	1
256			min	-249.202	1	-357.214	3	-135.932	3	-.438	1	-.234	1	-.121	2
257		4	max	-13.148	10	35.412	3	35.489	2	0	11	.036	1	.035	3
258			min	-33.144	5	-35.409	4	-35.482	1	0	1	-.036	2	-.035	4
259		5	max	0	11	.015	7	.091	2	0	11	0	11	0	11
260			min	0	1	-.011	4	-.085	1	0	1	0	1	0	1
261	MP1A	1	max	0	11	.017	4	.067	1	0	11	0	11	0	11
262			min	0	1	-.016	3	-.067	2	0	1	0	1	0	1
263		2	max	469.159	2	244.616	4	191.193	3	.55	1	.213	4	.463	4
264			min	-385.095	1	-352.698	3	-118.634	4	-.579	2	-.264	3	-.601	3
265		3	max	554.307	2	360.883	4	191.193	3	.55	1	.205	2	.181	2
266			min	-299.947	1	-468.965	3	-118.634	4	-.579	2	-.113	1	-.103	1
267		4	max	-13.148	10	35.406	3	35.493	2	0	11	.036	1	.035	3
268			min	-33.144	5	-35.413	4	-35.484	1	0	1	-.036	2	-.035	4
269		5	max	0	11	.008	3	.095	2	0	11	0	11	0	11
270			min	0	1	-.03	8	-.086	1	0	1	0	1	0	1
271	MP3A	1	max	0	11	.015	4	.114	1	0	11	0	11	0	11
272			min	0	1	-.016	3	-.116	2	0	1	0	1	0	1
273		2	max	156.239	4	534.325	4	197.398	1	.319	2	.102	2	.843	4
274			min	-62.332	3	-442.951	3	-176.341	2	-.285	1	-.073	1	-.709	3
275		3	max	183.613	8	569.723	4	232.796	1	.319	2	.357	1	.213	3
276			min	-49.184	3	-478.349	3	-211.739	2	-.285	1	-.286	2	-.261	4
277		4	max	-13.148	10	35.404	3	35.511	2	0	11	.036	1	.035	3
278			min	-33.144	5	-35.399	4	-35.501	1	0	1	-.036	2	-.035	4
279		5	max	0	11	.016	7	.113	2	0	11	0	11	0	11
280			min	0	1	-.001	4	-.103	1	0	1	0	1	0	1
281	MP2A	1	max	0	11	.146	4	1.038	1	0	11	0	11	0	11
282			min	0	1	-.146	3	-1.06	2	0	1	0	1	0	1
283		2	max	328.41	8	332.799	4	676.984	1	.149	4	.665	1	.609	4
284			min	89.228	1	-329.852	3	-677.006	2	-.168	3	-.665	2	-.603	3
285		3	max	666.741	7	648.62	4	484.058	1	.149	4	.711	1	.232	3
286			min	224.912	4	-645.673	3	-442.429	2	-.168	3	-.622	2	-.232	4
287		4	max	-97.388	10	320.021	3	779.904	2	0	11	.72	1	.312	3
288			min	-359.051	5	-320.022	4	-779.82	1	0	1	-.72	2	-.312	4
289		5	max	0	11	.054	4	.865	6	0	11	0	11	0	11
290			min	0	1	-.055	3	-.451	1	0	1	0	1	0	1
291	MP4C	1	max	0	11	.04	4	.029	1	0	11	0	11	0	11
292			min	0	1	-.037	3	-.032	2	0	1	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
293		2	max	363.865	3	178.525	3	235.672	1	.359	3	.66	2	.051	3
294			min	-256.39	4	-147.965	4	-297.365	2	-.335	4	-.624	1	-.06	4
295		3	max	438.814	3	50.811	1	370.313	1	.359	3	.199	4	.126	4
296			min	-181.442	4	-22.01	2	-432.006	2	-.335	4	-.284	3	-.196	3
297		4	max	-13.148	10	35.457	3	35.439	2	0	11	.035	1	.036	3
298			min	-33.144	5	-35.452	4	-35.445	1	0	1	-.035	2	-.036	4
299		5	max	0	11	.059	3	.042	2	0	11	0	11	0	11
300			min	0	1	-.054	4	-.048	1	0	1	0	1	0	1
301	MP1C	1	max	0	11	.057	4	.035	3	0	11	0	11	0	11
302			min	0	1	-.058	3	-.036	4	0	1	0	1	0	1
303		2	max	383.615	3	331.775	1	199.7	4	.471	4	.321	3	.416	4
304			min	-296.614	4	-215.741	2	-143.514	3	-.5	3	-.413	4	-.306	3
305		3	max	468.763	3	357.57	4	287.076	1	.471	4	.068	1	.129	2
306			min	-211.465	4	-243.463	3	-232.065	2	-.5	3	-.05	2	-.249	1
307		4	max	-13.148	10	35.487	3	35.422	2	0	11	.035	1	.036	3
308			min	-33.144	5	-35.476	4	-35.42	1	0	1	-.035	2	-.036	4
309		5	max	0	11	.089	3	.037	4	0	11	0	11	0	11
310			min	0	1	-.078	4	-.036	3	0	1	0	1	0	1
311	MP3C	1	max	0	11	.082	4	.046	1	0	11	0	11	0	11
312			min	0	1	-.083	3	-.044	2	0	1	0	1	0	1
313		2	max	187.158	2	238.845	4	397.476	1	.335	3	.7	2	.237	4
314			min	-94.17	1	-264.724	3	-486.107	2	-.3	4	-.6	1	-.328	3
315		3	max	200.306	2	274.243	4	432.874	1	.335	3	.231	1	.237	3
316			min	-81.022	1	-300.122	3	-521.505	2	-.3	4	-.308	2	-.276	4
317		4	max	-13.148	10	35.478	3	35.428	2	0	11	.035	1	.036	3
318			min	-33.144	5	-35.471	4	-35.437	1	0	1	-.035	2	-.036	4
319		5	max	0	11	.08	3	.036	4	0	11	0	11	0	11
320			min	0	1	-.074	4	-.052	7	0	1	0	1	0	1
321	MP2C	1	max	0	11	.802	4	.358	3	0	11	0	11	0	11
322			min	0	1	-.821	3	-.347	4	0	1	0	1	0	1
323		2	max	325.843	8	581.223	4	399.317	1	.19	2	.451	2	.574	3
324			min	88.028	2	-581.243	3	-399.305	2	-.21	1	-.445	1	-.574	4
325		3	max	662.788	8	583.587	4	543.41	1	.19	2	.271	1	.492	3
326			min	240.01	2	-548.631	3	-569.226	2	-.21	1	-.317	2	-.569	4
327		4	max	-97.388	10	695.193	3	431.972	2	0	11	.413	1	.633	3
328			min	-359.051	5	-695.119	4	-432.015	1	0	1	-.412	2	-.633	4
329		5	max	0	11	.678	7	.287	4	0	11	0	11	0	11
330			min	0	1	-.331	4	-.443	7	0	1	0	1	0	1
331	MP4B	1	max	0	11	.052	4	.029	4	0	11	0	11	0	11
332			min	0	1	-.055	3	-.03	3	0	1	0	1	0	1
333		2	max	441.996	4	232.631	2	180.202	3	.449	4	.29	4	.39	4
334			min	-332.049	3	-301.181	1	-175.785	4	-.423	3	-.316	3	-.416	3
335		3	max	516.944	4	232.631	2	217.98	1	.449	4	.044	3	.262	4
336			min	-257.101	3	-301.181	1	-214.817	2	-.423	3	-.062	4	-.155	3
337		4	max	-13.148	10	35.482	3	35.416	2	0	11	.035	1	.036	3
338			min	-33.144	5	-35.489	4	-35.417	1	0	1	-.035	2	-.036	4
339		5	max	0	11	.084	3	.038	3	0	11	0	11	0	11
340			min	0	1	-.091	4	-.039	4	0	1	0	1	0	1
341	MP1B	1	max	0	11	.052	4	.029	1	0	11	0	11	0	11
342			min	0	1	-.052	3	-.029	2	0	1	0	1	0	1
343		2	max	454.278	4	97.66	3	236.245	1	.463	3	.694	2	.093	2
344			min	-369.473	3	-107.076	4	-364.418	2	-.491	4	-.552	1	-.068	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
345		3	max	539.426	4	108.819	4	357.201	1	.463	3	.179	3	.133	4
346			min	-284.325	3	-118.235	3	-485.375	2	-.491	4	-.292	4	-.09	3
347		4	max	-13.148	10	35.461	3	35.43	2	0	11	.035	1	.036	3
348			min	-33.144	5	-35.465	4	-35.441	1	0	1	-.035	2	-.036	4
349		5	max	0	11	.063	3	.032	2	0	11	0	11	0	11
350			min	0	1	-.067	4	-.058	5	0	1	0	1	0	1
351	MP3B	1	max	0	11	.101	4	.048	4	0	11	0	11	0	11
352			min	0	1	-.099	3	-.048	3	0	1	0	1	0	1
353		2	max	183.176	3	283.104	4	423.091	1	.223	1	.542	2	.324	2
354			min	-87.335	4	-346.528	3	-355.808	2	-.189	2	-.672	1	-.364	1
355		3	max	196.324	3	318.502	4	458.489	1	.223	1	.209	1	.37	3
356			min	-74.187	4	-381.926	3	-391.205	2	-.189	2	-.205	2	-.284	4
357		4	max	-13.148	10	35.484	3	35.419	2	0	11	.035	1	.036	3
358			min	-33.144	5	-35.496	4	-35.421	1	0	1	-.035	2	-.036	4
359		5	max	0	11	.087	3	.05	3	0	11	0	11	0	11
360			min	0	1	-.098	4	-.052	4	0	1	0	1	0	1
361	MP2B	1	max	0	11	.794	4	.347	1	0	11	0	11	0	11
362			min	0	1	-.775	3	-.335	2	0	1	0	1	0	1
363		2	max	325.843	8	581.215	4	399.338	1	.216	3	.433	2	.574	3
364			min	88.028	1	-581.196	3	-399.326	2	-.236	4	-.441	1	-.574	4
365		3	max	666.049	6	525.091	4	560.613	1	.216	3	.31	1	.524	3
366			min	221.035	1	-564.606	3	-579.406	2	-.236	4	-.355	2	-.447	4
367		4	max	-97.388	10	695.119	3	431.969	2	0	11	.413	1	.633	3
368			min	-359.051	5	-695.192	4	-432.013	1	0	1	-.412	2	-.633	4
369		5	max	0	11	.331	3	.261	3	0	11	0	11	0	11
370			min	0	1	-.666	8	-.425	8	0	1	0	1	0	1
371	M38	1	max	207.977	1	591.16	2	552.386	3	.828	3	.528	1	.231	4
372			min	-127.441	2	-263.802	1	-445.213	4	-.588	4	-.586	2	-.341	3
373		2	max	207.977	1	591.16	2	552.386	3	.828	3	.534	1	.224	4
374			min	-127.441	2	-263.802	1	-445.213	4	-.588	4	-.584	2	-.357	3
375		3	max	207.977	1	591.16	2	552.386	3	.828	3	.539	1	.217	4
376			min	-127.441	2	-263.802	1	-445.213	4	-.588	4	-.582	2	-.373	3
377		4	max	207.977	1	591.16	2	552.386	3	.828	3	.545	1	.209	4
378			min	-127.441	2	-263.802	1	-445.213	4	-.588	4	-.58	2	-.389	3
379		5	max	207.977	1	591.16	2	552.386	3	.828	3	.55	1	.202	4
380			min	-127.441	2	-263.802	1	-445.213	4	-.588	4	-.579	2	-.405	3
381	M39	1	max	1295.593	1	1059.125	7	1000.26	3	.746	3	.426	4	.3	2
382			min	-1253.845	2	335.449	4	-1003.719	4	-.751	4	-.444	3	-.239	1
383		2	max	1295.593	1	1059.125	7	1000.26	3	.746	3	.357	4	.274	2
384			min	-1253.845	2	335.449	4	-1003.719	4	-.751	4	-.375	3	-.266	1
385		3	max	1295.593	1	1059.125	7	1000.26	3	.746	3	.288	4	.247	2
386			min	-1253.845	2	335.449	4	-1003.719	4	-.751	4	-.306	3	-.292	1
387		4	max	1295.593	1	1059.125	7	1000.26	3	.746	3	.218	4	.22	2
388			min	-1253.845	2	335.449	4	-1003.719	4	-.751	4	-.237	3	-.319	1
389		5	max	1295.593	1	1059.125	7	1000.26	3	.746	3	.149	4	.194	2
390			min	-1253.845	2	335.449	4	-1003.719	4	-.751	4	-.168	3	-.345	1
391	M40	1	max	301.758	1	249.946	8	549.359	3	.895	3	.331	2	.575	2
392			min	-282.593	2	-22.975	3	-639.86	4	-1.08	4	-.273	1	-.632	1
393		2	max	301.758	1	249.946	8	549.359	3	.895	3	.328	2	.573	2
394			min	-282.593	2	-22.975	3	-639.86	4	-1.08	4	-.276	1	-.642	1
395		3	max	301.758	1	249.946	8	549.359	3	.895	3	.325	2	.571	2
396			min	-282.593	2	-22.975	3	-639.86	4	-1.08	4	-.279	1	-.651	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
397		4	max	301.758	1	249.946	8	549.359	3	.895	3	.322	2	.57	2
398			min	-282.593	2	-22.975	3	-639.86	4	-1.08	4	-.282	1	-.661	1
399		5	max	301.758	1	249.946	8	549.359	3	.895	3	.319	2	.568	2
400			min	-282.593	2	-22.975	3	-639.86	4	-1.08	4	-.285	1	-.671	1
401	M41	1	max	269.974	1	624.14	6	502.016	3	.642	3	.459	2	.265	3
402			min	-206.619	2	-163.891	1	-541.634	4	-.743	4	-.424	1	-.333	4
403		2	max	269.974	1	624.14	6	502.016	3	.642	3	.46	2	.247	3
404			min	-206.619	2	-163.891	1	-541.634	4	-.743	4	-.427	1	-.346	4
405		3	max	269.974	1	624.14	6	502.016	3	.642	3	.461	2	.229	3
406			min	-206.619	2	-163.891	1	-541.634	4	-.743	4	-.431	1	-.358	4
407		4	max	269.974	1	624.14	6	502.016	3	.642	3	.462	2	.21	3
408			min	-206.619	2	-163.891	1	-541.634	4	-.743	4	-.434	1	-.37	4
409		5	max	269.974	1	624.14	6	502.016	3	.642	3	.463	2	.192	3
410			min	-206.619	2	-163.891	1	-541.634	4	-.743	4	-.438	1	-.382	4
411	M42	1	max	298.427	4	504.513	3	487.391	1	.794	1	.36	4	.186	3
412			min	-220.536	3	-176.346	4	-383.18	2	-.559	2	-.418	3	-.292	4
413		2	max	298.427	4	504.513	3	487.391	1	.794	1	.388	4	.179	2
414			min	-220.536	3	-176.346	4	-383.18	2	-.559	2	-.439	3	-.313	1
415		3	max	298.427	4	504.513	3	487.391	1	.794	1	.416	4	.185	2
416			min	-220.536	3	-176.346	4	-383.18	2	-.559	2	-.459	3	-.342	1
417		4	max	298.427	4	504.513	3	487.391	1	.794	1	.443	4	.192	2
418			min	-220.536	3	-176.346	4	-383.18	2	-.559	2	-.48	3	-.372	1
419		5	max	298.427	4	504.513	3	487.391	1	.794	1	.471	4	.199	2
420			min	-220.536	3	-176.346	4	-383.18	2	-.559	2	-.5	3	-.402	1
421	M43	1	max	1089.1	4	1054.906	8	959.432	1	.551	1	.456	2	.355	3
422			min	-1048.307	3	337.929	3	-964.049	2	-.555	2	-.474	1	-.294	4
423		2	max	1089.1	4	1054.906	8	959.432	1	.551	1	.389	2	.332	3
424			min	-1048.307	3	337.929	3	-964.049	2	-.555	2	-.408	1	-.324	4
425		3	max	1089.1	4	1054.906	8	959.432	1	.551	1	.323	2	.309	3
426			min	-1048.307	3	337.929	3	-964.049	2	-.555	2	-.342	1	-.354	4
427		4	max	1089.1	4	1054.906	8	959.432	1	.551	1	.256	2	.285	3
428			min	-1048.307	3	337.929	3	-964.049	2	-.555	2	-.276	1	-.385	4
429		5	max	1089.1	4	1054.906	8	959.432	1	.551	1	.19	2	.262	3
430			min	-1048.307	3	337.929	3	-964.049	2	-.555	2	-.21	1	-.415	4
431	M44	1	max	221.748	4	256.716	6	486.884	1	.793	1	.443	3	.389	3
432			min	-198.686	3	-56.129	1	-575.709	2	-.975	2	-.384	4	-.448	4
433		2	max	221.748	4	256.716	6	486.884	1	.793	1	.416	3	.38	3
434			min	-198.686	3	-56.129	1	-575.709	2	-.975	2	-.363	4	-.451	4
435		3	max	221.748	4	256.716	6	486.884	1	.793	1	.389	3	.372	3
436			min	-198.686	3	-56.129	1	-575.709	2	-.975	2	-.342	4	-.454	4
437		4	max	221.748	4	256.716	6	486.884	1	.793	1	.362	3	.363	3
438			min	-198.686	3	-56.129	1	-575.709	2	-.975	2	-.321	4	-.458	4
439		5	max	221.748	4	256.716	6	486.884	1	.793	1	.335	3	.355	3
440			min	-198.686	3	-56.129	1	-575.709	2	-.975	2	-.3	4	-.461	4
441	M45	1	max	284.827	2	606.158	7	491.722	1	.567	1	.45	3	.254	1
442			min	-224.711	1	-94.282	4	-531.418	2	-.665	2	-.416	4	-.321	2
443		2	max	284.827	2	606.158	7	491.722	1	.567	1	.428	3	.222	1
444			min	-224.711	1	-94.282	4	-531.418	2	-.665	2	-.396	4	-.318	2
445		3	max	284.827	2	606.158	7	491.722	1	.567	1	.405	3	.195	4
446			min	-224.711	1	-94.282	4	-531.418	2	-.665	2	-.375	4	-.325	3
447		4	max	284.827	2	606.158	7	491.722	1	.567	1	.382	3	.201	4
448			min	-224.711	1	-94.282	4	-531.418	2	-.665	2	-.355	4	-.361	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
449		5	max	284.827	2	606.158	7	491.722	1	.567	1	.359	3	.208	4
450			min	-224.711	1	-94.282	4	-531.418	2	-.665	2	-.335	4	-.397	3
451	M46	1	max	248.441	2	577.4	4	515.125	2	.708	2	.534	3	.229	1
452			min	-175.249	1	-246.935	3	-408.051	1	-.469	1	-.59	4	-.336	2
453		2	max	248.441	2	577.4	4	515.125	2	.708	2	.516	3	.208	1
454			min	-175.249	1	-246.935	3	-408.051	1	-.469	1	-.565	4	-.338	2
455		3	max	248.441	2	577.4	4	515.125	2	.708	2	.499	3	.186	1
456			min	-175.249	1	-246.935	3	-408.051	1	-.469	1	-.54	4	-.339	2
457		4	max	248.441	2	577.4	4	515.125	2	.708	2	.481	3	.165	1
458			min	-175.249	1	-246.935	3	-408.051	1	-.469	1	-.515	4	-.341	2
459		5	max	248.441	2	577.4	4	515.125	2	.708	2	.463	3	.143	1
460			min	-175.249	1	-246.935	3	-408.051	1	-.469	1	-.491	4	-.343	2
461	M47	1	max	1048.435	3	1058.368	6	940.717	2	.524	2	.429	3	.261	4
462			min	-1004.264	4	328.644	1	-945.456	1	-.531	1	-.446	4	-.201	3
463		2	max	1048.435	3	1058.368	6	940.717	2	.524	2	.375	3	.232	4
464			min	-1004.264	4	328.644	1	-945.456	1	-.531	1	-.394	4	-.225	3
465		3	max	1048.435	3	1058.368	6	940.717	2	.524	2	.322	3	.206	1
466			min	-1004.264	4	328.644	1	-945.456	1	-.531	1	-.341	4	-.255	2
467		4	max	1048.435	3	1058.368	6	940.717	2	.524	2	.269	3	.183	1
468			min	-1004.264	4	328.644	1	-945.456	1	-.531	1	-.288	4	-.287	2
469		5	max	1048.435	3	1058.368	6	940.717	2	.524	2	.216	3	.16	1
470			min	-1004.264	4	328.644	1	-945.456	1	-.531	1	-.236	4	-.319	2
471	M48	1	max	291.465	3	255.578	7	483.122	2	.783	2	.381	1	.539	4
472			min	-274.809	4	-51.636	4	-572.769	1	-.966	1	-.322	2	-.595	3
473		2	max	291.465	3	255.578	7	483.122	2	.783	2	.341	1	.542	4
474			min	-274.809	4	-51.636	4	-572.769	1	-.966	1	-.289	2	-.611	3
475		3	max	291.465	3	255.578	7	483.122	2	.783	2	.302	1	.546	4
476			min	-274.809	4	-51.636	4	-572.769	1	-.966	1	-.255	2	-.626	3
477		4	max	291.465	3	255.578	7	483.122	2	.783	2	.262	1	.549	4
478			min	-274.809	4	-51.636	4	-572.769	1	-.966	1	-.222	2	-.641	3
479		5	max	291.465	3	255.578	7	483.122	2	.783	2	.223	1	.553	4
480			min	-274.809	4	-51.636	4	-572.769	1	-.966	1	-.189	2	-.656	3
481	M49	1	max	328.368	3	617.044	8	449.724	2	.613	2	.35	4	.216	2
482			min	-264.478	4	-172.726	3	-485.653	1	-.706	1	-.313	3	-.287	1
483		2	max	328.368	3	617.044	8	449.724	2	.613	2	.375	4	.212	2
484			min	-264.478	4	-172.726	3	-485.653	1	-.706	1	-.341	3	-.313	1
485		3	max	328.368	3	617.044	8	449.724	2	.613	2	.399	4	.209	2
486			min	-264.478	4	-172.726	3	-485.653	1	-.706	1	-.368	3	-.339	1
487		4	max	328.368	3	617.044	8	449.724	2	.613	2	.424	4	.205	2
488			min	-264.478	4	-172.726	3	-485.653	1	-.706	1	-.395	3	-.366	1
489		5	max	328.368	3	617.044	8	449.724	2	.613	2	.449	4	.201	2
490			min	-264.478	4	-172.726	3	-485.653	1	-.706	1	-.423	3	-.392	1
491	M50	1	max	120.605	1	397.011	1	209.425	4	.636	3	.585	2	.22	4
492			min	-201.416	2	-458.061	2	-316.352	3	-.498	4	-.531	1	-.286	3
493		2	max	120.605	1	397.011	1	209.425	4	.636	3	.584	2	.218	4
494			min	-201.416	2	-458.061	2	-316.352	3	-.498	4	-.536	1	-.28	3
495		3	max	120.605	1	397.011	1	209.425	4	.636	3	.582	2	.217	4
496			min	-201.416	2	-458.061	2	-316.352	3	-.498	4	-.541	1	-.275	3
497		4	max	120.605	1	397.011	1	209.425	4	.636	3	.58	2	.215	4
498			min	-201.416	2	-458.061	2	-316.352	3	-.498	4	-.546	1	-.269	3
499		5	max	120.605	1	397.011	1	209.425	4	.636	3	.578	2	.213	4
500			min	-201.416	2	-458.061	2	-316.352	3	-.498	4	-.55	1	-.264	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
501	M51	1	max	493.164	1	133.52	8	26.905	8	.911	3	.171	3	.505	2
502			min	-536.133	2	-16.802	3	-18.574	7	-.917	4	-.152	4	-.483	1
503		2	max	493.164	1	133.52	8	26.905	8	.911	3	.17	3	.503	2
504			min	-536.133	2	-16.802	3	-18.574	7	-.917	4	-.152	4	-.485	1
505		3	max	493.164	1	133.52	8	26.905	8	.911	3	.169	3	.501	2
506			min	-536.133	2	-16.802	3	-18.574	7	-.917	4	-.151	4	-.487	1
507		4	max	493.164	1	133.52	8	26.905	8	.911	3	.169	3	.499	2
508			min	-536.133	2	-16.802	3	-18.574	7	-.917	4	-.15	4	-.489	1
509		5	max	493.164	1	133.52	8	26.905	8	.911	3	.168	3	.497	2
510			min	-536.133	2	-16.802	3	-18.574	7	-.917	4	-.149	4	-.492	1
511	M52	1	max	140.625	2	75.611	3	498.419	4	.744	3	.275	1	.144	2
512			min	-160.645	1	-142.927	4	-407.643	3	-.879	4	-.329	2	-.129	1
513		2	max	140.625	2	75.611	3	498.419	4	.744	3	.278	1	.142	2
514			min	-160.645	1	-142.927	4	-407.643	3	-.879	4	-.327	2	-.124	1
515		3	max	140.625	2	75.611	3	498.419	4	.744	3	.28	1	.141	2
516			min	-160.645	1	-142.927	4	-407.643	3	-.879	4	-.324	2	-.119	1
517		4	max	140.625	2	75.611	3	498.419	4	.744	3	.283	1	.139	2
518			min	-160.645	1	-142.927	4	-407.643	3	-.879	4	-.322	2	-.114	1
519		5	max	140.625	2	75.611	3	498.419	4	.744	3	.285	1	.138	2
520			min	-160.645	1	-142.927	4	-407.643	3	-.879	4	-.319	2	-.109	1
521	M53	1	max	219.482	1	335.548	1	250.996	4	.535	3	.426	1	.264	3
522			min	-283.203	2	-419.724	2	-212.046	3	-.575	4	-.461	2	-.294	4
523		2	max	219.482	1	335.548	1	250.996	4	.535	3	.429	1	.269	3
524			min	-283.203	2	-419.724	2	-212.046	3	-.575	4	-.461	2	-.294	4
525		3	max	219.482	1	335.548	1	250.996	4	.535	3	.432	1	.273	3
526			min	-283.203	2	-419.724	2	-212.046	3	-.575	4	-.462	2	-.294	4
527		4	max	219.482	1	335.548	1	250.996	4	.535	3	.435	1	.278	3
528			min	-283.203	2	-419.724	2	-212.046	3	-.575	4	-.462	2	-.294	4
529		5	max	219.482	1	335.548	1	250.996	4	.535	3	.438	1	.283	3
530			min	-283.203	2	-419.724	2	-212.046	3	-.575	4	-.463	2	-.294	4
531	M54	1	max	148.615	2	309.715	4	173.376	2	.584	4	.473	3	.193	2
532			min	-222.953	1	-371.269	3	-278.759	1	-.449	3	-.419	4	-.259	1
533		2	max	148.615	2	309.715	4	173.376	2	.584	4	.48	3	.18	2
534			min	-222.953	1	-371.269	3	-278.759	1	-.449	3	-.432	4	-.242	1
535		3	max	148.615	2	309.715	4	173.376	2	.584	4	.486	3	.167	2
536			min	-222.953	1	-371.269	3	-278.759	1	-.449	3	-.445	4	-.225	1
537		4	max	148.615	2	309.715	4	173.376	2	.584	4	.493	3	.153	2
538			min	-222.953	1	-371.269	3	-278.759	1	-.449	3	-.458	4	-.208	1
539		5	max	148.615	2	309.715	4	173.376	2	.584	4	.5	3	.14	2
540			min	-222.953	1	-371.269	3	-278.759	1	-.449	3	-.471	4	-.192	1
541	M55	1	max	363.747	4	129.061	7	109.585	4	.891	1	.207	1	.429	3
542			min	-402.497	3	-8.98	4	-105.826	3	-.898	2	-.187	2	-.406	4
543		2	max	363.747	4	129.061	7	109.585	4	.891	1	.207	1	.424	3
544			min	-402.497	3	-8.98	4	-105.826	3	-.898	2	-.188	2	-.406	4
545		3	max	363.747	4	129.061	7	109.585	4	.891	1	.208	1	.419	3
546			min	-402.497	3	-8.98	4	-105.826	3	-.898	2	-.188	2	-.405	4
547		4	max	363.747	4	129.061	7	109.585	4	.891	1	.209	1	.414	3
548			min	-402.497	3	-8.98	4	-105.826	3	-.898	2	-.189	2	-.405	4
549		5	max	363.747	4	129.061	7	109.585	4	.891	1	.209	1	.409	3
550			min	-402.497	3	-8.98	4	-105.826	3	-.898	2	-.19	2	-.404	4
551	M56	1	max	93.48	1	108.288	1	453.604	2	.666	1	.354	4	.142	1
552			min	-112.486	2	-172.926	2	-364.805	1	-.799	2	-.409	3	-.127	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
553		2	max	93.48	1	108.288	1	453.604	2	.666	1	.34	4	.136	1
554			min	-112.486	2	-172.926	2	-364.805	1	-.799	2	-.39	3	-.117	2
555		3	max	93.48	1	108.288	1	453.604	2	.666	1	.327	4	.13	1
556			min	-112.486	2	-172.926	2	-364.805	1	-.799	2	-.372	3	-.107	2
557		4	max	93.48	1	108.288	1	453.604	2	.666	1	.314	4	.124	1
558			min	-112.486	2	-172.926	2	-364.805	1	-.799	2	-.353	3	-.097	2
559		5	max	93.48	1	108.288	1	453.604	2	.666	1	.3	4	.117	1
560			min	-112.486	2	-172.926	2	-364.805	1	-.799	2	-.335	3	-.087	2
561	M57	1	max	253.083	4	268.211	4	237.782	2	.571	1	.351	4	.261	1
562			min	-314.22	3	-352.247	3	-197.976	1	-.608	2	-.385	3	-.29	2
563		2	max	253.083	4	268.211	4	237.782	2	.571	1	.347	4	.278	1
564			min	-314.22	3	-352.247	3	-197.976	1	-.608	2	-.379	3	-.302	2
565		3	max	253.083	4	268.211	4	237.782	2	.571	1	.343	4	.295	1
566			min	-314.22	3	-352.247	3	-197.976	1	-.608	2	-.372	3	-.314	2
567		4	max	253.083	4	268.211	4	237.782	2	.571	1	.339	4	.312	1
568			min	-314.22	3	-352.247	3	-197.976	1	-.608	2	-.366	3	-.326	2
569		5	max	253.083	4	268.211	4	237.782	2	.571	1	.335	4	.33	1
570			min	-314.22	3	-352.247	3	-197.976	1	-.608	2	-.359	3	-.338	2
571	M58	1	max	196.396	3	381.184	3	199.058	1	.678	2	.533	4	.195	1
572			min	-274.794	4	-443.15	4	-305.761	2	-.542	1	-.481	3	-.259	4
573		2	max	196.396	3	381.184	3	199.058	1	.678	2	.523	4	.205	1
574			min	-274.794	4	-443.15	4	-305.761	2	-.542	1	-.477	3	-.265	2
575		3	max	196.396	3	381.184	3	199.058	1	.678	2	.512	4	.215	1
576			min	-274.794	4	-443.15	4	-305.761	2	-.542	1	-.472	3	-.271	2
577		4	max	196.396	3	381.184	3	199.058	1	.678	2	.501	4	.225	1
578			min	-274.794	4	-443.15	4	-305.761	2	-.542	1	-.468	3	-.278	2
579		5	max	196.396	3	381.184	3	199.058	1	.678	2	.491	4	.235	1
580			min	-274.794	4	-443.15	4	-305.761	2	-.542	1	-.463	3	-.284	2
581	M59	1	max	406.042	3	134.458	5	72.394	4	.847	2	.219	4	.369	4
582			min	-450.738	4	-19.918	2	-72.067	3	-.855	1	-.199	3	-.347	3
583		2	max	406.042	3	134.458	5	72.394	4	.847	2	.223	4	.369	4
584			min	-450.738	4	-19.918	2	-72.067	3	-.855	1	-.203	3	-.351	3
585		3	max	406.042	3	134.458	5	72.394	4	.847	2	.227	4	.369	4
586			min	-450.738	4	-19.918	2	-72.067	3	-.855	1	-.207	3	-.356	3
587		4	max	406.042	3	134.458	5	72.394	4	.847	2	.232	4	.369	4
588			min	-450.738	4	-19.918	2	-72.067	3	-.855	1	-.212	3	-.36	3
589		5	max	406.042	3	134.458	5	72.394	4	.847	2	.236	4	.369	4
590			min	-450.738	4	-19.918	2	-72.067	3	-.855	1	-.216	3	-.365	3
591	M60	1	max	152.962	4	103.035	4	450.205	1	.662	2	.272	2	.183	4
592			min	-168.729	3	-167.225	3	-360.315	2	-.795	1	-.326	1	-.168	3
593		2	max	152.962	4	103.035	4	450.205	1	.662	2	.251	2	.177	4
594			min	-168.729	3	-167.225	3	-360.315	2	-.795	1	-.301	1	-.159	3
595		3	max	152.962	4	103.035	4	450.205	1	.662	2	.23	2	.171	4
596			min	-168.729	3	-167.225	3	-360.315	2	-.795	1	-.275	1	-.149	3
597		4	max	152.962	4	103.035	4	450.205	1	.662	2	.21	2	.165	4
598			min	-168.729	3	-167.225	3	-360.315	2	-.795	1	-.249	1	-.14	3
599		5	max	152.962	4	103.035	4	450.205	1	.662	2	.189	2	.159	4
600			min	-168.729	3	-167.225	3	-360.315	2	-.795	1	-.223	1	-.13	3
601	M61	1	max	178.997	2	344.727	3	191.519	1	.464	4	.382	3	.199	2
602			min	-237.268	1	-429.89	4	-154.957	2	-.5	3	-.417	4	-.229	1
603		2	max	178.997	2	344.727	3	191.519	1	.464	4	.392	3	.192	2
604			min	-237.268	1	-429.89	4	-154.957	2	-.5	3	-.425	4	-.217	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
605		3	max	178.997	2	344.727	3	191.519	1	.464	4	.402	3	.185	2
606			min	-237.268	1	-429.89	4	-154.957	2	-.5	3	-.433	4	-.206	1
607		4	max	178.997	2	344.727	3	191.519	1	.464	4	.412	3	.199	4
608			min	-237.268	1	-429.89	4	-154.957	2	-.5	3	-.441	4	-.213	3
609		5	max	178.997	2	344.727	3	191.519	1	.464	4	.423	3	.224	4
610			min	-237.268	1	-429.89	4	-154.957	2	-.5	3	-.449	4	-.233	3
611	M62	1	max	489.746	1	395.264	2	397.572	4	.113	3	.484	3	.212	2
612			min	-601.563	2	-412.598	1	-443.241	3	-.085	4	-.437	4	-.262	1
613		2	max	489.746	1	395.264	2	397.572	4	.113	3	.469	3	.199	2
614			min	-601.563	2	-412.598	1	-443.241	3	-.085	4	-.424	4	-.248	1
615		3	max	489.746	1	395.264	2	397.572	4	.113	3	.455	3	.186	2
616			min	-601.563	2	-412.598	1	-443.241	3	-.085	4	-.411	4	-.235	1
617		4	max	489.746	1	395.264	2	397.572	4	.113	3	.44	3	.174	2
618			min	-601.563	2	-412.598	1	-443.241	3	-.085	4	-.398	4	-.222	1
619		5	max	489.746	1	395.264	2	397.572	4	.113	3	.426	3	.161	2
620			min	-601.563	2	-412.598	1	-443.241	3	-.085	4	-.385	4	-.208	1
621	M63	1	max	366.211	1	366.003	2	574.276	4	.12	3	.586	3	.257	3
622			min	-458.984	2	-327.671	1	-503.525	3	-.127	4	-.653	4	-.265	4
623		2	max	366.211	1	366.003	2	574.276	4	.12	3	.57	3	.249	3
624			min	-458.984	2	-327.671	1	-503.525	3	-.127	4	-.635	4	-.258	4
625		3	max	366.211	1	366.003	2	574.276	4	.12	3	.553	3	.241	3
626			min	-458.984	2	-327.671	1	-503.525	3	-.127	4	-.616	4	-.251	4
627		4	max	366.211	1	366.003	2	574.276	4	.12	3	.537	3	.233	3
628			min	-458.984	2	-327.671	1	-503.525	3	-.127	4	-.597	4	-.244	4
629		5	max	366.211	1	366.003	2	574.276	4	.12	3	.521	3	.224	3
630			min	-458.984	2	-327.671	1	-503.525	3	-.127	4	-.579	4	-.237	4
631	M64	1	max	339.142	2	457.47	3	291.899	3	.156	4	.294	1	.313	3
632			min	-447.48	1	-475.769	4	-343.895	4	-.128	3	-.244	2	-.362	4
633		2	max	339.142	2	457.47	3	291.899	3	.156	4	.286	1	.298	3
634			min	-447.48	1	-475.769	4	-343.895	4	-.128	3	-.238	2	-.347	4
635		3	max	339.142	2	457.47	3	291.899	3	.156	4	.279	1	.283	3
636			min	-447.48	1	-475.769	4	-343.895	4	-.128	3	-.232	2	-.332	4
637		4	max	339.142	2	457.47	3	291.899	3	.156	4	.271	1	.268	3
638			min	-447.48	1	-475.769	4	-343.895	4	-.128	3	-.226	2	-.316	4
639		5	max	339.142	2	457.47	3	291.899	3	.156	4	.264	1	.253	3
640			min	-447.48	1	-475.769	4	-343.895	4	-.128	3	-.22	2	-.301	4
641	M65	1	max	425.091	4	423.077	1	592.094	2	.162	1	.605	1	.362	1
642			min	-520.549	3	-384.338	2	-519.575	1	-.169	2	-.672	2	-.369	2
643		2	max	425.091	4	423.077	1	592.094	2	.162	1	.588	1	.348	1
644			min	-520.549	3	-384.338	2	-519.575	1	-.169	2	-.653	2	-.356	2
645		3	max	425.091	4	423.077	1	592.094	2	.162	1	.571	1	.334	1
646			min	-520.549	3	-384.338	2	-519.575	1	-.169	2	-.633	2	-.344	2
647		4	max	425.091	4	423.077	1	592.094	2	.162	1	.554	1	.32	1
648			min	-520.549	3	-384.338	2	-519.575	1	-.169	2	-.614	2	-.331	2
649		5	max	425.091	4	423.077	1	592.094	2	.162	1	.538	1	.307	1
650			min	-520.549	3	-384.338	2	-519.575	1	-.169	2	-.595	2	-.319	2
651	M66	1	max	536.549	3	336.872	1	428.7	1	.155	2	.48	2	.289	1
652			min	-646.289	4	-356.876	2	-476.071	2	-.128	1	-.434	1	-.338	2
653		2	max	536.549	3	336.872	1	428.7	1	.155	2	.464	2	.278	1
654			min	-646.289	4	-356.876	2	-476.071	2	-.128	1	-.42	1	-.326	2
655		3	max	536.549	3	336.872	1	428.7	1	.155	2	.449	2	.267	1
656			min	-646.289	4	-356.876	2	-476.071	2	-.128	1	-.406	1	-.315	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
657		4	max	536.549	3	336.872	1	428.7	1	.155	2	.433	2	.256	1
658			min	-646.289	4	-356.876	2	-476.071	2	-.128	1	-.392	1	-.303	2
659		5	max	536.549	3	336.872	1	428.7	1	.155	2	.418	2	.245	1
660			min	-646.289	4	-356.876	2	-476.071	2	-.128	1	-.378	1	-.292	2
661	M67	1	max	310.627	2	485.691	4	442.927	3	.151	4	.392	4	.354	4
662			min	-404.06	1	-447.102	3	-368.786	4	-.158	3	-.461	3	-.361	3
663		2	max	310.627	2	485.691	4	442.927	3	.151	4	.38	4	.338	4
664			min	-404.06	1	-447.102	3	-368.786	4	-.158	3	-.447	3	-.347	3
665		3	max	310.627	2	485.691	4	442.927	3	.151	4	.368	4	.322	4
666			min	-404.06	1	-447.102	3	-368.786	4	-.158	3	-.432	3	-.332	3
667		4	max	310.627	2	485.691	4	442.927	3	.151	4	.356	4	.306	4
668			min	-404.06	1	-447.102	3	-368.786	4	-.158	3	-.418	3	-.318	3
669		5	max	310.627	2	485.691	4	442.927	3	.151	4	.344	4	.291	4
670			min	-404.06	1	-447.102	3	-368.786	4	-.158	3	-.404	3	-.303	3
671	M68	1	max	474.082	3	329.262	1	337.009	2	.011	1	.219	4	.599	4
672			min	-590.301	4	-364.336	2	-352.75	1	-.011	2	-.188	3	-.548	3
673		2	max	470.238	3	330.942	1	339.235	2	.011	1	.195	4	.469	4
674			min	-586.456	4	-362.656	2	-354.976	1	-.011	2	-.175	3	-.412	3
675		3	max	466.393	3	332.622	1	341.461	2	.011	1	.173	4	.34	4
676			min	-582.611	4	-360.977	2	-357.202	1	-.011	2	-.162	3	-.277	3
677		4	max	462.548	3	334.302	1	343.687	2	.011	1	.153	4	.357	2
678			min	-578.766	4	-359.297	2	-359.427	1	-.011	2	-.151	3	-.292	1
679		5	max	458.704	3	335.981	1	345.913	2	.011	1	.135	4	.529	2
680			min	-574.922	4	-357.617	2	-361.653	1	-.011	2	-.141	3	-.462	1
681	M69	1	max	370.864	4	385.653	2	394.64	1	.014	2	.166	2	.675	2
682			min	-486.515	3	-421.942	1	-404.569	2	-.014	1	-.135	1	-.625	1
683		2	max	374.698	4	387.333	2	392.432	1	.014	2	.162	2	.482	2
684			min	-490.349	3	-420.262	1	-402.362	2	-.014	1	-.142	1	-.426	1
685		3	max	378.532	4	389.013	2	390.225	1	.014	2	.159	2	.289	2
686			min	-494.183	3	-418.582	1	-400.154	2	-.014	1	-.149	1	-.228	1
687		4	max	382.367	4	390.693	2	388.017	1	.014	2	.156	2	.37	3
688			min	-498.017	3	-416.903	1	-397.947	2	-.014	1	-.156	1	-.304	4
689		5	max	386.201	4	392.372	2	385.81	1	.014	2	.155	2	.468	3
690			min	-501.851	3	-415.223	1	-395.739	2	-.014	1	-.163	1	-.401	4
691	M70	1	max	329.529	4	111.977	1	846.942	3	.067	1	.164	4	.26	2
692			min	-269.104	3	-834.909	9	-910.79	4	-.082	2	-.152	3	-.267	1
693		2	max	329.529	4	111.977	1	846.942	3	.067	1	.123	4	.283	2
694			min	-269.104	3	-834.909	9	-910.79	4	-.082	2	-.114	3	-.272	1
695		3	max	329.529	4	111.977	1	846.942	3	.067	1	.082	4	.305	2
696			min	-269.104	3	-834.909	9	-910.79	4	-.082	2	-.076	3	-.277	1
697		4	max	329.529	4	111.977	1	846.942	3	.067	1	.041	4	.328	2
698			min	-269.104	3	-834.909	9	-910.79	4	-.082	2	-.038	3	-.282	1
699		5	max	329.529	4	111.977	1	846.942	3	.067	1	0	4	.35	2
700			min	-269.104	3	-834.909	9	-910.79	4	-.082	2	0	1	-.287	1
701	M71	1	max	364.136	3	155.045	1	915.317	3	.081	2	.152	4	.24	2
702			min	-288.635	4	-856.524	10	-842.815	4	-.069	1	-.165	3	-.266	1
703		2	max	364.136	3	155.045	1	915.317	3	.081	2	.114	4	.266	2
704			min	-288.635	4	-856.524	10	-842.815	4	-.069	1	-.124	3	-.273	1
705		3	max	364.136	3	155.045	1	915.317	3	.081	2	.076	4	.293	2
706			min	-288.635	4	-856.524	10	-842.815	4	-.069	1	-.082	3	-.28	1
707		4	max	364.136	3	155.045	1	915.317	3	.081	2	.038	4	.32	2
708			min	-288.635	4	-856.524	10	-842.815	4	-.069	1	-.041	3	-.287	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
709		5	max	364.136	3	155.045	1	915.317	3	.081	2	0	1	.347	2
710			min	-288.635	4	-856.524	10	-842.815	4	-.069	1	0	4	-.294	1
711	M72	1	max	265.228	2	225.008	4	669.243	1	.048	4	.132	2	.225	1
712			min	-203.727	1	-617.243	3	-735.138	2	-.062	3	-.12	1	-.23	2
713		2	max	265.228	2	225.008	4	669.243	1	.048	4	.099	2	.233	1
714			min	-203.727	1	-617.243	3	-735.138	2	-.062	3	-.09	1	-.219	2
715		3	max	265.228	2	225.008	4	669.243	1	.048	4	.066	2	.24	1
716			min	-203.727	1	-617.243	3	-735.138	2	-.062	3	-.06	1	-.209	2
717		4	max	265.228	2	225.008	4	669.243	1	.048	4	.033	2	.248	1
718			min	-203.727	1	-617.243	3	-735.138	2	-.062	3	-.03	1	-.2	4
719		5	max	265.228	2	225.008	4	669.243	1	.048	4	0	7	.274	3
720			min	-203.727	1	-617.243	3	-735.138	2	-.062	3	0	4	-.21	4
721	M73	1	max	296.499	4	196.023	2	755.769	1	.081	3	.121	2	.265	3
722			min	-211.71	3	-658.179	5	-673.084	2	-.068	4	-.136	1	-.291	4
723		2	max	296.499	4	196.023	2	755.769	1	.081	3	.091	2	.283	3
724			min	-211.71	3	-658.179	5	-673.084	2	-.068	4	-.102	1	-.289	4
725		3	max	296.499	4	196.023	2	755.769	1	.081	3	.061	2	.3	3
726			min	-211.71	3	-658.179	5	-673.084	2	-.068	4	-.068	1	-.287	4
727		4	max	296.499	4	196.023	2	755.769	1	.081	3	.03	2	.318	3
728			min	-211.71	3	-658.179	5	-673.084	2	-.068	4	-.034	1	-.284	4
729		5	max	296.499	4	196.023	2	755.769	1	.081	3	0	3	.336	3
730			min	-211.71	3	-658.179	5	-673.084	2	-.068	4	0	4	-.282	4
731	M74	1	max	265.63	1	176.864	2	758.642	2	.067	3	.149	1	.303	4
732			min	-203.323	2	-567.296	1	-828.327	1	-.081	4	-.137	2	-.308	3
733		2	max	265.63	1	176.864	2	758.642	2	.067	3	.112	1	.319	4
734			min	-203.323	2	-567.296	1	-828.327	1	-.081	4	-.102	2	-.306	3
735		3	max	265.63	1	176.864	2	758.642	2	.067	3	.075	1	.334	4
736			min	-203.323	2	-567.296	1	-828.327	1	-.081	4	-.068	2	-.304	3
737		4	max	265.63	1	176.864	2	758.642	2	.067	3	.037	1	.349	4
738			min	-203.323	2	-567.296	1	-828.327	1	-.081	4	-.034	2	-.302	3
739		5	max	265.63	1	176.864	2	758.642	2	.067	3	0	7	.365	4
740			min	-203.323	2	-567.296	1	-828.327	1	-.081	4	0	4	-.3	3
741	M75	1	max	329.668	2	265.169	3	815.25	2	.073	4	.134	1	.179	1
742			min	-253.351	1	-709.48	4	-746.245	1	-.06	3	-.147	2	-.203	2
743		2	max	329.668	2	265.169	3	815.25	2	.073	4	.101	1	.201	4
744			min	-253.351	1	-709.48	4	-746.245	1	-.06	3	-.11	2	-.208	3
745		3	max	329.668	2	265.169	3	815.25	2	.073	4	.067	1	.233	4
746			min	-253.351	1	-709.48	4	-746.245	1	-.06	3	-.073	2	-.22	3
747		4	max	329.668	2	265.169	3	815.25	2	.073	4	.034	1	.265	4
748			min	-253.351	1	-709.48	4	-746.245	1	-.06	3	-.037	2	-.232	3
749		5	max	329.668	2	265.169	3	815.25	2	.073	4	0	4	.297	4
750			min	-253.351	1	-709.48	4	-746.245	1	-.06	3	0	3	-.244	3
751	M76	1	max	1270.386	1	-111.892	4	1311.879	2	.005	1	.267	1	.141	2
752			min	-1257.69	2	-824.491	7	-1667.933	1	-.006	2	-.21	2	-.22	1
753		2	max	1270.386	1	-111.892	4	1311.879	2	.005	1	.2	1	.154	2
754			min	-1257.69	2	-824.491	7	-1667.933	1	-.006	2	-.157	2	-.21	1
755		3	max	1270.386	1	-111.892	4	1311.879	2	.005	1	.133	1	.167	2
756			min	-1257.69	2	-824.491	7	-1667.933	1	-.006	2	-.105	2	-.2	1
757		4	max	1270.386	1	-111.892	4	1311.879	2	.005	1	.067	1	.18	2
758			min	-1257.69	2	-824.491	7	-1667.933	1	-.006	2	-.053	2	-.19	1
759		5	max	1270.386	1	-111.892	4	1311.879	2	.005	1	0	10	.193	2
760			min	-1257.69	2	-824.491	7	-1667.933	1	-.006	2	0	2	-.18	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
761	M77	1	max	889.587	1	-60.758	3	1294.072	1	.006	2	.158	2	.165	2
762			min	-855.774	2	-694.43	8	-988.813	2	-.006	1	-.207	1	-.226	1
763		2	max	889.587	1	-60.758	3	1294.072	1	.006	2	.119	2	.176	2
764			min	-855.774	2	-694.43	8	-988.813	2	-.006	1	-.155	1	-.218	1
765		3	max	889.587	1	-60.758	3	1294.072	1	.006	2	.079	2	.187	2
766			min	-855.774	2	-694.43	8	-988.813	2	-.006	1	-.104	1	-.209	1
767		4	max	889.587	1	-60.758	3	1294.072	1	.006	2	.04	2	.198	2
768			min	-855.774	2	-694.43	8	-988.813	2	-.006	1	-.052	1	-.201	1
769		5	max	889.587	1	-60.758	3	1294.072	1	.006	2	0	2	.208	2
770			min	-855.774	2	-694.43	8	-988.813	2	-.006	1	0	1	-.192	1
771	M78	1	max	1142.136	4	-124.662	2	1028.327	1	.004	4	.213	2	.14	3
772			min	-1124.363	3	-825.194	5	-1332.563	2	-.004	3	-.165	1	-.219	4
773		2	max	1142.136	4	-124.662	2	1028.327	1	.004	4	.16	2	.149	3
774			min	-1124.363	3	-825.194	5	-1332.563	2	-.004	3	-.123	1	-.205	4
775		3	max	1142.136	4	-124.662	2	1028.327	1	.004	4	.107	2	.158	3
776			min	-1124.363	3	-825.194	5	-1332.563	2	-.004	3	-.082	1	-.191	4
777		4	max	1142.136	4	-124.662	2	1028.327	1	.004	4	.053	2	.167	3
778			min	-1124.363	3	-825.194	5	-1332.563	2	-.004	3	-.041	1	-.177	4
779		5	max	1142.136	4	-124.662	2	1028.327	1	.004	4	0	2	.176	3
780			min	-1124.363	3	-825.194	5	-1332.563	2	-.004	3	0	1	-.162	4
781	M79	1	max	620.558	4	-110.365	1	1605.424	4	.006	3	.211	3	.116	3
782			min	-586.651	3	-683.281	6	-1317.473	3	-.006	4	-.257	4	-.178	4
783		2	max	620.558	4	-110.365	1	1605.424	4	.006	3	.158	3	.13	3
784			min	-586.651	3	-683.281	6	-1317.473	3	-.006	4	-.193	4	-.173	4
785		3	max	620.558	4	-110.365	1	1605.424	4	.006	3	.105	3	.144	3
786			min	-586.651	3	-683.281	6	-1317.473	3	-.006	4	-.128	4	-.167	4
787		4	max	620.558	4	-110.365	1	1605.424	4	.006	3	.053	3	.158	3
788			min	-586.651	3	-683.281	6	-1317.473	3	-.006	4	-.064	4	-.161	4
789		5	max	620.558	4	-110.365	1	1605.424	4	.006	3	0	3	.173	3
790			min	-586.651	3	-683.281	6	-1317.473	3	-.006	4	0	4	-.156	4
791	M80	1	max	931.185	3	-156.113	1	1632.984	4	.003	3	.316	3	.109	4
792			min	-918.698	4	-813.481	6	-1972.818	3	-.003	4	-.261	4	-.189	3
793		2	max	931.185	3	-156.113	1	1632.984	4	.003	3	.237	3	.126	4
794			min	-918.698	4	-813.481	6	-1972.818	3	-.003	4	-.196	4	-.183	3
795		3	max	931.185	3	-156.113	1	1632.984	4	.003	3	.158	3	.142	4
796			min	-918.698	4	-813.481	6	-1972.818	3	-.003	4	-.131	4	-.176	3
797		4	max	931.185	3	-156.113	1	1632.984	4	.003	3	.079	3	.159	4
798			min	-918.698	4	-813.481	6	-1972.818	3	-.003	4	-.065	4	-.169	3
799		5	max	931.185	3	-156.113	1	1632.984	4	.003	3	0	3	.176	4
800			min	-918.698	4	-813.481	6	-1972.818	3	-.003	4	0	4	-.163	3
801	M81	1	max	892.167	3	-92.198	2	1217.134	2	.008	4	.152	1	.171	4
802			min	-856.426	4	-693.937	5	-950.664	1	-.008	3	-.195	2	-.231	3
803		2	max	892.167	3	-92.198	2	1217.134	2	.008	4	.114	1	.178	4
804			min	-856.426	4	-693.937	5	-950.664	1	-.008	3	-.146	2	-.219	3
805		3	max	892.167	3	-92.198	2	1217.134	2	.008	4	.076	1	.186	4
806			min	-856.426	4	-693.937	5	-950.664	1	-.008	3	-.097	2	-.207	3
807		4	max	892.167	3	-92.198	2	1217.134	2	.008	4	.038	1	.193	4
808			min	-856.426	4	-693.937	5	-950.664	1	-.008	3	-.049	2	-.194	3
809		5	max	892.167	3	-92.198	2	1217.134	2	.008	4	0	1	.2	4
810			min	-856.426	4	-693.937	5	-950.664	1	-.008	3	0	3	-.182	3
811	M82	1	max	54.199	8	710.17	2	1199.673	2	.019	2	.153	1	.124	2
812			min	-1.465	3	-531.997	1	-870.605	1	-.036	1	-.209	2	-.094	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
813		2	max	54.199	8	710.17	2	1199.673	2	.019	2	.116	1	.093	2
814			min	-1.465	3	-531.997	1	-870.605	1	-.036	1	-.157	2	-.07	1
815		3	max	54.199	8	710.17	2	1199.673	2	.019	2	.078	1	.062	2
816			min	-1.465	3	-531.997	1	-870.605	1	-.036	1	-.105	2	-.047	1
817		4	max	54.199	8	710.17	2	1199.673	2	.019	2	.04	1	.031	2
818			min	-1.465	3	-531.997	1	-870.605	1	-.036	1	-.052	2	-.024	1
819		5	max	54.199	8	710.17	2	1199.673	2	.019	2	.02	3	.01	4
820			min	-1.465	3	-531.997	1	-870.605	1	-.036	1	-.018	4	-.011	3
821	M83	1	max	48.706	7	593.554	3	1345.757	4	.036	1	.167	1	.101	1
822			min	-4.028	4	-800.443	4	-975.386	3	-.019	2	-.225	2	-.133	2
823		2	max	48.706	7	593.554	3	1345.757	4	.036	1	.125	1	.076	1
824			min	-4.028	4	-800.443	4	-975.386	3	-.019	2	-.168	2	-.1	2
825		3	max	48.706	7	593.554	3	1345.757	4	.036	1	.084	1	.051	1
826			min	-4.028	4	-800.443	4	-975.386	3	-.019	2	-.111	2	-.066	2
827		4	max	48.706	7	593.554	3	1345.757	4	.036	1	.042	1	.026	1
828			min	-4.028	4	-800.443	4	-975.386	3	-.019	2	-.054	2	-.032	2
829		5	max	48.706	7	593.554	3	1345.757	4	.036	1	.026	4	.014	4
830			min	-4.028	4	-800.443	4	-975.386	3	-.019	2	-.021	3	-.012	3
831	M84	1	max	172.302	5	1039.6	4	1906.034	1	.25	4	.446	2	.22	4
832			min	35.583	2	-1019.533	3	-2598.343	2	-.247	3	-.205	1	-.218	3
833		2	max	172.302	5	1039.6	4	1906.034	1	.25	4	.345	6	.175	4
834			min	35.583	2	-1019.533	3	-2598.343	2	-.247	3	-.122	1	-.173	3
835		3	max	172.302	5	1039.6	4	1906.034	1	.25	4	.284	6	.13	4
836			min	35.583	2	-1019.533	3	-2598.343	2	-.247	3	-.039	1	-.129	3
837		4	max	172.302	5	1039.6	4	1906.034	1	.25	4	.222	6	.084	4
838			min	35.583	2	-1019.533	3	-2598.343	2	-.247	3	.045	1	-.084	3
839		5	max	172.302	5	1039.6	4	1906.034	1	.25	4	.194	5	.039	4
840			min	35.583	2	-1019.533	3	-2598.343	2	-.247	3	-.007	2	-.04	3
841	M85	1	max	576.996	1	-11.709	3	992.317	1	.002	2	.03	3	.055	5
842			min	-774.536	2	-85.865	8	-1355.554	2	-.095	5	-.052	4	0	2
843		2	max	576.996	1	-11.734	3	992.317	1	.002	2	.071	3	.058	5
844			min	-774.536	2	-85.953	8	-1355.554	2	-.095	5	-.109	4	0	3
845		3	max	576.996	1	88.477	7	992.317	1	.099	5	.049	1	.065	5
846			min	-774.536	2	-86.04	8	-1355.554	2	-.093	8	-.165	4	-.002	2
847		4	max	531.99	1	88.39	7	1242.73	2	.099	5	.059	4	.061	5
848			min	-710.175	2	12.51	4	-913.546	1	-.006	2	-.096	3	-.002	2
849		5	max	531.99	1	88.302	7	1242.73	2	.099	5	.033	4	.057	5
850			min	-710.175	2	12.485	4	-913.546	1	-.006	2	-.055	3	-.003	2
851	M86	1	max	750.431	4	843.541	9	621.961	3	.175	1	.204	4	.564	2
852			min	-665.911	3	-103.193	1	-649.767	4	-.126	2	-.207	3	-.28	1
853		2	max	747.945	4	842.392	9	617.61	3	.175	1	.144	4	.517	2
854			min	-663.425	3	-104.341	1	-645.416	4	-.126	2	-.149	3	-.27	1
855		3	max	745.458	4	841.244	9	613.26	3	.175	1	.083	4	.469	2
856			min	-660.939	3	-105.49	1	-641.066	4	-.126	2	-.091	3	-.26	1
857		4	max	742.972	4	840.095	9	608.909	3	.175	1	.023	4	.421	2
858			min	-658.453	3	-106.638	1	-636.715	4	-.126	2	-.034	3	-.25	1
859		5	max	740.486	4	838.947	9	604.559	3	.175	1	.023	3	.374	2
860			min	-655.966	3	-107.787	1	-632.365	4	-.126	2	-.036	4	-.24	1
861	M87	1	max	700.18	2	717.605	4	562.057	2	.108	1	.177	1	.647	4
862			min	-599.434	1	-256.671	3	-535.508	1	-.176	2	-.17	2	-.339	3
863		2	max	697.668	2	716.456	4	560.592	2	.108	1	.127	1	.58	4
864			min	-596.922	1	-257.82	3	-534.043	1	-.176	2	-.117	2	-.315	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
865		3	max	695.157	2	715.308	4	559.127	2	.108	1	.077	1	.513	4
866			min	-594.41	1	-258.968	3	-532.578	1	-.176	2	-.065	2	-.29	3
867		4	max	692.645	2	714.159	4	557.662	2	.108	1	.028	3	.446	4
868			min	-591.898	1	-260.116	3	-531.113	1	-.176	2	-.012	2	-.266	3
869		5	max	690.133	2	713.011	4	556.197	2	.108	1	.04	2	.379	4
870			min	-589.387	1	-261.265	3	-529.648	1	-.176	2	-.023	1	-.242	3
871	M88	1	max	1549.206	1	705.778	8	417.31	2	.16	2	.347	1	.333	6
872			min	-1258.979	2	65.29	3	-345.401	1	-.207	1	-.335	2	.037	1
873		2	max	1548.339	1	704.892	8	415.284	2	.16	2	.333	1	.307	6
874			min	-1258.113	2	64.933	3	-343.375	1	-.207	1	-.319	2	.028	1
875		3	max	1547.473	1	704.005	8	413.259	2	.16	2	.32	1	.281	6
876			min	-1257.246	2	64.575	3	-341.349	1	-.207	1	-.303	2	.019	1
877		4	max	1546.606	1	703.119	8	411.233	2	.16	2	.307	1	.255	6
878			min	-1256.38	2	64.217	3	-339.324	1	-.207	1	-.287	2	.01	1
879		5	max	1545.74	1	702.232	8	409.208	2	.16	2	.294	1	.229	6
880			min	-1255.513	2	63.86	3	-337.298	1	-.207	1	-.271	2	0	1
881	M89	1	max	1318.805	1	702.234	8	827.671	2	.209	2	.294	1	.232	8
882			min	-1016.734	2	63.606	3	-895.896	1	-.192	1	-.271	2	.021	3
883		2	max	1318.651	1	700.346	8	822.573	2	.209	2	.22	1	.173	8
884			min	-1016.58	2	62.845	3	-890.798	1	-.192	1	-.203	2	.015	3
885		3	max	1318.497	1	698.458	8	817.474	2	.209	2	.146	1	.115	8
886			min	-1016.426	2	62.083	3	-885.699	1	-.192	1	-.135	2	.01	3
887		4	max	1318.343	1	696.571	8	812.376	2	.209	2	.073	1	.058	8
888			min	-1016.272	2	61.321	3	-880.601	1	-.192	1	-.067	2	.005	3
889		5	max	1318.189	1	694.683	8	807.277	2	.209	2	0	11	0	11
890			min	-1016.118	2	60.56	3	-875.502	1	-.192	1	0	1	0	1
891	M90	1	max	2195.48	3	825.177	6	288.935	2	.174	3	.326	4	.399	8
892			min	-1880.688	4	163.268	1	-371.43	1	-.111	4	-.333	3	.026	3
893		2	max	2194.33	3	824.291	6	287.4	2	.174	3	.317	4	.367	8
894			min	-1879.538	4	162.911	1	-369.895	1	-.111	4	-.328	3	.019	3
895		3	max	2193.18	3	823.404	6	285.866	2	.174	3	.308	4	.335	8
896			min	-1878.388	4	162.553	1	-368.361	1	-.111	4	-.323	3	.011	3
897		4	max	2192.031	3	822.518	6	284.331	2	.174	3	.299	4	.304	8
898			min	-1877.238	4	162.195	1	-366.826	1	-.111	4	-.318	3	.004	3
899		5	max	2190.881	3	821.631	6	282.796	2	.174	3	.29	4	.272	8
900			min	-1876.088	4	161.838	1	-365.291	1	-.111	4	-.313	3	-.003	3
901	M91	1	max	1996.295	3	821.532	6	945.714	3	.163	3	.29	4	.273	6
902			min	-1660.607	4	161.901	1	-876.244	4	-.176	4	-.313	3	.053	1
903		2	max	1993.999	3	819.633	6	942	3	.163	3	.217	4	.204	6
904			min	-1658.312	4	161.135	1	-872.53	4	-.176	4	-.234	3	.04	1
905		3	max	1991.704	3	817.734	6	938.286	3	.163	3	.144	4	.136	6
906			min	-1656.016	4	160.369	1	-868.816	4	-.176	4	-.156	3	.027	1
907		4	max	1989.409	3	815.835	6	934.573	3	.163	3	.072	4	.068	6
908			min	-1653.721	4	159.603	1	-865.102	4	-.176	4	-.078	3	.013	1
909		5	max	1987.113	3	813.937	6	930.859	3	.163	3	0	11	0	11
910			min	-1651.426	4	158.837	1	-861.389	4	-.176	4	0	1	0	1
911	M92	1	max	1817.04	4	96.563	6	15.452	4	0	7	-.013	3	.111	6
912			min	-2256.796	3	22.087	1	-25.141	3	0	4	-.062	8	-.015	1
913		2	max	1807.666	4	72.106	6	8.948	1	0	7	.008	1	.042	2
914			min	-2247.422	3	13.193	1	-18.403	2	0	4	-.013	2	-.02	1
915		3	max	1798.292	4	30.486	6	7.172	3	0	7	.024	5	.012	4
916			min	-2238.047	3	-3.329	1	-16.862	4	0	4	0	2	-.027	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
917		4	max	1788.918	4	4.129	2	23.329	3	0	7	.02	3	-.008	4
918			min	-2228.673	3	-28.103	5	-33.019	4	0	4	-.009	4	-.028	7
919		5	max	1779.543	4	-8.996	2	39.486	3	0	7	.029	3	.024	3
920			min	-2219.299	3	-62.08	5	-49.176	4	0	4	-.051	4	-.027	4
921	M93	1	max	1227.675	2	34.736	2	99.533	8	0	9	-.009	3	.019	3
922			min	-1637.318	1	-44.5	1	23.418	3	0	5	-.065	6	-.115	8
923		2	max	1227.62	2	13.145	2	74.886	8	0	9	.01	3	.03	3
924			min	-1637.263	1	-22.909	1	14.439	3	0	5	-.015	4	-.053	4
925		3	max	1227.566	2	5.647	3	32.555	8	0	9	.026	6	.031	3
926			min	-1637.209	1	-15.181	4	-2.4	3	0	5	0	4	-.015	4
927		4	max	1227.511	2	20.273	1	1.839	4	0	9	.016	5	.03	5
928			min	-1637.154	1	-30.036	2	-32.226	7	0	5	-.001	2	.004	9
929		5	max	1227.457	2	41.863	1	-12.452	4	0	9	.024	1	.017	2
930			min	-1637.099	1	-51.627	2	-68.827	7	0	5	-.051	2	-.018	1
931	M94	1	max	966.772	4	838.982	9	111.445	4	.295	1	.023	3	.27	9
932			min	-889.876	3	-107.649	1	-70.33	3	-.36	2	-.036	4	-.035	1
933		2	max	965.674	4	837.995	9	111.701	4	.295	1	.017	3	.202	9
934			min	-888.778	3	-108.636	1	-70.586	3	-.36	2	-.027	4	-.027	1
935		3	max	964.576	4	837.007	9	111.957	4	.295	1	.011	3	.135	9
936			min	-887.68	3	-109.623	1	-70.842	3	-.36	2	-.018	4	-.018	1
937		4	max	963.478	4	836.02	9	112.214	4	.295	1	.006	3	.067	9
938			min	-886.581	3	-110.61	1	-71.098	3	-.36	2	-.009	4	-.009	1
939		5	max	962.38	4	835.033	9	112.47	4	.295	1	0	11	0	11
940			min	-885.483	3	-111.598	1	-71.355	3	-.36	2	0	1	0	1
941	M95	1	max	876.387	2	712.312	4	71.604	1	.306	4	.04	2	.228	4
942			min	-790.194	1	-261.707	3	-125.131	2	-.251	3	-.023	1	-.085	3
943		2	max	875.023	2	711.33	4	71.192	1	.306	4	.03	2	.171	4
944			min	-788.83	1	-262.689	3	-124.72	2	-.251	3	-.017	1	-.063	3
945		3	max	873.659	2	710.349	4	70.781	1	.306	4	.02	2	.114	4
946			min	-787.466	1	-263.67	3	-124.308	2	-.251	3	-.011	1	-.042	3
947		4	max	872.295	2	709.367	4	70.369	1	.306	4	.01	2	.057	4
948			min	-786.103	1	-264.652	3	-123.897	2	-.251	3	-.006	1	-.021	3
949		5	max	870.931	2	708.386	4	69.958	1	.306	4	0	11	0	11
950			min	-784.739	1	-265.633	3	-123.485	2	-.251	3	0	1	0	1
951	M96	1	max	150.795	1	-64.804	3	1578.293	1	-.012	1	.335	2	.134	2
952			min	-271.906	2	-705.389	8	-1300.204	2	-.329	6	-.347	1	-.21	1
953		2	max	1012.774	1	-114.023	3	185.564	1	-.066	2	.302	1	.431	2
954			min	-938.446	2	-787.26	8	-267.446	2	-.421	5	-.204	2	-.2	1
955		3	max	1024.228	1	-122.899	3	192.167	1	-.066	2	.424	1	.873	6
956			min	-949.9	2	-806.338	8	-274.049	2	-.421	5	-.379	2	-.029	1
957		4	max	1035.682	1	-131.775	3	198.771	1	-.066	2	.55	1	1.378	6
958			min	-961.354	2	-825.415	8	-280.652	2	-.421	5	-.558	2	.147	1
959		5	max	1047.136	1	-140.651	3	205.374	1	-.066	2	.681	1	1.911	8
960			min	-972.808	2	-844.493	8	-287.255	2	-.421	5	-.741	2	.243	3
961	M97	1	max	1041.855	3	956.179	6	455.299	4	.486	7	1.24	3	2.23	8
962			min	-989.507	4	235.771	1	-368.733	3	.028	4	-1.298	4	.192	3
963		2	max	1030.384	3	937.101	6	435.46	4	.486	7	1.008	3	1.622	8
964			min	-978.036	4	226.895	1	-348.894	3	.028	4	-1.011	4	.04	3
965		3	max	1018.913	3	918.023	6	415.621	4	.486	7	.79	3	1.026	8
966			min	-966.565	4	218.02	1	-329.055	3	.028	4	-.737	4	-.106	3
967		4	max	1007.442	3	898.945	6	395.783	4	.486	7	.584	3	.521	4
968			min	-955.094	4	209.144	1	-309.216	3	.028	4	-.475	4	-.247	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
969		5	max	235.451	2	824.368	6	1895.573	4	.391	8	.326	4	.078	4
970			min	-352.516	1	162.776	1	-2193.992	3	.005	3	-.333	3	-.175	3
971	M98	1	max	67.738	7	1637.258	1	48.512	2	.03	1	.007	1	.282	1
972			min	12.788	4	-1227.548	2	-37.91	1	-.048	2	-.009	2	-.19	2
973		2	max	67.738	7	1637.258	1	48.512	2	.03	1	.005	1	.21	1
974			min	12.788	4	-1227.548	2	-37.91	1	-.048	2	-.007	2	-.137	2
975		3	max	67.738	7	1637.258	1	48.512	2	.03	1	.004	1	.139	1
976			min	12.788	4	-1227.548	2	-37.91	1	-.048	2	-.004	2	-.083	2
977		4	max	67.738	7	1637.258	1	48.512	2	.03	1	.002	1	.067	1
978			min	12.788	4	-1227.548	2	-37.91	1	-.048	2	-.002	2	-.03	2
979		5	max	67.738	7	1637.258	1	48.512	2	.03	1	0	1	.027	6
980			min	12.788	4	-1227.548	2	-37.91	1	-.048	2	0	2	-.004	1
981	M99	1	max	61.35	5	1082.293	3	1937.918	3	.055	4	.259	4	.187	3
982			min	8.776	2	-848.242	4	-1565.234	4	-.037	3	-.336	3	-.14	4
983		2	max	61.35	5	1082.293	3	1937.918	3	.055	4	.191	4	.14	3
984			min	8.776	2	-848.242	4	-1565.234	4	-.037	3	-.251	3	-.103	4
985		3	max	61.35	5	1082.293	3	1937.918	3	.055	4	.122	4	.093	3
986			min	8.776	2	-848.242	4	-1565.234	4	-.037	3	-.167	3	-.066	4
987		4	max	61.35	5	1082.293	3	1937.918	3	.055	4	.054	4	.045	3
988			min	8.776	2	-848.242	4	-1565.234	4	-.037	3	-.082	3	-.029	4
989		5	max	61.35	5	1082.293	3	1937.918	3	.055	4	.007	2	.012	1
990			min	8.776	2	-848.242	4	-1565.234	4	-.037	3	-.02	1	-.004	2
991	M100	1	max	193.695	8	1903.85	3	1933.233	3	.18	2	.217	4	.349	5
992			min	59.464	3	-1306.798	4	-1551.502	4	-.182	1	-.36	3	-.098	4
993		2	max	193.695	8	1903.85	3	1933.233	3	.18	2	.149	4	.303	5
994			min	59.464	3	-1306.798	4	-1551.502	4	-.182	1	-.276	3	-.044	2
995		3	max	193.695	8	1903.85	3	1933.233	3	.18	2	.081	4	.257	5
996			min	59.464	3	-1306.798	4	-1551.502	4	-.182	1	-.191	3	-.001	2
997		4	max	193.695	8	1903.85	3	1933.233	3	.18	2	.014	4	.212	5
998			min	59.464	3	-1306.798	4	-1551.502	4	-.182	1	-.127	7	.041	2
999		5	max	193.695	8	1903.85	3	1933.233	3	.18	2	.002	1	.184	8
1000			min	59.464	3	-1306.798	4	-1551.502	4	-.182	1	-.105	6	.004	3
1001	M101	1	max	893.85	4	-22.069	1	1583.354	4	0	1	.021	1	.06	6
1002			min	-1099.859	3	-96.687	6	-1969.353	3	-.104	6	-.043	2	0	1
1003		2	max	893.85	4	-22.119	1	1583.354	4	0	1	.05	4	.064	6
1004			min	-1099.859	3	-96.8	6	-1969.353	3	-.104	6	-.089	3	0	1
1005		3	max	893.85	4	99.833	8	1583.354	4	.11	8	.116	4	.072	8
1006			min	-1099.859	3	-96.912	6	-1969.353	3	-.104	6	-.171	3	.016	3
1007		4	max	580.926	2	99.721	8	1442.1	1	.11	8	.057	2	.067	8
1008			min	-776.635	1	23.55	3	-1082.091	2	-.006	3	-.096	1	-.003	3
1009		5	max	580.926	2	99.608	8	1442.1	1	.11	8	.02	3	.063	8
1010			min	-776.635	1	23.5	3	-1082.091	2	-.006	3	-.043	4	-.004	3
1011	M102	1	max	615.022	2	624.78	3	482.3	1	.187	2	.159	2	.574	3
1012			min	-528.39	1	-216.841	4	-510.999	2	-.139	1	-.162	1	-.289	4
1013		2	max	612.532	2	623.635	3	480.862	1	.187	2	.112	2	.516	3
1014			min	-525.899	1	-217.985	4	-509.561	2	-.139	1	-.117	1	-.269	4
1015		3	max	610.041	2	622.491	3	479.424	1	.187	2	.065	3	.457	3
1016			min	-523.409	1	-219.13	4	-508.123	2	-.139	1	-.073	4	-.248	4
1017		4	max	607.551	2	621.346	3	477.986	1	.187	2	.027	3	.399	3
1018			min	-520.918	1	-220.274	4	-506.685	2	-.139	1	-.038	4	-.228	4
1019		5	max	605.06	2	620.202	3	476.548	1	.187	2	.017	1	.341	3
1020			min	-518.428	1	-221.419	4	-505.247	2	-.139	1	-.03	2	-.207	4

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
1021	M103	1	max	785.483	3	865.252	10	632.872	3	.104	2	.196	4	.618	2
1022			min	-683.314	4	-145.739	1	-605.954	4	-.175	10	-.189	3	-.309	1
1023		2	max	782.976	3	864.1	10	628.528	3	.104	2	.139	4	.561	2
1024			min	-680.806	4	-146.891	1	-601.611	4	-.175	10	-.129	3	-.295	1
1025		3	max	780.468	3	862.947	10	624.185	3	.104	2	.083	4	.504	2
1026			min	-678.299	4	-148.044	1	-597.268	4	-.175	10	-.071	3	-.282	1
1027		4	max	777.96	3	861.795	10	619.842	3	.104	2	.027	4	.448	2
1028			min	-675.791	4	-149.196	1	-592.924	4	-.175	10	-.012	3	-.268	1
1029		5	max	775.453	3	860.642	10	615.498	3	.104	2	.046	3	.391	2
1030			min	-673.283	4	-150.348	1	-588.581	4	-.175	10	-.029	4	-.254	1
1031	M104	1	max	1736.637	4	694.946	6	369.422	1	.117	3	.185	4	.338	7
1032			min	-1461.977	3	117.738	1	-297.227	2	-.163	4	-.181	3	.014	4
1033		2	max	1735.487	4	694.059	6	367.888	1	.117	3	.188	4	.311	7
1034			min	-1460.827	3	117.38	1	-295.692	2	-.163	4	-.18	3	.008	4
1035		3	max	1734.337	4	693.173	6	366.353	1	.117	3	.19	4	.284	7
1036			min	-1459.677	3	117.023	1	-294.158	2	-.163	4	-.179	3	.002	4
1037		4	max	1733.187	4	692.286	6	364.818	1	.117	3	.192	4	.258	7
1038			min	-1458.528	3	116.665	1	-292.623	2	-.163	4	-.178	3	-.004	4
1039		5	max	1732.037	4	691.4	6	363.284	1	.117	3	.194	4	.231	7
1040			min	-1457.378	3	116.307	1	-291.088	2	-.163	4	-.177	3	-.01	4
1041	M105	1	max	1634.244	4	691.423	6	541.253	3	.172	3	.194	4	.228	6
1042			min	-1348.402	3	116.26	1	-592.94	4	-.156	4	-.177	3	.038	1
1043		2	max	1631.961	4	689.535	6	537.561	3	.172	3	.145	4	.171	6
1044			min	-1346.12	3	115.499	1	-589.249	4	-.156	4	-.132	3	.028	1
1045		3	max	1629.678	4	687.647	6	533.87	3	.172	3	.096	4	.114	6
1046			min	-1343.837	3	114.737	1	-585.557	4	-.156	4	-.088	3	.019	1
1047		4	max	1627.396	4	685.76	6	530.178	3	.172	3	.048	4	.057	6
1048			min	-1341.554	3	113.976	1	-581.865	4	-.156	4	-.044	3	.009	1
1049		5	max	1625.113	4	683.872	6	526.486	3	.172	3	0	11	0	11
1050			min	-1339.272	3	113.214	1	-578.173	4	-.156	4	0	1	0	1
1051	M106	1	max	2042.661	1	835.987	7	557.1	1	.201	1	.498	2	.393	7
1052			min	-1714.162	2	116.562	4	-652.599	2	-.138	2	-.512	1	.055	4
1053		2	max	2041.794	1	835.101	7	555.074	1	.201	1	.473	2	.362	6
1054			min	-1713.296	2	116.204	4	-650.573	2	-.138	2	-.491	1	.05	1
1055		3	max	2040.928	1	834.214	7	553.049	1	.201	1	.448	2	.331	6
1056			min	-1712.429	2	115.847	4	-648.548	2	-.138	2	-.469	1	.039	1
1057		4	max	2040.061	1	833.328	7	551.023	1	.201	1	.423	2	.3	6
1058			min	-1711.563	2	115.489	4	-646.522	2	-.138	2	-.448	1	.029	1
1059		5	max	2039.195	1	832.441	7	548.997	1	.201	1	.397	2	.269	6
1060			min	-1710.696	2	115.131	4	-644.496	2	-.138	2	-.426	1	.018	1
1061	M107	1	max	1703.734	1	832.363	7	1288.399	1	.18	1	.397	2	.276	7
1062			min	-1351.612	2	114.968	4	-1202.102	2	-.194	2	-.426	1	.038	4
1063		2	max	1703.58	1	830.464	7	1283.271	1	.18	1	.297	2	.207	7
1064			min	-1351.458	2	114.202	4	-1196.974	2	-.194	2	-.319	1	.028	4
1065		3	max	1703.426	1	828.565	7	1278.143	1	.18	1	.198	2	.138	7
1066			min	-1351.304	2	113.436	4	-1191.847	2	-.194	2	-.212	1	.019	4
1067		4	max	1703.272	1	826.666	7	1273.015	1	.18	1	.099	2	.069	7
1068			min	-1351.15	2	112.67	4	-1186.719	2	-.194	2	-.106	1	.009	4
1069		5	max	1703.118	1	824.768	7	1267.887	1	.18	1	0	11	0	11
1070			min	-1350.997	2	111.904	4	-1181.591	2	-.194	2	0	1	0	1
1071	M108	1	max	1712.961	2	95.861	7	35.407	2	0	1	-.01	4	.109	7
1072			min	-2165.584	1	24.762	4	-45.117	1	0	2	-.063	6	-.011	4

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
1073		2	max	1712.915	2	71.403	7	13.812	2	0	1	.008	4	.046	3
1074			min	-2165.537	1	15.867	4	-23.521	1	0	2	-.013	3	-.024	4
1075		3	max	1712.869	2	29.784	7	3.858	4	0	1	.024	6	.012	3
1076			min	-2165.491	1	-.655	4	-13.952	7	0	2	0	3	-.027	4
1077		4	max	1712.823	2	1.436	3	19.67	1	0	1	.016	5	-.002	2
1078			min	-2165.445	1	-27.496	8	-29.38	2	0	2	-.004	2	-.03	5
1079		5	max	1712.776	2	-11.69	3	41.266	1	0	1	.031	1	.015	10
1080			min	-2165.399	1	-61.473	8	-50.976	2	0	2	-.053	2	-.013	2
1081	M109	1	max	1389.385	3	16.327	1	100.04	6	0	3	-.011	4	.023	1
1082			min	-1782.842	4	-25.842	2	21.636	1	0	8	-.065	7	-.117	6
1083		2	max	1380.009	3	10.882	1	75.392	6	0	3	.009	1	.026	1
1084			min	-1773.466	4	-20.397	2	12.657	1	0	8	-.014	2	-.049	2
1085		3	max	1370.633	3	7.816	4	33.062	6	0	3	.026	5	.028	4
1086			min	-1764.09	4	-17.575	3	-4.182	1	0	8	0	2	-.013	3
1087		4	max	1361.256	3	23.962	4	3.595	2	0	3	.018	4	.028	8
1088			min	-1754.713	4	-33.721	3	-32.752	5	0	8	-.006	3	.009	1
1089		5	max	1351.88	3	40.108	4	-10.697	2	0	3	.022	4	.029	3
1090			min	-1745.337	4	-49.867	3	-69.352	5	0	8	-.049	3	-.031	4
1091	M110	1	max	781.497	2	618.872	3	95.136	2	.216	4	.017	1	.199	3
1092			min	-703.037	1	-222.599	4	-53.621	1	-.281	3	-.03	2	-.072	4
1093		2	max	780.12	2	617.885	3	94.718	2	.216	4	.013	1	.149	3
1094			min	-701.66	1	-223.586	4	-53.204	1	-.281	3	-.023	2	-.054	4
1095		3	max	778.743	2	616.898	3	94.301	2	.216	4	.008	1	.099	3
1096			min	-700.283	1	-224.573	4	-52.786	1	-.281	3	-.015	2	-.036	4
1097		4	max	777.365	2	615.91	3	93.883	2	.216	4	.004	1	.05	3
1098			min	-698.905	1	-225.56	4	-52.369	1	-.281	3	-.008	2	-.018	4
1099		5	max	775.988	2	614.923	3	93.466	2	.216	4	0	11	0	11
1100			min	-697.528	1	-226.548	4	-51.951	1	-.281	3	0	1	0	1
1101	M111	1	max	979.158	3	860.732	10	88.516	4	.356	2	.046	3	.275	10
1102			min	-890.411	4	-149.034	1	-143.324	3	-.302	1	-.029	4	-.048	1
1103		2	max	978.061	3	859.75	10	88.774	4	.356	2	.035	3	.206	10
1104			min	-889.313	4	-150.016	1	-143.582	3	-.302	1	-.021	4	-.036	1
1105		3	max	976.963	3	858.768	10	89.032	4	.356	2	.023	3	.137	10
1106			min	-888.216	4	-150.997	1	-143.84	3	-.302	1	-.014	4	-.024	1
1107		4	max	975.865	3	857.787	10	89.289	4	.356	2	.012	3	.069	10
1108			min	-887.118	4	-151.979	1	-144.097	3	-.302	1	-.007	4	-.012	1
1109		5	max	974.768	3	856.805	10	89.547	4	.356	2	0	11	0	11
1110			min	-886.02	4	-152.96	1	-144.355	3	-.302	1	0	1	0	1
1111	M112	1	max	259.869	2	-117.274	1	1716.892	4	.006	4	.181	3	.088	3
1112			min	-362.247	1	-694.37	6	-1454.998	3	-.332	7	-.185	4	-.164	4
1113		2	max	649.957	4	-168.736	1	243.61	4	-.056	3	.527	4	.449	3
1114			min	-580.835	3	-775.78	6	-326.697	3	-.421	8	-.429	3	-.217	4
1115		3	max	661.414	4	-177.607	1	263.453	4	-.056	3	.69	4	.883	7
1116			min	-592.292	3	-794.849	6	-346.541	3	-.421	8	-.646	3	-.091	4
1117		4	max	672.87	4	-186.479	1	283.297	4	-.056	3	.867	4	1.398	7
1118			min	-603.748	3	-813.917	6	-366.385	3	-.421	8	-.876	3	.04	4
1119		5	max	684.327	4	-195.35	1	303.141	4	-.056	3	1.056	4	1.926	7
1120			min	-615.205	3	-832.985	6	-386.228	3	-.421	8	-1.119	3	.177	4
1121	M113	1	max	1453.425	1	967.865	7	347.725	2	.489	5	.844	1	2.208	7
1122			min	-1400.715	2	185.994	4	-262.379	1	.018	2	-.901	2	.33	4
1123		2	max	1441.956	1	948.777	7	341.104	2	.489	5	.677	1	1.597	6
1124			min	-1389.246	2	177.114	4	-255.758	1	.018	2	-.679	2	.176	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
1125		3	max	1430.488	1	929.69	7	334.482	2	.489	5	.514	1	1.011	6
1126			min	-1377.778	2	168.234	4	-249.137	1	.018	2	-.461	2	-.022	1
1127		4	max	1419.02	1	910.603	7	327.861	2	.489	5	.355	1	.486	2
1128			min	-1366.31	2	159.353	4	-242.516	1	.018	2	-.247	2	-.214	1
1129		5	max	292.631	1	835.348	7	1781.092	2	.386	6	.498	2	.109	2
1130			min	-457.68	2	116.068	4	-2092.632	1	.036	1	-.512	1	-.207	1
1131	M114	1	max	69.275	5	843.793	4	1195.034	3	.038	4	.272	4	.15	4
1132			min	10.986	2	-634.19	3	-1528.325	4	-.055	3	-.197	3	-.104	3
1133		2	max	69.275	5	843.793	4	1195.034	3	.038	4	.205	4	.113	4
1134			min	10.986	2	-634.19	3	-1528.325	4	-.055	3	-.144	3	-.076	3
1135		3	max	69.275	5	843.793	4	1195.034	3	.038	4	.139	4	.076	4
1136			min	10.986	2	-634.19	3	-1528.325	4	-.055	3	-.092	3	-.048	3
1137		4	max	69.275	5	843.793	4	1195.034	3	.038	4	.072	4	.04	4
1138			min	10.986	2	-634.19	3	-1528.325	4	-.055	3	-.04	3	-.021	3
1139		5	max	69.275	5	843.793	4	1195.034	3	.038	4	.024	5	.014	5
1140			min	10.986	2	-634.19	3	-1528.325	4	-.055	3	-.005	2	-.003	2
1141	M115	1	max	61.035	8	2165.501	1	37.161	1	.047	2	.008	2	.363	1
1142			min	11.49	3	-1712.915	2	-47.073	2	-.029	1	-.007	1	-.271	2
1143		2	max	61.035	8	2165.501	1	37.161	1	.047	2	.006	2	.269	1
1144			min	11.49	3	-1712.915	2	-47.073	2	-.029	1	-.005	1	-.196	2
1145		3	max	61.035	8	2165.501	1	37.161	1	.047	2	.004	2	.174	1
1146			min	11.49	3	-1712.915	2	-47.073	2	-.029	1	-.004	1	-.122	2
1147		4	max	61.035	8	2165.501	1	37.161	1	.047	2	.002	2	.08	1
1148			min	11.49	3	-1712.915	2	-47.073	2	-.029	1	-.002	1	-.047	2
1149		5	max	61.035	8	2165.501	1	37.161	1	.047	2	0	2	.028	2
1150			min	11.49	3	-1712.915	2	-47.073	2	-.029	1	0	1	-.014	1
1151	M116	1	max	187.919	7	2167.381	1	1183.161	3	.22	1	.283	4	.429	1
1152			min	33.688	1	-1523.093	2	-1525.325	4	-.215	2	-.144	3	-.184	2
1153		2	max	187.919	7	2167.381	1	1183.161	3	.22	1	.217	4	.335	1
1154			min	33.688	1	-1523.093	2	-1525.325	4	-.215	2	-.093	3	-.117	2
1155		3	max	187.919	7	2167.381	1	1183.161	3	.22	1	.159	8	.264	5
1156			min	33.688	1	-1523.093	2	-1525.325	4	-.215	2	-.041	3	-.051	2
1157		4	max	187.919	7	2167.381	1	1183.161	3	.22	1	.128	6	.214	5
1158			min	33.688	1	-1523.093	2	-1525.325	4	-.215	2	0	1	.016	2
1159		5	max	187.919	7	2167.381	1	1183.161	3	.22	1	.109	6	.181	7
1160			min	33.688	1	-1523.093	2	-1525.325	4	-.215	2	-.004	1	.009	4
1161	M117	1	max	822.29	2	-24.906	4	1502.934	2	0	4	.015	4	.06	7
1162			min	-1040.065	1	-95.963	7	-1900.179	1	-.104	7	-.037	3	0	4
1163		2	max	822.29	2	-24.956	4	1502.934	2	0	4	.077	2	.064	7
1164			min	-1040.065	1	-96.076	7	-1900.179	1	-.104	7	-.116	1	0	4
1165		3	max	822.29	2	100.471	6	1558.334	4	.11	6	.139	2	.072	6
1166			min	-1040.065	1	-96.188	7	-1900.179	1	-.097	5	-.196	1	.013	4
1167		4	max	680.592	3	100.358	6	1558.334	4	.11	6	.032	3	.067	6
1168			min	-864.275	4	21.634	1	-1212.414	3	-.005	1	-.07	4	-.002	1
1169		5	max	680.592	3	100.246	6	1558.334	4	.11	6	.026	1	.063	6
1170			min	-864.275	4	21.584	1	-1212.414	3	-.005	1	-.049	2	-.003	1

Envelope AISC 15th(360-16): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc.....	L...	phi*Pn...	phi*Pn...	phi*M...	phi*M...	...	Eqn
1	M106	PL3/8x6	.920	0	1	.469	0 y	1	72411....	72900	.57	9.113	1...	H1-1b
2	M7	PL3/8x6	.891	0	4	.462	0 y	4	72411....	72900	.57	9.113	1...	H1-1b
3	M107	PL3/8x6	.770	0	1	.454	0 y	2	69574....	72900	.57	9.113	1...	H1-1b
4	M8	PL3/8x6	.696	0	4	.412	0 y	3	69574....	72900	.57	9.113	1...	H1-1b
5	M5	PL3/8x6	.695	0	3	.488	0 y	3	72411....	72900	.57	9.113	1...	H1-1b
6	M88	PL3/8x6	.624	0	1	.481	0 y	1	72411....	72900	.57	9.113	1...	H1-1b
7	M90	PL3/8x6	.614	0	4	.403	0 y	3	72411....	72900	.57	9.113	1...	H1-1b
8	M91	PL3/8x6	.570	0	3	.417	0 y	4	69574....	72900	.57	9.113	1...	H1-1b
9	M22	PIPE_2.0	.540	7.943	2	.257	11....	2	6295.4...	32130	1.872	1.872	3...	H3-6
10	M89	PL3/8x6	.533	0	1	.487	0 y	2	69611.4	72900	.57	9.113	1...	H1-1b
11	M6	PL3/8x6	.533	0	3	.464	0 y	4	69611.4	72900	.57	9.113	1...	H1-1b
12	M23	PIPE_2.0	.495	1.172	1	.272	11....	4	6295.4...	32130	1.872	1.872	3...	H3-6
13	M68	L2.5x2.5x4	.448	0	4	.085	1.383 z	1	37553....	38556	1.114	2.537	1...	H2-1
14	M24	PIPE_2.0	.440	7.943	4	.267	1.172	4	6295.4...	32130	1.872	1.872	3...	H1-1b
15	M69	L2.5x2.5x4	.428	0	2	.103	0 y	1	37553....	38556	1.114	2.537	1...	H2-1
16	MP2C	PIPE_2.5	.413	5.5	4	.105	5.5	1	30038....	50715	3.596	3.596	1...	H1-1b
17	MP2A	PIPE_2.5	.410	5.5	1	.102	5.5	2	30038....	50715	3.596	3.596	2...	H1-1b
18	MP2B	PIPE_2.5	.392	5.5	3	.121	5.5	4	30038....	50715	3.596	3.596	1...	H1-1b
19	M105	PL3/8x6	.358	0	4	.406	0 y	3	69611.4	72900	.57	9.113	1...	H1-1b
20	M104	PL3/8x6	.354	.156	4	.378	0 y	4	72411....	72900	.57	9.113	2...	H1-1b
21	MP3A	PIPE_2.5	.323	5.5	4	.117	5.5	2	30038....	50715	3.596	3.596	2...	H1-1b
22	MP3C	PIPE_2.5	.314	5.5	2	.132	5.5	3	30038....	50715	3.596	3.596	1...	H1-1b
23	MP3B	PIPE_2.5	.285	5.5	1	.106	5.5	1	30038....	50715	3.596	3.596	2...	H1-1b
24	MP1A	PIPE_2.5	.274	5.5	3	.193	2	2	30038....	50715	3.596	3.596	2...	H1-1b
25	M25	L2.5x2.5x4	.268	0	1	.115	0 y	4	37553....	38556	1.114	2.537	1...	H2-1
26	MP1C	PIPE_2.5	.263	5.5	1	.180	5.5	3	30038....	50715	3.596	3.596	2...	H1-1b
27	MP4A	PIPE_2.5	.249	5.5	4	.162	2	2	30038....	50715	3.596	3.596	2...	H1-1b
28	M3	PL1/2x6	.240	0	1	.291	0 y	3	95121....	97200	1.012	12.15	1...	H1-1b
29	MP4B	PIPE_2.5	.239	5.5	1	.169	5.5	4	30038....	50715	3.596	3.596	2...	H1-1b
30	MP1B	PIPE_2.5	.234	5.5	2	.177	5.5	4	30038....	50715	3.596	3.596	2...	H1-1b
31	M109	L2x2x3	.227	0	6	.017	0 z	6	16079....	23392.8	.558	1.239	2...	H2-1
32	M13	HSS4X4X4	.226	5.188	4	.126	5.188 z	3	84899....	139518	16.181	16.181	2...	H1-1b
33	M92	L2x2x3	.224	4.21	4	.017	0 y	6	16076....	23392.8	.558	1.214	2...	H2-1
34	M86	PL1/2x6	.224	0	4	.241	0 y	9	95121....	97200	1.012	12.15	1...	H1-1b
35	M93	L2x2x3	.222	0	5	.017	0 z	5	16079....	23392.8	.558	1.239	2...	H2-1
36	M108	L2x2x3	.220	0	5	.017	0 y	5	16076....	23392.8	.558	1.239	2...	H2-1
37	MP4C	PIPE_2.5	.220	5.5	2	.134	5.5	3	30038....	50715	3.596	3.596	2...	H1-1b
38	M103	PL1/2x6	.216	0	3	.250	0 y	10	95107....	97200	1.012	12.15	1...	H1-1b
39	M4	PL1/2x6	.213	0	1	.276	0 y	4	95121....	97200	1.012	12.15	1...	H1-1b
40	M10	L2x2x3	.208	0	7	.016	0 z	7	16079....	23392.8	.558	1.239	2...	H2-1
41	M9	L2x2x3	.206	0	8	.015	0 y	8	16076....	23392.8	.558	1.239	2...	H2-1
42	M87	PL1/2x6	.199	0	1	.237	0 y	2	95121....	97200	1.012	12.15	1...	H1-1b
43	M102	PL1/2x6	.191	0	3	.250	0 y	2	95135....	97200	1.012	12.15	1...	H1-1b
44	M17	PIPE_3.0	.188	7.812	3	.135	8.073	4	28250....	65205	5.749	5.749	2...	H1-1b
45	M97	HSS4X4X4	.173	0	4	.070	2.204 z	4	13568....	139518	16.181	16.181	1...	H1-1b
46	M18	PIPE_3.0	.164	7.812	1	.130	4.427	1	28250....	65205	5.749	5.749	2...	H1-1b
47	M2	HSS4X4X4	.155	5.188	1	.107	5.188 z	2	84900....	139518	16.181	16.181	1...	H1-1b
48	M15	HSS4X4X4	.153	0	5	.059	0 y	8	13568....	139518	16.181	16.181	1...	H1-1b
49	M113	HSS4X4X4	.153	0	6	.065	2.205 z	2	13568....	139518	16.181	16.181	1...	H1-1b
50	M112	HSS4X4X4	.148	2.579	3	.056	.376 z	3	13568....	139518	16.181	16.181	1...	H1-1b
51	M14	HSS4X4X4	.134	2.58	5	.051	2.58 y	7	13568....	139518	16.181	16.181	1...	H1-1b
52	M96	HSS4X4X4	.133	2.58	6	.052	2.58 y	5	13568....	139518	16.181	16.181	1...	H1-1b

Envelope AISC 15th(360-16): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc.....	L..	phi*Pn...	phi*Pn...	phi*M...	phi*M...	...	Eqn
53	M16	PIPE 3.0	.129	7.812	2	.128	4.427	3	28250...	65205	5.749	5.749	2...	H1-1b
54	M1	HSS4X4X4	.127	1.296	4	.088	5.185	z	1	84943...	139518	16.181	16.181	1...	H1-1b
55	M20	LL2.5x2.5x3x3	.106	0	5	.005	0	z	3	44189...	58320	3.954	2.55	1	H1-1b*
56	M21	LL2.5x2.5x3x3	.105	0	7	.005	4.664	z	2	44189...	58320	3.954	2.55	1...	H1-1b*
57	M19	LL2.5x2.5x3x3	.105	0	8	.005	4.662	y	4	44201...	58320	3.954	2.55	1...	H1-1b*
58	M111	PL1/2x6	.064	0	3	.480	0	y	2	94902...	97200	1.012	12.15	1...	H1-1b
59	M12	PL1/2x6	.052	0	1	.460	0	y	3	94902...	97200	1.012	12.15	1...	H1-1b
60	M94	PL1/2x6	.052	0	4	.482	0	y	2	94875...	97200	1.012	12.15	1...	H1-1b
61	M95	PL1/2x6	.052	0	2	.417	0	y	4	94902...	97200	1.012	12.15	1...	H1-1b
62	M11	PL1/2x6	.043	0	1	.495	0	y	4	94875...	97200	1.012	12.15	1...	H1-1b
63	M110	PL1/2x6	.040	0	2	.383	0	y	3	94875...	97200	1.012	12.15	1...	H1-1b

EXHIBIT 9

EME Report

Radio Frequency Emissions Analysis Report

T-Mobile Wireless Monopole Facility

January 5, 2022

Analysis Format: Theoretical Calculations

Sign Count	
	1
	0
	1
	0
	1

Statement of Compliance

T-Mobile will be compliant with FCC Regulations once the mitigation measures recommended in this report are implemented.

CTHA705A
South Windam
187 Windham Center Rd, Windham, CT 06280

Contents

Overview

Centerline Communications, LLC ("Centerline") has been contracted to provide a Radio Frequency (RF) Analysis for the following T-Mobile wireless monopole facility to determine whether the facility is in compliance with federal standards and regulations regarding RF emissions. This analysis includes theoretical emissions calculations for all existing equipment for T-Mobile .

The facility is located on a monopole in Windham, Connecticut. Access to the facility is restricted to authorized personnel and facility management.

Analysis Site Data

Site ID:	CTHA705A
Site Name:	South Windam
Site Address:	187 Windham Center Rd, Windham, CT 06280
Site Latitude:	41.690056
Site Longitude:	-72.16253
Facility Type:	Monopole

Compliance Summary

Status:	T-Mobile will be compliant with FCC Regulations Upon Installation of Signage
Site Modeled Composite MPE% (General Public Limit):	1.10 %
T-Mobile Max Modeled MPE% (General Public Limit):	1.10 %
Lock or Control Measures if Present:	Unknown

In addition to the T-Mobile antennas and radio equipment there are antennas and radio equipment for AT&T and Verizon which have been included in this analysis as part of the overall site compliance determination.

*To be conservative, all sites are considered uncontrolled for modeling purposes unless confirmed otherwise by a site visit.

FCC Guidelines

All power density values used in this report were 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 ($\mu W/cm^2$). 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 public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limit for the 600, 700, and 800 MHz Bands is approximately 400 $\mu W/cm^2$, 467 $\mu W/cm^2$, and 567 $\mu W/cm^2$ respectively, and the general population exposure limit for the 1900 MHz PCS, 2100 MHz AWS, 2500 MHz, 3500 MHz CBRS, 5000 MHz LAA, 28GHz, and 39GHz 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. Reference the Site Antenna Data Table for list of frequencies in operation at this site.

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, have been properly trained in RF safety 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, have been trained in RF safety and can exercise control over his or her exposure by leaving the area or by some other appropriate means. The Occupational/Controlled exposure limits all utilized frequency bands is five (5) times the FCC's General Public / Uncontrolled exposure limit.

Additional details can be found in FCC OET 65.

Calculation Methodology & Data

Centerline has performed theoretical calculations on all transmission equipment located on this facility. All calculations have been performed using the RoofMaster® software from Waterford Consultants LLC. This software performs calculations using a cylindrical model for very conservative power density predictions within the near-field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations the power decreases inversely with the square of the distance. This modeling technique is accurate with low antenna centerlines, such as rooftops, where persons can get close to the antennas and pass through fields in close proximity.

The below calculation in Figure 1 shows the theoretical distribution of power over an imaginary cylinder with equal power distribution in all directions.

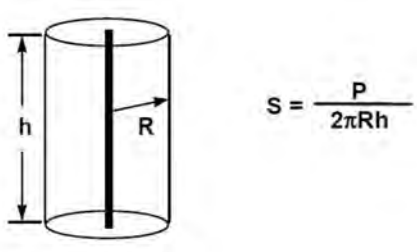


Figure 1: Distribution of power over an imaginary cylinder in all directions

This model can be modified for directional antennas to show directionality of power distribution. This formula will tend to be conservative as it assumes that all power is focused between the 3 dB power roll off points as shown in Figure 2.

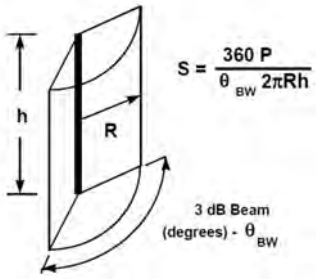


Figure 2: Distribution of power over an imaginary cylinder in all directions inside the half power roll off points (HBW)

The **proposed antenna configuration** for T-Mobile and any other known wireless carriers at this facility are shown below in **Table 1 – Site Antenna Data Table**.

All calculations for this facility were performed assuming that all radios were running at full power and were uncombined in their RF paths with the configuration shown in table 1. FCC OET Bulletin 65 – Edition 97-01 recommends that modeling of this nature should be done as described prior to yield a worst-case scenario. Due to the dynamic nature of many deployed systems the "real world" values will most likely be less than those shown in this report due to worst-case values being shown in all instances.

For all "Other" systems on this facility, exact equipment was used if available. In instances where "Other" system equipment was not available, standard radio configurations for these systems were utilized based upon prior experience with these systems on facilities in this area.

Site Antenna Data Table

Sector	Operator	Frequency Band	TX Power Per Channel	Tx #	ERP	Antenna Make	Antenna Model	Gain (dBd)	Az (°)	Antenna Centerline Height (ft)	Z Value (ft)**
A1	T-Mobile	L700	40	2	1853.92	RFS	APXVAALL24 43-U-NA20	13.65	40	167	163.00
A1	T-Mobile	L600	60	4	4733.81	RFS	APXVAALL24 43-U-NA20	12.95	40	167	163.00
A1	T-Mobile	N600	40	2	1577.94	RFS	APXVAALL24 43-U-NA20	12.95	40	167	163.00
A1	T-Mobile	L2100	140	2	12363.97	RFS	APXVAALL24 43-U-NA20	16.45	40	167	163.00
A1	T-Mobile	L1900	140	2	9821.05	RFS	APXVAALL24 43-U-NA20	15.45	40	167	163.00
A1	T-Mobile	G1900	15	1	526.13	RFS	APXVAALL24 43-U-NA20	15.45	40	167	163.00
A2	T-Mobile	L2500	90	1	15461.18	ERICSSON	SON_AIR6449 2500 LTE TB	22.35	40	167	165.62
A2	T-Mobile	N2500	90	1	15461.18	ERICSSON	SON_AIR6449 2500 NR TB	22.35	40	167	165.62
A2	T-Mobile	L/N2500	30	1	982.02	ERICSSON	AIR6449 LTE BrM 02DT	15.15	40	167	165.62
A2	T-Mobile	L/N2500	30	1	982.02	ERICSSON	AIR6449 LTE BrM 02DT	15.15	40	167	165.62
B3	T-Mobile	L700	40	2	1853.92	RFS	APXVAALL24 43-U-NA20	13.65	200	167	163.00
B3	T-Mobile	L600	60	4	4733.81	RFS	APXVAALL24 43-U-NA20	12.95	200	167	163.00
B3	T-Mobile	N600	40	2	1577.94	RFS	APXVAALL24 43-U-NA20	12.95	200	167	163.00
B3	T-Mobile	L2100	140	2	12363.97	RFS	APXVAALL24 43-U-NA20	16.45	200	167	163.00
B3	T-Mobile	L1900	140	2	9821.05	RFS	APXVAALL24 43-U-NA20	15.45	200	167	163.00
B3	T-Mobile	G1900	15	1	526.13	RFS	APXVAALL24 43-U-NA20	15.45	200	167	163.00
B4	T-Mobile	L2500	90	1	15461.18	ERICSSON	SON_AIR6449 2500 LTE TB	22.35	200	167	165.62
B4	T-Mobile	N2500	90	1	15461.18	ERICSSON	SON_AIR6449 2500 NR TB	22.35	200	167	165.62
B4	T-Mobile	L/N2500	30	1	982.02	ERICSSON	AIR6449 LTE BrM 02DT	15.15	200	167	165.62
B4	T-Mobile	L/N2500	30	1	982.02	ERICSSON	AIR6449 LTE BrM 02DT	15.15	200	167	165.62
C5	T-Mobile	L700	40	2	1853.92	RFS	APXVAALL24 43-U-NA20	13.65	320	167	163.00
C5	T-Mobile	L600	60	4	4733.81	RFS	APXVAALL24 43-U-NA20	12.95	320	167	163.00
C5	T-Mobile	N600	40	2	1577.94	RFS	APXVAALL24 43-U-NA20	12.95	320	167	163.00
C5	T-Mobile	L2100	140	2	12363.97	RFS	APXVAALL24 43-U-NA20	16.45	320	167	163.00
C5	T-Mobile	L1900	140	2	9821.05	RFS	APXVAALL24 43-U-NA20	15.45	320	167	163.00
C5	T-Mobile	G1900	15	1	526.13	RFS	APXVAALL24 43-U-NA20	15.45	320	167	163.00
C6	T-Mobile	L2500	90	1	15461.18	ERICSSON	SON_AIR6449 2500 LTE TB	22.35	320	167	165.62
C6	T-Mobile	N2500	90	1	15461.18	ERICSSON	SON_AIR6449 2500 NR TB	22.35	320	167	165.62
C6	T-Mobile	L/N2500	30	1	982.02	ERICSSON	AIR6449 LTE BrM 02DT	15.15	320	167	165.62
C6	T-Mobile	L/N2500	30	1	982.02	ERICSSON	AIR6449 LTE BrM 02DT	15.15	320	167	165.62
7	Verizon	850	20	7	2489.59	AMPHENOL	LPA-80080-4CF-EDIN-0	12.5	40	178	176.03
8	Verizon	1900	40	4	6153.47	JMA	MX06FRO660-02	15.85	40	178	175.03
9	Verizon	2100	40	4	5612.03	JMA	MX06FRO660-02	15.45	40	178	175.03
9	Verizon	700	40	4	2812.68	JMA	MX06FRO660-02	12.45	40	178	175.03
10	Verizon	3700	50	4	43154.89	SAMSUNG	SON_MT6407	23.34	40	178	176.54
11	Verizon	850	20	7	2489.59	AMPHENOL	LPA-80080-4CF-EDIN-0	12.5	40	178	176.03
12	Verizon	850	20	7	2489.59	AMPHENOL	LPA-80080-4CF-EDIN-0	12.5	200	178	176.03
13	Verizon	1900	40	4	6153.47	JMA	MX06FRO660-02	15.85	200	178	175.03

14	Verizon	2100	40	4	5612.03	JMA	MX06FRO660-02	15.45	200	178	175.03
14	Verizon	700	40	4	2812.68	JMA	MX06FRO660-02	12.45	200	178	175.03
15	Verizon	3700	50	4	43154.89	SAMSUNG	SON_MT6407	23.34	200	178	176.54
16	Verizon	850	20	7	2489.59	AMPHENOL	LPA-80080-4CF-EDIN-0	12.5	200	178	176.03
17	Verizon	850	20	7	2489.59	AMPHENOL	LPA-80080-4CF-EDIN-0	12.5	320	178	176.03
18	Verizon	1900	40	4	6153.47	JMA	MX06FRO660-02	15.85	320	178	175.03
19	Verizon	2100	40	4	5612.03	JMA	MX06FRO660-02	15.45	320	178	175.03
19	Verizon	700	40	4	2812.68	JMA	MX06FRO660-02	12.45	320	178	175.03
20	Verizon	3700	50	4	43154.89	SAMSUNG	SON_MT6407	23.34	320	178	176.54
21	Verizon	850	20	7	2489.59	AMPHENOL	LPA-80080-4CF-EDIN-0	12.5	320	178	176.03
22	AT&T	850	40	1	545.83	POWERWAVE	7770 00	11.35	40	147	144.69
23	AT&T	700	40	4	2686.09	CCI	DMP65R-BU8D	12.25	40	147	143.00
23	AT&T	1900	40	4	4160.26	CCI	DMP65R-BU8D	14.15	40	147	143.00
23	AT&T	2100	40	4	5237.45	CCI	DMP65R-BU8D	15.15	40	147	143.00
24	AT&T	850	40	4	2878.19	CCI	DMP65R-BU8D	12.55	40	147	143.00
24	AT&T	2300	25	4	2660.73	CCI	DMP65R-BU8D	14.25	40	147	143.00
25	AT&T	850	40	1	545.83	POWERWAVE	7770 00	11.35	200	147	144.69
26	AT&T	700	40	4	2686.09	CCI	DMP65R-BU8D	12.25	200	147	143.00
26	AT&T	1900	40	4	4160.26	CCI	DMP65R-BU8D	14.15	200	147	143.00
26	AT&T	2100	40	4	5237.45	CCI	DMP65R-BU8D	15.15	200	147	143.00
27	AT&T	850	40	4	2878.19	CCI	DMP65R-BU8D	12.55	200	147	143.00
27	AT&T	2300	25	4	2660.73	CCI	DMP65R-BU8D	14.25	200	147	143.00
28	AT&T	850	40	1	545.83	POWERWAVE	7770 00	11.35	320	147	144.69
29	AT&T	700	40	4	2686.09	CCI	DMP65R-BU8D	12.25	320	147	143.00
29	AT&T	1900	40	4	4160.26	CCI	DMP65R-BU8D	14.15	320	147	143.00
29	AT&T	2100	40	4	5237.45	CCI	DMP65R-BU8D	15.15	320	147	143.00
30	AT&T	850	40	4	2878.19	CCI	DMP65R-BU8D	12.55	320	147	143.00
30	AT&T	2300	25	4	2660.73	CCI	DMP65R-BU8D	14.25	320	147	143.00

*Table 1: Total Site Antenna data table **(Z Value is distance from bottom of antenna to walking surface)*

Results

All calculations performed based upon the data listed for this facility have produced results that are within allowable limits for General Population for exposure to RF emissions as specified by federal standards.

T-Mobile's RF Exposure: Responsibilities, Procedures & Guidelines document states that microwave dishes are compliant if they are mounted 20 feet or greater above any accessible walking or working surface.

Maximum Predicted MPE Level on Site:	% of MPE Limit:	Location:
Accessible **General Population** MPE Limits:	**1.10%**	**Sector A**
Accessible **Occupational** MPE Limits:	**0.22%**	

Ground Level Assessment:	% of MPE Limit:
Ground Level **General Population** MPE Limits:	**1.15%**
Ground Level **Occupational** MPE Limits:	**0.23%**

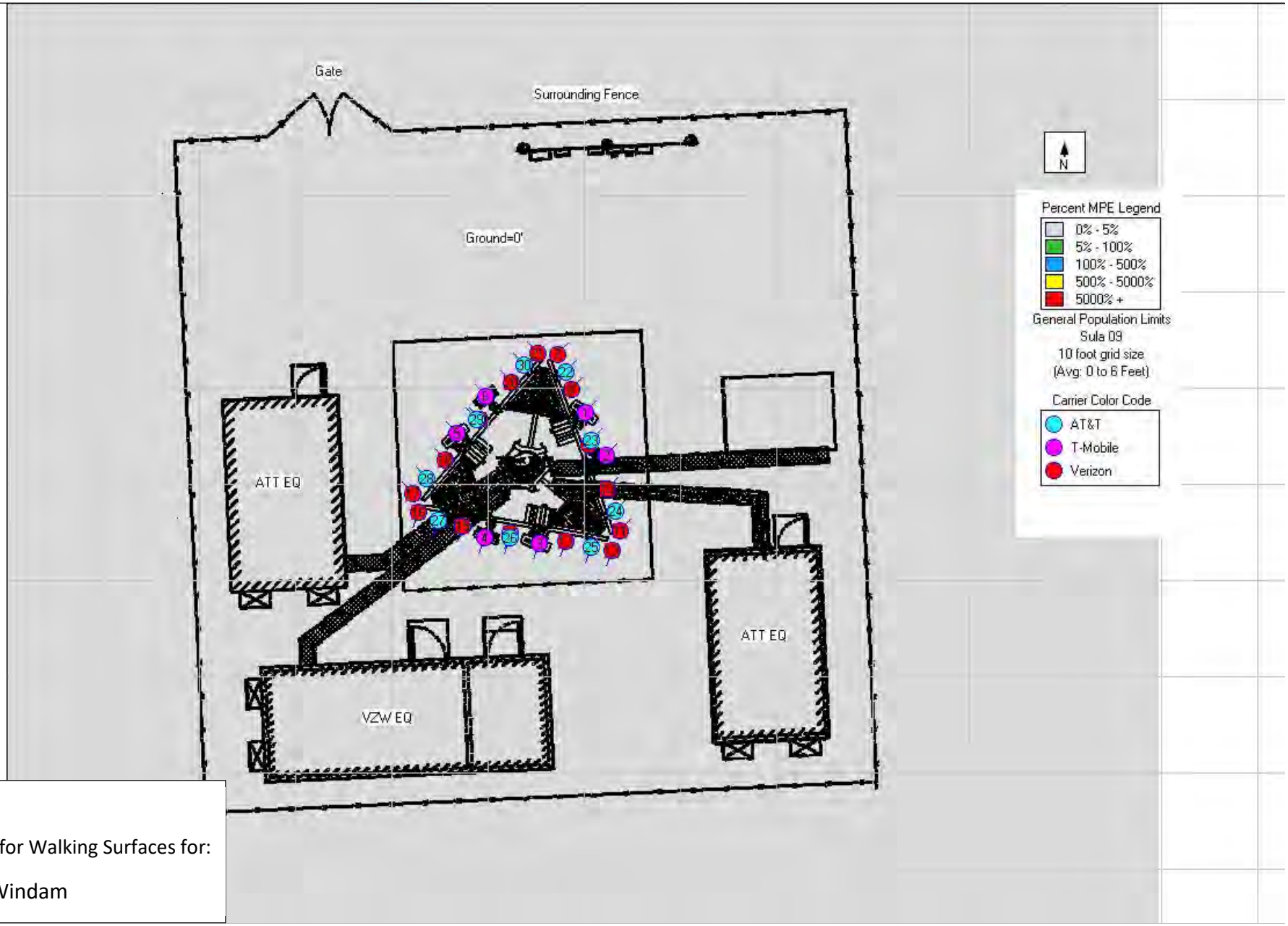
Sector A: Transmitting over Ground	% of MPE Limit:	*Distance from Antenna:
Accessible **General Population** MPE Limits:	**1.10%**	**0**
Accessible **Occupational** MPE Limits:	**0.22%**	**0**

Sector B: Transmitting over Ground	% of MPE Limit:	*Distance from Antenna:
Accessible **General Population** MPE Limits:	**1.10%**	**0**
Accessible **Occupational** MPE Limits:	**0.22%**	**0**

Sector C: Transmitting over Ground	% of MPE Limit:	*Distance from Antenna:
Accessible **General Population** MPE Limits:	**1.10%**	**0**
Accessible **Occupational** MPE Limits:	**0.22%**	**0**

**Distance from Antenna is the distance in feet that the MPE limits are exceeded from the front face of the antenna, outward across an accessible area.*

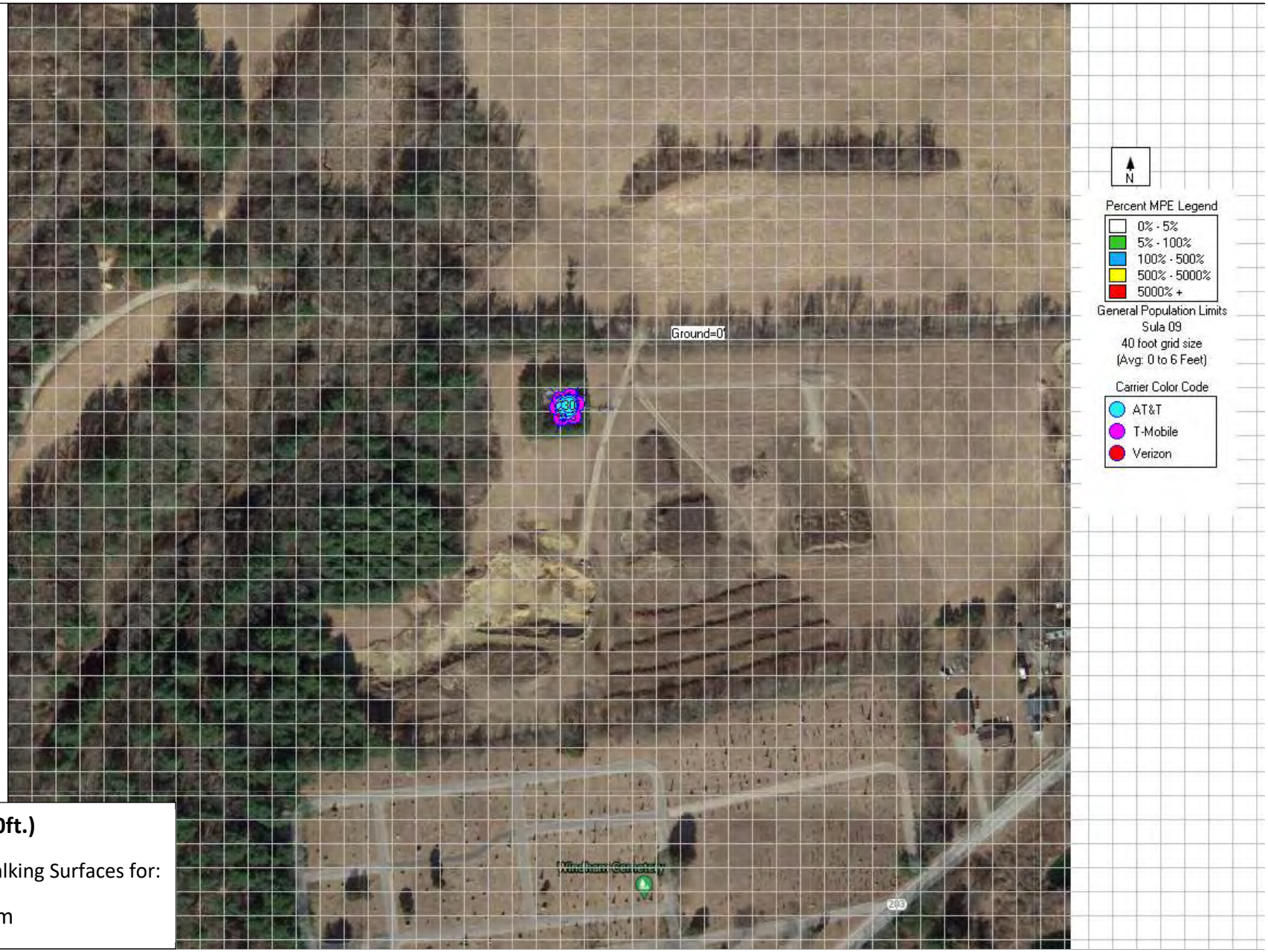
APPENDIX A: Emissions Thresholds for Walking Surfaces and Signage



Ground (0ft.)

Emissions Thresholds for Walking Surfaces for:

CTHA705A / South Windam

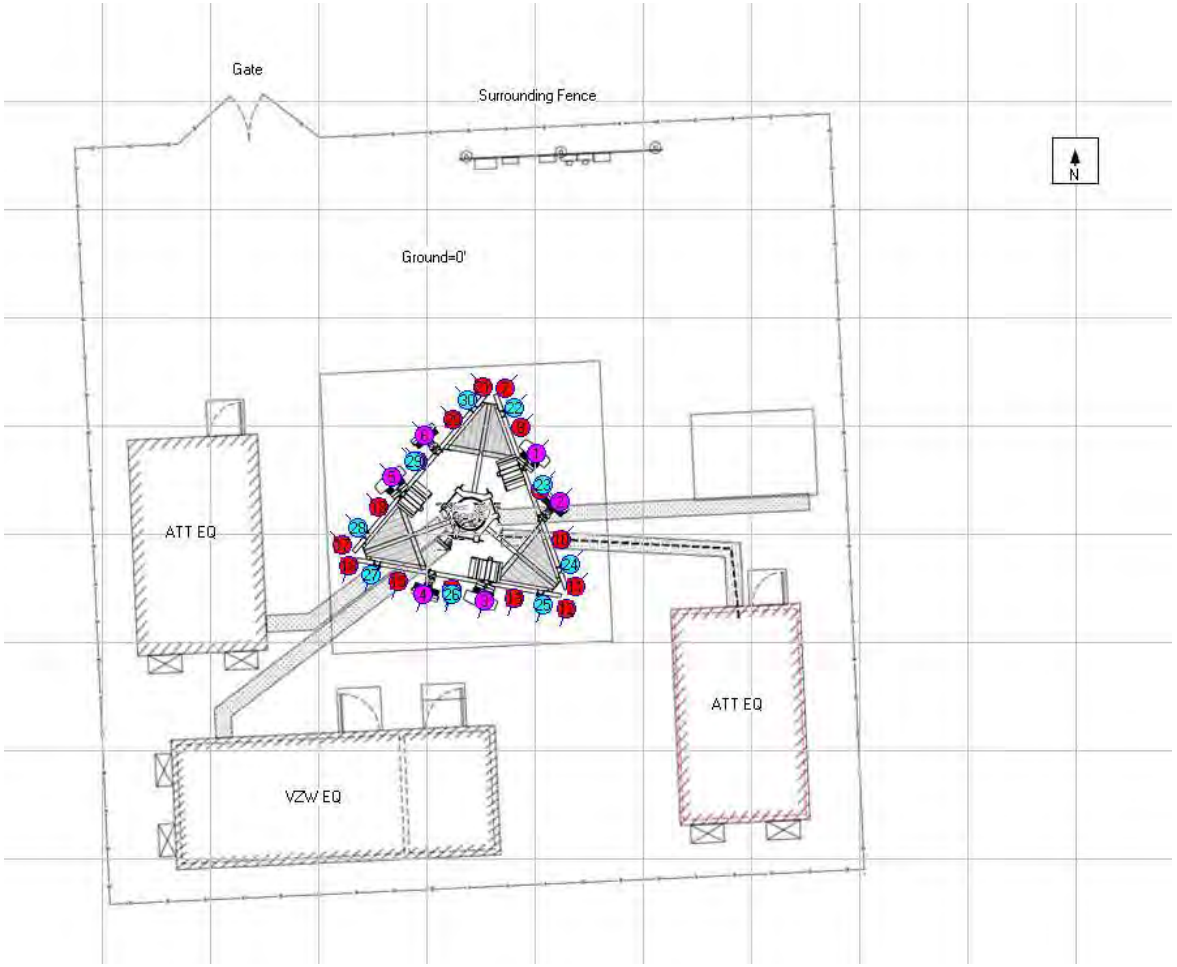


Ground Wide Overview (0ft.)

Emissions Thresholds for Walking Surfaces for:

CTHA705A / South Windam

Access/Monopole Base



Existing Item

Proposed Item

Signage Count									
	1		0		1		0		1

Signage Diagram

Signage for:

CTHA705A/ South Windam

Compliance Actions

Access	• Install (1) Guideline sign at the base of the monopole. • Install (1) Caution sign at the base of the monopole. • Install (1) Emergency sign at the base of the monopole.
Alpha Sector	• No Action Needed.
Beta Sector	• No Action Needed.
Gamma Sector	• No Action Needed.
Notes:	• If there is a fixed climbing point located on this site, a Guideline, Emergency sign and Caution sign should be installed at that location.

APPENDIX B: RF Signage Description Table

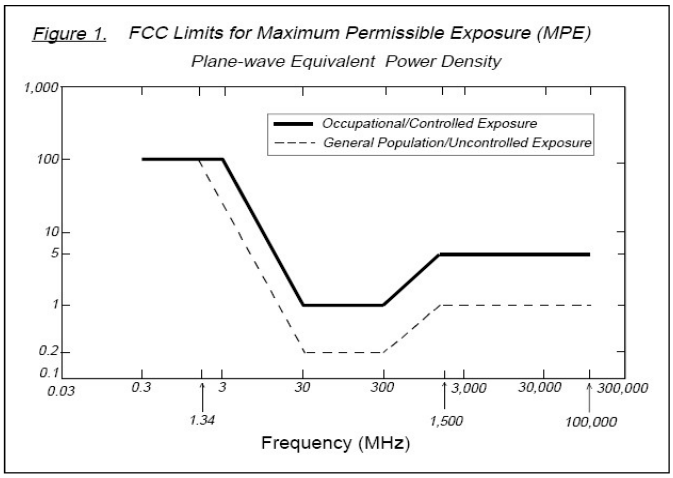
Sign	Description
	**RF Guideline Sign** Gives guidelines on how to proceed in areas that may exceed either the FCC's General Population or Occupational emissions limits.
	**Emergency Sign** Used to inform individuals to call 911 in case of emergency.
 	**Blue Notice Sign** Used to inform individuals that they are entering an area that may exceed the FCC's General Population limits. Must be placed anywhere the public can get within 30 feet vertically or horizontally of an antenna.
 	**Yellow Caution Sign** Used to inform individuals that they are entering an area that may exceed the either the FCC's General Population or Occupational Emissions limits. It must be placed so it is visible from all approachable sides. It must also be just outside of the area predicted to exceed the MPE limits so it can be read without standing within the affected area.
 	**Orange Warning Sign (Previously Red)** Used to inform individuals that they are entering an area that may exceed 5x the FCC's Occupational emissions limit. It must be placed so it is visible from all approachable sides. It must also be just outside of the area predicted to exceed the MPE limits so it can be read without standing within the affected area.

APPENDIX C: FCC Emissions Threshold Limits

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-I,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-I,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

* Plane-wave equivalent power density



APPENDIX D: Certifications

I, Michelle Stone, preparer of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined in T-Mobile's FCC Regulatory Compliance Manual.

Michelle Stone

1/5/2022

I, Yasir Alqadhili, reviewer and approver of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined in T-Mobile's FCC Regulatory Compliance Manual.

Yasir Alqadhili

1/5/2022